Minutes of the 480th meeting of the State Level Expert Appraisal Committee held on 06/02/2019 at Geer Foundation, Sector 9, Indroda Park, Gandhinagar.

The 480th meeting of the State Level Expert Appraisal Committee (SEAC) was held on 06th February 2019 at Geer Foundation, Sector 9, Indroda Park, Gandhinagar. Following members attended the meeting:

1. *Dr. Dinesh Misra, Chairman, SEAC*
2. *Shri S. C. Srivastav, Vice Chairman, SEAC*
3. *Shri V. N. Patel, Member, SEAC*
4. *Shri R. J. Shah, Member, SEAC*
5. Shri A.K. Muley, Member, SEAC

The additional agenda of TOR/Scoping cases and Appraisal was taken up. The applicants made presentations on the activities to be carried out along with other details furnished in the Form-1, PFR, EIA-EMP reports and other reports.

8.	SIA/GJ/IND2/30648/2017	**M/s: Hem-Deep Organics Pvt. Ltd.** (Suleshvari Pharma), Plot no.3801/2 & 3802,GIDC Ind. Estate, Ankleshwar, Bharuch	Appraisal

Category of the unit : 5(f)

Project status: Expansion

- Project proponent (PP) has submitted online application vide no. SIA/GJ/IND2/30648/2017 dated 16/01/2019 for obtaining Environmental Clearance.
- MoEF & CC issued TOR to PP vide letter No- IA-J-11011/374/2017-IA II(I) dated 24 Aug 2017.
- Project proponent has submitted EIA Report prepared by M/s: Aqua Air Environmental Engineering Pvt. Ltd based on the TOR issued by MoEF & CC.
- This is an existing unit engaged in Synthetic organic chemicals and now proposes for expansion as tabulated below:

Sr. No.	Products	Capacity (MT/Month)			CAS No.
		Existing	Additional	Total	
1	Oxyclozanide	3.5	0	3.5	2277-92-1
2	Furosemide	2.5	2.5	5.0	54-31-9
3	Diaminomethyleneamino (1-amino-1-iminomethylene) thiomethyl thiozole dihydrochloride [ITU]	0	100	100	123-92-2
4	N-Sulfomyl-3-chloropropionamide hydrochloride[IF]	0	100	100	105-68-0
5	Famotidine	0	10	10	76824-35-6
6	Fomepizole	--	25	25	14205-39-1
7	Colsevelam hydrochloride	--			88150-62-3

8	Glimepiride	--			93479-97-1
9	Betahistine Dihydrochloride	--			106649-95-0
10	Adapalene	--			76824-35-6
11	Telmisartan	--			152751-57-0
12	Tapentadol Hydrochloride	--			845273-93-0
13	Colistimethate Sodium	--			71550-12-4
14	Rusvastatin Calcium	--			7554-65-6
15	1-3 dichloro Acetone	--			182815-44-7
16	Gunylthiourea	--			93479-97-1
17	Rabeprazole Sodium	--			5579-84-0
18	Carvediol	--			106685-40-9
19	Celecoxib	--			144701-48-4
20	Clopidogrel Bisulfate	--			175591-09-0
21	Atoravastatin Calcium	--			8068-28-8
22	Etoricoxib	--			147098-20-2
23	Valsartan	--			534-07-6
24	Tranexamic Acid	--			2114-02-5
25	Folic Acid	---			117976-90-6
26	Zolpidic Acid	---			72956-09-3
27	Pregabaline	---			169590-42-5
28	Chlorohexidine Base	---			120202-66-6
29	Benzarone	--			134523-03-8
30	Benzbromarone	--			202409-33-4
31	Zaltoprofen	--			137862-53-4
32	Ondansetron Hydrochloride	--			1197-18-8
33	Miconazole Nitrate	--			59-30-3
34	Ecanazole Nitrate	--			189005-44-5
35	Desloratadine	--			148553-50-8
36	Loratidine	--			79794-75-5
37	Gabapentine	--			60142-96-3
38	Albendazole	--			54965-21-8
39	Citrezine Hydrochloride	--			83881-52-1
40	Lasamide	--			2736-23-4
41	Pioglitazone Hydrochloride	--			112529-15-4
42	Mesalamine	--			89-57-6
43	Febuxostat	--			144060-53-7
44	Itopride Hydrochloride	--			122892-31-3
45	Amodafinil	--			68693-11-8
46	Quetipine Fumrate	--			111974-72-2
47	Aripiprazole	--			129722-12-9
48	Amlodipine Besylate	--			111470-99-6
49	Nebivilol Hydrochloride	--			152520-56-4
50	Sevelamer Hydrochloride	--			106-27-4
51	Sevelamer Carbonate	--			103-45-7
52	Poly Allaylamine Hydrochloride	--	500	500	122-70-3
	Total	**6.0**	**737.5**	**743.5**	

- The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.
- PP was called for presentation in the SEAC meeting dated 06/02/2019.
- Salient features of the project are as under :

Sr. no.	Particulars	Details
A	Total cost of Proposed Project (Rs. in Crores):	Existing: 0.50 Crores Proposed: 3.5 Crores Total: 4.0 Crores
B	Total Plot area (sq. meter)	Existing: 2619.5 Sq. m. Proposed: 2833.2 Sq. m. Total: 5452.7 Sq. m.
	Green belt area (sq. meter)	Existing: 0 Sq. m. Proposed: 1800 Sq. m. Total: 1800 Sq. m.
C	Employment generation	Existing: 4 Proposed: 20 Total: 24
D	Water	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	GIDC water supply
	Status of permission from the concern authority.	Unit has obtained permission for required quantity of water.

ii Water consumption (KLD)

	Existing KLD	Proposed (Additional) KLD	Total after Expansion KLD	Remarks
(A) Domestic	1	1	2	
(B) Gardening	--	5	5	
(C) Industrial				
Process	2.43	26.27	28.7	
Washing	3	2	5	
Boiler	2.5	12.5	15	
Cooling	3	12	15	
Others(Scrubbing)	0	1.3	1.3	
Industrial Total	10.93	54.07	65	
Grand Total (A+B+C)	11.93	60.07	72	

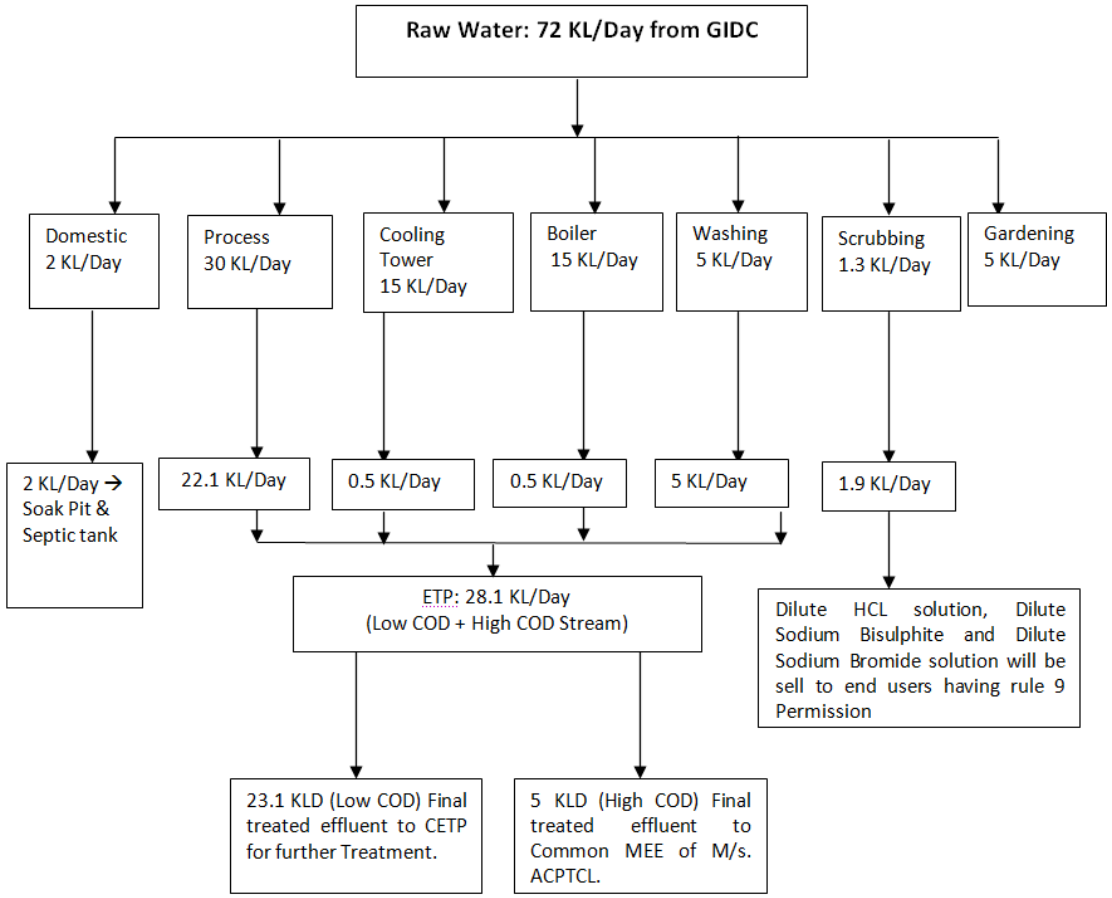
1) Total water requirement for the project: 72 KLD
2) Quantity to be recycled: 0 KLD
3) Total fresh water requirement: 72 KLD

iii Waste water generation (KLD)

Category	Existing KLD	Proposed (Additional) KLD	Total after Expansion KLD	Remarks
(A) Domestic	1	1	2	
(B) Industrial				
Process	2.95	19.15	22.1	
Washing	3	2	5	
Boiler	0.25	0.25	0.5	
Cooling	0	0.1	0.1	
Others(Scrubbing)	0	1.9	1.9	
Total Industrial waste water	6.2	23.8	30	

iv Treatment facility within premises with capacity [For existing and Proposed]

	[In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..	
	ETP consist of Primary Treatment: 30 KL/Day Septic Tank & Soak Pit: 2.5 KL/Day	
v	Mode of Disposal & Final meeting point	
	Domestic:	2 Kl/Day domestic wastewater will be disposed through Septic Tank/Soak Pit.
	Industrial:	• Low COD Industrial effluent @ 23.1 KLD is collected will be treated in ETP consists of primary treatment and finally sent to CETP of ETL for final treatment and disposal. • High COD Industrial effluent @ 5 KLD will be treated in ETP consists of primary treatment and sent to Common MEE of M/s. ACPTCL. • 1.9 KLD of Dilute HCL (30%) Solution, Dilute Sodium Bisulphite and Dilute Sodium Bromide solution will be sell to end users having rule 9 Permission.
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc. Name of Common facility	
	Common MEE of M/s. ACPTCL & Discharge Letter of M/s. ETL	
	Membership of Common facility (CF)	
	(For waste water treatment) Unit have obtained membership of Common MEE of M/s. ACPTCL.	
vii	Simplified water balance diagram with reuse / recycle of waste water	



vii	Reuse/Recycle details (KLD) [Source of reuse & application area]	

Total reuse - Nil
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E Air

i Flue gas emission details
No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.
Existing & Proposed

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Existing

Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
1	Non IBR Boiler (Capacity: 0.6TPH)	12	Natural Gas or LDO	10 SM^3/Day or 500 Lit/Day	SPM SO_2 NOx	Adequate Stack Height

Total Proposed

Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
1	Boiler (Existing) (Capacity: 0.6TPH)	12	Natural Gas	300 Sm^3/Day	SPM SO_2 NOx	Adequate Stack Height
2	Boiler (Proposed) (Capacity: 2.0 TPH)	30	Bio Coal	8 MT/Day		Multicyclone separator with bag filter
3	Thermic fluid heater (Proposed) (Capacity: 4 Lakh KCal/Hr.)	30	Bio Coal	2 MT/Day		Multicyclone separator with bag filter
4	D. G. Set	11	HSD	20 Litre/Hr		Adequate Stack Height

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ii Process gas i.e. Type of pollutant gases (SO_2, HCl, NH_3, Cl_2, NO_x etc.)
Existing & Proposed

-
Existing

Sr. no.	Source of emission	Type of emission	Stack/Vent Height (meter)	Air Pollution Control Measures (APCM)
1	Process Vent (Reactor Vessel)	SO_2 HCl HBr	10	Two Stage Alkali scrubber

Proposed

Sr. no.	Source of emission	Type of emission	Stack/Vent Height (meter)	Air Pollution Control Measures (APCM)
1	Process Vent (Reactor	HCl	11	Two Stage water scrubber

	Vessel)			
2	Process Vent (Reactor Vessel)	SO_2	11	Two Stage Alkali scrubber

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iii Fugitive emission details with its mitigation measures.

Following measures will be adopted to prevent and control fugitive emissions…

1. Airborne dust at all transfers operations/ points will be controlled either by spraying water or providing enclosures.
2. Care will be taken to store construction material properly to prevent fugitive emissions, if any.
3. Regular maintenance of valves, pumps, flanges, joints and other equipment will be done to prevent leakages and thus minimizing the fugitive emissions of VOCs.
4. Entire process will be carried out in the closed reactors with proper maintenance of pressure and temperature.
5. Periodic monitoring of work area will be carried out to check the fugitive emission.
6. Breather valves will be provided on solvent tanks.
7. Solvent tank vents will be connected to vent chillers.
8. To eliminate chances of leakages from glands of pumps, mechanical seal will be provided at all solvent pumps.
9. Close feeding system will be provided for centrifuges. Centrifuge and filtrate tank vents will be connected to vent chillers.
10. Minimum number of flanges, joints and valves in pipelines.
11. Enclosures to chemical storage area, collection of emission from loading of raw materials in particular solvents through hoods and ducts by induced draft, and control by scrubber / dust collector to be ensured.
12. Nitrogen blanketing will be provided, besides special care needs to be taken for control in respect of odorous chemicals.

F Hazardous waste
(as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
Existing & Proposed

i

Sr. No	Hazardous/Solid Waste	Source	Category	Quantity		Mode of Disposal
				Existing	Total after proposed expansion	
1	Discarded HDPE Drums/Bags	Material Handling	SCH-I-33.1	200 Nos./ Year (4 MT/ Year)	1000 Nos./ Month	Collection, Storage, Transportation and sell to Register Re-processors after decontamination.
2	Used / Spent Oil	Machinery & Equipment	SCH-I-5.1	5.0 Lit/Year	10 Lit/ Month	Collection, Storage, Transportation and reused within premises.
3	ETP Sludge	ETP	SCH-I-35.3	--	5 MT/ Month	Collection, Storage, Transportation and sent to

						common TSDF of M/s. BEIL.
4	Distillation Residue	Solvent Distillation Plant	SCH-I-28.1	750 Kg/ Month	24.5 MT/ Month	Collection, Storage, Transportation and sent for co-processing in cement industries or sent to common incineration at BEIL.
5	Spent Solvent	Process (From Product No. 1,2,3,4,5,14)	SCH-I-28.1	75 MT/Month	1000 MT/ Month	Collection, Storage, Transportation and Recovered by solvent distillation plant.
6	Spent Carbon	Process (From Product No. Furosemide & Benzarone	SCH-I-28.2	150 Kg/ Month	2 MT/ Month	Collection, Storage, Transportation and sent for co-processing in cement industries or sent to common incineration at BEIL.
7	HCL 30 %	Scrubber & Process (N-Sulfomyl-3-chloropropionamide hydrochloride[IF] & Lasamide)	SCH-II-B15	2.0 MT/ Month	46 MT/ Month & 150 MT/ Month	Collection, Storage, Transportation and sell to end users having rule 9 permission.
8	Sodium Bysulphite Solution (25%)	Scrubber	SCH-II-B-36	3 MT/ Month	8.5 MT/ Month	
9	Sodium Bromide Solution	Scrubber	SCH-II-B-36	2.5 MT/ Month	2.5 MT/ Month	
10	KCL Cake	Process (Benzarone)	SCH-I-28.1	--	30 MT/ Month	
11	Spent Sulfuric Acid (40%)	Process (Mesalmine)	SCH-II-B-36	--	163.75 MT/ Month	
12	Spent Catalyst	Process (Atorvastatin)	SCH-I-28.3	--	2 MT/ Month	Collection, Storage, Transportation and sent to regenerator
13	Inorganic Salt	Process (Benzarone)	SCH-I-28.1	--	20 MT/ Month	Collection, Storage, Transportation and sent to

							common TSDF at BEIL.
	14	Organic Process Waste	Process (Rusvastatin Calcium)	SCH-I-28.1	--	25 MT/ Month	Collection, Storage, Transportation and sent for co-processing in cement industries or sent to common incineration at BEIL.

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ii	Membership details of TSDF, CHWIF etc. (For HW management)	Unit is a member of TSDF site and Incineration Facility of M/s. BEIL (Ankleshwar) for disposal of hazardous wastes from time to time.
iii	Details of Non-Hazardous waste & its disposal(MSW and others)	No non hazardous waste will be generated.
G	Solvent management, VOC emissions etc.	
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents	
	Primary Condenser HE-01: Cooling Tower water or Chilled water will be used to condense the solvents depend on the vapor pressure at its operating conditions and the non condensedvapors will be condensed in a Secondary Condenser Secondary Condenser HE-02: Chilled Brine at - 5 0C will be used to condense the non condensed vapours in the Secondary Condenser Final venting will be done after passing through carbon column. 95% of Spent solvent will be recovered	
ii	VOC emission sources and its mitigation measures	
	During operation stage, leakage through valves/pumps, leakage and emission from open drum containing chemicals, open feeding, storage tanks, etc. will be major sources of fugitive emissions and VOCs. Excess use of solvent/s may also results fugitive emission from the process vessels. • Solid raw material charging will be done through closed system. • Entire process will be carried out in the closed reactors with proper maintenance of pressure and temperature. • Close feeding system will be provided for centrifuges. Centrifuge and filtrate tank vents will be connected to vent chillers. • Fugitive emission over reactors, formulation areas, centrifuges, chemical loading, transfer area, will be collected through hoods and ducts by induced draft and controlled by scrubber/dust collector. • Emphasis will be given to solvent management/solvent loss prevention. • Control by having proper scrubbing system. • Condenser to trap VOC. • Enclosures to chemical storage area, collection of emission from loading of raw materials in particular solvents through hoods and ducts by induced draft, and control by scrubber/dust collector to be ensured. • Nitrogen blanketing will be provided, besides special care needs to be taken for control in respect of odorous chemicals. • Proper maintenance schedule will be adhered to avoid emissions through flange joints, pump seals etc.	

