Minutes of 4th meeting of Technical Committee (2023-24) for assessment of application of under change in product-mix

Date : **28/11/2023**

Venue : **4th Floor, Conference Hall, Kalpataru Point, Sion, Mumbai & Microsoft Team Video conferencing.**

Technical Committee Members present for the meeting:

1)	Shri. Nandkumar Gurav, Assistant Secretary (Technical), MPCB	Chairman
2)	Shri. A.M. Pimparkar, Scientist-1, Environment Department	Member
3)	Shri. Partik Bharne, I/c Regional Director, CPCB	Member
4)	Shri. Dr. V. M. Motghare, Joint Director (APC)	Member
5)	Shri. Dr. J. B. Sangewar, Joint Director (WPC)	Member
6)	Dr. B.R. Naidu, Ex. Regional Director, CPCB	Member
7)	Shri. Anurag Garg, Chair Professor	Member
8)	Shri. S.V. Patil, Vasantdada Sugar Institute	Special Invitee
9)	Shir. Shankar Waghmare, Regional Officer (BMW), MPCB	Member Convener

At the outset, the request was received from the members (1) Shri. M.P. Patil, Representative of NEERI and (2) Shri. Dr. Ravindar Kontham, Principal Scientist, NCL Pune for leave of absence from attending the meeting was placed before the Committee meeting. The Committee considered the same.

Shri. Nandkumar Gurav, Assistant Secretary (Technical), MPCB & Chairman of the Committee welcomed all the Committee members. The committee deliberated on the agenda items placed and following decision were taken.

Agenda item No	**Item No. 1**
Proposal No.	UAN Number: MPCB-CONSENT-0000146534
Project Details	**M/s. Solara Active Pharma Sciences Limited.,** Plot No. N 39 / N 39-1, Additional Ambernath MIDC, Anand Nagar, Ambernath (East), Dist.- Thane.
NIPL Certificate	NIPL certificate issued by M/s. Mahabal Enviro Engineers Pvt. Ltd., date. 21.11.2023.

Introduction:

This is an existing unit engaged in manufacturing of API and located at MIDC Additional Ambernath. This has reference to the online proposal submitted vide No. MPCB-CONSENT-0000146534 along with the copies of documents seeking amendment in existing consent to operate under change in product – mix under the provisions of EIA Notification, 2006 amended on 23/11/2016 & on 02/3/2021.

Exiting Clearances:

1) Environmental Clearance is accorded to the industry ref no. SEAC-2013/CR-389/TC-2 dated 18.07.2016, in the Name of Perrigo API India Pvt. Ltd., The EC was transferred to M/s. Strides Chemicals Private Limited vide letter dated 13.12.2019 and the EC was further transferred from M/s. Strides Chemicals Private Limited to Solara Active Pharma Sciences Limited vide letter No. SIA/MH/IND2/173561/2020 dated 09.12.2021.
2) The unit has obtained valid consent to operate vide No: - Format 1.0/CC/UAN No. 0000109832/CR 2106000590 dated 14.06.2021 and said consent is valid upto 30.04.2026.

Project details:

Production Details:

	Product name	Before Product Mix MT/Annum	After Product Mix MT/Annum	Remarks
1	Pentoxifylline	270	110	Reduced by 160 TPA
2	Fenofibrate	70	5	Reduced by 65 TPA
3	Ammonium Lactate	50	10	Reduced by 40 TPA
4	Cetrizine Hydrochloride	30	5	Reduced by 25 TPA
5	Loratadine / Desloratadine	30	5	Reduced by 25 TPA

6	Tioconazole	3	3	No Change
7	IBRA solvate	0	1	New Product
8	Dolutagravir Sodium	0	10	New Product
9	Efinaconazole	0	3	New Product
10	Tenofovir Alafenamide Fumarate	0	5	New Product
11	Flucytosine	0	3	New Product
12	Clomipramine Hydrochloride	0	3	New Product
13	Zileuton	0	5	New Product
14	Celecoxib	0	10	New Product
15	Cinacalcet Hydrochloride	0	5	New Product
16	Pregabalin	0	5	New Product
17	Poly AllylAmine Hydrochloride	0	10	New Product
18	Carisoprodol	0	3	New Product
19	Sofosbuvir	0	5	New Product
20	Bumetanide	0	3	New Product
21	Metyrosine	0	3	New Product
22	Velpatasvir	0	10	New Product
23	Chlorpramizine Hydrochloride	0	2	New Product
24	Chlorthalidone	0	5	New Product
25	Mesalamine	0	10	New Product
26	Ketoprofen	0	3	New Product
27	Buspirone Hydrochloride	0	5	New Product
28	Atovaquone	0	5	New Product
29	Cycloserine	0	3	New Product
30	Erythromycin Ethyl Succinate	0	5	New Product
31	MycophenolateMofetil	0	180	New Product
32	Chlorzoxazone	0	5	New Product
33	Felbamate	0	5	New Product
34	Sugammadex Sodium	0	1	New Product
35	Rotigotine	0	0.5	New Product

36	Cevimeline	0	1	New Product
37	Velpatasvir Solid Dispersed	0	5	New Product
38	Levitracetam	0	20	New Product
39	Colesevalem Hydrochloric	0	1	New Product
40	SAPRO	0	1	New Product
41	Calcium Folinat	0	3	New Product
42	(s) Naproxen	0	10	New Product
43	Ibuprofen-L-Arginine	0	10	New Product
44	Safinamide	0	0.5	New Product
45	Valbenazine	0	6	New Product
46	Ertugliflozin	0	1	New Product
47	R/D new Products	0	10	New Product
48	Gabapentin	0	80	New Product
49	Cilostazol	15	0	Deleted
50	Modafinil	6	0	Deleted
51	Prazoles (Omeprazole Magnesium, Esomeprazole Magnesium, Pantoprazole, Sodum Sesquihydrate, Rabeprazole Sodium, Lansoprazole Sodium, Sesquihydrate)	60	0	Deleted
52	Dextromethorphan Hydrobromide/ fexofenadine hydrochloride / Tramadol Hydrochloride	50	0	Deleted
53	Montelukast Sodium	3	0	Deleted
54	Statin / Rosuvastatin Calcium	13	0	Deleted
	TOTAL	**600 MT/A**	**600 MT/A**	

- Industry has proposed a change in the product mix in its existing facility by deleting the existing 7 Nos. of products and reducing the quantities of existing 5 Nos. of products and addition of 41 Nos. of new proposed products in the same in API category. The total production capacity is 600 MT/A and will remain the same before and after a change in product mix.

A. Pollution load Details:

i) Water Aspect

Use	Before Product Mix As per CTO	After Change in Product Mix	Remarks
Process + APCM	166	149	Reduced by 17 CMD
Boiler	105	105	No Change
Cooling Tower	181	181	No Change
Washing/other	33	31	Reduced by 2 CMD
Gardening	10	10	No Change
Total Industrial	495	476	Reduced
Domestic	17	15	Reduced by 2 CMD
TOTAL	512	491	Reduction of 21 CMD water

ii) Wastewater Aspect: -

Effluent	Effluent Generation As Per CTO CMD	Effluent Generation after Proposed change in product mix CMD
Process + APCM	90	74
Boiler	14	14
Cooling	17	17
Other & Washing	32	30
Total Industrial	**153**	**135**
DOMESTIC	12	12

- Water consumption will be reduced by 21 CMD.
- The effluent generation will be reduced by 18 CMD.

iii) Pollution Load with respect to the Changes proposed: -

Parameter	Before Product Mix	After Change in Product Mix	Unit	Remarks
COD	5976	2838	Kg/day	Reduced by 3138 kg/day
TDS	1630.6	1622	Kg/day	Reduced by 8.6 kg/day

- After a change in product mix the COD load will reduce by 3138 kg/Day and TDS load will reduce by 8.6 Kg/Day.

Treatment System:-

a) Trade Effluent:

i) Strong Stream 13 CMD - Treatment system comprising of Primary, Multi Effect Evaporator (15 CMD), Agitated Thin Film Dryer (ATFD) & Centrifuge Decanter.

ii) Weak Stream 122 CMD- Effluent Treatment system of capacity 165 CMD comprising of Primary, Secondary (MBR), Tertiary & Ultrafiltration followed by three stage Reverse Osmosis.

b) Domestic Effluent:

The primary treated domestic effluent is connected to effluent treatment plant for further treatment and disposal.

B) Air Emission Load: -

Stack No.	Stack attached to	Fuel	Fuel Consumption as per CTO	After Change in Product Mix	APCM system	Parameters	Before Change in Product Mix	After Change in Product Mix	Stack Height In Mtrs.
S-1	Boiler (6 MT/Hr)	PNG	441 kg/hr	441 kg/hr	Stack	NOx	40-45 mg/Nm^3	40-45 mg/Nm^3	46
	Boiler (2 MT/Hr) (Stand by)	PNG	147 kg/hr	147 kg/hr					
S-2	DG set 500KVA	HSD	104 kg/hr	104 kg/hr	Stack	SO_2	4.16 kg/day	4.16 kg/day	9
S-3 & S-4	DG set 750 KVA	HSD	176 kg/hr	176 kg/hr	Stack	SO_2	7.04 kg/day	7.04 kg/day	9

S-5	Process Vent Scrubber	-	-	-	Falling film absorber, Graphite polyblock condenser, packed bed column caustic scrubber	HCL	6 -7 mg/Nm^3	6 -7 mg/Nm^3	39
S-6	Process Vent Scrubber	-	-	-	Packed bed column caustic scrubber	HCL	4-6 mg/Nm^3	4-6 mg/Nm^3	36
S-7	Process Vent Scrubber SBR101	-	-	-	Falling film absorber, Graphite polyblock condenser, Packed bed column caustic scrubber	HCL	5-7 mg/Nm^3	5-7 mg/Nm^3	39
S-8	Process Vent Scrubber SBR201	-	-	-	Packed bed column caustic scrubber	HCL	5-7 mg/Nm^3	5-7 mg/Nm^3	39
S-9	Scrubber R&D and QC fume hoods	-	-	-	Packed bed column caustic scrubber	HCL	--	--	21.7
S-10	Scrubber R&D and QC fume hoods	-	-	-	Packed bed column caustic scrubber	HCL	--	--	21.7
S-11	Fire Pump Diesel engine	HSD	63 kg/hr	63 kg/hr	Stack	SO_2	2.52 kg/day	2.52 kg/day	7.45

Flue Gas Emissions: -

- There is no change in the overall fuel consumption/ Air emissions due to proposed change in product.
- Industry is using cleaner fuel PNG for Boilers.

C) Hazardous Waste Load: -

Sr. NO.	Types of Waste	Category (As per Schedule)	Generation		UOM	Mode of Treatment & Disposal
			Existing As per CTO	After Change in Product Mix		
1	Sludge and filters contaminated with oil	3.3	0.08	0.08	MT/Month	CHWTSDF/ Authorized Recycler or Reprocessor
2	Spent Carbon	28.3	1.0	0.99	MT/Month	CHWTSDF/ Authorized Recycler or Reprocessor
3	Spent & used oil cat. 5.1	5.1	16.7	16.7	Lit/ Month	Sale to CPCB/MPCB Authorized Recycler or Reprocessor
4	Wastes/residue containing Oil	5.2	0.08	0.08	MT/Month	CHWTSDF/ Authorized Recycler or Reprocessor
5	Process Residue and Waste	28.1	8.0	6.15	MT/Month	CHWTSDF/ Authorized Recycler or Reprocessor
6	Off specification products	28.4	1.0	1.0	MT/Month	CHWTSDF
7	Spent organic Solvents	28.6	479	135.60	MT/Month	Sale to authorized reprocessor / Recyclers
8	Empty Barrels/containers/Barrels /Liners contaminated with hazardous chemicals/Waste	33.1	600	600	Nos./Month	Sale to Authorized Reprocessor
9	Chemical Sludge from Waste Water treatment	35.3	95.583	95.583	MT/Month	CHWTSDF/ Authorized Recycler or Reprocessor
10	Any process or Distillation residue	36.1	167	30.4	MT/Month	Sale to authorized reprocessor/Recyclers/ CHWTSDF

- There is reduction of 481.86 MT/Month of Hazardous waste generation after change in product mix.

Technical Committee Deliberations:

The proposed project was discussed based on documents – NIPL Certificate and presentation made by the industry. Product wise load calculation in terms of wastewater, Air emissions & Hazardous waste generation were discussed. Existing consent to operate, Environmental Clearance, NIPL Certificate issued by M/s. Mahabal Enviro Engineers Pvt. Ltd., date. 21.11.2023 and product –mix Proforma are taken on the record.

After due deliberations, Committee noticed that:

i) Industry has proposed a change in the product mix in its existing facility by deleting the existing 7 Nos. of products and reducing the quantities of existing 5 Nos. of products and addition of 41 Nos. of new proposed products in the same in API category. The total production capacity is 600 MT/A and will remain the same before and after change in product mix.
ii) Water consumption will be reduced by 21 CMD. The total recycled water will be 142.5 CMD and net water consumption fresh water after first cycle will be 348.5 CMD.
iii) The trade effluent generation will be reduced by 18 CMD and will be 135 CMD post change in product mix.
iv) After a change in product mix the COD load will reduce by 3138 kg/Day and TDS load will reduce by 8.6 Kg/Day.
v) The industry has provided Zero Liquid Discharge plant and there is no change after change in product mix.
vi) The PNG is used as a fuel for Boiler. Industry has provided Packed Bed Scrubber with alkali media to control the process emissions like HCL. The process emissions will remain the same as per existing.
vii) There is reduction of 481.86 MT/Month of Hazardous waste generation after change in product mix. Out of 10 nos. of category of hazardous waste, 6 nos. of Category of Hazardous waste remain unchanged and quantity of 4 Category waste will be reduced.

Technical Committee Decision:

The Technical Committee decided to recommend the case for a change in product under product mix with compliance of the following conditions.

1) Industry shall comply with the conditions stipulated in Environmental Clearance and ensure display /upload of six- monthly compliance monitoring report on their official website.
2) Industry shall not manufacture other products for which permission is not granted by the MPCB.
3) Industry shall ensure the connectivity of the OCEMS data to the Board Servers.

Agenda item No	**Item No. 2**
Proposal No.	MPCB-CONSENT-0000170890
Project Details	**M/s. Honour Lab Limited, (Unit 3B)** Plot No. A-88, Unit 3B, Plot No. A-88, MIDC, Kurkumbh, Tal: Daund & Dist: - Pune.
NIPL Certificate	NIPL certificate issued by M/s. Enviro Analysts and Engineers Pvt. Ltd., No. Nil Date. Nil.

Introduction:

This is an existing API & API Intermediate manufacturing unit for 24 Nos. of products having total production quantity - 3836 MT/A. This has reference to the online proposal submitted vide No. MPCB-CONSENT-0000170890 along with the copies of documents seeking amendment in existing consent to operate under change in product – mix under the provisions of EIA Notification, 2006 amended on 23/11/2016 & on 02/3/2021.

Exiting Clearances:

1. Environmental Clearance accorded to the industry by SEIAA vide No. SEAC-2015/CR-712/TC-2 dated 23.08.2016.
2. The unit has obtained valid consent to operate vide No: - Format1.0/CC/UAN No.0000080485/CR-2007000094, dated 01.07.2020 valid up to 30/06/2024.

Project details:

A. Production Details:-

Sr. No .	Product Name	Existing Quantity, TPA	Proposed Additional/ Deletion Quantity, TPA	Total Proposed Quantity, TPA
A	**Existing Product**			
1	Biapenem	2.4	9.6	12.0
2	Deflazocart	3	-3	0.0
3	Doripenem Hydrate	1.8	10.2	12.0
4	Epleranone	6	-6	0.0
5	Ertapenem sodium	12	12	24.0

6	Faropenem sodium	30	30	60.0
7	Emipenem monohydrate	12	8	20.0
8	Lafatidine	12	8	20.0
9	Meropenem trihydrate	60	0	60.0
10	Panipenem	1.2	22.8	24.0
11	Rupatidine Furamate	24	-24	0.0
12	Tebipenem pivoxil	6	0	6.0
13	Tacapenem pivoxil	6	0	6.0
14	(s)-Tert-butyl-3-oxo-1-phenylpropyl carbamate	120	-60	60.0
15	3-(3-isoprypyl-5-methyl-4H-1,2,4-TRIZOL-4-YL)EXO-8-Aza-bicyclo(3.2.1)octane	240	-60	180.0
16	Methyl vinyl phosphate	1080	-840	240.0
17	N-(2-CHLOROPYRIMIDINYL)-N-2,3-TRIMETHYL-INDAZOLE-6-AMINE	60	0	60.0
18	N-(4-Flurobenzyl)-2-(2-aminopropane-2-yl)1,6-dihydro-5-hydroxy-1-methyl-6-oxopyrimidine-4-carboxamide	60	0	60.0
19	Potassium 5-methyl-1,3,4-oxadiazole-2-carboxlatee	60	-20	40.0
20	(s-5-chloro-a-(cyclopropylethylene)-2(4-methoxyphenyl)methylamino-(trifluromethyl)benzene methanol(Efavirenz intermediate)	300	-240	60.0
21	(2R-cis)-5-(4-amino-1,2-di hydro-2-oxo-1-pyrimidinyl)-1-3-oxathialane-2-carboxalic acid(2s,5R)-METHYL ester(Lamivudine intermediate)	300	-240	60.0
22	3-azido-5-o-trityl-3-dexythymidine (Zidovudine intermediate)	240	-120	120.0
23	(1S,4R)-4-(2-Amino-6-chloro-9H-purin-9yl)cyclopent-2-ethyl methanol hydrochloride(Abacavir intermediate)	1020	-900	120.0
24	(2S,3S,5S)-5-Amino-2-(5-thiazolylmethoxycarbonyl-amino)-3-hydroxy-1,6-diphenyl hexane(Ritonavir intermediate)	180	-120	60.0
	Total	**3836.4**	**-2532.4**	**1304**
B	**Proposed Product**			
25	Isopropyl-((S)-Perfluorophenoxy) (phenoxy) Phosphoryl)-L-Alaninate	0	120.0	120

26	Methyl 2-(2-(Benzyloxy)carbonyl)amino)propan-2-yl)5,6-dihydroxypyrimidine-4-carboxylate(FOC)	0	100.0	100
27	Trans-4-(4-chlorophenyl)cyclohexane carboxylic acid	0	120.0	120
28	Methyl 4- Methoxy -3-Oxobutanoate	0	120.0	120
29	2,2-dimethoxyethylamine	0	120.0	120
30	Ethyl-4-(2-Hydroxypropan-2-Yl)-2-Propyl-1h-Imidazole-5- Carboxylate	0	80.0	80
31	2-Propyl-1H-imidazole-4,5-dicarboxylic acid	0	80.0	80
32	1-(2,2-dimethoxyethyl)-5-methoxy- 6-methoxycarbonyl-4-oxo-1h-pyridine-3-carboxylicacid	0	120.0	120
33	(S)-2- Aminobutanamide hydrochloride	0	480.0	480
34	Magnesium 2-Methylpropan-2-Olate	0	600.0	600
35	(S)-5-chloro-α -(cyclopropylethynyl)-2-amino-α-(trifluoromethyl)-benzene methanol	0	60.0	60
36	Pyrrolo [2,1-f][1,2,4]triazin-4-amine	0	60.0	60
37	6-Bromo-3-Hydroxypyrazine-2-Carboxamide	0	80.0	80
38	6-Fluoro-3-Oxo,4-Dihydro pyrazine-2-Carbonitrile compound with Dicyclohexylamine (1:1)	0	120.0	120
39	1-(2,2-Dimethoxyethyl)-5- methoxy-6-methoxycarbonyl-4-oxo-1H-pyridine-3-carboxylic acid.	0	100.0	100
40	Ethyl 5-Hydroxy-1,2-dimethyl-1H-indole-3-carboxylate	0	60.0	60
41	Ceftaroline fosamil mono acetate mono hydrate	0	60.0	60
42	(2S, 3S)-2,3-BIS ((4-Methylbenzoyl)Oxy Succinic acid	0	60.0	60
43	1,3-Dioxol-2-one,4-(cloromethyl)-5-methyl	0	60.0	60
44	(5-Methyl-2-Oxo-1,3-dioxol-4-yl)Methyl 4-(2-hydroxypropan-2yl)-2Propyl-1-((2-(1-trityl-1H-Tetrazol-5yl)-[1,1-biphenyl]-4-yl)Methyl)-1H-Imidazole-5-Carboxylate	0	72.0	72
45	2,7-dihydroxy-9H-fluorene-9-one	0	72.0	72
46	(R,E)-2-(1-(((1-(3-(2-(7-chloroquinoline-2-yl)vinyl)phenyl)-3-(2-(2-hydroxypropane-2-yl)phenyl)propyl)thio)methyl)cyclopropyl)acetic acid	0	120.0	120
47	7-Iodopyrrolo[2,1-F] [1,2,4]Triazin-4-Amine	0	80.0	80
48	Methyl 2-(2-(((benzyloxy) carbonyl)amino)propan-2-yl)-5,6-dihydroxypyrimidine-4-carboxylate	0	80.0	80

49	9, 11alfa-epoxy-7alfa-methoxycarbonyl-3-oxo-17alfa-pregn-4-ene-21,17-carbolactone	0	100.0	100
50	13-Chloro-2-[1-[5-methylpyridine-4-ylidene]-4-azatricyclo [9,4,0,0]pentadeca-1-1(11)3(8),4,6,12,14-hexane	0	0.0	0
51	Validation batches / Trial batches	0	36.0	36
	Total	**0**	**3160.0**	**3160.0**
	Grand Total (A+B)	**3836.4**	**3160 -2532.4 = 627.6**	**4464.0**

- Industry has proposed a change in the product mix in its existing facility by deleting the existing 03 nos. of products, decrease in production quantity of 9 nos. of products, increase in production quantity of 7 nos. of products and addition of 27 nos. of new products. i.e. total products will be 48 for total production quantity- 4464 MT/A.
- The industry has proposed to increase production capacity from 3836.4 TPA (as per EC) to 4464 TPA under change in product mix.