	• Minimum number of flanges, joints and valves in pipelines. • Proper gland packing will be maintained for pumps and valves and to the extent possible pumps with mechanical seal. • All Flange joints of the pipe lines which carry solvents will be covered with flange guards. • All rotating equipments like pumps will be installed with mechanical seals to arrest any sort of emissions. • A regular preventive maintenance schedule will be in place to replace or rectify all gaskets and joints etc. as a part of ISO systems to ensure no fugitive emissions take place. • Periodic monitoring of work area will be carried out to check the fugitive emission. • Solvent tank vents will be connected to vent chillers. • Stand by pumps will be provided on all scrubbers. Besides, scrubbers are equipped with on-line pH meter with hooter system for better operational control. • Regular inspection of floating roof seals and proper preventive maintenance of roofs and seals for tanks. • Adequate ventilation will be provided.

- During the meeting dated 06/02/2019, technical presentation made by project proponent.
- During the meeting, the project was appraised based on the information furnished in the EIA Report,and details presented during the meeting.
- The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect. The baseline environmental study has been conducted for the study area of 10 km radial distance from project site for the period March to May, 2017. Ambient Air Quality monitoring was carried out for PM10, PM2.5, SO2, NOx,O3,Pb,NH3,CO,C6H6,As,Ni
- Cl2 and VOC at Nine locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using ISCST. Values of PM10 are higher in some villages due to transportation. But it is within limit of NAAQS Standard. SPM value at Kharchi Bhilwada is 140.8 µg/m3. Incremental Increase will be 0.1 µg/m3 of SPM due to flue gas emission. Adequate measure will be taken to reduce incremental increase due to proposed expansion. The values of TDS in Ground Water are high in Umarwada & Kharchi Bhilwada Villages & is found within the permissible limit as per inland surface water and IS 10:500 norms for potable water standard. Company will provide RO system in these villages for drinking water as a CER Activity.The modelling study proved that the air emissions from the proposed plant would not affect the ambient air quality of the region in any significant manner. The ambient air quality around the proposed project site will remain within the National Ambient Air Quality Standards (NAAQS).
- Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios has been carried out. The detail proposed safeguard measures including On-Site / Off-Site Emergency Plan has been covered in the RA report.
- This unit was established well before year 2006. They have valid CC&A for existing unit. Copy of CC&A, its compliance report is submitted. PP ensured that there are no court cases pending and no public

complaints against the project.

- The proposal is for expansion. Unit has valid CCA and compliance of CCA conditions were deliberated at length. This is an existing unit engaged in organic chemicals and now proposes for new synthetic organic chemical products. PP informed that earlier closure order issued to unit and Board given Revocation order after compliance made by the unit. Committee asked for after expansion, waste water discharge to CETP of M/s ETL increase from 6.2 KLD to 23.1 KLD only with respect to production increase from 6 MT/M to 743.5 MT/M which is not convincing and also CETP is non-complying with Direction under section 18(1)(b) of Water Act,74, PP satisfactorily not addressed about it. PP also not justified water consumption and waste water generation quantity with respect to production expansion quantity. Committee asked about storage tank area is inadequate with respect to storage tank to be installed. PP also not satisfactorily addressed about treatment for Ammonical nitrogen proposed and mentioning about ammonical nitrogen reduction from 100 mg/l to 40 mg/l. Committee asked clarification regarding acceptance of effluent having Ammonical Nitrogen-180 mg/l, sending to M/s ACPTCL, Ankleshwar which is not addressed properly by PP. Also PP represented about area adequacy of proposed plant. PP has not satisfactorily addressed hazardous waste management including generation and disposal of bleed liquor, spent solvent and spent acid. Committee insisted for budgetary fund allocation for EMP,Green belt and CER activity for five year instead of one year and PP agreed for fund allocation for five year for CER and green belt activity.PP addressed about LDAR and solvent recovery system. Committee deliberated all the TOR in detail with details of baseline data, GLC of PM10,PM2.5,SO2,NOx,O3,Pb,NH3,CO,C6H6,As,Ni,Cl2 and VOC. impact on surface water and ground water quality and Noise, EMP, CER with details of budgetary provisions.

After deliberation, SEAC unanimously decided to submit the following details of the project & consider the proposal after submission of the following details.

1. Justification regarding proposed water consumption & waste water generation with respect to Production expansion from 6 MT/M to 743.5 MT/Month.
2. Action plan for additional waste water generation considering 18 (1) (b) directions under the Water Act 1974 imposed by CPCB on CETP. Zero Liquid Discharge scheme for additional waste water in this regard.
3. Revised EMP showing Ammonical Nitrogen treatment in ETP and justification regarding effluent sending to common MEE having Ammonical nitrogen -180 mg/l which is not acceptable.
4. Revised hazardous waste details as per HW Rules 2016 along with MOU/ LOI with end users (with details of quantity) having rule 9 permission intending to use hazardous waste proposed in aforementioned table.
5. Revised plant lay out with respect to storage of hazardous chemicals considering safety aspects.

9.	SIA/GJ/IND2/29010/2018	**M/s: Karunesh Remedies** Plot No. 417/2, Phase-II, GIDC	Appraisal

		Industrial Estate, Panoli, Ankleshwar, Dist-Bharuch	

Category of the unit : 5(f)

Project status: Expansion

- Project proponent (PP) has submitted online application vide no. SIA/GJ/IND2/29010/2018 dated 17/01/2019 for obtaining Environmental Clearance.
- SEIAA issued TOR to PP vide letter SEIAA/GUJ/TOR/5(f)/1368/2018 dated 18/12/2018.
- Project proponent has submitted EIA Report prepared by M/s: Aqua Air Environmental Engineering Pvt. Ltd based on the TOR issued by SEIAA.
- This is an existing unit engaged in Synthetic organic chemicals and now proposes for expansion as tabulated below:

Sr. no.	Name of the Products	CAS no. / CI no.	Quantity (MT/Month)			End-use of the products
			Existing	Proposed	Total	
1	Lamotrigine Intermediates (2,3 Dishlorophenyl (oxo) acetonitrile)	77668-42-9	03	00	03	Lamotrigine
2	Cetirizine Dihydrochloride Intermediates (4-Chlorophenyl phenyl)methyl]piperazine	300543-56-0				Cetirizine DIhydrochloride
3	Clopidogrel Bisulphate Intermediates (Methyl amino (2-chlorophenyl)acetate)	141109-14-0				Clopidogrel Bisulphate
4	Cetirizine Dihydrochloride	83881-52-1	00	06	06	Anti-histamines
5	Clopidogrel Bisulphate	120202-66-6	00	02	02	Antiplatelet agent
6	Levocetirizine Dihydrochloride	130018-77-8	00	01	01	Sneezing, itching, watery eyes
7	GLIMEPIRIDE	93479-97-1	00	0.2	0.2	Anti - Diabatic
8	Ivermectin	70288-86-7	00	01	01	Onchocerciasis
9	Isotretinoin	4759-48-2				Treatment of Acne Vulgaris
10	Tretinoin	302-79-4				To smooth rough facial skin
11	Betahistine Hydrochloride	5579-84-0				To treat dizziness (vertigo)
Total			3	10.2	13.2	

- The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.
- PP was called for presentation in the SEAC meeting dated 06/02/2019.
- Salient features of the project are as under:

Sr. no.	Particulars	Details
A	Total **cost of Proposed** Project (Rs. in Crores):	Existing: 0.80 Proposed:3.5

		Total: 4.30
B	**Total Plot area** (sq. meter)	Existing: 1500 Sq. m. Proposed: 00 Sq. m. Total: 1500.Sq. m.
	Green belt area (sq. meter)	Existing: 300 Sq. m. Proposed: 00.Sq. m. Total: 300 Sq. m.
C	**Employment generation**	Existing:15 Proposed:20 Total:35
D	**Water**	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	GIDC Water Supply
	Status of permission from the concern authority.	GIDC Water Supply
ii	**Water consumption (KLD)**	

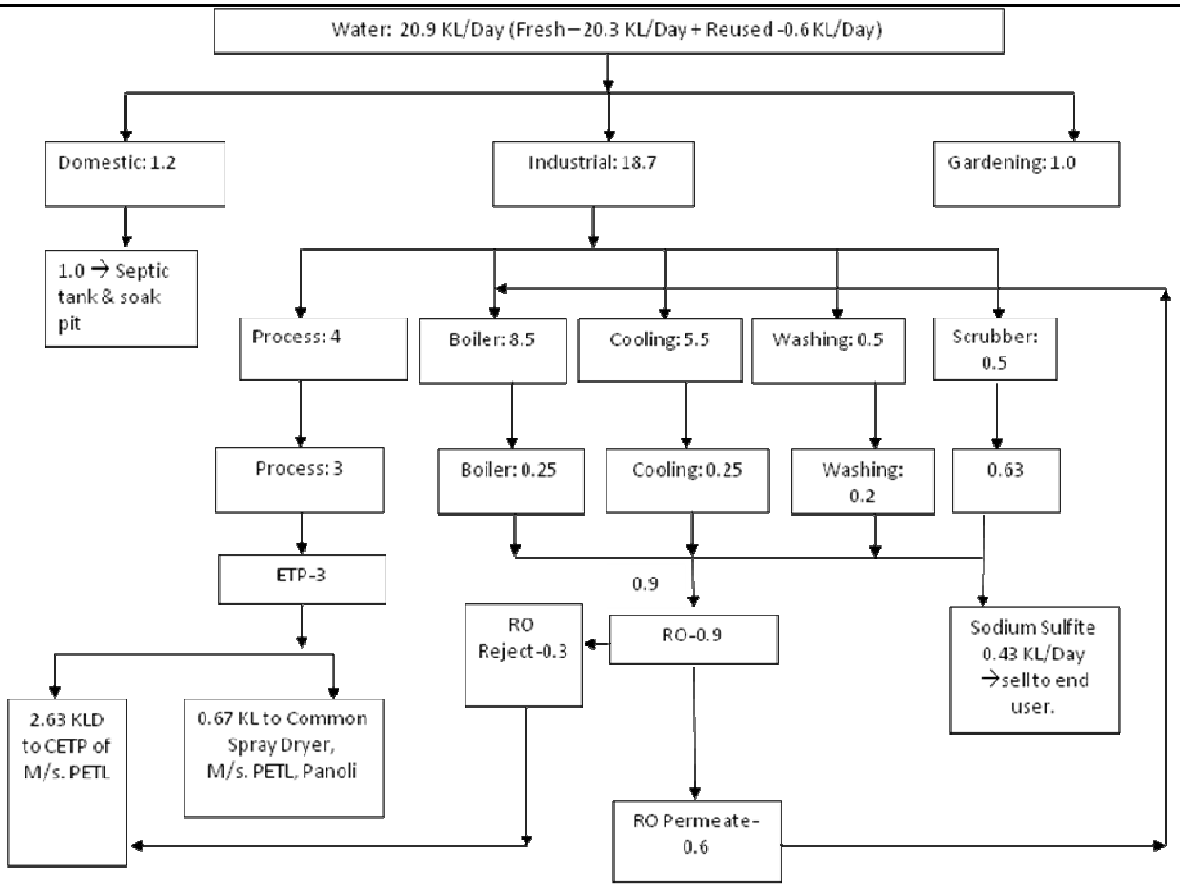
	Existing KLD	**Proposed (Additional)** KLD	**Total after Expansion** KLD	Remarks
(D) Domestic	0.05	1.15	1.2	
(E) Gardening	0.00	1.00	1.00	
(F) Industrial				
Process	1.0	3.0	4.00	
Washing	0.05	0.15	0.20	
Boiler	0.10	8.40	8.50	
Cooling	0.05	5.45	5.50	
Others	0.03	0.47	0.50	
Industrial Total	**1.23**	**17.47**	**18.70**	
Grand Total (A+B+C)	**1.28**	**19.62**	**20.90**	

4) **Total water requirement** for the project: 20.9 KLD
5) Quantity to be **recycled:** 0.6 KLD
6) Total **fresh water** requirement: 20.3 KLD

iii	**Waste water generation (KLD)**

Category	Existing KLD	Proposed (Additional) KLD	Total after Expansion KLD	Remarks
(C) Domestic	0.04	0.96	1.00	
(D) Industrial				
Process	0.72	2.28	3.00	
Washing	0.05	0.15	0.20	
Boiler	0.01	0.24	0.25	
Cooling	0.01	0.24	0.25	
Others	0.03	0.60	0.63	
Total Industrial waste water	**0.82**	**3.51**	**4.33**	

iv	Treatment facility within premises with **capacity [For existing and Proposed]** [In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..	
	In-house ETP (Primary Treatment) – 4.33 KL/Day	
v	Mode of Disposal & Final meeting point	
	Domestic:	1.0 KL/Day domestic wastewater will be disposed through Septic Tank/Soak Pit.
	Industrial:	0.67 KL/Day High COD stream is sent to Common Spray Dryer of M/s. PETL, Panoli. 0.6 KL/Day RO Permeate is re-used in Boiler. 0.43 KL/Day Sodium Sulfite generated from Scrubber will be send to end-user having permission under Rule-9 .2.63 KL/Day Low COD stream is sent to CETP of M/s. PETL, Panoli for further treatment & disposal.
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc. Name of Common facility	
	Common Spray Dryer & CETP of M/s. PETL, Panoli	
	Membership of Common facility (CF)	
	Common Spray Dryer & CETP of M/s. PETL, Panoli	
vii	**Simplified water balance diagram with reuse / recycle of waste water**	
All Figures in KL/Day **Source of water: GIDC Water Supply**		



vii	Reuse/Recycle details (KLD) [Source of reuse & application area]
	Total reuse 0.6 KLD

Source of waste water for reuse with quantity in KLD	**Application area with quantity in KLD**	**Remarks regarding feasibility to reuse i.e. w/w characteristics (COD, BOD, TDS etc.)**
0.9 KLD Wastewater from Boiler, Cooling, Washing, Scrubbing will be treated in RO.	0.6 KLD RO permeate will be re-used in Boiler	COD:-20 mg/L BOD:-5 mg/L TDS:-100 mg/L

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E	**Air**
i	Flue gas emission details No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc. **Existing & Proposed**
	-

Sr. no.	Source of emission With Capacity e.g. Boiler (8 TPH)	Stack Height (meter)	Name of the fuel	Quantity of Fuel MT/hr & MT/Day	Type of emissions i.e. Air Pollutants	APCM	NAAQS (National Ambient Air Quality Standards)
Existing							
1	Small Industrial Boiler (0.8 TPH)	18	Wood#	3 MT/Day	SPM SO2 Nox	Cyclone Separator	150 mg/Nm^3 262 mg/Nm^3 94 mg/Nm^3
Proposed							
1	Small Industrial Boiler (0.8 TPH)	18	Briquettes of Bio-Coal	3 MT/Day	SPM SO2 Nox	Cyclone Separator	150 mg/Nm^3 262 mg/Nm^3 94 mg/Nm^3
2	Steam Boiler -1.5 TPH	18	Briquettes of Bio-Coal	5 MT/Day	SPM SO2 Nox	Cyclone Separator with bag filter	150 mg/Nm^3 262 mg/Nm^3 94 mg/Nm^3
3	Thermopack Fluid Heater (1 Lac Kcal/Hr)	18	LDO	1 MT/Day	SPM SO2 Nox	Adequate Stack Height	150 mg/Nm^3 262 mg/Nm^3 94 mg/Nm^3
4	D.G. Set (125 KVA)	11	HSD	25 Liter/Hr	SPM SO2 Nox	Adequate Stack Height	150 mg/Nm^3 262 mg/Nm^3 94 mg/Nm^3

-# Wood will be discontinued after proposed expansion.

ii Process gas i.e. Type of pollutant gases (SO_2, HCl, NH_3, Cl_2, NO_x etc.)

Existing & Proposed

-

Sr. no.	Specific Source of emission (Name of the Product & Process)	Type of emission	Stack/Vent Height (meter)	Air Pollution Control Measures (APCM)
1	Process Vent -1 (Chlorination) (Betahistine Hydrochloride)	HCl	11	Water + Alkali Scrubber
2	Process Vent -2 (Sulphonation) Cetirizine Dihydrochloride Intermediates (4-Chlorophenyl phenyl)methyl]piperazine	SO2	11	Two Stage Alkali Scrubber

iii **Fugitive emission** details with its mitigation measures.

Following measures will be adopted to prevent and control fugitive emissions…

1. Airborne dust at all transfers operations/ points will be controlled either by spraying water

or providing enclosures.

2. Raw materials loading and unloading will be done in covered area
3. Care will be taken to store construction material properly to prevent fugitive emissions, if any.
4. Regular maintenance of valves, pumps, flanges, joints and other equipment will be done to prevent leakages and thus minimizing the fugitive emissions of VOCs.
5. Entire process will be carried out in the closed reactors with proper maintenance of pressure and temperature.
6. Periodic monitoring of work area will be carried out to check the fugitive emission.
7. To eliminate chances of leakages from glands of pumps, mechanical seal will be provided at all solvent pumps.
8. Close feeding system will be provided for centrifuges. Centrifuge and filtrate tank vents will be connected to vent chillers.
9. Minimum number of flanges, joints and valves in pipelines.
10. Enclosures to chemical storage area, collection of emission from loading of raw materials in particular solvents through hoods and ducts by induced draft, and control by scrubber / dust collector to be ensured.
11. Adequate ventilation will be provided.
12. Periodic monitoring of work area will be carried out to check the fugitive emission as per the norms of Gujarat Factory Rules.

F **Hazardous waste**

(as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

Existing & Proposed

i

Sr. no.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Rules.	Quantity (MT/Annum)			Management of HW
				Existing	Proposed	Total	
1	ETP Sludge	ETP	SCH-I/35.3	0.24	35.76	36.00	Collection, Storage, transportation and Disposal in TSDF

2	Used Oil	Machineries	SCH-I/5.1	0.06	0.24	0.30	Collection, Storage, transportation and Disposal by selling to registered reprocesser
3	Discarded container/ barrel/ liner/ bags	Raw Materials/ Products	SCH-I/33.1`	2.5	8.5	11.00	Collection, Storage, transportation and Disposal by sale to authorized vendors
4	Distillation Residue	Distillation	SCH-I/20.3	0.18	50	50.18	Collection, Storage, transportation and Disposal at co-processing, Cement industries or Common incinerator by M/s. BEIL, Ankleshwar.
5.	Spent Carbon	Process (Product No. 3,5)	SCH-I/28.2	0.048	48.00	48.048	
6.	Spent Solvent	Process	SCH-I/28.6	0.12	1800	1800.12	Collections, Storage, distill and reuse in plant premises.
7.	Filter material	Filter press	SCH-I/35.1	0.036	0.036	0.072	Collection, Storage, transportation and Disposal at Common incinerator by M/s. BEIL, Ankleshwar.
8.	Inorganic Waste	Process (Product No. 1)	SCH-I/28.1	0.000	60.00	60.00	Collection, Storage, transportation and Disposal in TSDF.
9.	Piperazine Solution (22%)	Process (Product No. 2, 4)	SCH-I/28.1	0.000	100.00	100.00	Collection, Storage, transportation and sell to end user who is having Rule-9 Permission.
10.	NaCL solution	Scrubber	SCH-I/28.1	0.000	12.00	12.00	Collection, Storage and send to ETP for further process.
11.	HCl	Scrubber	SCH-II/B-	0.000	20.00	20.00	Collection,

	Solution (28%)		15				Storage and re-use within premises for the manufacturing of Cetirizine Dihydro chloride Intermediates (Rqd. Qty.: 120 MT/Annum).
12.	Sodium Sulfite (18%)	Scrubber	SCH-I/28.1	0.000	142.00	142.00	Collection, Storage, transportation and sell to end user who is having Rule-9 Permission.
13.	Spent Sulphuric Acid (70-80%)	Process (Product No. 2, 6, 11)	SCH-II/B-15	0.000	69.50	69.50	

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ii	Membership details of **TSDF, CHWIF** etc. **(For HW management)**	Company will obtain the membership of TSDF, CHWIF.
iii	Details of Non-Hazardous waste & its disposal(MSW and others)	There is no generation of non – hazardous waste.

G **Solvent management**, VOC emissions etc.

i Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents

Name of Solvent	Total Input (MT)	Qty. of Recovered Solvent (MT)	Qty. of Losses (MT)	% Recovery	% Losses
Acetone	153	148.85	4.15	97.29	2.71
Acetonitrile	1516	1477.19	38.81	97.44	2.56
Ethyl Acetate	63	61.16	1.84	97.08	2.92
Hexane	1164	1135.37	28.63	97.54	2.46
MCB	1137	1104.25	32.75	97.12	2.88
Methanol	1800	1745.46	54.54	96.97	3.03
Methylene dichloride	271	264.12	6.88	97.46	2.54
Toluene	60	58.22	1.78	97.03	2.97

ii **VOC emission** sources and its mitigation measures

During operation stage, leakage through valves/pumps, leakage and emission from open drum containing chemicals, open feeding, storage tanks, etc. will be major sources of fugitive emissions and VOCs. Excess use of solvent/s may also results fugitive emission from the process vessels.

- Solid raw material charging will be done through closed system.
- Entire process will be carried out in the closed reactors with proper maintenance of pressure and temperature.
- Close feeding system will be provided for centrifuges. Centrifuge and filtrate tank vents will be connected to vent chillers.
- Fugitive emission over reactors, formulation areas, centrifuges, chemical loading, transfer area, will be collected through hoods and ducts by induced draft and controlled by

	scrubber/dust collector. • Emphasis will be given to solvent management/solvent loss prevention. • Control by having proper scrubbing system. • Condenser to trap VOC. • Enclosures to chemical storage area, collection of emission from loading of raw materials in particular solvents through hoods and ducts by induced draft, and control by scrubber/dust collector to be ensured. • Proper maintenance schedule will be adhered to avoid emissions through flange joints, pump seals etc. • Minimum number of flanges, joints and valves in pipelines. • Proper gland packing will be maintained for pumps and valves and to the extent possible pumps with mechanical seal. • All the raw materials will be pneumatically transfer to the reactor. • All rotating equipments like pumps will be installed with mechanical seals to arrest any sort of emissions. • A regular preventive maintenance schedule will be in place to replace or rectify all gaskets and joints etc. as a part of ISO systems to ensure no fugitive emissions take place. • Periodic monitoring of work area will be carried out to check the fugitive emission. • Solvent tank vents will be connected to vent chillers. • Adequate ventilation will be provided. • Airborne dust at all transfers operations/ points will be controlled either by spraying water or providing enclosures.

- During the meeting dated 06/02/2019, technical presentation made by project proponent.
- During the meeting, the project was appraised based on the information furnished in the EIA Report,and details presented during the meeting.
- The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect. The baseline environmental study has been conducted for the study area of 10 km radial distance from project site for the period March to May' 2017. Ambient Air Quality monitoring was carried out for PM10,PM2.5,SO2, NOx,O_3,Pb,NH_3,CO,C6H6, BaP(ng/m^3),As,Ni,Hcl,Cl_2, HBr, HC and VOC at Nine locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using ISCST – 3 model. The results of AAQM are within the norms prescribed in NAAQS. The Value of PM_{10} is higher in Panoli Region due to location near GIDC Estate Area & For Kosamdi & Jitali, The Value of PM_{10} is higher due to excess vehicle moment. The resultant concentrations are within the NAAQS. The modeling study proved that the air emissions from the proposed plant would

not affect the ambient air quality of the region in any significant manner. The ambient air quality around the proposed project site will remain within the National Ambient Air Quality Standards (NAAQS).

- Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios has been carried out. The detail proposed safeguard measures including On-Site / Off-Site Emergency Plan has been covered in the RA report.
- This unit having EC and CCA for existing synthetic organic chemical products. They have valid CC&A for existing unit. Copy of EC and CC&A, its compliance report is submitted. PP ensured that there are no court cases pending and no public complaints against the project.
- The proposal is for expansion. Unit has valid EC, CCA and compliance of EC conditions were deliberated at length. This is an existing unit engaged in organic chemicals and now proposes for new synthetic organic chemical products. Committee asked about EC conditions compliance verification report of RO, Bhopal, PP informed that except two conditions all other EC conditions are complied. Committee asked about non compliance of EC conditions, PP not satisfactorily addressed about green belt not provided in existing plant hence committee asked PP to come with concrete work regarding green belt development in plant.

After deliberation, SEAC unanimously decided to defer the proposal and proposal will be considered for appraisal after satisfactory submission of the above.

10.	SIA/GJ/IND2/27855/2018	**M/s: Balaji Industries** Plot No. 2525 & 2526, Chemical Zone, GIDC, Sarigam, Umargam, Valsad	Appraisal

Category of the unit : 5(f)

Project status: Expansion

- Project proponent (PP) has submitted online application vide no. SIA/GJ/IND2/27855/2018 dated **16/01/2019** for obtaining Environmental Clearance.
- SEIAA issued TOR to PP vide letter SEIAA/GUJ/TOR/5(f)/1143/2018 dated 23/08/2018.
- Project proponent has submitted EIA Report prepared by M/s: Aqua Air Environmental Engineering Pvt. Ltd based on the TOR issued by SEIAA
- This is an existing unit engaged in in-organic chemicals and now proposes for expansion of synthetic organic chemicals as tabulated below:

Sr. no.	Name of the Products	CAS no. / CI no.	Quantity MT/Month			End-use of the products
			Existing	Proposed	Total	
1	Ferrous Sulphate	--	250	-250	0	--
1	Aniline 2-5 DiSulfonic Acid	98-44-2	--	20 Mt/Month	20 Mt/Month	Intermediate for Dye Stuffs (Direct Dyes), Intermediate for Optical Brightening Agent, Acid Film orange P, Pigment Saturn Yellow 5 GL,

						Printing Board eaux 'B',In Manufacturing of Mordent Azaol
2	Metanilic Acid	121-14-1	--	80 Mt/Month	80 Mt/Month	Raw material for dyes, Intermediate for Optical Brightening Agent, Raw Material for DEMAP & Meta Amino Phenol.
3	Magnesium Sulphate	7487-88-9	--	60 Mt/Month	60 Mt/Month	In Mfg of Cattle Feed
	Total	250	-90	160		

Note: Existing Production Ferrous Sulphate will be discontinue after getting EC & CTE.

- The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.
- PP was called for presentation in the SEAC meeting dated 06/02/2019.
- Salient features of the project are as under:

Sr. no.	Particulars	Details
A	Total **cost of Proposed** Project (Rs. in Crores):	2.4 Crores
B	**Total Plot area** (sq. meter)	1700 Sq. m.
	Green belt area (sq. meter)	597 Sq. m.
C	**Employment generation**	**30**
D	**Water**	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	GIDC water supply
	Status of permission from the concern authority.	Unit has obtained permission for required quantity of water.
ii	**Water consumption (KLD)**	

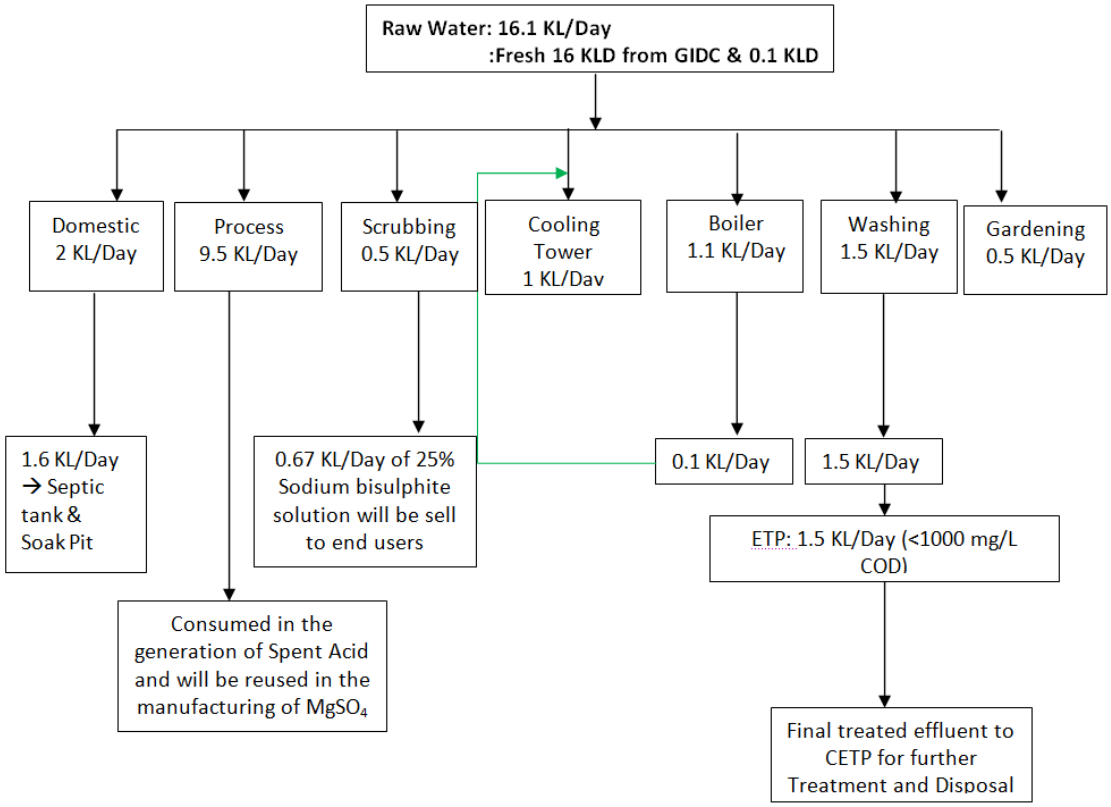
Category	**KLD**	**Remarks**
(G) Domestic	2	
(H) Gardening	0.5	
(I) Industrial		
Process	9.5	
Washing	1.5	
Boiler	1.1	
Cooling	1	
Others (Scrubber)	0.5	
Industrial Total	13.6	
Total (A + B + C)	16.1	

7) **Total water requirement** for the project: 16.1 KLD
8) Quantity to be **recycled:** 0.1 KLD
9) Total **fresh water** requirement: 16 KLD

iii	**Waste water generation (KLD)**			
	Category	**Waste water**	**Remarks**	

			KLD	
		(E) Domestic	1.6	
		(F) Industrial		
		Process	0	
		Washing	1.5	
		Boiler	0.1	Reuse in cooling Tower
		Cooling	0	
		Others (Scrubbing)	0.67	Sell to end users
		Total Industrial waste water	2.27	
		Total [A + B]	3.87	

iv	Treatment facility within premises with **capacity** [In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..	
	ETP consist of primary treatment: 2 KLD	
v	Mode of Disposal & Final meeting point	
	Domestic:	1.6 KLD of Domestic Wastewater will be disposed through Soak pit or Septic Tank.
	Industrial:	• 1.5 KL/Day effluent having <1000 mg/L COD will be neutralized in ETP and then treated effluent will be sent to CETP of M/s. Sarigam Clean Initiative, Sarigam for further treatment and disposal. • 0.1 KL/Day of boiler blow down will be reuse in cooling tower. • 0.67 KL/Day of 25% of sodium bisulphate solution will be sold to end users.
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc. Name of Common facility	
	CETP of M/s. Sarigam Clean Initiative, Sarigam.	
	Membership of Common facility (CF)	
	(For waste water treatment) Unit have obtained membership of Membership of CETP of M/s. Sarigam Clean Initiative, Sarigam.	
vii	**Simplified water balance diagram with reuse / recycle of waste water**	



vii Reuse/Recycle details (KLD)
[Source of reuse & application area]

Total reuse 0.1 KLD

Source of waste water for reuse with quantity in KLD	**Application area with quantity in KLD**	**Remarks regarding feasibility to reuse i.e. w/w characteristics (COD, BOD, TDS etc.)**
Boiler: 0.1 KLD	Cooling:0.1 KLD	COD: 250 mg/l BOD: 50 mg/l TDS: 400 mg/l

-

E Air

i Flue gas emission details
No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.

-

Sr. no.	**Source of emission With Capacity**	**Stack Height (meter)**	**Type of Fuel**	**Quantity of Fuel MT/Day**	**Type of emissions i.e. Air Pollutants**	**Air Pollution Control Measures (APCM)**
1	Boiler (800 Kg / Hr.)	18	Natural Gas	170 SCM/Day	Adequate Stack Height	PM < 150 mg/Nm^3 SO_2 < 100 ppm NOx < 50 ppm

2	DG Set	9	HSD	10 Liter/Day		

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ii Process gas i.e. Type of pollutant gases (SO_2, HCl, NH_3, Cl_2, NO_x etc.)

-

Sr. no.	Source of emission	Type of emission	Stack/Vent Height (meter)	Air Pollution Control Measures (APCM)
1	Reaction Vessel (Sulphonation)	SO_2 < 40 mg/Nm^3	11	Two Stage Alkali Scrubber

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iii **Fugitive emission** details with its mitigation measures.

Following measures will be adopted to prevent and control fugitive emissions…

1. Airborne dust at all transfers operations/ points will be controlled either by spraying water or providing enclosures.
2. Care will be taken to store construction material properly to prevent fugitive emissions, if any.
3. Regular maintenance of valves, pumps, flanges, joints and other equipment will be done to prevent leakages and thus minimizing the fugitive emissions of VOCs.
4. Entire process will be carried out in the closed reactors with proper maintenance of pressure and temperature.
5. Periodic monitoring of work area will be carried out to check the fugitive emission.
6. Breather valves will be provided on solvent tanks.
7. Solvent tank vents will be connected to vent chillers.
8. To eliminate chances of leakages from glands of pumps, mechanical seal will be provided at all solvent pumps.
9. Close feeding system will be provided for centrifuges. Centrifuge and filtrate tank vents will be connected to vent chillers.
10. Minimum number of flanges, joints and valves in pipelines.
11. Enclosures to chemical storage area, collection of emission from loading of raw materials in particular solvents through hoods and ducts by induced draft, and control by scrubber / dust collector to be ensured.
12. Nitrogen blanketing will be provided, besides special care needs to be taken for control in respect of odorous chemicals.

F **Hazardous waste**
(as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

i

Sr. no.	Type/Name of Hazardous waste	Source of generation	Category and Schedule as per HW Rules.	Quantity (MT/Annum)	Disposal Method
1	Discarded HDPE Drums/Bags	Process & Raw material Handling	Schedule-I-(33.1)	1000 Nos	**Collection, Storage, Transportation and sell to Register vendors after**

					decontamination.
2	Used / Spent Oil	Machinery and Equipment	Schedule-I-(5.1)	20 LTR	**Collection, Storage, Transportation and sell to registered recycler.**
3	ETP Sludge	ETP	Schedule-I-(35.3)	0.2	Collection, Storage, Transportation and sent to common TSDF.
4	Iron Sludge	Process (Metanilic Acid)	Schedule-I-(26.1)	960	Collection, Storage, Transportation and sent to Cement Industries or Common TSDF.
5	Process Waste	Process (Magnesium Sulphate)	Schedule-I-(26.1)	90	Collection, Storage, Transportation and sent to Common TSDF.
6	Gypsum	Process (Metanilic Acid)	Schedule-I-(26.1)	1200	Collection, Storage, Transportation and sent to Cement Industries or Common TSDF.
7	25% of Sodium bisulphite	Scrubber (Aniline 2,5 Disulfonic Acid)	Schedule-II-(B-36)	240	Collection, Storage, Transportation and sell to end users having rule 9 permission.
8	Spent Sulfuric Acid (30%)	Process	Schedule-I-(26.3)	3560	Collection, Storage, Transportation and 3600 MT will be Reused in Mfg of $MgSO_4$.

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ii	Membership details of **TSDF, CHWIF** etc. **(For HW management)**	Unit have obtained membership of Common TSDF of M/s. SEPPL.
iii	Details of Non-Hazardous waste & its disposal(MSW and others)	No non hazardous waste will be generated.
G	**Solvent management**, VOC emissions etc.	
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents	

	NA. No Solvent will be used.
ii	**VOC emission** sources and its mitigation measures
	NA. Company will not use any solvent. So, VOC will not be generated.