B. Pollution load Details:

Water & Wastewater Aspect of Unit 3B: -

a) Water Consumption Details: -

S. No.	Description	Before change in product mix consented Qty. m3/day	Change in product mix consented Qty. m3/day	Source
1	Domestic	25	25	MIDC
2	Industrial cooling, spray in mine pits or boiler feed	420	420	
	Processing whereby water gets polluted & pollutants are easily biodegradable	75	75	
3	Gardening	50	50	Recycled water
	TOTAL	**570**	570	(As per the NIPL certificate the proposed reduction in total water consumption is to 567.2 CMD.

b) Wastewater Aspect: -

Propose	Before change in product mix consented Qty. m3/day	Effluent Generation after proposed change in product mix, CMD	Mode of Disposal & Ultimate Receiving Body
Process & Washing Activity	85	76.1	Recycle 100% to Achieve ZLD
Cooling Tower & Boiler (Utility)		8	
Total Industrial	**85**	84.1	
Domestic	20	20	On land for Gardening
Grand Total	**105**	**104.1**	

- Industry has proposed reduction in total water consumption by 2.8 CMD and trade effluent generation by 0.9 CMD. However, the water budget as per the presentation and NIPL certificate are mismatching.

Treatment System

Trade Effluent: ETP of capacity 280 CMD consisting of Primary (Collection tank, Neutralization tank, Equalization tank, Flash mixer, Primary Clarifier/Primary Settling Tank), Secondary (Activated sludge process), Tertiary (Pressure sand filter, activated carbon filter) followed by Stripper, MEE, ATFD and RO.

Domestic Effluent:
The domestic effluent is treated in sewage treatment plant of capacity 50 CMD.

Note:- Effluent generated from sister concern unit located at plot No. D-10 is being transferred after the primary treatment along with the 15 CMD sewage generated through closed pipeline for treatment and disposal at this unit 3B located at Plot A-88 in Kurkumbh MIDC.

D) **Air Emission Load: -**

Existing Air emission aspect:-

Stack. No.	Stack attached to	Stack Nos.	Fuel Type	Qty.	Std. to be achieved
S-1	Boiler – I (3 TPH)	1	FO	150 Lit/hr.	150 mg/Nm3
S-2	Boiler -II (3 TPH)	1	Coal	400 Kg/hr	
S-3	Boiler -III (3 TPH)				
S-4	Process Vent / Double Stage Scrubbers	5	-	--	3 ppm
S-5	DG set (380 kVA)	1	HSD	100 Lit/hr.	
S-6	DG set (380 kVA)	1	HSD	100 Lit/hr.	150 mg/Nm3

Proposed Air emission aspect: -

Sr. No.	Stack Attached to	Fuel	Existing Fuel Consumption as per consent	Fuel Consumption after Change in Product Mix	APC system	Stack Height
1.	Boiler-1 (3 TPH)	Coal or	400 Kg/hr.	400 Kg/hr.	Dust Collector & Stack	30 m
		Briquette	500 Kg/hr.	500 Kg/hr.		
2.	Boiler-2 (6 TPH) (Proposed Boiler)	Coal or	-	800 Kg/hr.	Dust Collector & Stack	30 m
		Briquette	-	975 Kg/hr.		
3.	Process Vent / Double Stage Scrubbers	5 Nos	-	--	Scrubbers	10 m above roof level
4.	DG Set (380 KVA)	HSD	100 lit/hr.	100 lit/hr.	Stack & Acoustic Enclosure	3.0 m Above the Roof
5.	DG Set (380 KVA)	HSD	100 lit/hr.	100 lit/hr.	Stack & Acoustic Enclosure	3.0 m Above the Roof
6.	DG Set (960 KVA) (Stand by)	HSD	-	250 lit/hr.	Stack & Acoustic Enclosure	7 m Above the Roof

- The industry has proposed to dismantle the existing One number of FO fired boiler (3 TPH) & One number of Coal/Briquette fired boiler (3 TPH) and proposed to install a new Coal/Briquette fired Boiler of capacity 6 TPH. One additional DG set (960 KVA Standby) is also proposed to use in emergency.
- The total steam generation capacity will remain unchanged.
- Number and capacities to be used (Existing & Proposed) as per Environmental Clerance accorded are 520 KVA and 1010 KVA.

E) Hazardous Waste Load

Sr. No	Type of Waste	Cat. No.	As Per CTO.& EC	After Change in Product Mix Qty.	Disposal
			MT/A	MT/A	
1.	Used/Spent Oil	5.1	7.3 (0.02 T/D)	7.3	Sale to authorized party /Recycler/ CHWTSDF
2.	Process Residue and Wastes	28.1	4 MT/Annum	435.6	Sale to authorized party /Recycler/ CHWTSDF
3.	Spent catalyst	28.2	16	3.5	Sale to authorized party /Recycler/ CHWTSDF
4.	Spent Carbon	28.3		44.2	Sale to authorized party /Recycler/ CHWTSDF
5.	Spent solvents	28.6	21900 (60 T/D)	8919.5	Sale to authorized party /Recycler/ Co-Processing/Pre-Processing /CHWTSDF
6.	Distillation Residue	20.3		5404.6	Sale to authorized party/ Co-Processing/Pre-Processing /CHWTSDF
7.	Chemical sludge from waste water	35.3	716	716	CHWTSTF
8.	MEE Salts	35.3	300	300	CHWTSDF

9.	Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	33.1	10200 Nos./A (850 Nos/M)	10200 Nos./A	Sale to authorized party /Recycler/ CHWTSDF
Total Waste			22643.2	20393.3	

- The quantity of Haz. Waste category 28.1 Process residue and Waste is drastically increasing from consented quantity 4 MT/A to 435.6 MT/A.
- PP has submitted a letter stating that as per the consented quantity of Process Residue & Wastes (Category No. 28.1) generation is mentioned as 4 MT/Annum which is 4.8 MT/Month i.e. 57.6 MT/Annum.
- PP has also submitted that the byproduct Lithium Chloride should be read as MEE solid waste which was a typo error in the previous CTO.
- Industry has also applied for the additional disposal path for disposal of Haz. Waste to Co-Processing/Pre-Processing.

Technical Committee Deliberations:
The proposed project was discussed based on documents – NIPL Certificate and presentation made by the industry. Product wise load calculation in terms of wastewater, Air emissions & Hazardous waste generation were discussed. Existing consent to operate, Environmental Clearance, NIPL Certificate issued by M/s. Enviro Analysts and Engineers Pvt. Ltd., No. Nil Date. Nil and product –mix Proforma are taken on the record.

After due deliberations, Committee noticed that:

i) Industry has proposed a change in the product mix in its existing facility by deleting the existing 03 nos. of products, decrease in the existing production quantity of 9 nos. of products, increase the existing production quantity of 7 nos. of products and addition of 27 nos. of new products. i.e. total products will be 48 for total production quantity- 4464 MT/A. The industry has proposed to increase production capacity from 3836.4 TPA (as per EC) to 4464 TPA.

ii) The industry has proposed reduction in water consumption and trade effluent generation, however the comparison between pollution load before change in product mix and after change in product mix is not submitted.

iii) There is difference in water budget after change in product mix as per the presentation and NIPL certificate.
iv) Industry has not submitted the comparison between the existing and proposed highest pollution load product.
v) Industry has not submitted the details of the change in raw materials in comparison with existing products and proposed products.
vi) Industry has not submitted change in effluent characteristics in comparison with existing and proposed products.
vii) Industry has proposed to increase the Hazardous waste 28.1 Process residue and Waste from 4 MT/A to 435 MT/A, however, the justification along with the product wise mass balances is not submitted.
viii) PP was unable to show the details of emissions, its concentration and load before and after change in product mix.
ix) Committee, noticed that the presentations are not clearly specifying the comparison of pollution load with respect to Environmental Clerance, Consent and Proposed changes for water, air and Hazardous Waste etc.

Technical Committee Decision:

Technical Committee decided to defer the case and asked PP to reassess their pollution load based on individual product, along with the NIPL certificate and was advised the PP to furnish above details in comparison with the Environmental Clerance, Consent to Operate and proposed changes under product mix, before the committee.

Agenda Item No.	Item No. 3
Proposal No.	MPCB-CONSENT-0000170754
Project Details	**M/s. Hikal Limited,** Plot No.-A-18 MIDC Mahad, Tal.- Mahad, Dist.- Raigad
NIPL Certificate	NIPL Certificate issued by M/s. Goldfinch Engineering Systems Private Limited., Date. 20.11.2023.

Introduction:

This is an existing industry engaged in manufacturing of pesticides. This has reference to the online proposal submitted vide No. MPCB-CONSENT-0000170754 along with the copies of documents seeking amendment in existing consent to operate under change in product mix under the provision of EIA Notification 2006 and amendments on 23/11/2016 & on 02/3/2021.

Existing Environment Clearances (EC):

1. Environmental Clearance is granted to the industry ref no. F. No. J-11011/318/2016-IA II(I) dated 15th January 2018 with a total production capacity of 10580.04 TPA (Technical Products), 1008 TPA (Formulation) and 16209.36 TPA (By-Products).
2. The Board has accorded the consent to operate vide No Format1.0/CC/UAN No. MPCBCONSENT-0000165465 /CO/2310001670 dated 23.10.2023 for total production capacity of 10580.04 TPA (Technical Products), 1008 TPA (Formulation) and 20500 Kg/Day (Bio-products) which was valid up to 31.10.2024.
3. The By-products are shifted in the Hazardous Waste by the Board.

Project Details:

A. Products with change in product mix as below:

Sr. No.	Name of product	Production			
		As per EC (TPA)	As per CTO (TPA)	Proposed (+)Addition & (-) Deletion (TPA)	Total (TPA)
1	Ethyclozate	20.04	20.04	0.0	20.04
2	MMPDC(5 Methoxy Methyl Pyridine 2,3 dicarboxylic acid)	600.00	600.00	0.0	600
3	Diuron	6000.00	6000.00	0.0	6000
4	3,5-Dichloro Aniline	1800.00	1800.00	-1080	720

5	APP(2'Amino-2'Methyl-(4- Isopropyloxy-6-methyl)-propiophenone)	200.04	200.04	0.0	200.04
6	AF 02(4- Acetoxy-6-tert- Butyl-8-Fluro-2,3-Dimethyl Quinoline)	99.96	99.96	0.0	99.96
7	Benzofenap	180.00	180.00	0.0	180
8	Benfuresate	120.00	120.00	-60.0	60
9	Clothianidin	180.00	180.00	-120.0	60
10	Thiacloprid	300.00	300.00	-120.0	180
11	Trifloxystrobin	300.00	300.00	-60.0	240
12	Azoxystrobin	300.00	300.00	-60.0	240
13	SMPGM (S Methyl Phenyl Glycine Methyl ester)	180.00	180.00	-120.0	60
14	Fludioxonil	300.00	300.00	-240.0	60
15	Methoxy Amine Hydrochloride	0.00	0.0	180.0	180
16	Zinc Pyrithione	0.00	0.00	60.0	60
17	TZOX (TZOXNa.2H2O)	0.00	0.00	120.0	120
18	Tembotrione	0.00	0.00	60.0	60
19	Mesotrione	0.00	0.00	120.0	120
20	TFMAP(3'-Trifluoromethyl acetophenone)	0.00	0.00	120.0	120
21	Diflufenican	0.00	0.00	120.0	120
22	Metamifop	0.00	0.00	120.0	120
23	Azamethiphos	0.00	0.00	60.0	60
24	FHMB (2-fluro-6-hydroxy Methyl Benzoate)	0.00	0.00	60.0	60
25	Imidazoline Dione	0.00	0.00	60.0	60
26	MPDC DME	0.00	0.00	24.0	24
Total		**10580.04**	**10580.04**	**-756**	**9824.04**
27	Formulations	1008.00	1008.0	0.0	1008
28	Biocides (Formulations)	0.00	0.00	3000.0	3000
Total		**0.00**	**1008.0**	**3000.0**	**4008**

LIST OF BIO PRODUCTS

Name of Bio-product	As per EC (Kg/Day)	As per CTO (Kg/Day)	Proposed (+)Addition & (-) Deletion (Kg/Day)	Total (Kg/Day)

29	Biosol Odour Eliminator	-	2050	0	2050
30	Biosol Biosurf	-	2050	0	2050
31	Biosol Biotrack	-	2050	0	2050
32	Biosol Bioclean	-	2050	0	2050
33	Biosol MAC	-	2050	0	2050
34	Biosol Sanibac	-	2050	0	2050
35	Biosol Biotrap	-	2050	0	2050
36	Biosol Biospot	-	2050	0	2050
37	Biosol Biosep STC	-	2050	0	2050
38	Biosol Bioscrub	-	2050	0	2050
Total		-	**20500**	**0**	**20500**

- The proposed change in the product mix in the existing facility is by decreasing the production capacity of 8 existing products, keeping 6 existing products unchanged and adding 12 new technical products and Biocides (Formulations).
- Industry has proposed to decrease the total production capacity of the plant from 10580.04 TPA to 9824.04 TPA by 756 TPA (Technical products), increase in existing formulation products from 1008 TPA to 4008 TPA i.e., by 3000 TPA and Bio-products will be remained same i.e., 20500 Kg/Day.

B. Pollution load Details:

(i) Water & Wastewater Aspect: -

a) Water Aspect: -

	Consumption (CMD)			Loss(-) /gain(+) (CMD)			Effluent (CMD)		
	Existing as per CTO	Proposed reduction after CIPM	Total after CIPM	Existing	Proposed reduction after CIPM	Total after CIPM	Existing	Proposed reduction after CIPM	Total after CIPM
Industrial Cooling, Spraying in mine pits or boiler Feed	280	0	280	-246	0	-246	34	0	34

Processing Where water gets polluted, and pollutants are easily biodegradable	219	-2.6	216.4	-58.1	0.3	-58.4	160.9	-2.9	158
Total - Trade (only)	499	-2.6	496.4	-304.1	0.3	-304.4	194.9	-2.9	192
Gardening	32	0	32	-32	0	-32	0	0	0
Domestic	50	0	50	-5	0	-5	45	0	45
Grand Total	581	-2.6	578.4	-341.1	0.3	-341.4	239.9	-2.9	237
Grand Total as per CTO	581			-			240		
Grand Total as per EC	581			-			240		

b) Wastewater Aspect Before Product Mix

			Trade Effluent Generation									
Sr. No	Particular	Total Flow, CMD	Flow, CMD		COD Load				TDS Load			
			Strong	Weak	Strong		Weak		Strong		Weak	
					Mg/L	Kg/Day	Mg/L	Kg/Day	Mg/L	Kg/Day	Mg/L	Kg/Day
a	Process Activity	118.9	118.9	0	-	-	-	-	-	-	-	-
b	Cooling Tower & Boiler, Washing and other Activity	76	0	76	-	-	-	-	-	-	-	-
Total (Trade Effluent)		**194.9**	**118.9**	**76**	**289127**	**34387.8**	**589**	**44.8**	**83157**	**9890.4**	**1179**	**89.6**
Total Domestic Effluent		**45**	**-**	**45**	**-**	**-**	**600**	**27**	**-**	**-**	**600**	**27**

c) **Wastewater Aspect After Product Mix**

Sr. No	Particular	Total Flow, CMD	Trade Effluent Generation									
			Flow, CMD		COD Load				TDS Load			
			Strong	Weak	Strong		Weak		Strong		Weak	
					Mg/L	Kg/Day	Mg/L	Kg/Day	Mg/L	Kg/Day	Mg/L	Kg/Day
a	Process Activity	116	116	0	-	-	-	-	-	-	-	-
b	Cooling Tower & Boiler, Washing and other Activity	76	0	76	-	-	-	-	-	-	-	-
Total (Trade)		**192.0**	**116**	**76**	**256647**	**29764.3**	**589**	**44.8**	**83519**	**9686.0**	**1179**	**89.6**
Total Domestic Effluent		**45**	**-**	**45**	**-**	**-**	**600**	**27**	**-**	**-**	**600**	**27**

- Water Consumption will reduce by 2.6 CMD.
- Effluent generation will reduce by 3.0 CMD.
- Average COD Load and TDS load will be reduced by 4623.5 Kg/Day and 204.4 Kg/Day respectively.

C. Treatment System: -

i) Trade Effluent:

Industry has segregated trade effluent into strong & weak stream and provided treatment system as below.

Strong Stream: High COD/TDS stream effluent 116.0 CMD is treated in treatment system comprising of Primary, followed by Stripper, Multi effect evaporator and Agitated Thin Flim Dryer (ATFD). The MEE condensate is treated with weak stream in Effluent Treatment Plant.

Weak Stream: Low COD/TDS stream 76 CMD is treated in treatment system comprising of Primary (Collection tank, Neutralization tank, Equalization tank, Flash mixer, Primary Clarifier/Primary Settling Tank), Secondary (Activated sludge process, MBR), Tertiary (Pressure sand filter, Activated carbon filter) and Advanced treatment (Reverse osmosis).

ii) **Sewage effluent**
Domestic effluent 45 CMD is treated separately in STP having capacity 50 CMD.