- During the meeting dated 06/02/2019, technical presentation made by project proponent.
- During the meeting, the project was appraised based on the information furnished in the EIA Report, and details presented during the meeting.
- The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect. The baseline environmental study has been conducted for the study area of 10 km radial distance from project site for the period March to May, 2017. Ambient Air Quality monitoring was carried out for PM10, PM2.5, SO2, NOx,O_3,Pb,NH_3,CO,C6H6,As,Ni and VOC at Nine locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using ISCST. The resultant concentrations are within the NAAQS. The modeling study proved that the air emissions from the proposed plant would not affect the ambient air quality of the region in any significant manner. The ambient air quality around the proposed project site will remain within the National Ambient Air Quality Standards (NAAQS).
- Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios has been carried out. The detail proposed safeguard measures including On-Site / Off-Site Emergency Plan has been covered in the RA report.
- This unit is having valid CC&A for existing unit. Copy of CC&A, its compliance report is submitted. PP ensured that there are no court cases pending and no public complaints against the project.
- The proposal is for expansion. Unit has valid CCA and compliance of CCA conditions were deliberated at length. This is an existing unit engaged in mfg of inorganic chemicals and now proposes for new synthetic organic chemical products.PP informed that no legal action taken against unit. After expansion, industrial effluent will be treated in ETP consist of primary treatment & then it will be sent to CETP of Sarigam. Committee asked about compliance of CETP and PP informed that CETP is in compliance. Also PP represented about area adequacy of proposed plant and production activity carried out in closed shed. PP also informed that unit will discontinue existing ferrous sulphate production after getting EC and CTE for existing product. Committee asked about spent acid management, PP addressed that unit shall manufacture magnesium sulphate product from spent acid. PP informed that Natural gas is proposed as fuel for proposed project expansion. Two stage alkali scrubber will be provided with proposed reactor. Considering hazardous waste generation, PP has satisfactorily addressed hazardous waste management including generation and disposal of spent sulphuric acid. Committee deliberated all the TOR in detail with details of baseline data, GLC of PM10, PM2.5, SO2, NOx,O_3,Pb,NH_3,CO,C6H6,As,Ni and VOC ,impact on surface water and ground water quality and Noise, EMP, CER with details of budgetary provisions.

- Compliance of the ToR was found satisfactory.

After detailed discussion, it was decided to recommend the project to SEIAA Gujarat for grant of Environmental Clearance.

11.	SIA/GJ/IND2/30662/2018	**M/s: Iconic Pharmachem** Plot No. 3202, Phase-III, GIDC Estate, Panoli, Ankleshwar, Bharuch	Appraisal

Category of the unit : 5(f)

Project status: New

- Project proponent (PP) has submitted online application vide no. SIA/GJ/IND2/30662/2018 dated 16/01/2019 for obtaining Environmental Clearance.
- SEIAA issued TOR to PP vide letter SEIAA/GUJ/TOR/5(f)/1370/2018 dated 18/12/2018.
- Project proponent has submitted EIA Report prepared by M/s: Aqua-Air Environmental Engineers Pvt. Ltd based on the TOR issued by SEIAA
- This is a new unit proposes manufacturing of synthetic organic chemicals as tabulated below:

SR. NO.	PRODUCTS	CAS NO.	Production Capacity (MT/MONTH)	
			TOTAL	END USE
1	Diclofenac Sodium Derivatives	15307-79-6	30.0	Anti-inflammatory drug
2	Diclofenac Potassium	15307-81-0		Anti-inflammatory drug
3	Aceclofenac	89796-99-6		Anti-inflammatory drug
4	Citrizine Dihydrochloride	83881-52-1		Anti Histamine
5	Levocitrizine Dihydrochloride	130018-77-8		Anti Histamine
6	Meclizine Hydrochloride	31884-77-2		Anti Histamine
7	Cilnidipine	132203-70-4		Anti Hypertension
8	Azelinidipene	123524-52-7		Anti Hypertension
9	Nifidipine	21829-25-4		Anti Hypertension
10	Pregabaline	148553-50-8		Anti-Epileptic
11	RCMH(R(-)-3-(Carbamoylmethyl)-5-methyl hexanoic acid)	181289-33-8		Intermediate of Pregabaline
12	Glimepiride	93479-97-1		Anti Diabetic
13	Gadopententic Acid	80529-93-7		As a paramagnetic agents
14	Mannich Hydrochloride	42036-65-7		Intermediate of Tramadol

15	Ambroxol HCL	23828-92-4		Respiratory Diseases
16	Rosuvastatin Calcium	147098-20-2		Lipid Lowering
17	Desloratadine	100643-71-8		Anti Histamine
18	Levetiracetam	102767-28-2		Anti Epileptic
19	Telmisarton	144701-48-4		Anti Hypertension
20	Indolinone	15307-86-5		Intermediate of Diclofenac sodium
21	N-Chalroacetyl 2,6 Dichlrodiphenyl Amine	15308-01-7		Intermediate of Diclofenac sodium
22	2,6 Dichlrodiphenyl Amine	15307-93-4		Intermediate of Diclofenac sodium
Total			**30 MT/MONTH**	

- The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.
- PP was called for presentation in the SEAC meeting dated 06/02/2019.
- Salient features of the project are as under:

Sr. no.	Particulars	Details
A	Total cost of Proposed Project (Rs. in Crores):	3.0 Crores
B	Total Plot area(sq. meter)	1500.0 Sq. m.
	Green belt area (sq. meter)	495.0 Sq. m.
C	Employment generation	Direct-15 Indirect-15
D	Water	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	GIDC Water Supply
	Status of permission from the concern authority.	Unit has obtained permission for water supply.
ii	Water consumption (KLD)	

		Category	Quantity KLD	Remarks	
		(J) Domestic	2.0		

(K) Gardening	2.0	
(L) Industrial		
Process	15.0	
Washing	1.0	
Boiler	5.0	
Cooling	3.0	
Others/Scrubber	2.0	
Industrial Total	26.0	
Total (A + B + C)	30.0	

10) Total water requirement for the project: 30.0 KLD
11) Quantity to be recycled:0.7 KLD
12) Total fresh water requirement: 29.3 KLD

iii Waste water generation (KLD)

Category	Waste water KLD	Remarks
(G) Domestic	1.8	Septic tank or Soak pit system.
(H) Industrial		
Process	14.0	
Washing	1.0	
Boiler	0.5	R. O plant & 0.6 KLD Reuse In Boiler Feed Water (R.O Reject 0.1 KLD Common MEE)
Cooling	0.2	
*Scrubber/Others	2.2	Reuse in plant premises.
Total Industrial waste water	15.1	Common MEE of M/s. ACPTCL, Ankleshwar
Total [A + B]	17.9 KL/Day	

-

iv Treatment facility within premises with capacity
[In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..

ETP : 20.0 KL/Day

M/s. Iconic Pharmachem shall have an Effluent treatment plant consisting of primary & secondary treatment units. The details of ETP are as follows.

First all streams of wastewater shall be collected in Equalization cum Neutralization tank (ENT-

01)where the continuous addition and stirring of Caustic solution is done to maintain neutral pH of wastewater from Caustic Dosing Tank (CDT-01) as per requirement by gravity. Mixer is provided in the ENT-01 to keep all suspended solids in suspension and for proper mixing.

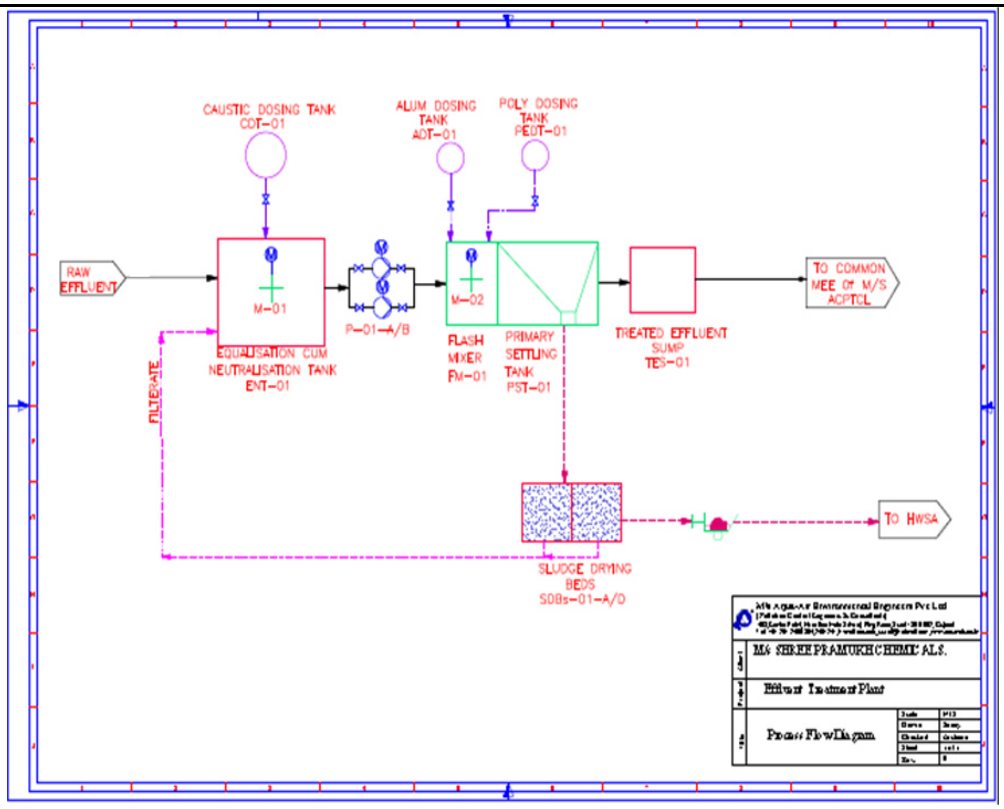
Then, neutralized wastewater shall be pump to Flash Mixer (FM-01) where Alum and Polyelectrolyte shall be dosed from Alum Dosing Tank (ADT-01) and Polyelectrolyte Dosing Tank (PEDT-01) respectively by gravity. Then it will go into PST-01 where solids are allowed to settle and Clear supernatant from PST-01 shall be collected in Treated Effluent Sump (TES-01) before sent to Common MEE of M/s Ankleshwar Cleaner Production Tech. Center Ltd (ACPTCL) for further treatment.

Sludge settled in PST-01 shall be collected in Sludge Drying Beds (SDBs-01-A/D) where, dewatering shall be carried out before storage in HWSA and ultimate disposal to TSDF.

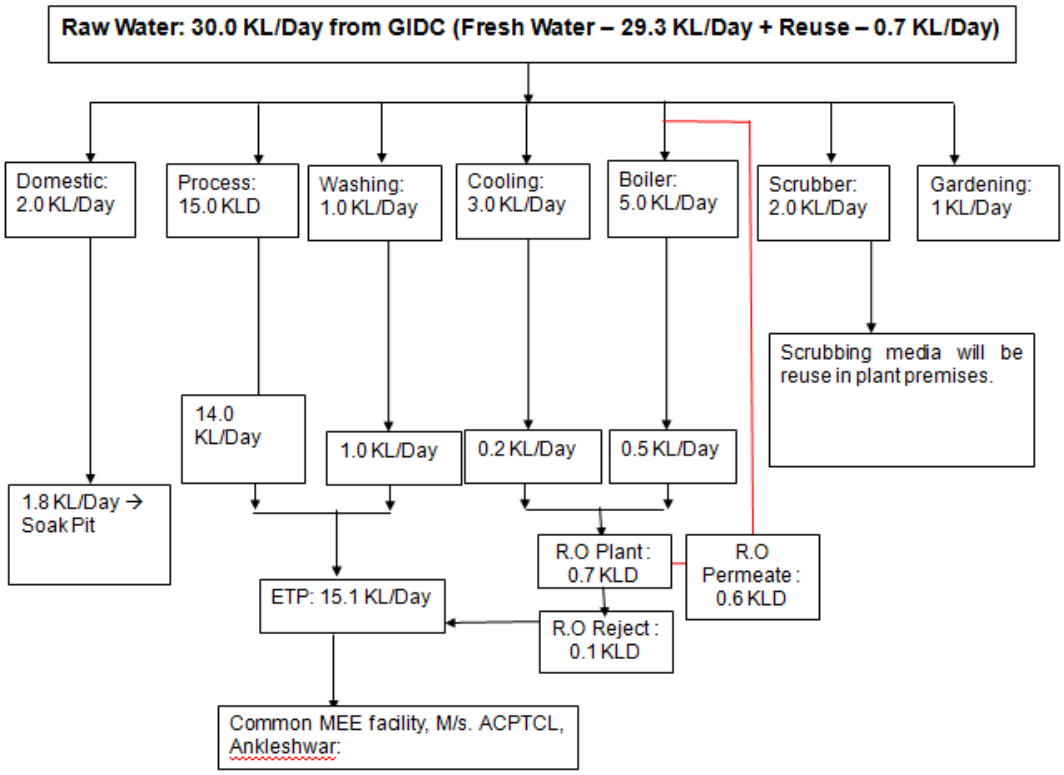
SIZE OF TANKS

S.N.	Name Of Unit	Size (M X M X M)	No.	Moc/ Remark
1	Equalization Cum Neutralization Tank (Ent-01)	4.0 M X 2.0 M (2.5 M+0.5 Fb)	1	Rcc M30+A/A Bk. Lining
2	Flash Mixer (Fm-01)	0.7 M X 0.7 M (1.5 M+0.3 Fb)	1	Rcc M30
3	Primary Settling Tank (Pst-01)	1.5 M X 1.0 M (1.8 M + 0.5 Fb)	1	Rcc M30
4	Treated Effluent Sump (Tes-01)	4.0 M X 2.0 M (2.5 M+0.5 Fb)	1	Rcc M30
5	Sludge Drying Beds (Sdbs-01-A/B)	3.0 M X 2.0 M	2	Bk. Maso. With Rcc Bedding
6	Caustic Dosing Tank (Cdt-01)	500 Lit	1	Hdpe
7	Alum Dosing Tank (Adt-01)	500 Lit	1	Hdpe
8	Poly Dosing Tank (Pedt-01)	250 Lit	1	Hdpe

Flow Diagram of Effluent Treatment Plant:



v	Mode of Disposal & Final meeting point	
	Domestic:	Soak Pit & Septic Tank
	Industrial:	Industrial Effluent will be treated in ETP and then sent to Common MEE of M/s. ACPTCL for further treatment and disposal.
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE etc. , Name of CF Common MEE of M/s. ACPTCL.	
	Unit have obtained membership of M/s. ACPTCL. ACPTCPL/1300000210/2018-19/51 Dated: 18.08.2018	
	Membership of Common facility (CF) (For waste water treatment)	
	BEIL for TSDF & INCINERATION	
vii	Simplified water balance diagram with reuse / recycle of waste water	



viii	Reuse/Recycle details (KLD)

Total reuse 0.6 KLD

Source of waste water for reuse with quantity in KLD	Application area with quantity in KLD	Remarksregarding feasibility to reuse i.e. w/w characteristics (COD, BOD, TDS etc.)
Boiler = 0.5 KLD Cooling= 0.2 KLD	0.6 KLD Boiler Feed Water	pH : 7.1 COD : 150.0 BOD : BDL TDS :500.0

E	Air
i	Flue gas emission details No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.

-

Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)

	1	Boiler (1000 kg/hr.)	30 m	Agro waste	2 MT/day	Pm < 150 mg/nm^3 So_2 < 100 ppm Nox < 50 ppm	Cyclone separator with bag filter
	2	TFH (2 lakh kcal/hr.)	30 m	Agro waste	2 MT/day		Cyclone separator with bag filter
	3	D.G.set (150 kva)	11 m	Diesel	15 lit/hr		Adequate height provided

-

ii Process gas i.e. Type of pollutant gases (SO_2, HCl, NH_3, Cl_2, NO_x etc.)

-

Sr. no.	Specific Source of emission (Name of the Product & Process)	Type of emission	Stack/Vent Height (meter)	Air Pollution Control Measures (APCM)
1	Process Vent*-1	Hcl < 20 Mg/Nm^3	11m	Two Stage Scrubber
2	Process Vent*-2	Nh3 < 175.0 Mg/Nm^3	11m	Two Stage Scrubber

-

iii Fugitive emission details with its mitigation measures.
As below:

Following measures will be adopted to prevent and control fugitive emissions…

1. Airborne dust at all transfers operations/ points will be controlled either by spraying water or providing enclosures.
2. Care will be taken to store construction material properly to prevent fugitive emissions, if any.
3. Regular maintenance of valves, pumps, flanges, joints and other equipment will be done to prevent leakages and thus minimizing the fugitive emissions of VOCs.
4. Entire process will be carried out in the closed reactors with proper maintenance of pressure and temperature.
5. Periodic monitoring of work area will be carried out to check the fugitive emission.
6. Breather valves will be provided on solvent tanks.
7. Solvent tank vents will be connected to vent chillers.
8. To eliminate chances of leakages from glands of pumps, mechanical seal will be provided at all solvent pumps.
9. Close feeding system will be provided for centrifuges. Centrifuge and filtrate tank vents will be connected to vent chillers.
10. Minimum number of flanges, joints and valves in pipelines.

11. Enclosures to chemical storage area, collection of emission from loading of raw materials in particular solvents through hoods and ducts by induced draft, and control by scrubber / dust collector to be ensured.

Nitrogen blanketing will be provided, besides special care needs to be taken for control in respect of odorous chemicals.

F Hazardous wastes
(as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

i

Sr. no.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Rules.	Quantity (MT/Annum)	Management of HW
1	ETP Sludge	ETP	Sch-I/35.3	2 MT/Month	Collection, Storage, Transportation And Dispose To Tsdf Site.
2	Discarded Drums /Containers	Raw Material	Sch-I/33.1	150 Nos/Month	Collection, Storage, Transportation, Decontamination & Disposal By Selling To Registered Recycler
3	Discarded Liner/Bag	Raw Material	Sch-I/33.1	600 Nos./Month	
4	Used Oil	Plant machinery	Sch-I/5.1	240 Liters/Annum	Collection, Storage, Transportation, Disposal By Selling To Registered Recycler Or Re-Use As Lubricant
5	Organic Waste	From Mfg. Of Rosuvastatin Calcium	Sch-I/28.1	3.3 MT/Month	Collection, Storage, Transportation And Dispose To Co-Processing In Cement Industries Or Common Incineration Site
6	Sulphuric Acid (70 To 80 %)	From Mfg. Of Cetrizine, Levocetrizine, Pregabaline, Rcmh,	Sch-I/28.1	796.5 MT/Month	Collection, Storage, Transportation And Sell To End User having permission under Rule-9
7	Spent Carbon	From Mfg. Process Of	Sch-I/28.3	5.0 MT/Month	Collection, Storage, Transportation And

			Pregabaline			Dispose To Co-Processing In Cement Industries Or Common Incineration Site.
	8	Inorganic Waste	From Mfg. Process Of Glimipride	Sch-I/28.1	6.3 MT/Month	Collection, Storage, Transportation And Dispose To Common TSDF Site
	9	Spent Solvents	From Mfg. Process	Sch-I/28.6	550 MT/Month	Collection, Storage, Recovered Through In House Distillation Or Sent For Distillation Job Work To Authorized Recycler Then Reuse In Process
	10	Distillation Residue	From Solvent Recovery Plan	Sch-I/28.1	5.5 MT/Month	Collection, Storage, Transportation And Dispose To Co-Processing In Cement Industries Or Common Incineration Site
	11	Dil. HCL (30 %)	From Scrubber	Sch-II/B15	32.5 MT/Month	Collection, Storage, Transportation And Reuse in Cetirizine Dihydrochloride (Require Quantity of HCL (30%) – 90 MT/Month).
	12	Liq. Ammonia (25 %)	From Scrubber	Sch-I/28.1	31.25 MT/Month	Collection, Storage, Transportation And Reuse in Levetiracetam (Require Quantity of liq.Ammonia (25%) – 54.3 MT/Month).

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ii	Membership details of TSDF, CHWIF etc. (For HW management)	Membership Certificate of Common TSDF, Incineration SITE
iii	Details of Non-Hazardous waste & its disposal	No non hazardous waste will be generated.

	(MSW and others)	
G	Solvent management, VOC emissions etc.	
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents	

Details of Solvent recovery

Atmospheric Distillation of Solvents:

Primary Condenser HE-01: Cooling Tower water will be used to condense the solvents and the non condensed vapors will be condensed in a Secondary Condenser.

Secondary Condenser HE-02: Chilled water at 6 ^{0}C will be used to condense the non condensed vapors in the Secondary Condenser.

VOC Trap Condenser HE-03: Chilled Brine at -35 ^{0}C will be used to trap any traces of Solvent which is slipped from Secondary condenser.

Vacuum distillation of Solvent:

Primary Condenser HE-01: Cooling Tower water or Chilled water will be used to condense the solvents depend on the vapor pressure at its operating conditions and the non condensed vapors will be condensed in a Secondary Condenser.

Secondary Condenser HE-02: Chilled Brine at -17 ^{0}C will be used to condense the non condensed vapors in the Secondary Condenser.

VOC Trap Condenser HE-03: Chilled Brine at -35 ^{0}C will be used to trap any traces of Solvent which is slipped from Secondary condenser.

- 97.00 % of Spent Solvent will be recovered by In-house distillation of Solvent.

ii VOC emission sources and its mitigation measures

- All the solvents are directly distillate from product mix and purified in packed column with the help of reflux and therefore there is no generation of any distillation residue from the solvent distillation.
- The solvent distillation system is designed so as to achieve minimum 95% recovery of solvent.
- Pure solvent, crude solvent and distilled (recovered) solvent shall be stored only in storage tanks and we shall not be using drums at any stage in the Solvent Management System.
- Wherever required, the solvents shall be directly pumped into day tanks from the storage tanks and shall be charged into the reactors without involving any manual handling.
- All the pumps shall be mechanical seal type to avoid any leakage of solvent.
- All necessary fire fighting systems shall be provided with alarm system. Flame proof wiring and flame proof electrical accessories shall be provided to avoid any mishap.
- All the storage tank and day tank shall be connected to a vent system through chilled water condensers to prevent loss of solvents in the atmosphere.

All the distillation column vents are also connected to chilled water condensers for maximum possible recovery of the solvents.

Name of Solvent	B.P	V.P	Before LDAR		After LDAR	
			% Recovery	% Loss	% Recovery	% Loss
Acetone	56.2Ÿ C	24 kpa	95.0	5.0	97.3	2.7
Chloroform	61.0Ÿ C	21.1 kpa	95.2	4.8	97.2	2.8
Methanol	64.6	13.02 kpa	95.4	4.6	97.3	2.7

Toluene	111.0	760 mm hg	92.1	7.9	97.0	3.0
IPA	82	44hpa	92.5	7.5	97.0	3.0
Acetonitrile	82	97hpa	94.2	5.8	96.3	3.7
Ethyl Acetate	75	103mbar	92.4	7.6	97.0	3
n-hexane	69	160mbar	92.7	7.3	97.1	2.9

- During the meeting dated 06/02/2019, technical presentation made by project proponent.
- During the meeting, the project was appraised based on the information furnished in the EIA Report, and details presented during the meeting.
- The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect. The baseline environmental study has been conducted for the study area of 10 km radial distance from project site for the period March 2017 to May 2017. Ambient Air Quality monitoring was carried out for PM10,PM2.5,SO2, NOx,O_3,Pb,NH_3,CO,C6H6,As,Ni,Hcl,HC and VOC at Nine locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using ISCST – 3 model. The resultant concentrations are within the NAAQS. The modeling study proved that the air emissions from the proposed plant would not affect the ambient air quality of the region in any significant manner. The ambient air quality around the proposed project site will remain within the National Ambient Air Quality Standards (NAAQS).
- Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios has been carried out. The detail proposed safeguard measures including On-Site / Off-Site Emergency Plan has been covered in the RA report.
- This unit is new synthetic organic chemical product unit.
- The proposal is for new bulk drug unit. PP informed that Diclofenac product partly captive used for Aceclofenac product and partly selling as bulk drug product. Committee asked about banned chemicals manufacturing, PP informed that no banned bulk drug products proposed by them. Committee asked about worst case scenario for proposed product, PP satisfactorily addressed about it. PP informed that effluent from process will be treated in primary ETP and then sent to common MEE of M/s ACPTCL, Ankleshwar and boiler and cooling blow down will be treated in RO plant and RO permeate reused while RO reject will be sent to common MEE of M/s ACPTCL, Ankleshwar. Committee asked about spent aluminium chloride generation from proposed product, PP informed that spent aluminium chloride generated is utilized for KCl manufacturing which is used as raw material for proposed bulk drugs. PP informed about spent HCl generated from Diclofenac product is utilized for Cetrizine product within premises. PP satisfactorily addressed about hazardous waste management specifically spent solvent. Committee insisted for solvent will be stored in drums as per PESO standard. Also PP represented about area adequacy of proposed plant and production activity carried out in closed shed. Upon asking about raw effluent quality, PP ensured about inlet norms will be achieved before sending to common MEE. Agro waste is proposed as

fuel for proposed project. Cyclone and Bag filter will be provided with proposed boiler and thermo pack. Two stage scrubber will be provided with each process stack. Considering hazardous waste generation, PP has satisfactorily addressed hazardous waste management including generation and disposal of bleed liquor. Committee deliberated all the TOR in detail with details of baseline data, GLC of PM10,PM2.5,SO2, NOx,O_3,Pb,NH_3,CO,C6H6,As,Ni,Hcl,HC and VOC,, Impact on surface water and ground water quality and Noise, EMP, CER with details of budgetary provisions.

- Compliance of the ToR was found satisfactory.

After detailed discussion, it was decided to recommend the project to SEIAA Gujarat for grant of Environmental Clearance with following specific condition:

1. Unit shall provide solvent drum storage area as per PESO standards.

12.	SIA/GJ/IND2/21961/2017	**M/s: Aarti Industries Limited (Organic Division)** Plot No.801, 801/23, 806 & 807, Phase-III, GIDC Estate, Pardi, Vapi, Dist-Valsad	Reconsideration EC, Refer back case

Category of the unit : 5(f)

Project status: Expansion

- M/s. Aarti Industries Limited (Organic Division) applied for environmental clearance and the SEAC recommended the project for grant of environmental clearance vide this office letter no.EIA-10-2017-IND2/412/2876 dated 24/09/2018 for setting up of new manufacturing plant of 'Synthetic Organic Chemicals' as mentioned therein:
- The case was referred back by the SEIAA, Gujarat vide letter no. SEIAA/GUJ/EC/5(f)/1070/2018 dated 05/10/2018 with the following point:
    1. To verify the details of generation and management of spent acid.
    2. To verify the details of generation and management of Distillation residue.
    3. To verify the details of study area with respect to the TOR accorded.
- Project proponent submitted reply vide their letter dated 22/12/2018 for the above mentioned points.
- PP has submitted as under:
    1. **The unit have two types of Spent Acid Management.**
        a. The unit is having existing permission for reception, concentration and dispatch through consent no: AWH 88120 Date of Issue 06/09/2017 for spent sulphuric acid. The unit will receive spent sulphuric acid (18-40 %) from M/s Aarti Industries Limited (Alchemie Division), Vapi and M/s Apex Pharma Chem Pvt Ltd., Vapi. The consent is for receiving 21600 MT/Annum from M/s Aarti Industries Limited (Alchemie Division) and 7500 MT/Annum from M/s Apex Pharma Chem Pvt Ltd. and concentrate the same and 17292 MT/ Annum as Dilute Sulphiric Acid (70%) dispatched to Single Super Phosphate Manufacturing unit. The distillate water is given back to the same two industries.

The unit has applied to CPCB under Rule 9 and obtained trial permission.

b. The second type of spent sulfuric acid from unit's own manufacturing activity. The spent acid is generated from nitration products. The spent acid calculation is done based on Material Balance and its quantification of spent acid generation and use, material balance per ton of finished product is again given in Annexure II. Product wise spent acid generation and reuse based on worst case scenario are given by them. Total spent acid generation from the process as per worst case scenario will be 21115 MT/ Month in which 14462 MT/month spent acid will be reused in same products as such in the next batch. Out of Excess 6653 MT/Month, 3924 MT/Month spent sulfuric acid (70%) will be sent to acid concentration plant. After that, concentrated 88% acid will be reuse in PNCB, ONCB & MNCB plant. Remaining 2729 MT/Month (32,748 MT/Annum) spent sulfuric acid(70%) will be sold out to end users under rule-9 permission. MOU with end users are submitted in EIA Report. Due to introduction of above mentioned acid concentration plant the spent acid to be sold out quantity will be reduced from 6653 MT/Month to 2729 MT/Month. Revised Hazardous waste table was attached as Annexure-IV. Details of generation and management of Hydrochloric acid (30%): The HCl (30%) acid is generated from chlorination products. The HCl acid calculation is done based on Material Balance. Product wise HCl acid generation based on worst case scenario are given in below table. It has been verified and there is no any change in the quantity of HCl acid as per EIA Report.

2. The distillation residue calculation is done based on Material Balance. To verify the quantification of distillation residue generation and material balance per ton of finished product is again given in Annexure II. Unit has proposed to reduce the Production quantity of 124 TCB, 123 TCB, TCAN products from 3000 MT/Month to 1000 MT/Month in order to reduce the residue quantity. Product wise distillation residue generation based on worst case scenario are given. Due to reduction of 1, 2, 4 TCB, 1, 2, 3 TCB, TCAN products from 3000 MT/Month to 1000 MT/Month the residue will be reduced from 561 MT/Month to 352 MT/ Month. List of products table 1.1 on page no 3 & 4 in Chapter-1 as per EIA report as below,

- Revised list of products are as under:

Sr. No.	Name of Product	CAS No.	Existing quantity in MT/Month as per CCA AWH-88120	Proposed quantity in MT/Month	Total quantity after expansion in MT/Month
1	Para Nitro Chloro Benzene (PNCB)	100-00-5	5000	3900	9000 (Either/Or)
2	Ortho Nitro Chloro Benzene (ONCB)	88-73-3			
3	Meta Nitro Chloro Benzene (MNCB)	121-73-3	100		
4	2,5 Dichloro Nitro Benzene (2,5 DCNB)	89-61-2	400	0	1500 (Either/Or)
5	3,4 Dichloro Nitro Benzene	99-54-7	600		

	(3,4 DCNB)				
6	2,3 Dichloro Nitro Benzene (2,3 DCNB)	3209-22-1	100		
7	2,4 Dichloro Nitro Benzene (2,4 DCNB)	611-06-3	400		
8	2,6 Dichloro Nitro Benzene (2,6 DCNB)	601-88-7	0		
9	2,3,4 Trichloro Nitro Benzene (2,3,4 TCNB)	17700-09-3	0		
10	2,4,5 Trichloro Nitro Benzene (2,4,5 TCNB)	89-69-0	0		
11	2,4 Dichloro 3 Fluoro Nitro Benzene	393-79-3	0		
12	2,4 Dinitro Chloro Benzene (DNCB)	97-00-7	200	1300	1500 (Either/Or)
13	Mono Chloro Benzene (MCB)	108-90-7	3800	3000	8000* (Either/Or)
14	Ortho Dichloro Benzene (ODCB)	95-50-1	500		
15	Para Dichloro Benzene (PDCB)	106-46-7	500		
16	Meta Dichloro Benzene(MDCB)	106-46-7	0		
17	1,2,4 Tri Chloro Benzene (1,2,4 TCB)*	120-82-1	200		
18	1,2,3 Tri Chloro Benzene (1,2,3 TCB)*	87-61-6			
19	Trichloroaniline (TCAN)*	636-30-6 634-93-5	0		
20	Ortho Anisidine	90-04-0	30	0	30
21	Para Anisidine	104-94-9	20	0	20
22	Dichloro Aniline	95-76-1	50	0	50
23	2,5 Dichloro Aniline	95-82-9	35	0	35
24	3,4 Dichloro Aniline	95-76-1	15	0	15
25	Ortho Chloro Aniline	95-51-2	10	0	10
26	P-Phenylene diamine	106-50-3	25	0	25
27	O-Phenylene diamine	95-54-5	225	0	225
28	OCPNA/PCONA	121-87-9	100	0	100
29	Ortho Nitro Aniline (ONA) / Para Nitro Aniline (PNA)	88-74-4/ 100-01-6	150	0	150
30	ONCB Para sulphonic acid	17691-19-9	25	0	25
31	3,3 Dichloro benzidine	74332-	10	0	10

	sulphate	73-3			
32	Dilute Sulphuric Acid	7665-93-9	1441	0	1441
	Total		**13,936**	**8,200**	**22, 136**

***** NOTE: as such either/or any product will be 8000 MT/Month, but 1, 2, 4 TCB, 1, 2, 3 TCB, TCAN not more than 1000 MT/Month.

* Due to reduction of production quantity of 1, 2, 4 TCB, 1, 2, 3 TCB, TCAN from 3000 MT/Month to 1000MT/Month. There will be no any changes in water consumption, waste water generation and in emission. Except reduction in residue.

- Revised Hazardous waste details are as under:

Sr. no.	**Type/Name of Hazardous waste**	**Specific Source of generation (Name of the Activity, Product etc.)**	**Category and Schedule as per HW Rules.**	**Quantity (MT/Annum)**			**Management of HW**
				Existing	**Proposed**	**Total**	
1.	ETP waste	ETP	35.3	900	1320	2220	Collection, Storage, Transportation, disposal to TSDF site.
2.	MEE salt	MEE	35.5	0	1460	1460	Collection, Storage, Transportation, disposal to TSDF site.
3.	Distillation Residue	Process Nitration & Chlorination Products	26.1	1440	5292	6732	Collection, Storage, Transportation, disposal to Co processing/ CHWIF.
4.	Spent carbon	Process	36.2	12	0	12	Collection, Storage, Transportation disposal to Co processing/ CHWIF.
5.	Discarded Material (plastic bags, Drums)	Packing Raw Materials	33.1	40	20	60	Collection, Storage, Transportation disposal entire quantity reuse for filling the ETP waste and drums for filling residue.
6.	Used Oil	Maintenance/ Plant	5.1	200 Lit/ Annum	800 Lit/ Annum	1000 Lit/ Annum	Collection, Storage, Transportation disposal by reuse in plant & machinery for lubricating purpose.

7.	a. Dilute H_2SO_4 b. Dilute H_2SO_4 (18- 40 %)	Reception from (a) M/s. Aarti Industries Ltd.(Alchemie organic Div.) & (b) M/s. Apex Pharma Chem Pvt. Ltd.)	B15	a. 21600 b. 7500	--	a. 21600 b. 7500	Reception, concentration and dispatch through consent no: AWH 88120 Date of Issue 06/09/2017. Reception-M/s. Aarti Industries Ltd. (Alchemie organic Div.) & M/s. Apex Pharma Chem Pvt. Ltd.) collection/ Storage/ concentrate and send dilute sulphuric acid (70%) as product for SSP mfg. and distilled water to parent companies under Rule-9 permission.
8.	Sulfuric Acid (70%)	Nitration Products	B15	43524	36312	79836	Collection, storage and 47088MT/Annum sent to in-house SAC Plant and reuse in-house PNCB/ONCB plant and remaining 32748 MT/Annum sale to authorized industry having permission under rule-9 of Hazardous & other wastes (Management &Transboundry Movement) rule-2016.
9.	Hydrochloric Acid (30%)	Chlorination Products	B15	73980	84456	1, 58, 436	Collection, storage, Transportation and sale to authorized industry having permission under rule-9 of Hazardous & other wastes (Management &Transboundry Movement) rule-2016.
10.	Aq. Sodium Thio sulphate (Thio Liquor)	OPDA/PPDA Products	--	1638	--	1638	Collection, storage, Transportation and sale to authorized industry having permission under rule-9 of Hazardous & other wastes

							(Management &Transboundry Movement) rule-2016.

3. Unit has considering the baseline monitoring of additional 3 locations (Dumalav, Koparli, and Karambeli) in the different directions at 10 km study area. For the baseline monitoring period of 05th October-2018 to 05th December-2018 has considered. Details of Ambient Air, ground water, surface water, noise and soil monitoring results with photographs are submitted. Unit submitted revised Chapter-3-Baseline Environment Status with 10KM study area.

- The case was reconsidered in the SEAC meeting dated 06/02/2019. EIA consultant of the project was remained present during presentation. Committee asked about management of spent sulphuric acid receipt from sister concern unit and generate from plant, PP satisfactorily addressed about spent sulphuric acid and spent HCl management. Committee asked about distillation residue quantity, PP addressed that distillation residue quantity will be reduced by reduction of production of products from which distillation residue generated. PP informed that revised study area along with ToR incorporated in EIA report.
- Committee found that reply submitted by PP was found satisfactory.