D. **Air Emission Aspect: -**

Stack No.	Stack Attached to	As Per EC, Fuel Consumption	As Per Valid CTO, Existing Fuel Consumption	Fuel Consumption after Change in Product Mix	APC system	Stack Height
S-1	DG Set 125 KVA	Not Mentioned	HSD 13.5 Kg/Hr	NO Change	Acoustic Enclosure stack	9 m
S-2	DG Set 500 KVA	Not Mentioned	HSD 170 Kg/Hr	NO Change	Acoustic Enclosure stack	11 m
S-3	Process Vent Chlorine	-	-	NO Change	Scrubber	15 m
S-4	Process Vent Bromine	-	-	NO Change	Scrubber	15 m
S-5	Process Vent TMA	-	-	NO Change	Scrubber	15 m
S-6	DG Set 500 KVA	Not Mentioned	HSD 170 Kg/Hr	NO Change	Acoustic Enclosure Stack	11 m
S-7	Thermopack, Boiler (4 TPH), Boiler (IAEC-5 TPH)	Furnace oil	HSD 275 Kg/Hr	NO Change	Multicyclone, Dust Collector and Common Stack	40 m
		Briquette	Briquette 625 Kg/Hr			
		Furnace oil	LSHS 277 Kg/Hr			
S-8	Process Vent NOx	-	-	NO Change	Scrubber	15 m
S-9	Process Vent (HMP-447)	-	-	NO Change	Scrubber	15 m
S-10	Process Vent (General Scrubber)	-	-	NO Change	Scrubber	15

- **There is no change in the process emissions, existing utilities and fuel.**

E. Hazardous Waste Aspect: -

Sr. No	Type of Waste	Cat. No.	As Per EC (TPA)	As Per CTO. (TPA)	After Change in Product Mix Qty. (TPA)	Changes
1.	Process waste sludge/ residues containing acid, toxic metals, organic compounds	29.1	300	300	583.1	Increase
2.	Spent Catalyst (Haz. Waste)	29.5	36	47.856	47.7	Decrease
	Spent catalyst	-	11.856 (As per EC By-product)			
3.	Empty barrels /containers /liners contaminated with hazardous chemicals /Wastes	33.1	6030	6030	6030	No change
4.	HCl (30%)	-	600 (As per EC By-product)	600	120.0	Decrease
5.	Acetone	-	522 (As per EC By-product)	522	299.6	Decrease
6.	Spent Solvents	29.4	30	30	616.9	Increase
7.	Spent Solvents (from stripper)	29.4	-	-	1800*	Newly added generated due to upgradation of pollution control system i.e by adding stripper.
8.	Sodium Bromide Solution	-	7200 (As per EC By-product)	7200	10572	Increase
9.	Potassium bromide solution	-	2064 (As per EC By-	2064	1651.2	Decrease

			product)			
10.	Calcium Sulphate (Gypsum)	-	2550.504 (As per EC By-product)	2550.5	1667.3	Decrease
11.	10% Sulphuric Acid	-	1224 (As per EC By-product)	1224	0	Decrease Now propose to take ETP for neutralization.
12.	35% Sulphuric Acid	-	1437 (As per EC By-product)	1437	0	Decrease Now propose to take ETP for neutralization.
13.	Waste or residues containing oil	5.2	-	6	6	No change
14.	Distillation residues	20.3	99	964 (99 + 865 shifted from evaporator salt as per EC)	613	Decrease
15.	Sludge filters contaminated with oil	3.3	1.8	1.8	1.8	No change
16.	Sludge from treatment of wastewater arising out of cleaning/ disposal of barrels / containers	34.2	-	1.2	1.2	No change
17.	TMA + Methanol	-	600 (As per EC By-product)	600	300.2	Decrease
18.	Used or spent oil	5.1	0.6	5.0	0.6	Increase
19.	Chemical Sludge from wastewater treatment	35.3	67.8	66.6	65.3	Decrease
20.	Evaporation residue (MEE Salts)	37.3	4465	3600 (From this Incinerable	3769.8	Increase (Due to pollution control system upgradation by

				evaporation residue 865 is shifted in Distillation residue)		installing MEE & ATFD)
21.	Filters and filter material	-	6	-	-	Deleted
Total			**Haz. Waste-11036.2 and Byproduct-16209.36 Total = 27245.56 TPA**	**27605.56 (11036.2 Haz. waste + 16209.36 Byproduct + 360 MEE salt after upgradation of ETP =27605.56**	**29396.3 (Haz. Waste 27605.56 + 1800 Solvent from stripper due to upgradation of ETP i.e by installation of stripper)**	The waste category Spent Solvent 1800 TPA and MEE salts 360 TPA are generated and increased due to upgradation of Pollution Control Systems.

- The total Hazardous waste is increasing by 1800 TPA, the increase in Haz. Waste is due to upgradation of pollution control systems i.e Spent Solvent – 1800 TPA due to installation of stripper i.e upgradation of Effluent Treatment Plant.

Technical Committee Deliberations:

The project proposal was discussed based on presentation made and documents- revised NIPL Certificate, NIPL proforma submitted by the proponent. Product wise load calculation in terms of wastewater, Air Emissions & Hazardous Waste generations were discussed. Existing Consent to Operate, Environmental Clearance, No Increase in Pollution Load certificate issued by M/s. Goldfinch Engineering Systems Private Limited., Date. 20.11.2023 and product-mix proforma are taken on the record.

Committee after due deliberations noticed that:

1) The proposed change in the product mix in the existing facility is by decreasing the production capacity of 8 existing products, keeping 6 existing products unchanged and adding 12 new technical products and Biocides (Formulations).
2) Industry has proposed to decrease the total production capacity of the plant from 10580.04 TPA to 9824.04 TPA i.e by 756 TPA (Technical products), increase in existing formulation products from 1008 TPA to 4008 TPA i.e., by 3000 TPA and Bio-products will be remained same i.e., 20500 Kg/Day.

3) After a change in product mix industry has proposed to reduce water Consumption by 2.6 CMD and effluent generation by 3.0 CMD.
4) Average COD Load and TDS load will be reduced by 4623.5 Kg/Day and 204.4 Kg/Day respectively.
5) Industry has upgraded the effluent treatment plant by installing strippers, multi effect evaporator and ATFD.
6) Industry is segregating the strong and weak stream trade effluent and treating separately.
7) There is no change in Air pollution aspect, industry has switched the fuel from Furnace Oil to LSHS.
8) The Board has already shifted the claimed By-products in Hazardous Waste categories.
9) The committee noted that the products newly applied Methanol and Sodium Sulphate are generated from the process as by-products, therefore these cannot be considered as products. The committee suggested PP to shift these claimed By-products to Hazardous Waste and recalculate the pollution load by shifting the claimed By-products to hazardous Waste and submit revised product list and hazardous waste details. Accordingly, the PP has submitted the revised product list by decreasing the quantity of one product and shifting the claimed products Sodium Sulphate in Haz. Waste and Haz. Waste generation with respect to the same.
10) The committee also noted that the increase in Haz. Waste i.e Spent Solvent – 1800 TPA and MEE Salts – 360 TPA in comparison to EC is due to the upgradation of Effluent Treatment Plant by installing stripper, Multiple Effect evaporator and Agitated Thin Film Dryer i.e generated due to upgradation in pollution control system.

Technical Committee Decision:

Technical Committee decided to recommend the case for change in product mix based on revised "No Increase in Pollution Load" as per the provision of EIA notification 2006 with compliance of the following conditions;

1) Industry shall comply with all the conditions stipulated in Environmental Clearance and ensure display/upload of six-monthly compliance monitoring report on their official website.
2) The standards of the parameter Total Particulate Matter shall be stringent to the 50 mg/NM3.
3) Industry should not manufacture any other product for which permission is not granted by the MPCB.
4) Industry shall ensure connectivity of OCEMS data to Board server.
5) The industry shall dispose of the claimed by-products as Hazardous waste as per the provisions of Hazardous & Other Wastes (M & TM) Rules,2016.

Review Agenda item No	**Item No. 4**
Proposal No.	MPCB-CONSENT- 0000174275
Project Details	**M/s. Cipla Ltd., (Unit 3)** Plot No. A-2, MIDC Patalganga, Tal. Khalapur, Dist. Raigad
NIPL Certificate	NIPL certificate issued by M/s. Ultra Tech (Environmental Consultancy & Environmental Laboratory) dated 19.06.2023.

Introduction:

This is an existing industry engaged in manufacturing of pharmaceutical products. This has reference to the online proposal submitted vide No. MPCB-CONSENT-0000174275 along with the copies of documents seeking amendment and renewal of consent to operate under change in product mix under the provision of EIA Notification 2006 and amendments thereof.

Existing Environment Clearances (EC):

1. The consent to operate accorded vide No: - No. Format 1.0/CAC/UAN No. MPCB-CONSENT 0000130621 /CR/ 2209001230 dated 19.09.2022 valid upto 20.02.2024.
2. Industry has submitted copy of consent to operate obtained vide No. BO/ROB/PG-KA/9/R/C-564. Date.22.03.1993.
3. Industry has submitted copy of consent to operate obtained vide No.BO/TB/WPAE/Raigad-43/CC-220, Date.11.05.2204

Project Details:

C. **Products with change in product mix as below:**

Sr. No.	Product Name	Existing Consent Qty. (MT/A)	Proposed Qty. in Product mix (MT/A)	Addition / Reduction (MT/A)
Anti-Histaminic / Anti- Inflammatory Drugs				
1.	Loraketone & its derivative	0.50	0.00	-0.50
2.	Loratidine & its derivative	1.00	1.00	0.00
3.	Desloratidine & its derivative	1.50	8.00	6.50
4.	Fexofenadine HCl& its derivative	1.00	1.00	0.00
5.	Promethazine HCl & its derivative	1.00	1.00	0.00

6.	Celecoxib & its derivative	1.00	1.00	0.00
7.	Etoricoxib & its derivative	1.00	1.00	0.00
8.	Meloxicam & its derivative	1.00	1.00	0.00
9.	Rofecoxib & its derivatives	1.00	1.00	0.00
10.	Piroxicam	1.00	1.00	0.00
11.	Leflunomide & its derivatives	1.00	1.00	0.00
12.	Tramadol HCl & its derivatives	1.00	1.00	0.00
13.	Valdecoxib & its derivatives	0.50	0.00	-0.50
14.	Parecoxib sodium & its derivatives	1.00	1.00	0.00
15.	Divalproex sodium & its derivative	1.00	1.00	0.00
16.	Reloxifene HCl & its derivatives	0.50	0.00	-0.50
17.	Mometosone furate & its derivatives	1.00	1.00	0.00
18.	Pirfenidone & its derivatives	0.00	36.00	36.00
19.	Cetrizine Dihydrochloride	0.00	7.50	7.50
20.	Lumefantrine & its derivatives	1.00	1.00	0.00
Anti-Depressant Drugs				
21.	Fluxetine HCl & its derivatives	1.00	1.00	0.00
22.	Racemic Alcohol and its derivatives	1.00	1.00	0.00
23.	Paroxitine HCl & its derivatives	1.00	1.00	0.00
24.	Venlafaxine HCl & its derivatives	4.50	4.50	0.00
25.	Bupropion HCl & its derivatives	1.00	1.00	0.00
26.	Citalopram HBr & its derivatives	1.00	1.00	0.00
27.	Duloxetine HCl & its derivatives	1.00	1.00	0.00
28.	Reboxetine methane sulfonate & itsderivatives	1.00	1.00	0.00
29.	Sertraline HCl & its derivatives	1.00	1.00	0.00
30.	Torsemide & its derivatives	11.50	15.00	3.50
31.	Escitalopram oxalate & itsderivatives	3.00	3.00	0.00
32.	Vortioxetine Hydrobromide	0.00	3.00	3.00
Hormones				
33.	Mesterolone & its derivatives	0.20	0.00	-0.20
34.	HPC V	0.20	0.00	-0.20
35.	Testosterone Enanthate & itsderivatives	1.00	1.00	0.00
36.	Norethisterone & its derivatives	0.10	0.00	-0.10

37.	Levonorgestryl & its derivatives	1.00	1.00	0.00
38.	Mifepristone & its derivatives	1.00	1.00	0.00
Anti-Bacterial/ Anti-Fungal/ Anti-Viral Drugs				
39.	Sulfamoxole& its derivatives	0.40	0.00	-0.40
40.	Trimethoprim & its derivatives	0.05	0.00	-0.05
41.	Ciprofloxacin & its derivatives	1.00	1.00	0.00
42.	Difloxacin & its derivatives	1.00	1.00	0.00
43.	Enrofloxacin & its derivatives	1.00	1.00	0.00
44.	Gatifloxacin & its derivatives	1.00	1.00	0.00
45.	Linezoid & its derivatives	1.00	1.00	0.00
46.	Levofloxacin hemihydrate & itsderivatives	7.50	7.50	0.00
47.	Norfloxacin & its derivatives	1.00	1.00	0.00
48.	Olfloxacin & its derivatives	1.00	1.00	0.00
49.	Sparfloxacin & its derivatives	1.00	1.00	0.00
50.	Fluconazole & its derivatives	1.00	1.00	0.00
51.	Terbinafine & its derivatives	1.00	1.00	0.00
52.	Aciclovir & its derivatives	1.00	1.00	0.00
53.	Didonosine & its derivatives	0.05	0.00	-0.05
54.	Efaverinz & its derivatives	1.00	1.00	0.00
55.	Lamivudine & its derivatives	1.00	1.00	0.00
56.	Nelfinavir Mesylate	1.00	1.00	0.00
57.	Bictegravir	0.00	4.00	4.00
58.	Griseofulvin	0.00	4.50	4.50
59.	Praziquantel & its derivatives	30.00	35.00	5.00
Cardiac Drugs/ Erectile Dysfunction				
60.	Xantinol Niconate & its derivatives	6.00	0.00	-6.00
61.	Atorvastin Calcium & its derivatives	2.00	2.00	0.00
62.	Fluvastatin Sodium	5.00	0.00	-5.00
63.	Oxyfedrine HCl & its derivatives	2.00	2.00	0.00
64.	Pitavastatin & its derivatives	2.00	2.00	0.00
65.	Pitavastatin sodium & its derivatives	2.00	2.00	0.00
66.	Simvastatin & its derivatives	2.00	2.00	0.00
67.	Sildenafil Citrate & its derivatives	2.00	2.00	0.00
68.	Apomorphine & its derivatives	2.00	2.00	0.00
Laxative / Anti-Ulcerative Drugs				
69.	Bisacodyl & its derivatives	17.00	6.00	-11.00

70.	Normacol & its derivatives	30.00	0.00	-30.00
71.	Famotidine & its derivatives	16.00	6.00	-10.00
72.	Lansoprazole & its derivatives	16.00	6.00	-10.00
73.	Omerazole, Omerazole Magnesium /Sodium & its derivatives	16.00	6.00	-10.00
74.	Pantaprazole & its derivatives	16.00	6.00	-10.00
75.	Rabeprazole & its derivatives	16.00	6.00	-10.00
76.	L-Glutamine	0.00	7.00	7.00
Anti-Hypertensive Drugs / Anti-Convulsant				
77.	Chlonidine HCl & its derivatives	1.00	0.00	-1.00
78.	Dipyridamole & its derivatives	1.00	0.00	-1.00
79.	Verpamil HCl & its derivatives	1.00	1.00	0.00
80.	Amlodipine Besylate/ HCl & itsderivatives	1.00	1.00	0.00
81.	Atenolol & its derivatives	1.00	1.00	0.00
82.	Benzapril HCl & its derivatives	1.00	1.00	0.00
83.	Candesartan celextil & its derivatives	1.00	1.00	0.00
84.	Carvedilol & its derivatives	1.00	1.00	0.00
85.	Diltiazem HCl & its derivatives	1.00	1.00	0.00
86.	Enalapril Maleate & its derivatives	1.00	1.00	0.00
87.	Metolazone & its derivatives	1.00	1.00	0.00
88.	Ramipril & its derivatives	1.00	1.00	0.00
89.	S-Amlodipine Besylate & itsderivatives	1.00	1.00	0.00
90.	Terazosin HCl $2H_2O$ & its derivatives	1.00	1.00	0.00
91.	Bosantan Monohydrate	0.00	10.00	10.00
92.	Telmisartan & its derivatives	10.00	10.00	0.00
Anti-Asthmatic Drugs				
93.	Theophylline & its derivatives	10.00	2.00	-8.00
94.	Etophylline & its derivatives	10.00	2.00	-8.00
95.	Diprophylline & its derivatives	10.00	2.00	-8.00
96.	Montelukast Sodium & its derivatives	10.00	2.00	-8.00
97.	Salbutamol & its derivatives	32.00	31.50	-0.50
98.	Salmeterol Xinafoate & it Derivatives	0.00	7.00	7.00
99.	Levo Salbutamol Sulphate & itsderivatives	0.00	18.00	18.00

100.	Levalbuterol Tartrate & Itsderivatives	0.00	5.00	5.00
101.	Levalbuterol Hydrochloride & Its derivatives	0.00	2.00	2.00
Anti-Epileptic Drugs				
102.	Carbamazepine & its derivatives	16.00	16.00	0.00
Anti-Diabetic Drugs				
103.	Sulphonamide	4.00	2.00	-2.00
104.	Glibenclamide	4.00	0.00	-4.00
105.	Glyburide & its derivatives	4.00	2.00	-2.00
106.	Glimperide & its derivatives	4.00	2.00	-2.00
107.	Pioglitazone HCl & its derivatives	4.00	2.00	-2.00
108.	Repaglenide & its derivatives	4.00	2.00	-2.00
Anti-Spasmodic Drugs				
109.	Mebeverine HCl & its derivatives	6.00	6.00	0.00
Anti-Cancer/ Anti-Neoplastic Drugs				
110.	Fosfestrol & its derivatives	0.10	0.00	-0.10
111.	Cyclophosphamide & its derivatives	0.10	0.00	-0.10
112.	Exemestane & its derivatives	0.80	1.00	0.20
Benign Prostatic Hypertrophy				
113.	Tamsulosin Hydrochloride	0.00	3.00	3.00
Excipient				
114.	Salcaprozate Sodium	0.00	5.00	5.00
Hypophosphatemia				
115.	Potassium Phosphate Monobasic	0.00	5.00	5.00
116.	Potassium Phosphate Dibasic	0.00	5.00	5.00
Acute Influenza Treatment				
117.	Baloxavir Marboxil	0.00	5.00	5.00
CNS Therapy				
118.	Donepezil Form I	0.00	5.00	5.00
Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) Potentiators				
119.	Ivacaftor premix	0.00	2.00	2.00
Kinase Inhibitor				
120.	Nintedanib Esylate Premix	0.00	2.00	2.00
R & D				
121.	R & D Product	0.00	2.00	2.00
	TOTAL PRODUCTION CAPACITY	**394.50**	**394.50**	-

- The industry is engaged in the manufacturing of 101 main products under 12 categories, with a total quantity of 394.5MTA.
- The industry proposes to manufacture 121 main products under 21 categories, with a total quantity of 394.5MTA. The quantity of 16 products is reduced by 103.5MTA and 17 products are removed to the tune of 49.7MTA; the total quantity reduced/removed shall be 153.2MTA, the quantity of 4 products is increased by 15.2MTA and 20 products are added at 138MTA.Thereby, No Change in the overall production capacity as granted in the earlier consent.

D. Pollution load Details:

(ii) Water & Wastewater Aspect: -

Sr. No.	Purpose	Water Consumption in CMD		Disposal Details	Remarks
		Pre-Product Mix	Post Product Mix		
1	Domestic Purposes	50	50	Recycle	Sewage generated is treated in ETP and Reused
2	Processing whereby water gets polluted & pollutants are easily biodegradable	150	138.5	Recycle	Effluent generated is treated in ETP and Reuse for Process.
3	Processing whereby water gets polluted & pollutants are not easily biodegradable	--	10	Recycle	Effluent generated is treated in ETP and Reuse for Process
4	Industrial Cooling, spraying in mine pits or boiler feed	175	175	Recycle	Effluent generated is treated in ETP and Reuse for Process

5	Others such as gardening, agriculture etc	46 (for Gardening)	46 (for Gardening)	NA	NA

Thod Load Scenario Pre and Post Product Mix

ThOD CALCULATIONS	LOAD	Effluent to ETP without sewage	Utility	Weak Stream	Strong Stream to MEE	Sewage to ETP	TOTALETP
PRE/ EXISTING	Volume	120.00	20.00	100.00	10.00	20.00	140.0
	Concentrationmg/l	7,386.58	400.00	8,783.77	96,621.45	500.00	6,402.85
	Kg of ThOD	886.46	8.00	878.46	966.21	10.00	896.46
POST PM	Volume	118.20	20.00	98.20	9.80	20.00	138.20
	Concentrationmg/l	7,324.30	400.00	8,261.31	84,597.95	500.00	6,336.77
	Kg of ThOD	865.80	8.00	857.80	951.08	10.00	875.80
POST PMFINAL CHANGE	**REDUCTIONS**						
	VOLUME	1.80					
	ThOD Reduction Kg	20.66	-	20.66	-	-	
	Concentration reduced mg/l			**-49.36**	-	-	**-66.09**

Comparative Analysis of TDS Load Scenario Pre and Post Product Mix

TDS LOAD CALCULATIONS		Effluent to ETP without sewage	Utility	Weak Stream	Strong Stream to MEE	Sewage to ETP	TOTALETP
PRE/ EXISTING	TDS Concentration	8,332.68	1,500.00	1,500.00	59,408.58	600.00	
	TDS Kg	1,000.0	30.00	150.00	594.09	12.00	192.00
	UF Inlet			133.00			
	RO Inlet			119.70			
	RO Concentration			7,500.70			
	TDS Load to MEE						786.10
POSTPM	TDS Concentration	8,207.68	1,500.00	1,500.0	58,808.60	600.00	
	TDS Kg	985.00	30.00	147.30	588.09	12.00	189.30
	UF Volume			131.30			
	RO Volume			118.20			
	RO Concentration			7,365.70			
	TDS Load to MEE						783.70
POST PM	Reductions in TDS for ETP + Sewage without strong stream (kg/day)						-2.70
	Reduction in TDS in strong stream (kg/day)						-2.40
	Total reduction in TDS (kg/day)						-5.10

- Total water consumption will reduce by 1.5 CMD.
- Total reduction in TDS is 5.10 Kg/Day.