After detailed discussion, it was decided to recommend the project to SEIAA Gujarat for grant of Environmental Clearance with above mentioned project details i.e Product profile & Hazardous waste matrix & with following specific condition:

1. Unit shall install online continuous monitoring system for VOC specifically for Benzene and shall submit action taken report regarding curb VOC specifically Benzene into atmosphere from plant.
2. Unit shall provide CEMS for process gas emission as well as for effluent.

13.	SIA/GJ/IND2/17183/2017	**M/s: Aarti Industries Limited** Plot no- CH-1+2/B, Dahej Ind. Estate, Vagra, Dist-Bharuch.	Reconsideration EC

Category of the unit : 5(f)

Project status: New

- Project proponent (PP) has submitted online application vide no. SIA/GJ/IND2/17183/2017 dated 02/02/2018 for obtaining Environmental Clearance.
- SEIAA issued TOR to PP vide letter no- SEIAA/GUJ/TOR/5(f)/91/2017, dated: 18/02/2017.
- Project proponent has submitted EIA Report prepared by M/s: Jyoti om Chemical Research Centre Pvt. Ltd based on the TOR issued by SEIAA
- This is a new unit proposes manufacturing of synthetic organic chemicals as tabulated below:

Sr. No.	Name of the Products	CAS no.	Quantity MT/Month	End-use of product

Chlorination Products maximum quantity 64, 464 MT/Annum where in individual maximum quantity of each product is defined. The production will be controlled based on generation of 30% HCl (45, 600 MT/Annum)				
1.	Mono Chloro benzene And/or	108-90-7	3,545	Dyestuff, Pharma, Pigment & R.M. for Agro Chemical Intermediates.
2.	Ortho Dichlorobenzene / Para Dichlorobenzene / Meta Dichlorobenzene And/Or	95-50-1/ 106-46-7/ 541-73-1	2,286	Dyestuff & Pharma Intermediates.
3.	1,2,3-Trichlorobenzene / 1,2,4-Trichlorobenzene And/Or	87-61-6/ 120-82-1	1,877	Dyestuff, R.M. for Agro Chemical Intermediates & Speciality Chemicals
4.	Ortho Chlorotoluene / Para Chlorotoluene And/Or	95-49-8/ 106-43-4	3,955	Dyestuff Intermediates & Pharma Intermediates.
5.	6-Chloro-2-nitrotoluene / 4-Chloro-2-nitrotoluene And/Or	83-42-1/ 89-59-8	3,550	Dyestuff Intermediates
6.	2-Chloro-4-nitrotoluene And/Or	121-86-8	5,372	Dyestuff Intermediates
7.	Hydrochloric Acid (30%) (Co-product)	7647-01-0	3,800	Dyestuff Intermediates

- The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.
- PP was called for presentation in the SEAC meeting dated 21/06/2018.
- Salient features of the project are as under:

Sr. no.	Particulars	Details
A	Total **cost of Proposed** Project (Rs. in Crores):	40 Crore
	EMP Cost: (I)Capital cost for EMS (Environmental Management System)**:** 2.50Crores. (II)Recurring cost towards the environmental protection measures: 3.36 Crores per Annum. CER Cost: 0.805 Crore (This amount will be spent over the period of 5years after commissioning of project)	
B	**Total Plot area** (sq. meter)	12, 000 sq. meter
	Green belt area (sq. meter)	3, 366 sq. meter
C	**Employment generation**	Managerial: 10 Nos. Skilled : 40 Nos. Un-skilled : 50 Nos. **Total : 100 Nos.**
D	**Water**	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	GIDC, Dahej Industrial Estate, Dist. Bharuch.
	Status of permission from the concern authority.	Status of permission from the concern authority. Letter form GIDC, Dahej is attached as annexure-V in EIA Report. NO: GIDC/BRH/WS/166, Date: 18/03/2017
ii	**Water consumption (KLD)**	

Category	Quantity KLD	Remarks
(M) Domestic	10	
(N) Gardening	15	
(O) Industrial		
Process	0	
Washing	20	
DM Plant	230	Use in Boiler
Cooling	230	
Others	90	Use in scrubber
Industrial Total	**570**	
Total (A + B + C)	**595**	

13) Total water requirement for the project: 595 KLD
14) Quantity to be recycled: 0.0 KLD
15) Total fresh water requirement: 595 KLD

iii **Waste water generation (KLD)**

Category	Waste water KLD	Remarks
(I) Domestic	9	Sent to soak pit/septic tank
(J) Industrial		
Process	0	
Washing	20	
DM Plant Reject	20	
Boiler BD	15	
Cooling BD	40	
Others (Scrubber)	200 *	Send to ETP*
Total Industrial waste water	**295**	--
Total [A + B]	**304**	--

- **NOTE:-**
1)* Unit will be neutralizing generated 30% HCl solution from scrubber and send to ETP.
2) Generated effluent has been considered as maximum worst case scenario.

iv Treatment facility within premises with **capacity**
[In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..

ETP capacity : 300 KL

v Mode of Disposal & Final meeting point

Domestic:	Sent to soak pit/septic tank
Industrial:	Treated Effluent will be sending to CETP/ Discharged to GIDC Underground Drainage Pipeline

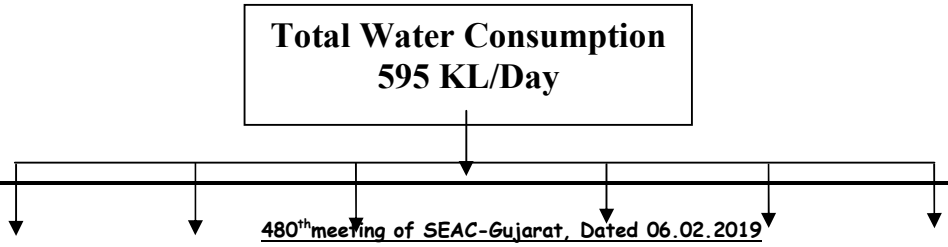
vi In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE etc. , Name of CF

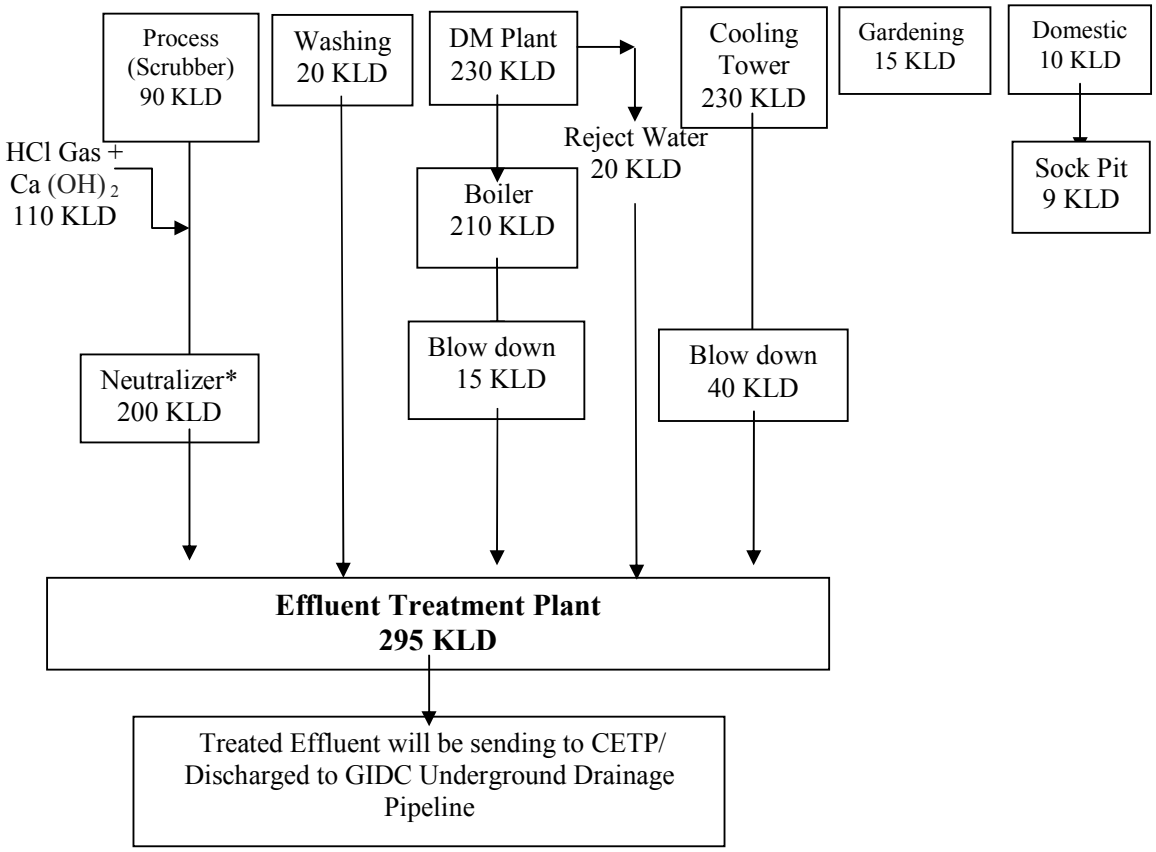
GIDC Bharuch.

Membership of Common facility (CF)
(For waste water treatment)

TSDF site: DETOX Group, Saurashtra Enviro Projects Pvt. Ltd, Surat.

vii Simplified water balance diagram with reuse / recycle of waste water





NOTE:

1) * Unit will be neutralizing generated 30% HCl solution from scrubber and send to ETP.

2) Generated effluent has been considered as maximum worst case scenario.

viii	Reuse/Recycle details (KLD) **Total reuse- Nil**
E	**Air**
i	Flue gas emission details No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.

-

Sr. No.	Stack attached to	Fuel consumption Permission	Stack Height In meter	Stack Diameter	APCM	Probable Pollutants	Permissible Limit
1.	Boiler (15 TPH) (Standby)	Natural Gas (12 SCM/Day)	30 m	750 mm	Low NO_X Burner	SPM SO_X	150 mg/Nm^3 100 ppm 50 ppm
2.	DG Set (750 KVA) (2 nos.)	Diesel (120 Liter/Hr)	12 m	250 mm	Aquatic Encloser	NO_X	

Note: DG sets will be run only in case of electricity failure.

ii Process gas i.e. Type of pollutant gases (SO_2, HCl, NH_3, Cl_2, NO_X etc.)

-

Sr. No.	Stack attached to	Stack Height	Stack Diameter	APCM	Probable Pollutants	Permissible Limit
1.	Chlorinator	11 meter	100 mm	Carbon tower followed by water scrubber & alkali scrubber.	Cl_2 HCl	09 mg/Nm^3 20 mg/Nm^3

-

iii **Fugitive emission** details with its mitigation measures.
As below:

Sr. No.	Source	Probable Pollutant Emission	Control Measures/ APCM
1.	Chemical handling	Air Pollutant (VOC)	The VOC emission in terms of handling losses will be reduced by storing chemicals in a tank and handling raw material feeding will be carried out by pumps in a close loop.
2.	Handling of raw material bags in storage area	Air pollutant (PM)	• Provision of exhaust ventilation • Provision of PPE • Provision of Job rotation to reduce exposure
3.	Flange joints of pipeline, pump & motors	Air pollutant (VOC)	• Routine & periodic inspection to check leakage • Preventive maintenance, follow SOP for maintenance • Pumps & motors are mechanical seal type • LDAR program is followed.
4.	Solid raw material transferring to reactor	Air pollutant (PM)	• Hopper are provided with powder transfer system
5.	Liquid raw material transferring to reactor	Air pollutant (VOC, Acid fumes)	• Feeding of liquid raw material is carried out by closed pipeline and mechanical seal pump.
6.	Loading /unloading at storage area	Air pollutant (VOC)	• Unloading through pipeline to tank in a close system.

F **Hazardous wastes**
(As per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

i

Sr.	Type/Name	Specific	Category	Quantity	Management of HW

		no.	**of Hazardous waste**	**Source of generation (Name of the Activity, Product etc.)**	**and Schedule as per HW Rules.**	**(MT/ Annum)**	
		1.	ETP Waste	ETP	35.3	2000	Collection, storage, transportation & disposal at TSDF.
		2.	Spent carbon	ETP	36.2	12	Collection, storage, transportation & disposal at TSDF.
		3.	Distillation Residue	Production (All products)	36.1	360	Collection, storage, transportation, disposal at CHWIF/co processing facility.
		4.	Spent catalyst	Production	26.5	220	Collection, Storage, Transportation, Disposal by Registered regenerators.
		5.	Discarded containers/ bags	Raw materials	33.1	What so ever	Collection, storage, Decontamination, Disposal by sold to authorize Recyclers/ TSDF site.
		6.	Used oil	Plant Maintenance	5.1	1 KL/Year	Collection, Storage, Transportation, Disposal by selling to registered reprocessor.
		7.	Hydrochloric Acid-30%	Scrubber	26.3	45, 600	Collection, Storage, Transportation disposal by selling to actual end users having rule 9 permission/Neutralize with in the promises and send to ETP.
	-						
ii	Membership details of **TSDF, CHWIF** etc. **(For HW management)**			TSDF site: DETOX Group, Saurashtra Enviro Projects Pvt. Ltd, Surat.			
iii	Details of Non-Hazardous waste & its disposal(MSW and others)			As Below			

Sr. No.	**Solid Waste**	**Quantity**	**Mode of Disposal**
1.	Glass Waste (Z 13)	What so ever	Authorized Scrap Vendors.
2.	Paper waste (Z 44)	What so ever	Authorized Scrap Vendors.

3.	Insulation Waste	What so ever	Collection, Storage, Transportation disposal by at TSDF Site.	
4.	Cotton waste	What so ever	Collection, Storage, Transportation disposal by at TSDF Site.	
5.	Wooden Waste	What so ever	Authorized Scrap Vendors.	

G **Solvent management**, VOC emissions etc.

i Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents

- There will be no solvent use in plant.

ii VOC emission sources and its mitigation measures

Sr. No.	Source	Waste Type/ Pollution	Control Measures
1.	Chemical handling	Air Pollutant (VOC)	The VOC emission in terms of handling losses will be reduced by storing chemicals in a tank and handling raw material feeding will be carried out by pumps in a close loop.
2.	Flange joints of pipeline, pump & motors	Air pollutant (VOC)	• Routine & periodic inspection to check leakage • Preventive maintenance, follow SOP for maintenance • Pumps & motors are mechanical seal type • LDAR program is followed.
3.	Liquid raw material transferring to reactor	Air pollutant (VOC, Acid fumes)	• Feeding of liquid raw material is carried out by closed pipeline and mechanical seal pump.
4.	Loading /unloading at storage area	Air pollutant (VOC)	• Unloading through pipeline to tank in a close system.

- During the meeting dated 21/06/2018, technical presentation made by project proponent.
- During the meeting, the project was appraised based on the information furnished in the EIA Report, and details presented during the meeting.
- The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect. The baseline environmental study has been conducted for the study area of 5 km radial distance from project site for the period December 2016 to February 2017. Ambient Air Quality monitoring was carried out for PM10, PM2.5, SO2, NOx, HCl, Cl2, CO and VOC at eight locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using ISCST – 3 model. The resultant concentrations are within the NAAQS. The modelling study proved that the air emissions from the proposed plant would not affect the ambient air quality of the region in any significant manner.

The ambient air quality around the proposed project site will remain within the National Ambient Air Quality Standards (NAAQS).

- Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios has been carried out. The detail proposed safeguard measures including On-Site / Off-Site Emergency Plan has been covered in the RA report.
- Committee deliberated on source of raw material Chlorine & its handling,
- PP informed that, in case of steam to be taken from M/s: Meghmani Industries located adjacent to the project site, DM plant will not be operated. Committee asked to consider this situation in water balance details. CEMS will be provided for waste water discharge as well as gaseous emission.
- Committee deliberated on spent HCl generation and its management. Unit has proposed to sell out to actual users or to discharge after treatment within premises. Management of spent HCl found not convincing and Committee asked PP to resubmit sound management of spent HCl. LDAR programme is not covered in EIA report.
- After deliberation, it was unanimously decided to consider the project for further appraisal only after satisfactory submission of the following :

1. Revised water balance considering a situation in which DM plant is not required to operate.
2. Compliance of ToR no. 7. Revised HW management details considering sound management of Spent HCl.
3. Compliance of ToR no. 14 regarding ZLD.
4. Compliance of ToR no. 33 regarding VOC including LDAR programme i.e. Leak Detection and Repairing Programme (LDAR) for all the volatile organic solvent proposed for use in-house with detailed chemical properties including vapor pressure.
5. Compliance of MoEFCC's OM dated 01/05/2018 regarding "Corporate Environment Responsibility" (CER). Fund allocation for Corporate Environment Responsibility (CER) shall be made as per MoEFCC's O.M. No. 22-65/2017-IA.III dated 01/05/2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.

Project proponent submitted reply vide their letter dated 31/01/2019. PP has submitted as below:

- Unit has calculated the water consumption and waste water generation by considering the operation of stand by boiler(worst case scenario). During stand by boiler operation unit needs to operate the DM Plant.Therefore there is no change in the water balance given in the EIA Report.
- Hydrochloric Acid (30%) is generated as a Co-product from the chlorination. It is widely used in industries for different purposes and also for the production of $CaCl_2$ and Chloro Sulphonic acid etc. The complete pattern of HCl in the industry is fluctuating depending up on global market scenario.In Aarti Industries Limited, we have $CaCl_2$ granulated plant in Kutch & Jhagadia with capacity of 3000 MT/Month and 4800 MT/Month respectively. However market demand is also fluctuating and we are not even able to utilize the full installed capacity of $CaCl_2$.With the above scenario to keep on running

the plant we need to manage the HCl by neutralizing within the premises and discharge as effluent. One of the purpose of selecting this site is avability of effluent conveyance line up to deep sea. Sea water is full of TDS – mainly in form of sodium chloride. We are proposing to discharge calcium chloride solution in to the sea. This will not have any adverse impact on marine environment. The Hydrochloric Acid (30%) quantity generated per worst case scenario is 45, 600 MT/Annam. This hydrochloric acid will be sent to ETP for neutralization using hydrated lime and after neutralization will be discharge to GIDC Drainage line or whenever market demand is there for 30% HCl will be sold to actual end user having permission of rule 9.The quality of HCl solution generated by unit is same as available in market and will be sold to end users. MOU with end users are attached as Annexure – X in EIA report. The HCL 30% shall be sold to authorized end users for utilization as per Hazardous Waste and other (Management and Trans boundary Movement) Rules, 2016.

- For making ZLD, unit will required to install multi effect evaporator. Since the TDS of effluent will be very high, RO system will not work. The energy/coal consumption in the evaporator will be - 30 MT/Day, Fly ash generation will be 1.5 MT/Day and MEE salt generation will be 8.25 MT/Day.This will be not viable from environment as well as economic point of view. So, it is not possible to adopt 'Zero' Liquid discharge. Unit will discharge treated effluent to GIDC underground drainage pipeline. So, undertaking will not be applicable.
- Leak Detection and Repairing Programme (LDAR) for all the volatile organic solvents are given.
- Unit will spend Rs. 80.5 Lakhs i.e. 2.0% of the project cost toward CER. This is as per OM dated 01/05/2018. Unit is Greenfield project. So, unit will fund allocation for the CER 2% of capital investment as per new Office Memorandum - F. No: 22-65/2017-IA.III, MoEF &CC on Dated: 1st May, 2018.The total cost of the proposed project (Rs.40 Crore) over a period of five years towards CER activity. So, as per the proposed project cost Rs. 80.5 Lakhs used in the CER activities. Budgetary allocation is submitted**.** Copy of letters from Rahiyad gam panchayat, Jageshwar gam panchayat, Primary School from Jageshwar village, shree Rukhneshwar trust, Lakhigam, Tal: Vagra, Dist.: Bharuch is submitted.

- During the SEAC meeting dated 06/02/2019, the said reply was considered by the Committee. The above mentioned reply was found satisfactory.

- Committee found that reply submitted by PP was satisfactory.

After detailed discussion, it was decided to recommend the project to SEIAA Gujarat for grant of Environmental Clearance with the following specific condition.

1. Unit shall install online continuous monitoring system for VOC specifically for Benzene and shall submit action taken report regarding curb VOC specifically Benzene into atmosphere from plant.
2. Unit shall provide CEMS for process gas emission as well as for effluent.

14.	SIA/GJ/IND2/30427/2018	**M/s: Cadila Healthcare Limited**	Screening and scoping

		(Unit-1) Plot No. 291, G.I.D.C. Estate, Ankleshwar, Dist -Bharuch	

Category of the unit: 5(f)

Status of the project: Expansion

- This office has received an application vide their online proposal no. SIA/GJ/IND2/30427/2018 dated 15/01/2019 regarding grant of Terms of Reference [ToR] for preparation of EIA/EMP report.
- This is an existing unit engaged in Synthetic organic chemicals and now proposes for expansion as tabulated below:

Sr. No.	Name of the Products	CAS No. / CI No.	Quantity MT/Month			End-use of the Products
			Existing	Proposed	Total	
1	Losartan Potassium	0124750-99-8	2.500	5.000	7.500	These all products are Bulk Drugs which will be used for manufacturing of Formulation Medecines where the therapeutic use of these medicines may vary
2	Quetiapine Hemifumarate	0111974-69-7	0.750	3.000	3.750	
3	Paroxetine Hydrochloride	0078246-49-8	1.000	3.000	4.000	
4	Famotidine	0006824-35-6	7.000	-6.900	0.100	
5	Fluconazole	0086386-73-4	0.250	0.250	0.500	
6	Fluvastatin Sodium	0093957-55-2	0.500	0.500	1.000	
7	Lansoprazole	0103577-45-3	0.750	1.500	2.250	
8	Meloxicam	0007305-71-7	1.000	3.000	4.000	
9	Pantoprazole Sodium	0102625-70-7	0.800	1.500	2.300	
10	Amlodipine Maleate	0088150-47-4	0.500	5.000	5.500	
11	Atorvastatin Calcium	0134523-03-8	3.000	1.000	4.000	
12	Bisacodyl	0000603-50-9	0.600	2.000	2.600	
13	Calcium Polystyrene Sulphonate	0099300-78-4	0.250	0.250	0.500	
14	Cinitapride Hydrogen Tartrate	0066564-14-5	0.025	0.100	0.125	
15	Clopidogrel Bisulphate	0135046-48-9	1.000	2.000	3.000	
16	Desloratadine	0100643-71-8	0.300	1.000	1.300	
17	Desvenlafaxine succinate	0386750-22-7	0.500	1.000	1.500	
18	Pazufloxacin Mesylate	136905-87-8	0.050	0.100	0.150	

19	Duloxetine Hydrochloride	136434-34-9	0.300	2.500	2.800	
20	Venlafaxine Hydrochloride	99300-78-4	1.000	10.000	11.000	
21	Loratadine	79794-75-5	2.000	5.000	7.000	
22	Glibenclamide / Glyburide	10238-21-8	2.500	2.500	5.000	
23	Doxophylline	69975-86-6	0.500	0.500	1.000	
24	Escitalopram Oxalate	219861-08-2	0.500	0.000	0.500	
25	Esomeprazole Magnesium	217087-09-7	0.500	1.000	1.500	
26	Eszopiclone	138729-47-2	0.100	0.100	0.200	
27	Fidarestat	105300-43-4	0.050	0.100	0.150	
28	Ipratropium	66985-17-9	0.025	0.100	0.125	
29	Ivabradine Hydrochloride	148849-67-6	0.050	0.100	0.150	
30	Levofloxacin Hemihydrate	138199-71-0	2.000	3.000	5.000	
31	Omeprazole	73590-58-6	6.500	10.000	16.500	
32	Carvedilol /C -5 / B-3	72956-09-3	2.500	3.000	5.500	
33	Etoricoxib / CDTH Phosphate	202409-33-4	1.000	5.000	6.000	
34	Omeprazole Magnesium	95382-33-5	0.300	1.000	1.300	
35	Paliperidone	144598-75-4	0.100	0.100	0.200	
36	Piperaquine Phosphate	4085-31-8	0.100	0.100	0.200	
37	Amlodipine Besylate	111470-99-6	4.000	6.000	10.000	
38	Lamivudine	134678-17-4	1.600	0.000	1.600	
39	Proquanil Hydrochloride	637-32-1	0.250	0.250	0.500	
40	Mebeverine Hydrochloride	2753-45-9	0.500	0.500	1.000	
41	Linezolid	165800-03-3	0.500	0.500	1.000	
42	Prasugrel	150322-43-3	0.250	0.250	0.500	
43	Rimonabant	168273-06-1	0.250	0.250	0.500	
44	Tramadol Hydrochloride	36282-47-0	10.000	5.000	15.000	

45	Lamotrigine	84057-84-1	2.000	3.000	5.000	
46	Tenatoprazole	113712-98-4	0.100	0.100	0.200	
47	Nicronadil	65141-46-0	0.100	0.500	0.600	
48	Candesartan Cilexetil	145040-37-5	0.500	0.500	1.000	
49	Fosphenytoin Sodium	92134-98-0	0.300	0.500	0.800	
50	Glimepiride	93479-97-1	0.250	0.500	0.750	
51	Apomorphine Hydrochloride	41372-20-7	0.025	0.025	0.050	
52	Arformoterol Tartrate	200815-49-2	0.025	0.025	0.050	
53	Cilansetron	120635-74-7	0.025	0.025	0.050	
54	Prulifloxacine	123447-62-1	0.050	0.050	0.100	
55	Montelukast Sodium	151767-02-1	0.050	0.050	0.100	
56	Dapoxetine Hydrochloride	129938-20-1	0.100	0.100	0.200	
57	Pioglitazone Hydrochloride	112529-15-4	0.100	0.500	0.600	
58	Pitavastatin	147511-69-1	0.025	0.025	0.050	
59	Reboxetine Methane Sulphonate	98769-82-5	0.025	0.025	0.050	
60	Pregablian	148553-50-8	0.250	1.000	1.250	
61	Sertraline Hydrochloride	79559-97-0	0.500	0.500	1.000	
62	Revaprazan Hydrochloride	7647-01-0	0.025	0.025	0.050	
63	Roflumilast	162401-32-3	0.100	0.100	0.200	
64	Rosuvastatin Calcium (RO 117)	147098-20-2	0.200	0.500	0.700	
65	Rupatadine Fumarate	158876-82-5	0.050	0.250	0.300	
66	Zileuton	132880-11-6	0.025	0.250	0.275	
67	Sitagliptine	486460-32-6	0.100	0.100	0.200	
68	Tamsulosin Hydrochloride/Amine	112101-81-2	0.050	1.950	2.000	
69	Tiotropium Bromide	186691-13-4	0.025	0.500	0.525	
70	Tirofiban Hydrochloride	149490-61-9	0.005	0.500	0.505	

71	Clebopride	55905-53-8	0.025	0.500	0.525	
72	Olmesartan	144689-63-4	0.050	0.500	0.550	
73	Silodosin	160970-64-9	0.025	1.000	1.025	
74	Solifenacin	242478-37-1	0.100	0.100	0.200	
75	Telemisartan	144701-48-4	0.100	1.000	1.100	
76	Hydroxy Chloroquine Sulfate	747-36-4	0.200	0.200	0.400	
77	Mitiglinide Calcium	145525-41-3	0.025	0.025	0.050	
78	Naproxcinod	163133-43-5	0.025	0.025	0.050	
79	Nipradilol	81486-22-8	0.025	0.025	0.050	
80	Trospium Chloride	10405-02-4	0.020	0.020	0.040	
81	Febuxostat	144060-53-7	0.050	0.050	0.100	
82	Levalbuterol	50293-90-8	0.025	0.025	0.050	
83	Ramelteon	196597-26-9	0.025	0.025	0.050	
84	Ramosetron	132036-88-5	0.025	0.025	0.050	
85	Renzapride	109872-41-5	0.025	0.025	0.050	
86	Simvastatin	79902-63-9	0.400	0.400	0.800	
87	Mesalamine	89-57-6	0.000	5.000	5.000	
88	Valsartan	137862-53-4	0.000	10.000	10.000	
89	Etodolac	41340-25-4	0.000	5.000	5.000	
90	Tenoxicam	59804-37-4	0.000	0.500	0.500	
91	Benzoyl Peroxide Hydrous	94-36-0 ·	0.000	1.000	1.000	
92	Zaleplon	151319-34-5	0.000	1.000	1.000	
93	Ranolazine	95635-55-5	0.000	1.000	1.000	
94	Bupropion Hydrochloride	31677-93-7	0.000	6.000	6.000	
95	Clorthredion	----	0.000	1.500	1.500	
96	Suxomethnium Chloride	6101-15-1	0.000	0.500	0.500	
97	Azilsartan Medoxomil	147403-03-0	0.000	1.500	1.500	
98	Lornoxicam	70374-	0.000	4.0	4.00	

		39-9				
99	R & D Products	----	0.000	2.000	2.000	
	Total		**64.300**	**134.70**	**199.00**	

- The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.
- PP was called for presentation in the SEAC meeting dated 06/02/2019.
- The project proponent along with their expert /consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd., Surat attended the meeting and made presentation before the committee
- Salient features of the project are as under:

Sr. no.	Particulars	Details
A	**Total cost of Proposed Project** (Rs. in Crores):	Existing: 205 Proposed: 0 Total: 205
B	**Total Plot area** (sq. meter)	Existing: 42120.50 Sq. m. Proposed: 0.00 Sq. m. Total: 42120.50 Sq. m.
	Green belt area (sq. meter)	Existing: 10027.00 Sq. m. Proposed: 0.00 Sq. m. Total: 10027.00 Sq. m.
C	**Employment generation**	Existing: 586 Proposed: 100 Total: 686
D	**Water**	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	GIDC Water Supply
	Status of permission from the concern authority.	Obtained

- Technical presentation was made by the project proponent during SEAC meeting dated 06/02/2019.
- Committee deliberated on compliance status of existing project, water balance, HW management, safety aspects etc.
- Committee asked about compliance of existing plant and any legal action taken against unit, PP informed that CCA compliance report submitted by the unit, one show cause notice issued by Board and compliance of SCN submitted to the Board. PP addressed area adequacy, green belt, new proposed products water and waste water management in length. PP informed that green belt development for proposed plant will be carried out in waste land of GIDC.
- Committee asked about proposed R and D work production quantity, PP satisfactorily addressed about it.
- **Considering the above project details, after detailed discussion, the terms of reference (ToR) were prescribed as below and as per the standard TOR for the Synthetic Organic Chemical projects recommended by SEAC vide letter no. EIA-10-GEN-21/1480 dated 14/09/2017 and approved by SEIAA in its 12th meeting dated 16/09/2017 for the EIA study to be done covering 10 Km radial distance from the project boundary.**

1. Unit shall install CEMS for process gas emission as well as effluent discharge.

2. Unit shall obtain PESO certificate for solvent handling for proposed expansion.
3. Adequacy of proposed area with respect to plant machineries , EMS, green belt , safety aspect, raw material & product storage considering worst case scenario. Submit proper lay out plan clearly demarcating all activities with scale.
4. Compliance of MoEFCC's OM dated 01/05/2018 regarding "Corporate Environment Responsibility" (CER). Fund allocation for Corporate Environment Responsibility (CER) shall be made as per MoEFCC's O.M. No. 22-65/2017-IA.III dated 01/05/2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
5. Details with respect to justification for proposed expansion: (1) To address proportionate availability of space for production plant. (2) To address proportionate availability of storage area for raw materials finished goods, utilities and goods carrier movement within premises. (3) To address proportionate captive/common infrastructure available to accommodate additional load due to proposed expansion. (4) Environment impact and its mitigation measures for common/ captive infrastructure due to proposed production.
6. Explore the use of renewable energy to the maximum extent possible. Details of provisions to make the project energy-efficient through of energy efficient devices and adoption of modes of alternative eco-friendly sources of energy like solar water heater, solar lighting etc. Measures proposed for energy conservation.
7. Leak Detection and Repairing Programme (LDAR) for all the volatile organic solvent proposed for use in-house with detailed chemical properties including vapor pressure. LDAR shall endeavour prevention of losses of solvents to the best minimum extent.
8. Qualitative and quantitative analysis of hazardous waste streams generation from the manufacturing process (Product wise). Explore the possibility to reuse such waste streams within premises as raw materials for other products or to convert it into valuable products instead of selling out side. Sound management of such waste streams as per the HW Rules 2016 as amended time to time. Feasibility report for utilization shall be incorporated in EIA report.
9. To define unit processes involved in R & D Products keeping proposed product group in view.
10. Ensure that R & D products shall be of similar chemistry and the pollution load shall remain within the proposed in EIA/EMP report.
11. Legal undertaking regarding no continuous/commercial manufacturing of the R & D products.

- The TOR prescribed as above and as per the standard TOR approved by SEIAA and the model ToRs available in the MoEFCC's sector specific EIA Manual for **'Synthetic Organic Chemical Industry'** shall be considered as generic TORs for preparation of the EIA report in addition to all the relevant information

as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006. The project proponent shall have to apply for Environmental clearance through online portal http://environmentclearance.nic.in/ along with final EIA report.

15.	SIA/GJ/IND2/30753/2019	**M/S: Sun Industries** Plot No. 38/10, GIDC, Jhagadia Ind. Estate, Ankleshwar, Dist - Bharuch	Screening and scoping

Category of the unit: 5(f)

Status of the project: New

- This office has received an application vide their online proposal no. SIA/GJ/IND2/30753/2019 on dated 26/01/2019 regarding grant of Terms of Reference [ToR] for preparation of EIA/EMP report.
- This is a new unit proposes manufacturing of synthetic organic chemicals as tabulated below:

Sr. No.	Name of the Products	CAS no. /CI no.	Quantity MT/Month	End-use of products
1.	Scarlet ChromeAND/OR	12656-85-8	40	Dying and Printing in Textile, Paper, Paints and Leather
2.	Lemon ChromeAND/OR	1344-37-2		Dying and Printing in Textile, Paper, Paints and Leather
3.	Middle ChromeAND/OR	1344-37-2		Dying and Printing in Textile, Paper, Paints and Leather
4.	Ultramarine Blue	57455-37-5		Dying and Printing in Textile, Paper, Paints and Leather
5.	Pigment Alpha Blue 15:0 & 15:1AND/OR	147-14-8	40	Dying and Printing in Textile, Paper, Paints and Leather
6.	Pigment Beta Blue 15:3 & 15:4AND/OR	147-14-8		Dying and Printing in Textile, Paper, Paints and Leather
7.	Pigment Blue 60	81-77-6		Dying and Printing in Textile, Paper, Paints and Leather
8.	Pigment Red 122/254AND/OR	980-26-7/ 84632-65-5	40	Dying and Printing in Textile, Paper, Paints and Leather
9.	Pigment Yellow 180/191	77804-81-0/ 129423-54-7		Dying and Printing in Textile, Paper, Paints and Leather
	TOTAL		120	

- The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.
- PP was called for presentation in the SEAC meeting dated 06/02/2019.
- The project proponent along with their expert /consultant M/s. Eco earth Technology attended the meeting and made presentation before the committee
- Salient features of the project are as under:

Sr. no.	Particulars	Details

A	Total **cost of Proposed** Project (Rs. in Crores):	1.76 Crores
B	**Total Plot area**(sq. meter)	1650 Sq. m.
	Green belt area (sq. meter)	550 Sq. m.
C	**Employment generation**	40 Nos or more
D	**Water**	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	The water requirement for proposed new project will be satisfied through GIDC water supply. Ultimate fresh water requirement : 92 KLD
	Status of permission from the concern authority.	At the time of EIA, we will be provide.
ii	**Water consumption (KLD)**	

Category	Quantity KLD	Remarks
(P) Domestic	04	
(Q) Gardening	02	
(R) Industrial		
Process + Washing	60	

Boiler	14	
Cooling	12	
Others	0.0	
Industrial Total	86.0	
Total (A + B + C)	**92.0**	

16) **Total water requirement** for the project: 92.0 KLD

17) Quantity to be **recycled**: 0.0 KLD

18) Total **fresh water** requirement: 92.0KLD

iii **Waste water generation (KLD)**

Category	Waste water KLD	Remarks
(K) Domestic	02	
(L) Industrial		
Process + Washing	34	
Boiler	03	
Cooling	03	
Others	0.0	
Total Industrial waste water	**40.0**	
Total [A + B]	**42.0**	

-

Note : For proposed project, there will be a generation of waste water from the process and utility etc. and generated waste water will be collected in treated into ETP and after adequate treatment, and then discharge to Jhagadia pipeline project of NCT.
Domestic waste water will be disposed in to Septic tank/Soak pit.