C. Treatment System:-

i. **Trade Effluent:** - Effluent Treatment Plant (ETP) of designed capacity of 150.00 CMD consisting of Primary (Collection tank, Neutralization tank, Equalization tank, Flash mixer, Primary Clarifier/Primary Settling Tank), Secondary (Activated sludge process), Tertiary (Pressure sand filter, Activated carbon filter), Advanced treatment (Reverse osmosis, Multi effective evaporator) is provided to achieve Zero Liquid Discharge.

ii. **Sewage effluent:** - Primary treated sewage connected to Effluent Treatment Plant for further treatment & disposal.

D. Air Emission Aspect: -

Stack No.	Source	APC System provided/ proposed	Stack Height (in m)	Type of Fuel	Sulphur Content (in %)	Pollutant
S-1	Boiler	Stack	32.00	PNG 120 SCM/Hr	-	SO_2 and TPM
				HSD 100 Ltr/Hr	1	
S-1 Combined	Boiler	Stack	32.00	PNG 120 SCM/Hr	-	SO_2 and TPM
				HSD 100 Ltr/Hr	1	
S-2	Boiler	Stack	32.00	PNG 175 SCM/Hr	-	SO_2 and TPM
				HSD 130 Ltr/Hr	1	
S-3	Scrubber - 401	Scrubber System	3.20	-	-	Acid Mist, Ammonia and Hydrogen Bromide
S-4	Scrubber - 402	Scrubber System	3.70	-	-	Acid Mist, Ammonia and Hydrogen Bromide

S-5	Scrubber - 403	Scrubber System	3.70	-	-	Acid Mist, Ammonia and Hydrogen Bromide
S-6	Scrubber - 404	Scrubber System	3.20	-	-	Acid Mist, Ammonia and Hydrogen Bromide
S-7	Scrubber - 405	Scrubber System	3.70	-	-	Acid Mist, Ammonia and Hydrogen
S-8	DG Set	Acoustic Enclosure	32.00	HSD 210 Ltr/Hr	1	SO_2 and TPM
S-9	DG Set	Acoustic Enclosure	32.00	HSD 35 Ltr/Hr	1	SO_2 and TPM
S-10	Scrubber - 406	Scrubber System	3.00	-	-	Acid Mist, Ammonia and Hydrogen Bromide
S-11	Scrubber - 407	Scrubber System	3.00	-	-	Acid Mist, Ammonia and Hydrogen Bromide
S-12	Scrubber-PCRD/SC/001	Scrubber System	3.30	-	-	Acid Mist, Ammonia and Hydrogen Bromide
S-13	Scrubber-PCRD/SC/002	Scrubber System	3.30	-	-	Acid Mist, Ammonia and Hydrogen Bromide
S-14	Scrubber-PSCR-101	Scrubber System	3.30	-	-	Acid Mist, Ammonia and Hydrogen Bromide
S-15	Scrubber-PSCR-102	Scrubber System	3.80	-	-	Acid Mist, Ammonia and Hydrogen Bromide

S-16	Scrubber-PFD/E-008	Scrubber System	1.50	-	-	Acid Mist, Ammonia and Hydrogen Bromide
S-17	Scrubber-PFD/E-024	Scrubber System	1.50	-	-	Acid Mist, Ammonia and Hydrogen Bromide
S-18	Scrubber-PFD/E-073	Scrubber System	1.50	-	-	Acid Mist, Ammonia and Hydrogen Bromide
S-19	Scrubber- Lab-01	Scrubber System	3.30	-	-	Acid Mist, Ammonia and Hydrogen Bromide

- Industry has removed one DG set of 250 KVA and has added eight scrubbers for lab exhaust(R&D) as part of internal standards.

E. Hazardous Waste Aspect: -

Category	HW Type	Quantity	UOM	Method of Treatment	Method of Disposal
5.1	Used or spent oil	3.50	MT/M	Recycle	Sale to authorized party
5.2	Wastes or residue containing oil	0.50	MT/M	Landfill/ Incineration	CHWTSDF/ Co-processing/ Pre-processing
28.1	Process residue and wastes	16.00	MT/M	Co-processing/ Pre-processing /Landfill/ Incineration	CHWTSDF/ Co-processing/ Pre-processing
28.2	Spent Catalyst	2.00	MT/M	Landfill/ Incineration	CHWTSDF/ Co-processing/ Pre-processing

28.3	Spent carbon	1.50	MT/M	Landfill/ Incineration	CHWTSDF/ Co-processing/ Pre-processing
28.4	Off Specification products	19.00	MT/M	Landfill/ Incineration	CHWTSDF/ Co-processing/ Pre-processing
28.5	Date Expired product	40.00	MT/M	Landfill/ Incineration	CHWTSDF/ Co-processing/ Pre-processing
28.6	Spent organic solvents	126.00	MT/M	Recycle/ Incineration	Sale to authorized Party/Co-processing/ Pre- processing/ CHWTSDF
33.1	Empty barrels/container/liners	30.00	Nos/ M	Recycle/ Incineration	Sale to authorized Party/Co-processing/ Pre- processing/ CHWTSDF
33.2	Contaminated cotton rags or other cleaning materials	0.20	MT/M	Landfill/ Incineration	CHWTSDF/ Co-processing/ Pre-processing
35.1	Exhaust Air or Gas cleaning residue	0.50	MT/M	Landfill/ Incineration	CHWTSDF/ Co-processing/ Pre-processing
35.3	Chemical sludge fromwaste water treatment	10.00	MT/M	Incineration	CHWTSDF/ Co-processing/ Pre-processing
37.3	Concentration or evaporation residues	2.90	MT/M	Landfill/ Incineration	CHWTSDF/ Co-processing/ Pre- processing

- Post product mix, quantity of Concentration or evaporation residues will reduce from 3.00 MT/M to 2.90 MT/M i.e., reduction of 0.10 MT/M. Also Spent organic solvents will reduce from 129.00 MT/M to 126.00 MT/M i.e., reduction of 3.00 MT/M.

Technical Committee Deliberations:

The project proposal was discussed based on presentation made and documents- revised NIPL Certificate, NIPL proforma submitted by the proponent. Product wise load calculation in terms of wastewater, Air Emissions & Hazardous Waste generations were discussed. Existing Consent to Operate, No Increase in Pollution Load certificate issued by M/s. Ultra Tech dtd. 19.06.2023 and product-mix proforma are taken on the record.

Committee after due deliberations noticed that:

After due deliberations, the committee noted that though the technical committee is having mandate to compare / determine the "Pollution Load" on the basis of prior Environmental Clearance. In absence of the Environmental Clerance and on the request of project proponent, the committee has taken the record of pollution load comparison submitted by the project proponent based on last consent to operate certificate issued by the Board vide No. Format 1.0/CAC/UAN No. MPCB-CONSENT 0000130621 /CR/ 2209001230 dated 19.09.2022 and came to conclusion that, there is "No Increase in Pollution Load".

However, this product mix facility is available to those units which have obtained prior environmental clearance under EIA Notification, 1994 and EIA Notification, 2006.

Technical Committee Decision:

Technical Committee noted that, PP does not have the Environmental Clearance (EC) for the existing consented products being the unit is established prior to EIA Notification 1994 and 2006. Now PP has proposed to manufacture additional products by replacing/ reducing some of the existing product/ production quantity under Change in Product-Mix. However, as per EIA Notification, 2006 and subsequent amendments thereto, it is understood that Product-Mix benefit can be availed by the units who were earlier having Environmental Clearance (EC).

After due deliberations and discussions Technical Committee decided that, it will be appropriate to seek guidance from MoEF & CC, regarding this product – mix application as well other such units, who were then not required to obtain EC/ exempted as having old establishment prior to EC applicability, if NIPL is satisfied and in such cases the pollution load can be compared with valid consent to operate (CTO) for getting exemption from going through entire EIA process. Technical Committee decided to send a letter to the Joint Secretary, MoEF&CC for seeking the guidance in the matter. Technical Committee decided to defer the case till receipt of guidance from MoEF & CC. with liberty that PP may pursue in this regard with MoEF & CC.

Agenda Item No.	Item No. 5
Proposal No.	MPCB-CONSENT-0000176458
Project Details	**M/s. Balaji Amines Limited, Unit- I,** Gat No. 197, Tamalwadi, Tal.: Tuljapur, Dist.: Dharashiv.
NIPL Certificate	NIPL Certificate issued by M/s. Equinox Environments (India) Pvt. Ltd., Dated. 28.06.2023

Introduction:

This is an existing industry engaged in manufacturing of Aliphatic Amines and its derivative manufactures. This has reference to the online proposal submitted vide No. MPCB-CONSENT-0000176458 along with the copies of documents seeking amendment and renewal of consent to operate under change in product mix under the provision of EIA Notification 2006 and amendments thereof.

Existing Environment Clearances (EC):

4. Environmental Clearance is accorded for expansion ref no. F. No. J-11011/296/2011-IA II (I), Date.15.07.2015.
5. Previous obtained amendment in consent to operate under change in product-mix on 28.08.2020.
6. The consent to operate accorded vide No: - Consent no.- Format1.0/CC/UAN No. MPCBCONSENT-0000129327/CR/2211001973, Date: 24/11/2022 valid upto 29.02.2024.

Project Details:

A. Products with change in product mix as below:

No.	Product	Existing Capacity as per EC (MT/M)	Existing Capacity as per CTO (MT/M)	After proposed NIPL Capacity (MT/M)	Remark
1	Mono Methyl Amines (MMA)	600	600	600	--
2	Di Methyl Amine (DMA)	1448	1448	1448	--
3	Tri Methyl Amine (TMA)	304	304	304	--
4	Mono Ethyl Amine (MEA)	83.2	83.2	83.2	--

5	Di Ethyl Amine (DEA)	173.6	173.6	173.6	--
6	Tri Ethyl Amine (TEA)	396	396	396	--
7	Di Methyl Amine Hydrohloride (DMAHCL)	1260	1260	630	Decrease by 630 MT/M
8	Di Methyl Acetamide (DMAC) (125 to 375 MT/M tho' Previous NIPL)	125	375	625	Increase by 250 MT/M
9	Choline Chloride (CC)	150	150	750	Increase by 600 MT/M
10	Di Methyl Amino Ethanol (DMAE)	305	305	305	--
11	Di Ethyl Amino Ethanol (DEAE)	316	316	316	
12	Mono Methyl Urea(MMU)	150	0	0	Discontinued under previous NIPL
13	Tri Ethyl Benzyl Ammonium Chloride (TEBAC)	100	100	100	--
14	Dimethyl Urea (DMU)	300	300	300	--
15	Methyl Diethanol Amine(MDEA)	125	0	0	Discontinued under previous NIPL
16	Morpholine	330	330	330	--
17	Absolute Alcohol(AA)	3000KL/M(2367MT)	2000 KL/M (1578)	2000 KL/M (1578)	Reduced under previous NIPL
18	Choline Chloride 50% on Corn cobs (CC 50%)	500	500	500	--
19	Choline Chloride 60% on Corn cobs (CC 60%)	500	500	500	--
20	N-Methyl -2- Pyrrolidone (NMP)	804	304	304	Reduced under previous NIPL
21	Gama Butyro Lactone	1008	533	533	Reduced under previous NIPL
22	2-Pyrrolidone / N –Ethyl -2-Pyrrolidone(NEP)	504	504	252	Decrease by 252 MT/M

23	Mono Ethyl Amine Hydrochloride (MEAHCL)/ Di Ethyl Amine Hydrochloride (DEAHCL) / Tri Ethyl Amine Hydrochloride (TEAHCL)	72	72	72	--
24	Tri Methyl Amine Hydrochloride (TMAHCL)/ Mono Methyl Amine Hydrochloride (MMAHCL)	72	72	72	--
25	Hydrogen	49.32	49.32	49.2	--
	Product total	**12,042.12**	**10,253**	**10,221**	
27	Electricity Generation		2.5 MW	2.5 MW	--

- Industry has proposed to enhance the production quantity of existing three products and reduction in mfg. quantity of one product.
- Industry has proposed change in product mix by total reduction in manufacturing quantity by 1821.12 MT/M as against EC & by 32 MT/M as against consent to operate.
- Industry has Proposed enhancement for the product at sr. no. 9 that the product capacity will be carried out in the existing manufacturing set-up at sr. no. 7 by managing 15 days of production each in a month and industry reportedly has adequate equipment's for manufacturing of both the products under Product- Mix.

B. Pollution load Details:

(iii) Water & Wastewater Aspect: -

d) Water Aspect: -

Sr. No.	Purpose		Water Consumption		Remarks
		Existing as per EC (KL/Day)	Existing as per CTO (KL/Day)	After Change in Product-Mix (KL/Day)	
1	Domestic	#24	#24	#24	-

Sr. No.	Purpose	Water Consumption			Remarks
		Existing as per EC (KL/Day)	Existing as per CTO (KL/Day)	After Change in Product-Mix (KL/Day)	
2	**Industrial**				
	Process	48	40	40	-
	Boiler Feed	**278**	**198**	**195**	-
	DM Regeneration Water	35	25	20	DM plant regeneration frequency has been reduced by installation of polisher RO unit at upstream of DM.
	Cooling	917 (590+ 327)	700 (479.5+220.5)	700 (485+215)	-
	Lab & Washing	5	5	5	-
	Industrial Total	**1283** (956 + 327)	**968** (747.5 + 220.5)	**960** (745 + 215)	-
3	**Gardening**	**36** (20 + 16)	**36** (20 + 16)	**36** (20 + 16)	-
Total (1+2+3)		**1343** (1000 + 327+ 16) **(25.5 % Recycle)**	**1028** (791.5 + 220.5+ 16) **(23 % Recycle)**	**1020** 789 + 215 + 16) **23 % Recycle)**	**Against EC:** • Total Reduction in Water Consumption : 323 CMD • Fresh water Reduction: 211 CMD **Against CTO:** • Total Reduction in Water Consumption : 8 CMD • Fresh water Reduction: 2.5 CMD

e) Wastewater Aspect after Product Mix:-

No.	Purpose	Existing Effluent Generation as per EC (KL/DAY)	Existing Effluent Generation as per CTO (KL/DAY)	Effluent Generation after change in product mix (KL/DAY)
1	Domestic	18	18	18
2	Industrial			
	Process	136.98	124	115
	Boiler Blow down	28	26	26
	DM Backwash	35	25	20
	Cooling Blow down & RO Reject	120	60	60
	Washing	8	4	4
	Industrial Total	327.98	239	225

- Total Reduction in Water Consumption with respect to EC is 323 CMD and Fresh water is 211 CMD
- Total Reduction in Water Consumption with respect to consent to operate is 8 CMD and Fresh water Reduction is 2.5 CMD.
- Reduction in Effluent by 102.98 CMD as against EC and by 14 CMD as against CTO.

C. **Treatment System:-**

Trade Effluent: - Industry has segregated the strong stream and weak stream and provided the following treatment system;

Stream-I: (High COD & Low TDS): Process Effluents from different Plants; Treatment in Bio- ETP & RO. RO permeate is used for Cooling Tower Make-up.

Stream II: (Low COD & High TDS) - Cooling blow down, Boiler blow down, DM back wash treated in ETP (Neutralization, Settling & RO, MEE, ATFD). Reused/Recycled for cooling tower make up to achieve Zero Liquid Discharge.

iii. **Sewage effluent: -** The domestic effluent is treated in Sewage Treatment Plant of capacity 30 CMD.

D. Air Emission pollution load Aspect: -

No.	Stack attached to	Fuel	Existing Fuel Consumption	Stack Height in meter	APC System
1.	Boiler - 14 TPH	Imported Coal	2792 Kg / hr	Common Stack 38	MDC & Fabric Bag Filter
2.	Boiler - 14 TPH	Imported Coal	2792 Kg / hr		
3.	CPP Boiler- 35 TPH	Imported Coal	7700 Kg/hr	49	ESP
4.	TFH - 6 lac Kcal/Hr.	Imported Coal	125 Kg/Hr	30	MDC & Fabric Bag Filter
5.	TFH - 6 lac Kcal/Hr.	Imported Coal	250 Kg/Hr	30	MDC & Fabric Bag Filter
6.	TFH - 6 lac Kcal/Hr	H_2 Gas	68.5 Kg/Hr	10	Stack
7.	TFH - 6 lac Kcal/Hr.	H_2 Gas	68.5 Kg/Hr	30	Stack
8.	TFH - 6 lac Kcal/Hr.	Diesel	129 Kg/Hr	12	Stack (propose to discontinued after NIPL
9.	DG Set - 300 KVA	Diesel	51.6 Kg/Hr.	3.5	Acoustic Enclosure/Stack
10.	DG Set - 600 KVA	Diesel	86 Kg/Hr.	5	Acoustic Enclosure/Stack
11.	DG Set - 750 KVA	Diesel	103.2 Kg/Hr.	5.5	Acoustic Enclosure/Stack

Process Emissions Aspect:-

Sr. No.	Scrubber Attached to Process Plant	Process Emissions	Height of Scrubber (In Mt)	Packing Material used in Scrubber	Scrubbing Media used in Scrubber
1.	Plant – 1 (NMP)	Mono Methyl Amine (MMA)	10	SS Poll Ring	Water
2.	Plant – 2 Ethyl Amines	Ammonia (NH_3), Mono Ethyl Amine (MEA)	10	SS Poll Rings	Water
3.	Plant – 4 DMAHCL	Di Methyl Amine (DMA), HCL	17	PP Rings	Water
4.	Plant – 5 DMU	Ammonia (NH_3), Mono Methyl Amine (MMA)	10	SS Poll Rings	Water
5.	Plant – 8 Methyl Amines	Ammonia (NH_3), Amines	10	SS Poll Rings	Methanol
6.	Plant – 10 Morpholine	Ammonia (NH_3)	10	SS Poll Rings	Di-ethylene glycol (DEG)
7	Ethyl Amines (Loading & Unloading Area)	VOC	10	SS Poll Rings	Water
8	Methyl Amines (Loading & Unloading Area)	VOC	10	SS Poll Rings	Water

- After Product –Mix, no any change in the fuel pattern. Only one thermic fluid heater of TFH - 6 lac Kcal/Hr which is operated on diesel @ 129 Kg/Hr will be discontinued.
- Presently, 8 nos. of scrubbers are provided as APC for process emission. There will be no change in process emission.

E. Hazardous Waste Aspect: -

Sr. No.	Type of Waste	Category (As per Schedule)	Existing as per CTO	After Change in Product mix	Source of Generation	Mode of Treatment & Disposal	Remark
1.	Spent Carbon / Water Scrubber	36.2	0.9 MT/A	0.9 MT/A	Process	Authorized Recyclers/CHWTSDF	
2.	Spent Catalyst (Nickel) from EA Plant/ Spent Catalyst (Alumina) from MA Plant/ Spent Catalyst (Copper) from GBL Plant	28.2	7.8 MT/A	7.8 MT/A	Process	Authorized Recyclers/CHWTSDF	--
3.	Chemical sludge from waste water treatment	35.3	250 Kg/Day	250 Kg/Day	ETP	CHWTSDF	--
4.	Chemical-containing residue arising from Decontamination.	34.1	24 Kg/Day	24 Kg/Day	WTP/ Process/ ETP	CHWTSDF	--
5.	Distillation residues	20.3	280 Kg/Day	280 Kg/Day	Process	CHWTSDF	--
6.	MEE Salts	37.3	100 Kg/Day	100 Kg/Day	ETP	CHWTSDF	--
7.	Used or spent oil	5.1	200 ltr/A	200 ltr/A	Process	Authorized Recyclers/ CHWTSDF	--
8.	Claimed By-product Higher Amines	28.1	**170.28 MT/M**	**164.88 MT/M**	Process	Authorized Recyclers/ CHWTSDF	Due to reduction in production of NEP/2-P the quantities of Higher

							amines will be reduced.
Solid Waste:							
1.	Solid Organic Waste (Corn Cob)	--	20 MT/Day	20 MT/Day	Process	Sale to farmers-composting / Use as Manure	
2.	Boiler Ash		**35 MT/Day**	**30 MT/Day**	Fuel Burning activity	Sale to Brick Manufacturer	• Overall ash quantity will get reduced after Change in Product- Mix implementation, since the fuel quantity reduced. •

- Ash quantity reduced by 5 MT/Day as against the permission granted in CTO
- The claimed By-product which is shifted in Hazardous waste is reduced due to reduction in production of NEP/2-P the quantities.

Technical Committee Deliberations:

The project proposal was discussed based on presentation made and documents- revised NIPL Certificate, NIPL proforma submitted by the proponent. Product wise load calculation in terms of wastewater, Air Emissions & Hazardous Waste generations were discussed. Existing Consent to Operate, Environmental Clearance, No Increase in Pollution Load certificate issued by M/s. Equinox Environments (India) Pvt. Ltd., Dated. 28.06.2023 and product-mix proforma are taken on the record.

Committee after due deliberations noticed that:

1) Industry has proposed to enhance the production quantity of existing three products and reduction in mfg. quantity of one product.

2) Industry has proposed a change in product mix by total reduction in manufacturing quantity by 1821.12 MT/M as against EC & by 32 MT/M as against consent to operate.
3) Industry has Proposed enhancement at sr. no. 9 in the product capacity, which will be carried out in the existing manufacturing set-up of product at sr. no. 7 by managing 15 days of production each in a month and industry reportedly has adequate equipment's for manufacturing of both the products under Product- Mix.
4) Industry has proposed enhancement in the product /production capacity will be carried out in the existing manufacturing set-up and industry has adequate equipment's for manufacturing of increase capacity of products under Product- Mix.
5) Industry has proposed the total reduction in water Consumption with respect to EC by 323 CMD and Fresh water by 211 CMD and total reduction in water Consumption with respect to consent to operate will be 8 CMD and Fresh water Reduction will be 2.5 CMD.
6) Reduction in Effluent will be 102.98 CMD as against EC and by 14 CMD as against CTO.
7) The unit is Zero Liquid Discharge unit.
8) Industry has not proposed any change in the fuel pattern. Only one thermic fluid heater of TFH - 6 lac Kcal/Hr which is operated on diesel @ 129 Kg/Hr is proposed to dismantle.
9) Presently, 8 nos. of scrubbers are provided as air pollution control systems to control process emission. There will be no change in process emission.
10) Ash quantity reduced by 5 MT/Day as against the permission granted in CTO
11) The claimed By-product Higher Amines which is shifted in Hazardous waste is reduced due to reduction in production of NEP/2-P the quantities.

Technical Committee Decision:

Technical Committee decided to recommend the case for change in product mix based on revised "No Increase in Pollution Load" as per the provision of EIA notification 2006 with compliance of the following conditions;

1) Industry shall comply with all the conditions stipulated in Environmental Clearance and ensure display/upload of six-monthly compliance monitoring report on their official website.
2) Industry should not manufacture any other product for which permission is not granted by the MPCB.
3) Industry shall ensure connectivity of OCEMS data to Board server.
4) The industry shall dispose of the claimed by-products as Hazardous waste as per the provisions of Hazardous & Other Wastes (M & TM) Rules,2016.

Agenda Item No.	Item No. 6
Proposal No.	MPCB-CONSENT-0000178467
Project Details	**M/s. Balaji Formalin Pvt. Ltd.,** Plot No. N-32/1, Additional Patalganga MIDC, Tal. Panvel, Dist. Raigad
NIPL Certificate	NIPL Certificate issued by M/s. Shrkrishna Environment Consultants Pvt. Ltd.

Introduction:

This has reference to the online proposal submitted vide No. MPCB-CONSENT-0000178467 along with the copies of documents seeking Amendment in consent under change in product mix under the provisions of EIA Notification 2006 amended on 23/11/2016 & amended on 02/3/2021.

Industry has sent mail on 27.11.2023 and reported that due to some unavoidable circumstances they are unable to attend the meeting scheduled on 28.11.2023 and requested to postpone their proposal in upcoming meeting.

In view of above, as per the request of the project proponent, the Technical Committee decided to consider this proposal in next meeting.

Agenda Item No.	**Item No. 7**
Proposal No.	**MPCB-CONSENT-0000180403**
Project Details	**M/s. Shree Datta Shetkari Sahkari Sakhar Karkhana Limited., A/p. Datta Nagar, Shirol, Tal Shirol, Dist. Kolhapur.**
NIPL Certificate	NIPL Certificate issued By Mantras Green Resources Ltd., Satpur, MIDC, Nashik, Date. 02.11.2023.

Introduction:

This is an existing Industry having existing sugar unit of capacity of 12000 TCD and Distillery unit of capacity 90 KLPD. This has reference to the online proposal submitted vide No. MPCB-CONSENT-0000180403 along with the copies of documents seeking consent to establish and operate for enhancement of alcohol production to 135 KLPD in the existing 90 KLPD molasses-based distillery unit by changing raw material from C- Heavy molasses to B-heavy molasses and cane juice/syrup under No Increase in pollution load under the provisions of EIA Notification, 2006 amended on 23/11/2016 & on 02/3/2021.

Existing Clearances:

1. The industry has obtained the Environmental Clearance SEIAA – EC-0000002257 Date. 01.06.2020. For expansion from 60 KLPD to 90 KLPD and also for expansion of Sugar & Co-generation.
2. The industry has obtained Consent vide. Format CAC/ UAN No. MPCB-CONSENT - 0000163712/CO-2308000521 dated **08.08.2023** Valid up to 31.08.2024 for 90 KLPD Molasses base distillery.

Project Details:

The industry is presently having distillery unit for manufacture of alcohol (RS/Ethanol) by using C heavy Molasses. Accordingly, industry has obtained combined Consent to Operate for **90** KLPD Molasses. Industry has proposed additional 50 % RS / Ethanol production of the existing 'C' Molasses based 90 KLPD by change in type and quantity of raw materials (B Heavy Molasses & Cane Juice/syrup).

A. **Product Details:**

Sr. No.	Product	At present From C-Heavy Molasses	After 50% Increase in Ethanol Production from B-Heavy Molasses or Canne Juice/Syrup
	Products		
1	Rectified Spirit OR	2700 KL/M (90 KLPD)	4050 KL/M (135 KLPD)
2	Ethanol	2700 KL/M (90 KLPD)	4050 KL/M (135 KLPD)
3	Co-generation Power	2.5 MW	2.5 MW
	By-product		
1	Fusel Oil	5.4 KL/M	8.1 KL/M
2	Incineration Boiler Ash	41 MT/D	≤ 41 MT/D
3	CO2	68.87 MT/D	103.30 MT/D
4	Compost	7800 MT/M	≤ 7800 MT/M

- **After a change in product mix, the total ethanol production will be 135 KLPD.**
- **CO_2 Gas will be sent to Bottling Plant, PP has submitted undertaking that they will install CO2 bottling plant in one year.**

B. **Pollution load Details:**

(i) **Process Water Consumption Aspect:**

Propose	Existing Water Consumption inMT/D when C Molasses used	Water Consumption Break up after change in product mix in MT/D		Proposed Additional Water Consumption
		when B Heavy Molasses used	when Sugarcane juice/syrup used	
Industrial				
Process + APCM	810	769	562	Nil

Boiler	30	30	30	Nil
Cooling	120	120	120	Nil
Washing	15	15	15	Nil
Gardening	120	120	120	Nil
Other	0	0	0	Nil
Total Industrial	**1095**	**1054**	**847**	Nil
Domestic	6	6	6	Nil

Wastewater Aspect:-

Sr. No.	Propose	Wastewater Generation (MT)						Remarks
		C Molasses		B heavy molasses		Sugarcane juice/ syrup		
1	Domestic	4		4		4		Treated in existing sugar STP and disposed on land for gardening
Industrial								
1	Process – Raw Spent wash	780CMD		766CMD		660 CMD		
a	Conc. Spent wash	343	203	287	170	204	121	To Composting
			140		117		83	To Incinerator boiler
b	Spent lees	155		155		155		To CPU
c	MEE Condensates	482		516		482		To CPU
2	Boiler blow down	16		16		16		To CPU
3	Cooling tower blow down	14		14		14		To CPU
4	Washings	15		15		15		To CPU

	Total	682	716	682	None

Pollution Loads for Principle Effluent (Spent wash) in Existing 90 KLPD Molasses Distillery & 135 KLPD Distillery after Change in Raw Material: -

Sr. No.	Parameter	EC permission / 90 KLD on C molasses (CTO Permission)			135 KLPD on B Heavy Molasses			135 KLPD on Cane juice/syrup		
		Conc. mg/ L	Discharge m^3/D	Load Kg/D	Conc. mg/ L	Discharge m^3/D	Load Kg/D	Conc. mg/ L	Discharge m^3/D	Load Kg/D
1	TS	115000	780	89700	90000	766	68400	50000	660	33000
2	SS	20000		15600	15000		11400	5000		3300
3	TDS	90000		70200	80000		60800	40000		26400
4	BOD	80000		62400	60000		45600	25000		16500
5	COD	140000		109200	110000		83600	60000		39600

Pollution Loads for Other diluted effluents (Weak Stream) of the Distillery (MEE Condensate + Spent lees + Cooling, Boiler B/d + Washing effluent): -

Sr. No.	Parameter	EC permission / 90 KLD on C molasses (CTO Permission)			135 KLPD on B Heavy Molasses			135 KLPD on Cane juice/syrup		
		Conc. mg/ L	Discharge m3/D	Load Kg/ D	Conc. mg/ L	Discharge m3/D	Load Kg/ D	Conc. mg/ L	Discharge m3/D	Load Kg/ d
1	TS	2450	670	1641.5	2000	701	1402	1970	667	1313.99
2	SS	250		167.5	205		143.71	195		130.07
3	TDS	2200		1474	1800		1261.8	1775		1183.93
4	BOD	1300		871	1050		736.05	1035		690.35
5	COD	2500		1675	2050		1437.05	2025		1350.68

Total Pollution Load Calculation: -

Sr. No.	Parameter	EC permission / 90 KLD on C molasses			135 KLPD on B Heavy Molasses			135 KLPD on Cane syrup		
		Based on Spent wash	Based on Other diluted effluent	Total	Based on Spent wash	Based on Other diluted effluent	Total	Based on Spent wash	Based on Other diluted effluent	Total
1	TS	89700	1641.5	91341.5	68400	1402	69802	33000	1313.99	34313.99
2	SS	15600	167.5	15767.5	11400	143.705	11543.71	3300	130.065	3430.065
3	TDS	70200	1474	71674	60800	1261.8	62061.8	26400	1183.925	27583.93
4	BOD	62400	871	63271	45600	736.05	46336.05	16500	690.345	17190.35
5	COD	109200	1675	110875	83600	1437.05	85037.05	39600	1350.675	40950.68

- Total actual spent wash generation under existing operations is- 786 CMD (Molasses based distillery raw material C -Heavy Molasses). After a change in raw material under NIPL the total spent wash generation will reduce for B-Heavy Molasses 766 CMD and for Cane Juice/ Syrup to 660 CMD.
- The COD pollution load in 90 KLPD plant for C- Heavy molasses shall get reduced to 85037.05 KG/day & 40950.68 kg/Day respectively after switching raw material to B-Heavy Molasses or Cane juice/Syrup.
- Total actual generation of trade Effluent under existing operations is 786 CMD & after NIPL will be reduced to 766 & 660 CMD after switching raw material to B-Heavy Molasses or Cane juice/Syrup respectively.

Treatment System:

a. **Trade effluent Treatment:**

Segregation of Concentrated stream and its disposal:

Spent wash generated from distillery is disposed by concentration in MEE and composting technology and partly disposed by concentration in MEE and burnt into incineration boiler. Same practice shall be followed after 50 % increase in distillery production capacity under No Increase in Pollution Load.

Details of Reduction / Recycle / Reuse of effluent:

All streams of effluent are treated in existing distillery CPU except spent wash and treated effluent are used as process water, make-up water for cooling tower and boiler. Same practice shall be followed after 50 % increase in distillery production capacity under No Increase in Pollution Load.

C. Air Emission Load:

Fuel Utilization for Manufacturing Operation for 90 KLPD and after product mix.

Sr. No.	Stack Attached to	Fuel	Existing Fuel Consumption	APCM	Stack Height
1	10 TPH conventional boiler	Bagasse	120 MT/D	Wet Scrubber	40 meters
2	25 TPH incineration boiler	Conc. Spent wash +	216 MT/D	ESP	70 meters
		Bagasse OR	105 MT/D		
		Coal	43.2 MT/D		

Steam and power requirements: -

Sr. No.	Description	Before change in product-mix	After change in product-mix	Remarks
1	Steam in TPH	19.50	19.41	Existing 10 TPH boiler & 25 TPH Incineration boiler is adequate even after proposed addition under NIPL
2	Power in MW	1.5	1.5	Existing 2.5 MW TG set connected to incineration boiler is adequate even after proposed addition under NIPL

- There is no additional fuel requirement after the proposed addition of distillery capacity. Therefore, there is no change in flue gas quantity and parameters.
- The steam and power shall be taken from the existing 10 TPH conventional boiler and existing 25 TPH incineration boiler. Therefore, there is no need for the addition of fuel after 50% increase in distillery production capacity. The same practice shall be continued even after the proposed change in product mix
- CO2 scrubbing system & bottling will be provided in one year as per undertaking submitted.

D. Solid Waste Load:

Details of non-hazardous waste generation: -

Sr. No.	Description	Before change in product-mix	After change in product-mix	Remarks
1	Ash from 25 TPH Incineration boiler in MT/D	41	≤ 41	Sold to farmers or fertilizer industry as potash rich manure
2	Ash from 10 TPH Conventional boiler in MT/D	1.8	≤ 1.8	Mixed with Press mud/CPU sludge and used as manure or sold to brick manufacturer
3	Compost in MT/Cycle	7800	≤ 7800	Sold as manure
4	CPU Sludge in MT/Annum	128	≤ 128	Used as manure

E. Details of hazardous waste generation: -

Sr. No.	Type of Waste	Category (As per Schedule)	Before change in product-mix	After change in product-mix	Remarks
1	NA	NA	0	0	There is no generation of hazardous waste from existing as well as proposed. distillery plant.

Technical Committee Deliberations:

The project proposal was discussed based on presentation made and documents- NIPL Certificate, NIPL proforma submitted by the proponent. Product wise load calculation in terms of wastewater and Air Emissions were discussed. Existing Consent to Operate, Environmental Clearance, Revised No Increase in Pollution Load certificate issued by M/s. Mantras Green Resources Ltd., Satpur, MIDC, Nashik Date.02.11.2023.

After due deliberations Committee noticed that:

1) Existing Distillery is having capacity 90 KLPD molasses-based distillery unit.
2) PP has proposed a change in raw material from C-heavy molasses to B-heavy molasses or Cane Juice /Syrup and increase the capacity of the existing distillery unit from 90 KLPD to 135 KLPD i.e increase in production by 50% under no increase in pollution load.
3) There is an overall reduction in water consumption, wastewater generation and Air Pollution Load.
4) As per presentation no change in fuel quantity.
5) Industry has proposed CO2 bottling plant.
6) Industry has provided a Zero Liquid Discharge system. i.e MEE followed by composting and MEE followed by incineration boiler.
7) PP installed Wet scrubber & ESP as an air pollution control system to 10 TPH boiler and 25 TPH incineration boiler respectively.

Technical Committee Decision:

The Technical Committee decided to recommend the case for change in product mix after with a compliance of the following condition.

1) The industry shall submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF & CC, the respective Zonal Office of CPCB & MPCB. A copy of the Environmental Clearance and six-monthly compliance status report shall be posted on the website of the industry.
2) The consent to be issued after the change in product mix shall be in line with the new actual water consumption quantities and trade effluent submitted.
3) PP should not manufacture any other product for which permission is not granted by the MPCB.
4) PP shall ensure connectivity of OCEMS data to Board server.
5) PP shall install adequate capacity CO_2 bottling plant in one year.
6) PP shall ensure that there is no increase in the effluent and shall ensure Zero Liquid Discharge system.

Agenda Item No.	Item No. 8
Proposal No.	MPCB-CONSENT- 0000180994
Project Details	**M/s. Privi Specialty Chemicals Limited (Unit-II),** Plot No. C-3, 4, 5, 6, 6/1, 6/2, 7, 8, 9, 10, 11,13 & C-33/1, 33/2, X-8, 9, 10, 11,12, MIDC Mahad, Tal. Mahad, Dist. Raigad - 401 506.
NIPL Certificate	NIPL Certificate issued by M/s. Aditya Environmental Services Pvt. Ltd., vide NIPL certificate dtd. 05.10.2023.

Introduction:

This is an existing industry engaged in manufacturing of Specialty Chemicals. This has reference to the online proposal submitted vide No. MPCB-CONSENT- 0000180994 along with the copies of documents seeking amendment and renewal of consent to operate under change in product mix under the provision of EIA Notification 2006 and amendments thereof.

Existing Environment Clearances (EC):

1. Environmental Clearance File no SIA/MH/IND3/70523/2014 dated 24/08/2022 (EC Identification No. EC22B021MH111364).
2. Consent to operate No. CTO- Format1.0/CAC/UAN No. 0000160698/CR/2308001822 dated 25/08/2023, valid up to 30/06/2028.

Project Details:

A. Products with change in product mix as below: -

Sr.No	Product Name	Qty (TPA)			Remark
		Existing (as per CTO & EC)	Proposed	Final	
1	Isobornyl cyclohexanol (IBCH)	1200	0	1200	No Change
2	L/D- Carvone	360	-300	60	Qty Reduced from 360 to 60
3	Carvacrol	1200	-900	300	Qty Reduced from 1200 to 300
4	Orange oil folds	144	-84	60	Qty Reduced from 144 to 60
5	D-Limonene	1500	-1140	360	Qty Reduced from 1500 to 360
6	Myrcene	5400	0	5400	No Change

7	Alpha-Campholenic aldehyde	456	-96	360	Qty Reduced from 456 to 360
8	Floreol	240	-180	60	Qty Reduced from 240 to 60
9	Dihydrocarvone	24	-12	12	Qty Reduced from 24 to 12
10	Carvomenthone	27	-3	24	Qty Reduced from 27 to 24
11	Menthone All varieties	359	-299	60	Qty Reduced from 359 to 60
12	DL- Menthol or L-Menthol All varieties	421	-241	180	Qty Reduced from 421 to 180
13	Nimberol	24	0	24	No Change
14	Dihydromyrcene	3000	-600	2400	Qty Reduced from 3000 to 2400
15	Sandal fleur	240	0	240	No Change
16	Indian sandal Core	240	0	240	No Change
17	Sandal Touch	24	-6	18	Qty Reduced from 24 to 18
18	Citral extra pure	360	-360	0	Shifted from mfg to repacking (Industry has propose to stop the mfg. of this product and procure from market directly for the repacking activity only)
19	Citronellal	720	0	720	No Change
20	Hydroxy Citronellal	360	-240	120	Qty Reduced from 360 to 120
21	Cyclocitral (Alpha & Beta mixture)	132	0	132	No Change
22	Cyclocitral -Alpha	24	0	24	No Change
23	Cyclocitral -Beta	24	0	24	No Change
24	Isocitronellene & Isomer	360	-180	180	Qty Reduced from 360 to 180
25	Citronellyl nitrile	1200	-480	720	Qty Reduced from 1200 to 720
26	Damascone-Alpha	36	0	36	No Change
27	Damascone-Beta	12	12	24	Qty Increased from 12 to 24
28	Delta-Damascone,	12	0	12	No Change
29	Beta Isodamascol etc	72	-12	60	Qty Reduced from 72 to 60
30	Mixture of Terpenes and alcohols 5090	5076	0	5076	No Change
31	A-Pinene from CST	19404	0	19404	No Change
32	B-Pinene from CST	6060	0	6060	No Change
33	Limonene from CST	708	0	708	No Change

34	**Mixed terpenes/Terpene biofuel from CST (Sr. No. 35 to 41)**	--	--	--	**Group Heading**
35	DDTO	3600	-969	2631	Qty Reduced from 3600 to 2631
36	Carene varieties 60,90,98	2316	1538	3854	Qty Increased from 2316 to 3854
37	Terpene biofuel	4500	0	4500	No Change
38	DMS	84	0	84	No Change
39	DMDS	12	-6	6	Qty Reduced from 12 to 6
40	MSM	12	-6	6	Qty Reduced from 12 to 6
41	Mixed Sulphurs compounds	12	0	12	No Change
42	A-Pinene from GTO	6444	1690	8134	Qty Increased from 6444 to 8134
43	B-Pinene from GTO	4008	1789	5797	Qty Increased from 4008 to 5797
44	Methyl Pentenone (MPO)	180	-180	0	Deleted
45	Amberfleur	2220	-2220	0	Shifted from mfg to repacking (Industry has propose to stop the mfg. of this product and procure from market directly for the repacking activity only)
46	Ammbergamma	120	-120	0	Shifted from mfg to repacking (Industry has propose to stop the mfg. of this product and procure from market directly for the repacking activity only)
47	Cedarketol	60	0	60	No Change
48	Isoborneol	600	0	600	No Change
49	Camphor & varieties IP/BP/USP	3000	0	3000	No Change
50	MI for soap	24	0	24	No Change
51	Violetone Coeur	24	0	24	No Change
52	Timber Touch	96	48	144	Qty Increased from 96 to 144
53	Timber forte	48	12	60	Qty Increased from 48 to 60
54	**Ester-**	--	--	--	**Group Heading**
55	Para Tertiary Butyl Cyclo Hexyl Acetate/PTBCH	600	-480	120	Qty Reduced from 600 to 120
56	Ortho Tertiary Butyl Cyclohexyl acetate/OTBCH	600	-480	120	Qty Reduced from 600 to 120

57	Styrallyl acetate	480	-300	180	Qty Reduced from 480 to 180
58	Terpinyl acetate	780	60	840	Qty Increased from 780 to 840
59	Citronellyl acetate	120	-30	90	Qty Reduced from 120 to 90
60	Geranyl acetate	60	-12	48	Qty Reduced from 60 to 48
61	Neryl acetate	36	0	36	No Change
62	Dimethyl Octanol acetate	36	0	36	No Change
63	Isobornyl acetate	1200	600	1800	Qty Increased from 1200 to 1800
64	Longifolene acetate	12	-6	6	Qty Reduced from 12 to 6
65	Mixture of esters 4090	600	0	600	No Change
66	2-Methyl Cyclohexyl acetate	12	-12	0	Deleted
67	Ethyl Geranate	12	-12	0	Deleted
68	Isobutyl Geranate	12	-12	0	Deleted
69	Geraniol Tiglates	6	-6	0	Deleted
70	Nerol Tiglates	6	-6	0	Deleted
71	Geraniol angilates	6	-6	0	Deleted
72	Nerol angilates	6	-6	0	Deleted
73	PEME	120	0	120	No Change
74	PADMA	60	0	60	No Change
75	Geranyl Propionate	24	-24	0	No Change
76	Citronellyl Propionate	12	0	12	Deleted
77	Neryl Propionate	12	-12	0	Deleted
78	Phenyl ethyl acetate	240	-240	0	Deleted
79	Linalyl acetate	12	-12	0	Deleted
80	Linalyl Propionate	12	-12	0	Deleted
81	Linalyl Isobutyrate	12	-12	0	Deleted
82	**Alcohol-**	--	--	--	**Group Heading**
83	Citronellol (COL)	600	0	600	No Change
84	Geraniol (GOL)	241	-61	180	Qty Reduced from 241 to 180
85	Nerol (NOL)	180	-60	120	Qty Reduced from 180 to 120
86	Terpineol	540	-540	0	Shifted from mfg to repacking (Industry has propose to stop the mfg. of this product and procure from market directly for the

					repacking activity only)
87	Dihydromyrcenol (DHMOL)	7800	0	7800	No Change
88	Linalool	120	-120	0	Shifted from mfg to repacking (Industry has propose to stop the mfg. of this product and procure from market directly for the repacking activity only)
89	Tetrahydro Floreol	0	50	50	New product
90	Tetrahydromyrcenol (THMOL)	240	0	240	No Change
91	Dimethyl Octanol (Tetrahydrogeraniol)	120	0	120	No Change
92	Terpinen-4-ol (4-Terpineol)	1500	0	1500	No Change
93	Rose Oxide	180	60	240	Qty Increased from 180 to 240
94	**Ionone-**	--	--	--	**Group Heading**
95	Gamma Methyl Ionone (GMI)	600	-120	480	Qty Reduced from 600 to 480
96	Normal Methyl Ionone (NMI)	360	-240	120	Qty Reduced from 360 to 120
97	Alpha-Ionone (AI) & Ionone 100%	360	-60	300	Qty Reduced from 360 to 300
98	Beta Ionone (BI)	240	0	240	No Change
99	Beta Ionone Technical	240	0	240	No Change
100	Beta Ionone PG	240	0	240	No Change
101	Gammanolene	60	-24	36	Qty Reduced from 60 to 300
102	Mixture of Ionones 1090	300	0	300	No Change
103	Geaniol Formate	12	-12	0	Deleted
104	Citronellol Formate	12	0	12	No Change
105	Camphene	12	-12	0	Deleted
106	ISO Longifoline Ketone	12	0	12	No Change
107	Prionyl/Privi Moss	120	0	120	No Change
108	Rosaxanol/Rosepyran	120	-60	60	Qty Reduced from 120 to 60
109	Muganol	12	0	12	No Change
110	Super Sandal Core	24	-12	12	Qty Reduced from 24 to 12
111	Hydrogen	300	60	360	Qty Increased from 300 to 360
112	Natemyl Acetate & Fine	12	0	12	No Change
113	Isojasmone Privi	24	0	24	No Change

114	Luzernyl Acetate	48	-24	24	Qty Reduced from 48 to 24
115	Luzernyl Butyrate	24	-6	18	Qty Reduced from 24 to 18
116	Luzernyl Isobutyrate	24	-6	18	Qty Reduced from 24 to 18
117	Luzernyl Benzoate	24	-6	18	Qty Reduced from 24 to 18
118	Citronellidene ketone	12	0	12	No Change
119	Navinitrile	24	0	24	No Change
120	Berninyl Acetate	12	0	12	No Change
121	Berninanitrile & Its Solution (0.1 to 10%) in DPG/TEC/BB/DEP/IPM/ Others	24	0	24	No Change
122	Valleynate	12	0	12	No Change
123	Propioncene	12	0	12	No Change
124	Maltol Isobutyrate	12	0	12	No Change
125	Misirone	12	0	12	No Change
126	Ambarate woody	12	0	12	No Change
127	Gardeniarate	12	0	12	No Change
128	n- Nerolidol (Naturilol)	12	0	12	No Change
129	Woodypep	24	0	24	No Change
130	Rosacone Alpha & Beta	12	0	12	No Change
131	Woodamarate	12	0	12	No Change
132	Spicyralein	12	0	12	No Change
133	Ethyl Frutynoate	12	0	12	No Change
134	Luzernyl Hexenoate	12	0	12	No Change
135	Synfonylal	12	0	12	No Change
136	Floroberry	12	0	12	No Change
137	Tellal	12	0	12	No Change
138	Dihydrotellal	12	0	12	No Change
139	Nonadienol (Berninol)	12	0	12	No Change
140	Lactinone & Its Solution (5 to 50%) in DPG/TEC/BB/DEP/IPM/ Others	12	0	12	No Change
141	Roseecone	0	1	1	New product
142	Muskether	0	1	1	New product

143	Marizona	0	1	1	New product
144	Hexadecanolide -M	0	1	1	New product
145	Amberaxyolane/Woodexylone	0	1	1	New product
146	Cyclamen Aldehyde	0	720	720	New product
147	Trimethyl cyclohexyl methanol (Cyclademol)	0	120	120	New product
148	Indomeran	0	60	60	New product
149	Ambery woody Extreme & Ambery Woody Exxtreme	0	90	90	New product
150	Hydroxyl Citronellol	0	180	180	New product
151	Aldehyde C-16	0	84	84	New product
152	Aldehyde C-14	0	60	60	New product
153	Allyl Amyl Glyconate	0	84	84	New product
154	Allyl Cyclohexyl Galycolate	0	94	94	New product
155	Hydrotropic Aldehyde	0	9	9	New product
156	Hydroxy Tetrahydrocitronellal	0	40	40	New product
157	Schiff base of Hydroxy Citronellal & Hydroxy Dihydrocitronellal	0	20	20	New product
158	Isocamphyl Cyclo hexanol (ICCH)	0	240	240	New product
159	**Dipentene Total**	--	--	--	**Group Heading**
160	Terpinolene Varieties from 20 to 99%	1452	0	1452	No Change
161	1,4-Cineol	540	0	540	No Change
162	1,8-Cineol (Eucalyptol)	336	0	336	No Change
163	Gamma terpinene	204	0	204	No Change
164	Limonene	996	0	996	No Change
165	Terpine Mixture	840	0	840	No Change
166	p-Cymene	120	-58	62	No Change
167	Mixture of alcohol	84	82	166	Qty Increased from 84 to 166
168	Dipentene	2148	243	2391	Qty Increased from 2148 to 2391
169	Technical Ester Mixed	12	71	83	Qty Increased from 12 to 83
170	Technical Odourify Compound	84	111	195	Qty Increased from 84 to 195
171	Isopulygyl acetate	120	-101	19	Qty Reduced from 120 to 19

172	saturated alcohol	120	0	120	No Change
173	IBCH T&B/ IBCH Technical	360	-164	196	Qty Reduced from 360 to 196
174	Carvone T&B/ Carvacrol Technical	1284	-940	344	Qty Reduced from 1284 to 344
175	Menthone/ Menthol Technical	948	-918	30	Qty Reduced from 948 to 30
176	HCAL T&B	204	-125	79	Qty Reduced from 204 to 79
177	Florol T&B 3039	204	67	271	Qty Reduced from 204 to 122
178	Heavy Fractions	1272	0	1272	No Change
179	Ester T&B 590	480	-356	124	Qty Reduced from 480 to 124
180	DHM Terpenes & HB Terpenes	2988	416	3404	Qty Increased from 2988 to 3404
181	DHMOL Terpenes & HB alcohol	2880	385	3265	Qty Increased from 2880 to 3265
182	Terpenes & HB alcohol	480	412	892	Qty Increased from 480 to 892
183	Ionone T&B	564	-168	396	Qty Reduced from 564 to 396
184	SF T&B	144	354	498	Qty Increased from 144 to 498
185	Pine HB	612	-140	472	Qty Reduced from 612 to 472
186	Ambery T&B 910	276	69	345	Qty Increased from 276 to 345
187	Citro T&B	216	360	576	Qty Increased from 216 to 576
188	Calcogol T&B	120	220	340	Qty Increased from 120 to 340
189	Terpenes 950 (Pine 10 technical)	60	-60	0	Deleted
190	DHP	84	-63	21	Qty Reduced from 84 to 21
191	Camphor Oil	84	-84	0	Deleted
192	Camphor Pitch/Oil	264	-168	96	Qty Reduced from 264 to 96
193	Mixture of Terpenes from Menthol & menthone	0	410	410	New formulation product
194	Acetaldehyde	0	56	56	New formulation product
195	Aldehyde C-14 T & B	0	28	28	New formulation product
196	Aldehyde C-16 T&B	0	21	21	New formulation product
197	Odour compound 1010	0	100	100	New formulation product
198	Cumen alcohol	0	58	58	New formulation product
199	Cyclahydro T&B	0	245	245	New formulation product
200	TMCM T&B	0	84	84	New formulation product
201	Dicitronellyl ether	0	58	58	New formulation product
202	Glycogal T&B	0	50	50	New formulation product
203	IBA T&B	0	340	340	New formulation product

204	Isomenthol & Neomenthol	0	23	23	New formulation product
205	Rose odour T&B	0	72	72	New formulation product
206	Musk Amber T&B	0	311	311	New formulation product
207	Mugetol T&B	0	128	128	New formulation product
208	Floral Fruity Odour	0	47	47	New formulation product
209	Misirone T&B	0	41	41	New formulation product
210	Sweet fruity Odour	0	30	30	New formulation product
211	Floral jasmin Odour	0	17	17	New formulation product
212	Electricity Generation	4 MW	0	4 MW	No Change
213	Recovery of Concentrated Sulphuric acid	60 TPD	0	60 TPD	No Change
	Total	**117460**	**-2388**	**115072**	
214	IBCH & its blends various diluents like DEP/IPM/DPG/PG other and with aroma chemicals	0	140	140	New products for Blending and Repacking activity only
215	Galaxmusk	0	1200	1200	New products for Blending and Repacking activity only
216	Floravone	0	120	120	New products for Blending and Repacking activity only

- Total given above is the Sum of Organic Chemical Products (including Synthesis and Formulation etc) that is from 1 to 211 above.

Blending and Repacking: -

The industry proposes to shift the following existing products from manufacturing activity to blending and repacking activity only. Industry has propose to procure the product from the market directly.

Sr. No.	Product Name	Qty (TPA)			Remarks
		Existing (*)	Proposed	Final	
18	Citral extra pure	360	-360	0	Existing shifted from mfg. to blending and repacking activity
45	Amber fleur	2220	-2220	0	Existing shifted from mfg. to blending and repacking activity

46	Amber gamma	120	-120	0	Existing shifted from mfg. to blending and repacking activity
86	Terpineol	540	-540	0	Existing shifted from mfg. to blending and repacking activity
88	Linalool	120	-120	0	Existing shifted from mfg. to blending and repacking activity

- The industry has propose to change manufacturing operations after the change in product mix with some new activities like formulations & repacking.
- Industry has proposed change in product mix by reducing the quantities of the 48 Nos. of existing products from 25020 TPA to 33679 22348 TPA to 11406 TPA, increasing the quantities of the existing 22 Nos. of products from TPA, deletion of 18 Nos. of existing products, addition of 19 Nos. of new products, addition of 19 Nos. new formulation products and 3 Nos. of new products for the Blending and repacking activity.

B. Pollution load Details:

(i) Water & Wastewater Aspect: -

a) Water Aspect: -

No	Purpose	Water Requirement in CMD			Proposed Additional WaterConsumption
		Existing	After Change in product Mix	Total	
1	**Domestic**	49	49	49	No Change
2	**Industrial**				
2.1	Processing	238	238	238	No Change
2.2	Utilities	1955	1955	1955	No Change
3	**Gardening**	35	35	35	No Change
	Grand Total Including Garden	**2277**	**2277**	**2277**	

b) Wastewater Aspect: -

No	Purpose	Effluent generation, CMD			Mode of Disposal & Ultimate Receiving Body
		Existing(*)	After Change in product Mix	Total	
1	**Domestic**	35	35	35	Treated in STP & sent to ETP

2	**Industrial**	0	0		
2.1	Processing	228	227	227	Treated in ETP (primary/ secondary / tertiary treatment + RO-MEE-ATFD) discharge to CETP 98 CMD, remaining 301 CMD recycled.
2.2	Utilities	137	137	137	
3	**Gardening**	0	0	0	
	Grand Total	**400**	**0**	**399**	

Pollution Load with respect to COD and TDS:-

	Existing Facility (*)	**POST CHANGE OF PRODUCT MIX**	**REMARKS**
Total CODkg/day	2294.82	2113.78	COD reduction is 181 Kg per day
Total TDSkg/day	3885.56	3722.30	TDS reduction is 163.27 Kg per day

- Post proposal, there is decrease in COD load post proposal (181 kg/day) as also in the TDS load (by 163.26 kg/day).
- The industry has proposed the total effluent reduction from process by 1 CMD.

C. Treatment System: -

i) **Trade Effluent: -** Primary/secondary/tertiary treatment for low COD/TDS effluent treatment, two nos of MEE - ATFD units having capacity 72KLD (with 14KLD ATFD) & 26.5 KLD (with 5.5KLD ATFD). 26.5 KLD MEE unit is used for treatment of effluent from Dihydromyrcenol and the condensate is recycled to same process. 72 KLD MEE unit is used for RO reject and high TDS effluent streams from other products. The condensate is sent to ETP aeration tank . The effluent from CST caustic scrubber is evaporated in agitated vessels-nutsche filter system. The condensate is recycled back in process for preparation of lime/caustic solution & Solid separated sent to MWML.

ii) **Sewage effluent: -** The domestic effluent sewage treatment plant of designed capacity 40 CMD comprising of Primary & secondary treatment for the treatment of 35 CMD of sewage effluent.

D. Air Emission Aspect: -

EC SrNo	Unit	APC	STACK EMISSIONS				
			Height (m)	Fuel	%S	SO2 kg/d	TPM mg/Nm^3
1	Boiler II (6 TPH)	FabricBag Filter	30	Coal 938 kg/hr	0.5	225	NS
2	Boiler IV (18TPH)	ESP	45	Coal 2083 Kg/Hr	0.5	500	150
	Boiler V (15TPH)	ESP		Coal 1666 Kg/Hr	0.5	400	150
	Boiler I (20 TPH)	ESP		Terpene Biofuel 1250 Kg/hr	0.5	51	150
3	Boiler (60 TPH)	ESP + FGD	54	Coal 9167 Kg/Hr	0.5	220	150
	Boiler (60 TPH)	ESP +FGD		Briquette 16776 Kg/Hr	0.5	402.6	150
4	TFH I (6 Lkcal /hr)	--	30	Terpene Biofuel 23 Kg/Hr	0.5	5.52	150
5	TFH II (50 Lkcal /hr)	ESP	40	Coal 1458 Kg/Hr	0.5	14.58	150
6	Incinerator I (100 kg/hr)	Scrubber	30	HSD/Terpen bio fuel 100kg/hr	1	48	150
7	Incinerator II (Solid-83 kg/hr, Liquid 125 kg/hr/ Gas 250 kg/ hr)	Scrubber	35	HSD/Terpen bio fuel 120kg/hr	1	57.6	150
8 and9	Pyro 4001 and Pyro 4002 (1500 KgPH each)	--	4	Terpene Biofuel 70 Kg/Hr	--	--	150

10 and11	Pyro 4003 and Pyro 4004 (1200 KgPH each)	--	4	Terpene Biofuel 62.5 Kg/Hr	--	--	150
12	DG Set 750KVA	--	12	HSD 110 lit/hr	1	26.4	150
13	DG Set 125KVA	--	12	HSD 15 lit/hr	1	28.8	150
14	DG Set 625KVA	--	12	HSD 60 lit/hr	1	72	150
15	DG Set 380KVA	--	12	HSD 60 lit/hr	1	72	150
16	DG Set 1000KVA	--	12	HSD 150 lit/hr	1	72	150
17	DG sets 1000KVA		30	HSD 100 lit/hr	1	110.4	150
18	DG sets 1000 KVA	--	30	HSD 100 lit/hr	1	110.4	150
19	DG sets 1000 KVA	--	12	HSD 100 lit/hr	1	72	150
	Total SO_2 emission Kg /day (unchanged)					**2488.3**	

Process emission load

- As per the EC, there are 7 Nos. of process scrubber vents specified, the details of the emissions are not specified Industry has propose process scrubber vents 5 Nos. only against 7 nos of EC, the process emissions post proposal will be within EC limits.
- Industry has proposed to dismantle Coal fired 8 TPH Boiler, thereby additional reduction of SO_2 by 225 Kg/day (from 2713.3 to 2488.3 Kg/Day)

E. Hazardous Waste Aspect: -

Sr. No	Category No	Type of Waste	Existing CTO (*)	Post proposal	UOM	Method of treatment	Method of disposal	Remarks /Proposed change

1	5.1	Used or spent oil	12	12	MT/A	Recycle	Sale to authorized party/ Preprocessor	No Change
2	5.2	Wastes or residues containing oil	4.2	4.2	MT/A	Recycle/Incineration	CHWTSDF	No Change
3	33.1	Empty barrels /containers /liners contaminated with hazardous chemicals/IBC/Carboys	3600	7200	Nos/A	Recycle	Recycle /Reuse/ Sale to authorized party	The Haz. Waste as per CTO Sr. No. 3, 4 & 5 are clubbed.
4	35.3	Chemical sludge from ETP	504	504	MT/A	Landfill	CHWTSDF	No Change
5	37.3	Concentration or evaporation residues (MEE salt)	1080	1080	MT/A	Landfill	CHWTSDF or Sale to authorized party	No Change
6	19.2	Spent catalyst / Recovered Catalyst	156	156	MT/A	Recycle	Sale to authorized party OR CHWTSDF	No Change
7	28.3	Spent carbon (Charcoal)	48	48	MT/A	As fuel in boiler/Incineration	Sale to authorized party OR CHWTSDF	No Change
8	1.6	Silica / Molecular Sieves	24	10	MT/A	----	Sale to authorized party OR CHWTSDF	Reduced
9	---	Resin	60	300	MT/A	----	Sale to authorized party OR CHWTSDF	Increased
10	37.2	Ash from Incinerator	360	360	MT/A	Landfill/Incineration	Sale to authorized party OR CHWTSDF	No Change

11	20.3	Distillation Tops /Residue	1212	600	MT/A	As fuel in boiler/ Incineration	Use as Fuel or Sale to authorized party or CHWTSDF	Reduced
12	36.2	Filter pads/Bags/ Liners	2400	2400	MT/A	----	CHWTSDF	No Change
13	20.2	Mix of salts	1668	3500	MT/A	Landfill	Sale to authorized party OR CHWTSDF	The By-product sodium sulphate is clubbed in Mix Salt
14	20.2	MEK & Methanol recovered	1368	881	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Decreased
15	20.2	Mix MEK+ Butanol /Acetone +IPA recovered	2772	638	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Decreased
16	20.2	Recovered Cyclohexane	1920	240	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Decreased
17	20.2	Recovered IPA	1560	120	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Decreased
18	20.2	Recovered Pet Ether & THF	24	144	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Increased
19	20.2	2-Butanol / Isopropyl alcohol (IPA)	1008	232	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to	Decreased

		(Separated from MEK+Butanol mix					authorized party or CHWTSDF	
20	20.2	Spent Solvent	36	120	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Increased
21	20.2	Aluminium Chloride Solution	48	140	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Increased
22	---	Ammonium sulphate 35 OR	3600	6081	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	Increased
23	---	Ammonium sulphate	2280	0	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	Deleted
24	---	Chromium sulphate solution OR	2220	2897	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	Increased
25	---	Chromium sulphate Solid (Chromium Hydroxide)	540	1467	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	Increased
26	---	Acetic acid 30	1080	332	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	decreased
27	---	Phosphoric acid 30	1620	990	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	decreased
28	---	Sulphuric acid 25 OR	18000	9996	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	decreased
29	---	Calcium Sulphate	11400	5711	MT/A	Recycle/Reuse/sale	Sale to authorized party or	decreased

							CHWTSDF/Cement Industry	
30	---	Potassium acetate 40	432	294	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	decreased
31	---	Potassium acetate	156	106	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	decreased
32	---	Sodium acetate 30 OR	7320	9855	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	increased
33	---	Sodium Acetate	2304	4210	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	increased
34	---	Cycloamine Sulphate	0	24	MT/A	Recycle/Sale	Sale to authorized party or CHWTSDF	Proposed
35	---	Potassium Bromide Solution (18-25%)	0	1357	MT/A	Recycle/Sale	Sale to authorized party or CHWTSDF	Proposed
36	---	Methyl Hydantaoin Solution (25-30%)	0	528	MT/A	Recycle/Sale	Sale to authorized party or CHWTSDF	Proposed
37	35.4	ETP Oil/Skimmed Oil	240	0	MT/A	As fuel in boiler/Incineration	CHWTSDF or Sale to authorized party/Burn as fuel in Boiler	Deleted
38	15.2	Discarded Asbestos	108	0	Kg/A	Landfill	Sale to authorized party	Deleted
39	20.2	Process Waste	420	0	MT/A	Landfill/Incinerator	Sale to authorized party OR CHWTSDF	Shifted in Mix Salts at Sr. No. 13

40	---	Zinc bromide solution	72	0	MT/A	Recycle/Reuse/sale	Sale to authorized party OR CHWTSDF	Deleted
41	20.2	Recovered 2-Butanol	6	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
42	20.2	Recovered Cyclohexane/EDC	528	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
43	20.2	Recovered Ethyl alcohol	36	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
44	20.2	Sodium Sulphide/SMM/Sodium Hydrogen Sulphide solution	3012	0	MT/A	Recycle/Incineration	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
45	20.2	Recovered Acetone	12	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
46	20.2	Recovered Butanol	24	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
47	20.2	Recovered EDC	108	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
48	20.2	Recovered Xylene	36	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted

49	20.2	Recovered Isobutyl alcohol	0.72	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
50	20.2	Recovered Methanol	2160	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
51	20.2	Recovered MPK	264	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
52	20.2	Recovered Pet Ether	288	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
53	20.2	Recovered Toluene	1404	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
54	20.2	Recovered Triethylamine	360	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
55	20.2	THF recovered	228	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
56	20.2	Recovered Heptane	12	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
57	20.2	Aniline recoverd	156	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted

58	---	Dione Residue	60	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
59	---	Hydrochloric acid solution (18-22%)	480	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
60	---	Phosphoric acid layer	12	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
61	---	Prionyl Residue/Distillation Residue (HaZ Waste)	24	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
62	---	Recovered Barium hydroxide	120	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
63	---	Recovered Butyric acid	24	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
64	---	Recovered Isobutyric acid	12	0	MT/A	Recycle/Reuse/sale	Recycle/Reuse /Sale to authorized party or CHWTSDF	Deleted
65	---	Sodium Borate	12	0	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	Deleted
66	---	Sodium Chloride salt	72	0	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	Deleted

67	---	Ferrous Sulphate	6000	0	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	Deleted
68	---	Magnesium sulphate	6224	0	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	Deleted
69	---	DMF 80	324	0	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	Deleted
70	---	Sodium Sulphate	2280	0	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	Considered in mix salts
71	---	Potassium sulphate	24	0	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	Deleted.
72	---	Sodium Phosphate 10 OR	300	0	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	Deleted
73	---	Sodium Phosphate	156	0	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	Deleted
74	---	Acetic acid 80	2760	0	MT/A	Recycle/Reuse/sale	Sale to authorized party or CHWTSDF	Deleted
75	33.1	33.1 Empty barrels /containers /liners contaminated with hazardous chemicals	1800	0	Nos/A	Recycle/Reuse/sale	Sale to authorized party	Included in Sr No. 3 above (duplication in EC)
76	33.1	33.1 Empty barrels /containers /liners contaminated with hazardous chemicals	1800	0	Nos/A	Recycle/Reuse/sale	Sale to authorized party	Included in Sr No. 3 above (duplication in EC)
		Total	73151.0	50749.2				

- Total Haz. Waste generation is reduced from 73151 TPA to 50749.2 TPA, due to process changes, recycling of the solvents in closed loop in plant only. Inorganic Salts and Solutions were earlier disposed to end user. Now PP is proposing to mix these salt solutions and evaporate in process evaporator and dispose to CHWTSDF as Mix Salts.

Technical Committee Deliberations:

The project proposal was discussed based on presentation made and documents- revised NIPL Certificate, NIPL proforma submitted by the proponent. Product wise load calculation in terms of wastewater, Air Emissions & Hazardous Waste generations were discussed. Existing Consent to Operate, Environmental Clearance, No Increase in Pollution Load certificate issued by M/s Aditya Environmental Services Pvt. Ltd. vide NIPL certificate dtd. 05.10.2023 and product-mix proforma are taken on the record.

Committee after due deliberations noticed that:

1) Industry has proposed change in product mix by reducing the quantities of the 48 Nos. of existing products from 22348 TPA to 11406 TPA, increasing the quantities of the existing 22 Nos. of products from 25020 TPA to 33679 TPA, deletion of 18 Nos. of existing products, addition of 19 Nos. of new products for manufacturing, addition of 19 Nos. new formulation products and shifting of 5 Nos. of products from manufacturing to blending and repacking activity and addition of 3 Nos. of new products for the Blending and repacking activity.
2) The industry has proposed to change manufacturing operations after the change in product mix with some new activities like formulations & repacking.
3) Post proposal, there is decrease in COD load post proposal (181 kg/day) as also in the TDS load (by 163.26 kg/day).
4) The industry has proposed the total effluent reduction from process by 1 CMD.
5) As per the EC, there are 7 Nos. of process scrubber vents specified, the details of the emissions are not specified Industry has propose process scrubber vents 5 Nos. only against 7 Nos. of EC, the process emissions post proposal will be within EC limits.
6) Industry has proposed to dismantle Coal fired 8 TPH Boiler, thereby additional reduction of SO2 by 225 Kg/day (from 2713.3 to 2488.3 Kg/Day)
7) Total Haz. Waste generation is reduced from 73151 TPA to 50749.2 TPA, due to process changes, recycling of the solvents in closed loop in plant only. Inorganic Salts and Solutions were earlier disposed to end user. Now PP is proposing to mix these salt solutions and evaporate in process evaporator and dispose to CHWTSDF as Mix Salts.

Technical Committee Decision:

1) Industry shall comply with all the conditions stipulated in Environmental Clearance and ensure display/upload of six-monthly compliance monitoring report on their official website.
2) The standards of the parameter Total Particulate Matter shall be stringent to the 50 mg/NM3.
3) Industry should not manufacture any other product for which permission is not granted by the MPCB.
4) Industry shall ensure connectivity of OCEMS data to Board server.
5) The industry shall dispose of the claimed by-products as Hazardous waste as per the provisions of Hazardous & Other Wastes (M & TM) Rules,2016.

Agenda Item No.	Item No. 9
Proposal No.	MPCB-CONSENT-0000178467
Project Details	**M/s. Lupin Limited.,** Plot No. T-142, MIDC Tarapur, Tal. Palghar, Dist. Palghar-401 506.
NIPL Certificate	NIPL Certificate issued by M/s. Goldfinch Engineering Systems Private Limited., Date. 05.10.2023.

Introduction:

This is an existing industry engaged in manufacturing of Bulk Drugs and API. This has reference to the online proposal submitted vide No. MPCB-CONSENT-0000178467 along with the copies of documents seeking amendment and renewal of consent to operate under change in product mix under the provision of EIA Notification 2006 and amendments thereof.

Existing Environment Clearances (EC):

1. Environmental Clearance is accorded for expansion ref no. EC (Lupin)-2009/153/CR.167/TC.1 dated 16.11.2010.
2. The Amendment in consent to operate under change in product mix is accorded vide No: - Consent no.- Format1.0/CAC/ UAN No.0000156973/CR/2306001502 dated 21.06.2023.

Project Details:

A. Products with change in product mix as below:

Sr no	Name of Product under API & Intermediates	Production			
		As per EC (TPA)	As per CTO (TPA)	Proposed (+)Addition & (-) Deletion (TPA)	Total (TPA)
1	Rifa S,Rifa O & Rifampicin	404	404	-6.5	397.5
2	Rifaximin	5	20	0	20
3	Lovastatin	150	10	0	10
4	Simvastatin	72	30	+15	45
5	Sertraline	36	72	0	72

6	Losartan potassium	10	65	-25	40
7	Valsartan	0	20	-19	1
8	Duloxetine	8	25	0	25
9	Irbesartan	0	0.5	0	0.5
10	Quetiapine Fumerate	0	80	-20	60
11	Pyrazinamide	225	172	0	172
12	Levetiracetam	60	464	0	464
13	Abacavir (Hydrochloride/ Sulphate)	0	12	-4	8
14	Amlodipine Besilate	4	25	-2.5	22.5
15	Escitalopram Oxalate	0	0.5	0	0.5
16	Cysteamine Bitartrate	0	20	0	20
17	Tolterodine Tartarate	0.5	0.03	0	0.03
18	Celecoxib	0	18	0	18
19	Ethambutol	10	18	0	18
20	Fenofibrate/Choline Fenofibrate	15	20	0	20
21	Rifabutin	3	1	0	1
22	Zolpidem Tartarate	1	0.8	+0.7	1.5
23	Imipramine pamoate/Imipramine Hcl	3	0.5	0	0.5
24	Lansoprazole	7	2.5	0	2.5
25	Rabeprazole	0	1	0	1
26	Risperidone	0.25	1	0	1
27	Azythromycin	20	2	0	2
28	Gatifloxacin	0	0.02	0	0.02
29	Ziprasidone	3	2	0	2
30	Desloratadine	0.5	1	0	1
31	Memantine	1	1.5	0	1.5
32	Eszopiclone	0.5	0.1	0	0.1
33	Tenofovir	0	6	0	6

34	Emticitabine	0	6.5	0	6.5
35	Ezetimibe	0	12	0	12
36	R & D batches	5	13	0	13
37	Ranolazine	0	20	-15	5
38	Armodafinil	0	0.8	0	0.8
39	Capreomycin Sulfate	0	1	0	1
40	Calcium L-5- Methyltetrahydrofolate	0	0.1	0	0.1
41	Rifapentine	0	42	0	42
42	Oseltamivir	0	3	0	3
43	Sodium Rifamycin SV	0	4.5	0	4.5
44	Dalbavancin Intermediate (A- 40926)	0	0.2	0	0.2
45	Demeclocycline/DMCTC	0	0.5	0	0.5
46	Tacrolimus	0	0.1	0	0.1
47	Tolvaptan	0	0	+ 0.075	0.075
48	Venlafaxin	18	0	0	0
49	Pentaprazole	6	0	0	0
50	Carvcdiol & Carvediol phospate	3	0	0	0
51	Quina	0	0	0	0
52	Rami 8	0	0	0	0
53	Levomepromazine Malcate	0	0	0	0
54	Topiramate	15	0	0	0
55	Lamotrigine	10	0	0	0
56	Nabumatone	60	0	0	0
57	Diacereine	3	0	0	0
58	Omeprazole mg	15	0	0	0
59	sevelamer HCl	45	0	0	0
60	Atorvastain	15	0	0	0
61	Levofloxacine	30	0	0	0
62	Lamivudine	3	0	0	0

63	Clinadamycin	2	0	0	0
64	Esomeprazole	20	0	0	0
65	Sevelmar carbonate	45	0	0	0
66	Pregramblin	20	0	0	0
67	Mesalamine	30	0	0	0
68	Lisinopril	65	0	0	0
	Total	**1449.75**	**1599.15**	**-76.225**	**1522.925**

- Industry has proposed a change in product mix in its existing facility by addition of 1 new product, no change in 37 existing products, decrease in production capacity of 7 existing products & increase production of 2 existing products.
- Industry has proposed to decrease the total production from 1599.15 MT/A to 1522.925 MT/A i.e. by 76.225 MT/A.

B. Pollution load Details:

(i) Water & Wastewater Aspect: -

a) Water Aspect: -

Particular	Consumption (CMD)			Loss(-)/gain (+) CMD			Effluent (CMD)		
	Existing as per CTO	Proposed reduction after CIPM	Total after CIPM	Existing	Proposed reduction after CIPM	Total after CIPM	Existing	Proposed reduction after CIPM	Total after CIPM
Processing whereby water gets polluted & pollutants are easily biodegradable	888.3	-10.8	877.5	-67.6	0.3	-67.9	820.7	-11.1	809.6

Industrial Cooling, spraying in mine pits or boiler feed	1100	0	1100	-900	0	-900	200	0	200
Total - Trade (only)	**1988.3**	**-10.8**	**1977.5**	**-967**	**0.3**	**-967.6**	**1020.7**	**-11.1**	**1009.6**
Gardening	150	0	150	-150	0	-150	0	0	0
Domestic purpose	120	0	120	-25	0	-25	95	0	95
Grand Total	**2258.3**	**-10.8**	**2247.5**	-1142.6	0.3	-1142.9	**1115.7**	**-11.1**	**1104.6**
Grand Total as per CTO	**2258.3**			-			**1115.7**		
Grand Total as per EC	**2270**			-			**1145.0**		

b) **Wastewater Aspect Before Product Mix:-**

	Trade Effluent Generation											
Sr. No	**Particular**	**Total Flow, CMD**	**Flow, CMD**		**COD**				**TDS**			
					Strong		**Weak**		**Strong**		**Weak**	
			Strong	**Weak**	**Mg/L**	**Kg/Day**	**Mg/L**	**Kg/Day**	**Mg/L**	**Kg/Day**	**Mg/L**	**Kg/Day**
a	Process & Washing Activity	820.7	0	820.7	--	--	--	--	--	--	--	--
b	Cooling Tower & Boiler	200	0	200	--	--	--	--	--	--	--	--
Total (Trade)		**1020.7**		**1020.7**	**--**	**--**	**12633**	**12894.9**	**--**	**--**	**7572**	**7729.1**
c	Domestic Effluent Generation, CMD	95	0	95	--	--	500	47.5	--	--	700	66.5

Total	**1115.7**	-	**1115.7**	--	--	**11600**	**12942.4**	--	--	**6987**	**7795.6**

c) **Wastewater Aspect After Product Mix** :-

	Trade Effluent Generation											
Sr. No	**Particular**	**Total Flow, CMD**	**Flow, CMD**		**COD**				**TDS**			
			Strong	**Weak**	**Strong**		**Weak**		**Strong**		**Weak**	
					Mg/L	**Kg/Day**	**Mg/L**	**Kg/Day**	**Mg/L**	**Kg/Day**	**Mg/L**	**Kg/Day**
a	Process & Washing Activity	809.6	-	809.6	-	-	-	-	-	-	-	-
b	Cooling Tower & Boiler	200	-	200	-	-	-	-	-	-	-	-
Total (Trade)		**1009.6**	-	**1009.6**	-	-	**12437**	**12557**	-	-	**6849**	**6914.9**
c	Domestic Effluent Generation, CMD	95	-	95	-	-	500	47.5	-	-	700	66.5
	Grand Total	**1104.6**	-	**1104.6**	-	-	**11411**	**12604.5**	-	-	**6320**	**6981.4**

- Water Consumption and effluent generation will reduce by 10.8 CMD and 11.1 CMD respectively.
- Average COD Load will reduce by 337.83 Kg/Day
- Average TDS Load will reduce by: 814.2 Kg/Day

C. Treatment System: -

Trade Effluent: - Trade effluent is treated in effluent treatment plant of capacity 1200 CMD Comprising of Primary (Equalization Tank cum Neutralization Tank, Flash Mixers, Clariflocculator), secondary (Anaerobic System, Activated Sludge Process) and tertiary advance treatment (RO plant, MEE with ATFD plant), the treated effluent is recycled to achieve Zero Liquid Discharge.

Sewage effluent: - The domestic effluent is taken into effluent treatment plant for further treatment and disposal.

D. Air Emission Aspect: -

Stack No.	Stack Attached to	As per CTO Fuel Consumption	Existing Fuel Consumption	Fuel Consumption after Change in Product Mix	APC system	Stack Height, m
S-1	Boiler-(12 TPH &10 TPH)	Natural Gas: 1679 SCM/Hr OR LSHS: 895 Kg/Hr	Natural Gas: 1679 SCM/Hr OR LSHS: 895 Kg/Hr	No Change	Stack	57
S-2	Boiler-(12 TPH & 12 TPH)	Natural Gas :1832 SCM/Hr	Natural Gas : 1832 SCM/Hr	No Change	Stack	31
S-3	Boiler-(10 TPH)	Natural Gas :763 SCM/Hr OR LSHS :407 Kg/Hr	Natural Gas :763 SCM/Hr OR LSHS :407 Kg/Hr	No Change	Stack	45
S-4 to S12	DG Set-(2x2.5 MW, 4x1.2 MW,3x1.6 MW)	HSD: 157 MT/M	HSD:157 MT/M	No Change	Stack	30 each
S-13 to S-14	Power Generator (2x2.5 MW)	HSD: 414 MT/M	HSD:414 MT/M	No Change	stack	48 each
S-42	Boilers (2 Nos) 8 TPH & 8 TPH	Briquette -1903 MT/M	Briquette -1903 MT/M	No Change	ESP	35

Process stack

Sr.No.	Stack Attached to	APC system	Stack Height
S-15 to S-41	Process Vent (27 Nos)	Scrubber	30 m each

- **There is no change in the process emissions, existing utilities, and fuel.**

E. Hazardous Waste Aspect: -

Sr. No	Type of Waste	Cat. No.	As Per EC	As Per CTO.	After Change in Product Mix Qty.	Remarks
1.	Used/Spent Oil	5.1	0.025 MT/Day	10.8 MT/A	10.8 MT/A	No change
2.	Waste or residues containing oil	5.2	0.02 MT/Day	7.2 MT/A	7.2 MT/A	No change
3.	Process Residue and wastes	28.1	3.70 MT/Day	2216.52 MT/A	2205.20 MT/A	Decrease
4.	Spent catalyst	28.2	0.367 MT/Day	36.72 MT/A	20.13 MT/A	Decrease
5.	Spent carbon	28.3	0.510 MT/Day	238.68 MT/A	225.57 MT/A	Decrease
6.	Off specification products	28.4	As & when generated	720 MT/A	720 MT/A	No change
7.	Date-expired products	28.5	As & when generated	720 MT/A	720 MT/A	No change
8.	Spent organic solvents	28.6	374.42 MT/Day	95176.44 MT/A	85901.32 MT/A	Decrease
9.	Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	33.1	As & when generated	4320 MT/A	4320 MT/A	No change
10.	Chemical containing residue arising from decontamination	34.1	As & when generated	180 MT/A	180 MT/A	No change
11.	Any process or distillation residue	36.1	2.40 MT/Day	981 MT/A	932.91 MT/A	Decrease
12.	Concentration or evaporation residue	37.3	4.0 MT/Day	4140 MT/A	4140 MT/A	No change
13.	Spent organic solvents	28.6	Not Mentioned	116.32 MT/A	116.32 MT/A	No change

14.	Process waste- trans sertaline	28.1	Not Mentioned	230.98 MT/A	230.98 MT/A	No change
15.	Process waste-piperazine di acetate	28.1	Not Mentioned	79.05 MT/A	77.78 MT/A	Decrease
16.	Process waste -2Amino 4 Methyl pyridine	28.1	Not Mentioned	4.44 MT/A	4.44 MT/A	No change
17.	Process waste- tributyl tin chloride	28.1	Not Mentioned	26.78 MT/A	1.34 MT/A	Decrease
18.	Process waste-Di methyl Butanoic Acid	28.1	Not Mentioned	27.93 MT/A	41.90 MT/A	Increase
19.	Process waste-R-R Mandelate salt	28.1	Not Mentioned	91.67 MT/A	91.67 MT/A	No change
20.	Process waste- Immidazole Hydrochloride	28.1	Not Mentioned	22.26 MT/A	33.39 MT/A	Increase
21.	Process waste-Tri Ethyl Amine	28.1	Not Mentioned	58.40 MT/A	87.60 MT/A	Increase
22.	Process waste-Mandelic Acid	28.1	Not Mentioned	38.01 MT/A	38.01 MT/A	No change
23.	Process waste-Di iso propyl Ethyl Amine	28.1	Not Mentioned	33.58 MT/A	1.68 MT/A	Decrease
24.	Process waste-D2 Amino 1Butanol (D2AB)	28.1	Not Mentioned	6.63 MT/A	6.63 MT/A	No change
	Total		**138759.12**	**109483.41**	**100114.62**	Decrease

- Sr.no. 13 to 24 in the above tables are on active basis & are recovered from streams generated from manufacturing process. Sale to authorized party having permission under Rule 9 of H & OW Rule 2016.
- After Change in product mix the Total Hazardous Waste from Process will be reduced by 9368.80 MT/A.

Technical Committee Deliberations:

The project proposal was discussed based on presentation made and documents- revised NIPL Certificate, NIPL proforma submitted by the proponent. Product wise load calculation in terms of wastewater, Air Emissions & Hazardous Waste generations were discussed. Existing Consent to Operate, Environmental Clearance, No Increase in Pollution Load

certificate issued by M/s. Goldfinch Engineering Systems Private Limited., Date. 05.10.2023 and product-mix proforma are taken on the record.

Committee after due deliberations noticed that:

1) Industry has proposed a change in product mix in its existing facility by addition of 1 new product, no change in 37 existing products, decrease in production capacity of 7 existing products & increase production of 2 existing products.
2) Industry has proposed to decrease the total production from 1599.15 MT/A to 1522.925 MT/A i.e. by 76.225 MT/A.
3) Water Consumption and effluent generation will reduce by 10.8 CMD and 11.1 CMD respectively.
4) Average COD load will reduce by 337.83 Kg/Day and average TDS load will reduce by 814.2 Kg/Day
5) The unit is Zero Liquid Discharge unit.
6) Total Hazardous Waste from Process will be reduced by 9368.80 MT/A.

Technical Committee Decision:

Technical Committee decided to recommend the case for change in product mix based on revised "No Increase in Pollution Load" as per the provision of EIA notification 2006 with compliance of the following conditions;

1) Industry shall comply with all the conditions stipulated in Environmental Clearance and ensure display/upload of six-monthly compliance monitoring report on their official website.
2) The standards of the parameter Total Particulate Matter shall be stringent to the 50 mg/NM3.
3) Industry should not manufacture any other product for which permission is not granted by the MPCB.
4) Industry shall ensure connectivity of OCEMS data to Board server.
5) The industry shall dispose of the claimed by-products as Hazardous waste as per the provisions of Hazardous & Other Wastes (M & TM) Rules,2016.

Agenda Item No.	Item No. 10
Proposal No.	MPCB-CONSENT-0000176795
Project Details	**M/s. Aastrid Life Sciences Private Limited.** Plot No FS-1 & FS-2, Additional Industrial Area, Mahad, Village Amshet Tal. Mahad & District. Raigad, Maharashtra-402302.
NIPL Certificate	NIPL Certificate issued by M/s. Goldfinch Engineering Systems Private Limited., Date. 20.10.2023.

Introduction:

This is an existing industry engaged in specialty chemicals and intermediates. This has reference to the online proposal submitted vide No. MPCB-CONSENT-0000176795 along with the copies of documents seeking amendment in existing consent to operate under change in product mix under the provision of EIA Notification 2006 and amendments thereof.

Existing Environment Clearances (EC):

1. Environmental clearance accorded vide No. SEIAA-EC-0000001492 on 07.05.2019.
2. Part Consent to Operate for production capacity of 974 TPA accorded vide No: Format 1.0/AS(T)/UAN No.-0000123206/CO/2111000838 dated 22.11.2021 which is valid up to 31.10.2026.

Project Details:

A. Products with change in product mix as below:

Sr no.	Product Name	As per EC, TPA	As per CTO, TPA	Proposed (+) Addition & (-) Deletion, TPA	Proposed After CIPM , TPA
1.	(S)-n-ethyl-2-aminomethyl pyrrolidine	60.0	42.0	18.0	60.0
2.	N-ethyl-2-aminomethyl pyrrolidine	120.0	80.0	40.0	120.0
3.	2H-thieno[2,3-e]-1,2-thiazine-3-carboxylic acid-6-chloro-4-hydroxy-2-methyl-methyl ester,1,1-dioxide	12.0	9.0	3.0	12.0

4.	2-Amino-3-nitro-6-chloropyridine	24.0	17.0	-17.0	0.0
5.	5,6-Dimethoxy Indanone	60.0	42.0	18.0	60.0
6.	5-Chloro-3-Sulfonamide Acetate Thiophene-2-Carboxylate	60.0	42.0	18.0	60.0
7.	Glycine Methyl Ester Hydrochloride	12.0	9.0	-9.0	0.0
8.	(S)-3-Hydroxy Tetrahydrofuran	36.0	25.0	11.0	36.0
9.	(R)-3-Hydroxy Tetrahydrofuran	12.0	9.0	-9.0	0.0
10.	2,5-Pyridinedicarboxylic Acid,1-(2,2-Dimethoxyethyl)-1,4-Dihydro-3-Methoxy-4-Oxo-2-Methyl Ester	60.0	42.0	18.0	60.0
11.	Methyl-4-Methoxy Oxobutanoate	60.0	42.0	-42.0	0.0
12.	2,4,5-Trimethoxy Benzoic Acid	36.0	25.0	11.0	36.0
13.	2-Aminothiazol-4-Carboxylic Acid Ethyl Ester	36.0	25.0	11.0	36.0
14.	(1S)-2-(Dimethyl amino)-1-Phenylethanol	24.0	17.0	-17.0	0.0
15.	3-(Bromomethyl)-7-Chlorobenzo[B] Thiophene	24.0	17.0	7.0	24.0
16.	Methyl-5-Formyl-2-Methoxy Benzoate	24.0	17.0	7.0	24.0
17.	4-Isobutoxybenzylamine	36.0	25.0	-25.0	0.0
18.	N-(4-fluorobenzyl)-1-methylpiperidin-4-amine	24.0	17.0	-17.0	0.0
19.	Propiolic acid	12.0	9.0	3.0	12.0
20.	N-(4-Aminobenzoyl)-beta alanine	60.0	42.0	18.0	60.0
21.	1,2,6-Hexanetriol	12.0	9.0	-9.0	0.0
22.	Cyclo butyl Carbinol	24.0	17.0	7.0	24.0
23.	6-[methyl(phenylsulfonyl)amino]-hexanoic acid. DMAPA	300.0	209.0	-209.0	0.0
24.	Cyano methyl imidazole	36.0	25.0	-25.0	0.0
25.	5-methylisoxazole-4-carboxylic acid	24.0	17.0	-17.0	0.0
26.	6-Bromo 2- naphthoic acid methyl ester	24.0	17.0	7.0	24.0
27.	Ethyl 7 chloro heptanoate	24.0	17.0	-17.0	0.0
28.	Trans- Pentenoic acid	24.0	17.0	-17.0	0.0

29.	3 nitro 2 methyl benzoic acid	24.0	17.0	-17.0	0.0
30.	5 nitro 2 methoxy phenol	24.0	17.0	7.0	24.0
31.	Bis(4-hydroxyphenyl) (2pyridyl) methane / Deacetyl Bisacodyl	60.0	42.0	-42.0	0.0
32.	2-((4-amino pentyl) (ethyl)amino) ethanol	24.0	17.0	7.0	24.0
33.	2-Amino-2'-chloro-5-nitrobenzophenone;	0.0	0.0	36.0	36.0
34.	2-Amino-5 chloro-2' chloro benzophenone	0.0	0.0	24.0	24.0
35.	2-(1-adamentyl) 4-bromoanisole	0.0	0.0	12.0	12.0
36.	(2-amino-5-chlorophenyl)(2-fluorophenyl)methanone	0.0	0.0	36.0	36.0
37.	3,6 Dichloro pyridazine	0.0	0.0	24.0	24.0
38.	3 fluoro 2 nitro Pyridine	0.0	0.0	12.0	12.0
39.	3,3-tetra methyl glutarimide	0.0	0.0	12.0	12.0
40.	2-Aminomethyl-7-chloro-2,3-dihydro-5-(2-fluorophenyl)-1H-1,4-benzodiazepine dimaleate [Midazolam intermediate]	0.0	0.0	24.0	24.0
41.	4,6-dichloro-5-methoxypyrimidine	0.0	0.0	60.0	60.0
42.	4-Bromophthalic Anhydride	0.0	0.0	12.0	12.0
43.	N-phenethyl acetamide	0.0	0.0	12.0	12.0

44.	N-(pyridin-3-yl)acetamide	0.0	0.0	12.0	12.0
	Total	1392.0	974.0	-2.0	972.0

- Industry has proposed change in the product mix in its existing facility by increasing production capacity of 17 existing products, addition of 12 new products & deletion of 15 existing products by decreasing the total production capacity from 974 MT/A to 972 MT/A i.e., by 2 MT/A.

B. Pollution load Details:
Water & Wastewater Aspect: -

a) Water Aspect: -

Particular	Consumption (CMD)			Loss(-)/gain (+) CMD			Effluent (CMD)		
	Existing	Proposed reduction after CIPM	Total after CIPM	Existing	Proposed reduction after CIPM	Total after CIPM	Existing	Proposed reduction after CIPM	Total after CIPM
Processing whereby water gets polluted & pollutants are easily biodegradable	52.8	0	52.8	-17.3	0.5	-17.8	35.5	- 0.5	35
Industrial Cooling, spraying in mine pits or boiler feed	360	0	360	-295.5	0	-295.5	64.5	0	64.5
Total - Trade (only)	412.8	0	412.8	-312.8	0.5	-313.3	100	- 0.5	99.5
Gardening	38	0	38	-38	0	-38	0	0	0
Domestic purpose	10	0	10	-2	0	-2	8	0	8
Grand Total	460.8	0	460.8	-352.8	0.5	-353.3	108	- 0.5	107.5

Grand Total as per CTO	617	-	108
Grand Total as per EC	617	-	306.4

b) **Wastewater Aspect Before Product Mix: -**

	Trade Effluent Generation											
Sr. No	Particular	Total Flow, CMD	Flow, CMD		COD				TDS			
			Strong	Weak	Strong		Weak		Strong		Weak	
					Mg/L	Kg/Day	Mg/L	Kg/Day	Mg/L	Kg/Day	Mg/L	Kg/Day
a	Process Activity	35.5	35.5	0	-	-	-	-	-	-	-	-
b	Cooling Tower & Boiler, Washing and other Activity	64.5	0	64.5	-	-	-	-	-	-	-	-
Total (Trade)		100	35.5	64.5	490979	17441.1	67	3.7	231268	8215.4	116	2
c	Domestic Effluent Generation, CMD	8	-	8	-	-	600	4.8	-	-	600	4.8

c) **Wastewater Aspect After Product Mix**

	Trade Effluent Generation											
Sr. No	Particular	Total Flow, CMD	Flow, CMD		COD				TDS			
			Strong	Weak	Strong		Weak		Strong		Weak	
					Mg/L	Kg/Day	Mg/L	Kg/Day	Mg/L	Kg/Day	Mg/L	Kg/Day

a	Process Activity	35	35	0	-	-	-	-	-	-	-	-
b	Cooling Tower & Boiler, Washing Activity	64.5	0	64.5	-	-	-	-	-	-	-	-
Total (Trade)		**99.5**	**35**	**64.5**	**479106**	**16770.8**	**67**	**3.7**	**234424**	**8205.9**	**116**	**2**
c	Domestic Effluent Generation, CMD	8	-	8	-	-	600	4.8	-	-	600	4.8

- The 1st Consent to Operate was granted for Part, in which typographically the water consumption was given at full quantity i.e 617 CMD as per E.C, PP has submitted the actual water consumption for current Part CTO is 460.8 CMD and the water budget will remain same i.e 460.8 CMD after Change in product mix.
- The trade effluent generation will be reduced by 0.5 CMD in comparison to the Part 1st Consent to Operate.
- The average COD Load will reduce by 670.3 Kg/Day and TDS Load will reduce by 9.5 Kg/Day.

C. Treatment System: -

iii) Trade Effluent:

Industry has segregated trade effluent into strong & weak stream and provided treatment system as below.

Strong COD/TDS stream of 35 CMD – Treatment system comprising of Primary (collection tank, neutralization tank, equalization tank, primary clarifier/Primary Settling Tank), Multi effect evaporator (4 stage) followed by Pusher centrifuge. The MEE condensate is treated in weak stream ETP.

Weak COD/TDS stream of 64.5 CMD- Treatment system comprising of Primary (collection tank, neutralization tank, equalization tank, flash mixer, primary clarifier/Primary Settling Tank) secondary (activated sludge process, bioreactor), tertiary (pressure sand filter & Activated carbon filter) followed by Advance treatment in Reverse Osmosis. Unit is ZLD, 100% Treated effluent is being recycled in utility.

iv) Sewage effluent

Domestic effluent 8 CMD is treated separately in STP having capacity 10 CMD.

D. Air Emission Aspect: -

Stack No.	Stack Attached to	As per EC	As per CTO	Existing Fuel Consumption	Fuel Consumption after Change in Product Mix	APC system	Stack Height
S-1	Boiler-1 3TPH	Briquettes: 30 TPD /Furnace oil 13 TPD for both boilers	Briquettes: 18 MT/Day	Briquettes: 15MT/Day	No Change	Fabric Bag Filter and mechanical dust collector	30 m
	Boiler-2 1TPH (standby)		FO:16.4 MT/Day	LDO/LSHS:1.2 MT/Day	No change	-	
	Thermopack 2lac Kcal/hr.	Furnace Oil 2.2 TPD	Furnace Oil 2.2 TPD	LDO: 0.3 MT/Day	No change	-	
S-2	D.G. Set 810 KVA	HSD 1000 Ltr/Hr	HSD 1000 Ltr/Hr	HSD 1000 Ltr/Hr	No Change	Stack	8 m

Process stack:

Sr. No.	Stack Attached to	APC system	Scrubbing media	Stack Height
1	Process stack	Two Stage Scrubber + Stack with adequate Height	Caustic + water	20 m
2	Process stack	Two Stage Scrubber + Stack with adequate Height	Caustic + water	20 m

- Industry has switched the fuel from Furnace Oil to LDO/ LSHS.
- There is no change in existing utilities.

E. Hazardous Waste Aspect: -

Sr. No	Type of Waste	Cat. No.	As Per EC	As Per CTO.	After Change in Product Mix Qty.	Remarks
1.	Process Residue and wastes	28.1	1200 MT/A	840 MT/A	1066.32 MT/A	Increase
2.	Chemical sludge from wastewater treatment	35.3	300 MT/A	210 MT/A	210 MT/A	No Change
3.	MEE Salts	37.3	4980 MT/A	3486 MT/A	3486 MT/A	No Change
4.	Spent Carbon from ETP	35.3	65 MT/A	46 MT/A	46 MT/A	No Change
5.	Spent Carbon	28.3	15.12 MT/A	10.58 MT/A	17.58 MT/A	Increase
6.	Spent Catalyst	28.2	25.44 MT/A	17.8 MT/A	17.04 MT/A	Decrease
7.	Spent Solvent	28.6	2880 MT/A	2016 MT/A	1205.8 MT/A	Decrease
8.	Empty barrels /containers /liners contaminated with hazardous chemicals/ wastes	33.1	2400 Nos./Y	1680 Nos./Y	1680 Nos./Y	No Change
9.	Contaminated Polyethylene Bags / Liners	33.1	1.5 MT/A	1.05 MT/A	1.05 MT/A	No Change
10.	Byproduct (2-chloro benzoic acid)	-	0.00	0.00	83.88 MT/A	Newly added
11.	Byproduct (Acetic Acid)	-	0.00	0.00	9.84 MT/A	Newly added
12	Spent Acid		0	0	482.76 MT/A	Newly added

Sr. No	Type of Waste	Cat. No.	As Per EC	As Per CTO.	After Change in Product Mix Qty.	Remarks
	Total		9467.06 and 2400 Nos./Y	6627.43 and 1680 Nos./Y	6626.27 MT/A and 1680 Nos./Y	

- The total Hazardous waste is decreasing in comparison to Part 1st Consent to Operate by 1.12 MT/A and it is within the EC quantity 9467.06 MT/A.

Technical Committee Deliberations:

The project proposal was discussed based on presentation made and documents- revised NIPL Certificate, NIPL proforma submitted by the proponent. Product wise load calculation in terms of wastewater, Air Emissions & Hazardous Waste generations were discussed. Existing Consent to Operate, Environmental Clearance, No Increase in Pollution Load certificate issued by M/s. Goldfinch Engineering Systems Private Limited., Date. 20.10.2023 and product-mix proforma are taken on the record.

Committee after due deliberations noticed that:

1) Industry has proposed change in the product mix in its existing facility by increasing production capacity of 17 existing products, addition of 12 new products & deletion of 15 existing products by decreasing the total production capacity from 974 MT/A to 972 MT/A i.e., by 2 MT/A.
2) The 1st Consent to Operate was granted for Part, in which typographically the water consumption was given at full quantity i.e 617 CMD as per E.C, PP has submitted the actual water consumption for current Part CTO is 460.8 CMD and the water budget will remain same i.e 460.8 CMD after Change in product mix.
3) The trade effluent generation will be reduced by 0.5 CMD in comparison to the Part 1st Consent to Operate.
4) The average COD load will reduce by 670.3 Kg/Day and TDS load will reduce by 9.5 Kg/Day.
5) Industry is segregating the strong and weak stream trade effluent and treating separately.
6) Industry has switched the fuel from Furnace Oil to LDO/ LSHS.
7) There is no change in existing utilities.
8) The total Hazardous waste is decreasing in comparison to Part 1st Consent to Operate by 1.12 MT/A and it is within the EC quantity 9467.06 MT/A.
9) The unit is Zero Liquid Discharge unit.

Technical Committee Decision:

Technical Committee decided to recommend the case for change in product mix based on revised "No Increase in Pollution Load" as per the provision of EIA notification 2006 with compliance of the following conditions;

1) Industry shall comply with all the conditions stipulated in Environmental Clearance and ensure display/upload of six-monthly compliance monitoring report on their official website.
2) The standards of the parameter Total Particulate Matter shall be stringent to the 50 mg/NM3.
3) Industry should not manufacture any other product for which permission is not granted by the MPCB.
4) Industry shall ensure connectivity of OCEMS data to Board server.
5) The industry shall dispose of the claimed by-products as Hazardous waste as per the provisions of Hazardous & Other Wastes (M & TM) Rules,2016.

(Shankar Waghmare)
Regional Officer (BMW)

(N. N. Gurav)
Assistant Secretary (Tech.)