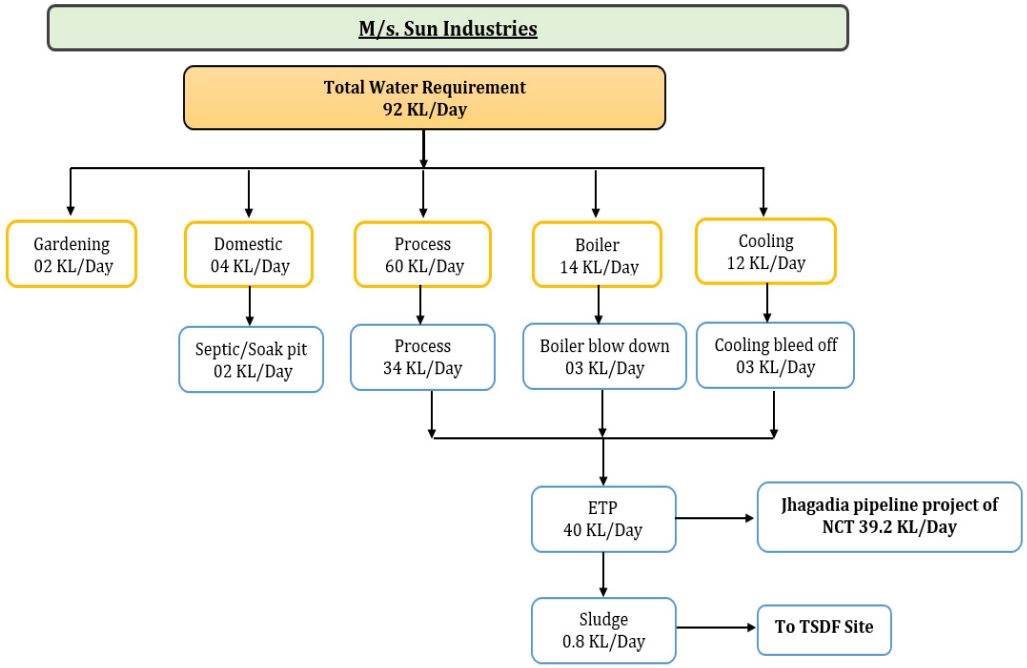
iv Treatment facility within premises with **capacity**

[In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..

- Unit will be provided Primary, Secondary and Tertiary treatment in ETP Plant.

v Mode of Disposal & Final meeting point

	Domestic:	Domestic waste water will be disposed in to Septic tank/Soak pit.
	Industrial:	For proposed new project, there will be a generation of waste water from the process and utility etc. and generated waste water will be collected and treated into ETP and after adequate treatment (i.e. Primary, secondary, tertiary),it will be discharge to Jhagadia pipeline project of NCT.
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE etc. , Name of CF	
	Industrial waste water will be treated into unit's own ETP [Primary, Secondary, Tertiary] and then sent to Jhagadia Pipeline Project by **NCT (Narmada Clean Tech)**.	
	Membership of Common facility (CF) **(For waste water treatment)**	
	Membership certificate is attached as Annexure-I.	
vii	**Simplified water balance diagram with reuse / recycle of waste water**	



viii	Reuse/Recycle details (KLD)

Total reuse:- NIL

E **Air**

i Flue gas emission details

No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.

-

Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
1	Steam Boiler [2 Ton /Hrs.]	33	Bio Coal and/or Imported Coal	3 MT Day and/or 2 MT/Day	PM SO_2 NO_x	Cyclone Separator, Bag Filter, Scrubber
2	D.G. Set [100 KVA]	11	Diesel	10 Lit/Hr.		Adequate Stack Height

-

ii Process gas i.e. Type of pollutant gases (SO_2, HCl, NH_3, Cl_2, NO_x etc.)

-

Sr. no.	Specific Source of emission (Name of the Product & Process)	Type of emission	Stack/Vent Height (meter)	Air Pollution Control Measures (APCM)

	Not Applicable -
iii	**Fugitive emission** details with its mitigation measures. As below:
	• Minimum Joints & flanges • Pumps with mechanical seals • Proper ventilation • Adequate PPEs
F	**Hazardous waste (as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016**.
i	

Sr. no.	**Type/Name of Hazardous waste**	**Specific Source of generation (Name of the Activity, Product etc.)**	**Category and Schedule as per HW Rules.**	**Quantity (MT/Annum)**	**Management of HW**
1.	Empty barrels/Containers / liners contaminated with hazardous chemicals /wastes	Raw Material and Packaging	33.1	200 Nos	Collection, Storage, Transportation, Decontamination, reuse or send back to supplier, and sold to Authorized Vendors.
2.	Used Oil	From Machinery	5.1	0.02	Collection, Storage, Transportation and sold to authorized Recyclers.
3.	ETP Sludge	ETP	35.3	300	Collection, Storage, Transportation and sent to TSDF site.
4.	Process sludge	Process [1] Scarlet Chrome [2] Lemon Chrome [3] Middle Chrome	A4	250	Collection, Storage, Transportation and sent to TSDF site.

	5.	Spent Sulphuric Acid	Process [1] Pigment Alpha Blue 15:0 & 15:1 [2]Pigment Blue 60	---	600	Collection, Storage, Transportation and sell to authorized end users registered under rule-9.
	-					
ii	Membership details of **TSDF, CHWIF** etc. **(For HW management)**	At the time of EIA, we will be provide membership certificate.				
iii	Details of Non-Hazardous waste & its disposal (MSW and others)	Not Applicable				
G	**Solvent management**, VOC emissions etc.					
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents					
	• Not Applicable					
ii	VOC emission sources and its mitigation measures					
	• Minimum joints/flanges • Adequate Condenser • Brine will be utilised as chilling agent • Pumps with double mechanical seals • Proper Ventilation • PPEs					

- Technical presentation was made by the project proponent during SEAC meeting dated 06/02/2019.
- Committee deliberated on water balance, waste water generation, HW management, safety aspects etc.
- Committee asked about Heavy metal treatment for proposed chromate base products, PP satisfactorily addressed about it.
- Committee insisted for process sludge ,sodium dichromate will be disposed to TSDF as per HW rules 2016
- Considering the above project details, after detailed discussion, the terms of reference (ToR) were prescribed as below and as per the standard TOR for the Synthetic Organic Chemical projects recommended by SEAC vide letter no. EIA-10-GEN-21/1480 dated 14/09/2017 and approved by SEIAA in its 12th meeting dated 16/09/2017 for the EIA study to be done covering **10 Km** radial distance from the project boundary.

1. Unit shall dispose sodium dichromate sludge after encapsulation as per HW Rules 2016.
2. Adequacy of proposed area with respect to plant machineries, EMS, green belt, safety aspect,

raw material & product storage considering worst case scenario. Submit proper lay out plan clearly demarcating all activities with scale.

2. Compliance of MoEFCC's OM dated 01/05/2018 regarding "Corporate Environment Responsibility" (CER). Fund allocation for Corporate Environment Responsibility (CER) shall be made as per MoEFCC's O.M. No. 22-65/2017-IA.III dated 01/05/2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
3. Explore the use of renewable energy to the maximum extent possible. Details of provisions to make the project energy-efficient through of energy efficient devices and adoption of modes of alternative eco-friendly sources of energy like solar water heater, solar lighting etc. Measures proposed for energy conservation.
4. Leak Detection and Repairing Programme (LDAR) for all the volatile organic solvent proposed for use in-house with detailed chemical properties including Vapour pressure. LDAR shall endeavour prevention of losses of solvents to the best minimum extent.
5. Qualitative and quantitative analysis of hazardous waste streams generation from the manufacturing process (Product wise). Explore the possibility to reuse such waste streams within premises as raw materials for other products or to convert it into valuable products instead of selling out side. Sound management of such waste streams as per the HW Rules 2016 as amended time to time. Feasibility report for utilization shall be incorporated in EIA report.
6. Safety precautions including flame proof electric fittings to be taken to avoid fire hazard & Occupational health hazards during unloading, storage, transportation, handling and processing of hazardous chemicals like Sodium Di chromate and other hazardous chemicals.

- The TOR prescribed as above and as per the standard TOR approved by SEIAA and the model ToRs available in the MoEFCC's sector specific EIA Manual for **'Synthetic Organic Chemical Industry'** shall be considered as generic TORs for preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006. The project proponent shall have to apply for Environmental clearance through online portal http://environmentclearance.nic.in/ along with final EIA report.

16.	SIA/GJ/IND2/30096/2018	**M/s: NCR Colors LLP** Plot No. 3507/D, Phase IV, GIDC Estate, vatva, Ahmedabad	Screening and scoping

Category of the unit: 5(f)

Status of the project: Expansion

- This office has received an application vide their online proposal no. SIA/GJ/IND2/30550/2018 dated 19/01/2019 regarding grant of Terms of Reference [ToR] for preparation of EIA/EMP report.
- This is an existing unit engaged in organic chemicals and now proposes for expansion of synthetic organic chemical products as tabulated below:

Sr. no.	Name of the Products	CAS no. / CI no.	Quantity MT/Month			End-use of the products
			Existing	Proposed	Total	
1	Reactive Golden Yellow R	--	15	0	15	Use in Dying , Textile, Paper & Lather Industries
2	Reactive Brilliant Red M5B	17804-49-8				
3	Acid Orange 7	633-96-5				
4	Acid Black 194	61931-02-0	0	65	65	
5	Acid Black 210	99576-15-5				
6	Acid Black 234	157577-99-6				
TOTAL			15	65	80	

- The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.
- PP was called for presentation in the SEAC meeting dated 06/02/2019.
- The project proponent along with their expert /consultant M/s. Bhagvati Enviro care Pvt. Ltd attended the meeting and made presentation before the committee
- Salient features of the project are as under:

Sr. no.	Particulars	Details
A	Total **cost of Proposed** Project (Rs. in Crores):	Existing: 4.24 Crores Proposed: 0.27 Crores Total: 4.52 Crores
B	**Total Plot area** (sq. meter)	Existing: 625 Sq. m. Proposed: 0 Total: 625 Sq. m.

	Green belt area (sq. meter)	Existing: 30 Sq. m. Proposed: 40 Sq. m. Total: 70 Sq. m.
C	**Employment generation**	Existing: 7 Proposed: 8 Total: 15
D	**Water**	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	GIDC Vatva Bore well
	Status of permission from the concern authority.	Yes
ii	**Water consumption (KLD)**	

	Existing KLD	**Proposed (Additional)** KLD	**Total after Expansion** KLD	Remarks
(S) Domestic	0.5	1	1.5	
(T) Gardening	0	0.3	0.3	
(U) Industrial				
Process	0.45	1.95	2.4	
Washing	1	2	3	
Boiler	0.5	1.5	2	
Industrial Total	1.95	5.45	7.4	
	2.45	6.75	9.2	

Grand Total (A+B+C)					

19) **Total water requirement** for the project: 9.2 KLD

20) Quantity to be **recycled:** 0

21) Total **fresh water** requirement: 9.2 KLD

iii **Waste water generation (KLD)**

Category	**Existing** KLD	**Proposed (Additional)** KLD	**Total after Expansion** KLD	Remarks
(M) Domestic	0.5	0.8	1.3	
(N) Industrial				
Process	0	0	0	
Washing	1	2	3	
Boiler	0.05	0.15	0.2	
Total Industrial waste water	1.05	2.15	3.2	

iv Treatment facility within premises with **capacity [For existing and Proposed]**

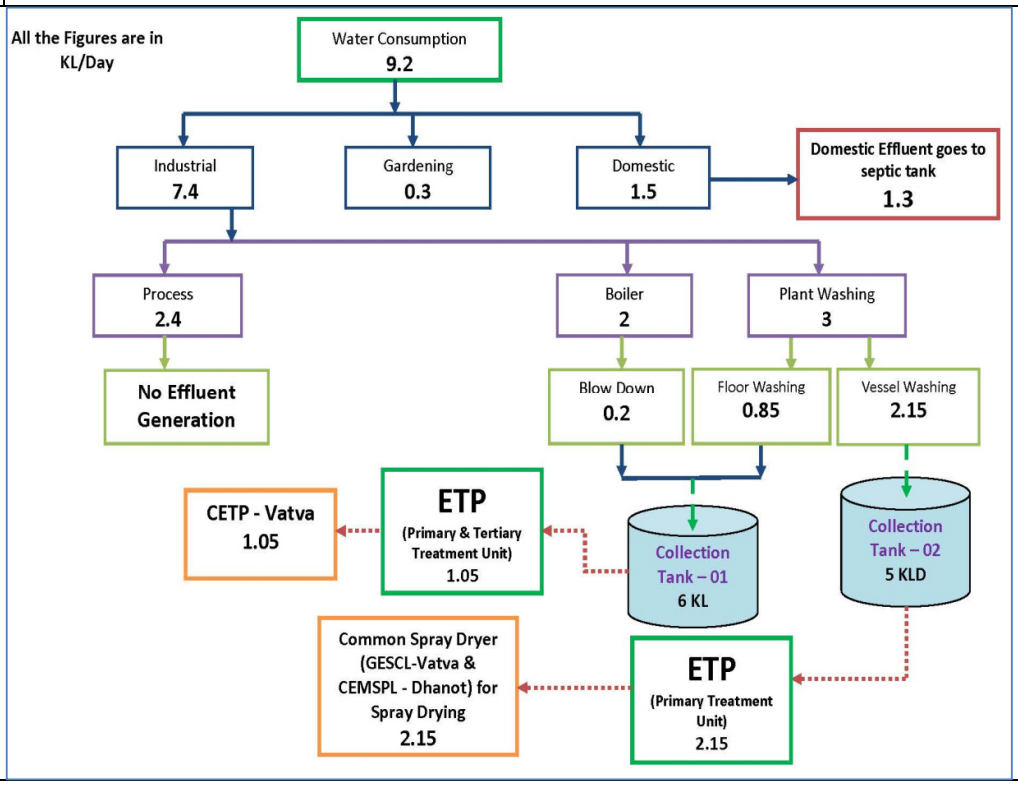
[In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..

ETP (For Low Concentrated Effluent)

(Cap-11 KLD Having Primary & Tartary Treatment Unit)

v Mode of Disposal & Final meeting point

Domestic:	1.3 KLD_Discharge to soak pit via septic tank.
Industrial:	Total Industrial Waste Water Generation: 3.2 KLD

		• 1.05 KLD (0.2-Boiler Blow down & 0.85-Floor Washing) _ Treat in Existing ETP (Cap-6 KLD, Primary & Tertiary treatment unit) then send to as per Existing CCA CETP – Vatva. • 2.15 KLD (Vessel Washing) _ Treat in Upgraded Proposed ETP (Cap-5 KLD, Primary treatment unit) then send to Common Spray Dryer at The Green Environment Service Co. operative Society Ltd. – Vatva & Chhatral Environment Management System Pvt. Ltd. - Dhanot for Spray Drying.
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc. Name of Common facility	
	CETP – The Green Environment Service Co. Operative Society Ltd.-Vatva Common Spray Dryer - The Green Environment Service Co. Operative Society Ltd.-Vatva Common Spray Dryer – Chhatral Environment System Pvt. Ltd. - Dhanot	
	Membership of Common facility (CF)	
	(For waste water treatment) CETP – The Green Environment Service Co. Operative Society Ltd.-Vatva Common Spray Dryer - The Green Environment Service Co. Operative Society Ltd.-Vatva Common Spray Dryer – Chhatral Environment System Pvt. Ltd. - Dhanot	
vii	**Simplified water balance diagram with reuse / recycle of waste water**	
		

vii	Reuse/Recycle details (KLD) [Source of reuse & application area]
	Total reuse: Nil -
E	**Air**
i	Flue gas emission details No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc. **Existing & Proposed**

-

Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
1	Boiler (800 kg) **(Existing)**	12	PNG	500	Adequate Stack Height	Particulate Matter SOx NOx
2	Hot Air Generator (3 Lacs K cal/Hr) **(Existing)**	12	PNG	370	Adequate Stack Height	Particulate Matter SOx NOx

-

ii	Process gas i.e. Type of pollutant gases (SO_2, HCl, NH_3, Cl_2, NO_x etc.) **Existing & Proposed**
	There will be no process gas emission in existing as well as proposed manufacturing activity.
iii	**Fugitive emission** details with its mitigation measures.
	Fugitive Emission Generation Point • Raw material handling • Transfer point • Loading and unloading of raw material • Leakage and Spillage Mitigation Measure for control of Fugitive Emission • Regular maintenance of valves, pumps and other equipment to prevent leakage and thus minimize the fugitive emissions of VOCs. • Entire process is carried out in the closed reactors with proper maintenance of pressure and

temperature.

- Regular periodic monitoring of work area to check the fugitive emission.
- Concrete rods will make to reduce the fugitive emission. Water sprinkler will be provided to reduce dusting from road transportation.
- To reduce the pollutant emission during transportation, the unit will unsure check up and maintenance of vehicular engines for complete combustion of the fuel by the transporter.
- Raw material loading & unloading will be done in cover area.
- Plantation will be done around the project area and along the roads.

F **Hazardous waste**

(as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

Existing & Proposed

i

Sr. no.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Rules.	Quantity (MT/Annum)			Management of HW
				Existing	Proposed	Total	
1	ETP Waste	ETP	35.3	0.25	0.65	0.9	Collection, Storage, Transportation Disposal at TSDF site approved by Board.
2	Used Oil	Plant Machinery	5.1	15 Lit	5 Lit	20 Lit	Collection, Storage, Transportation &Disposal by selling to registered refiners/Used as lubricant in Plant & Machineries.
3	Discarded Drums, Barrels	Production/ Raw Material Section	33.1	6	24	30	Collection, Storage Decontamination, Transportation &Disposal by selling to authorized recycler

	-	
ii	Membership details of **TSDF, CHWIF** etc. **(For HW management)**	TSDF site - Eco Care Infrastructure Limited.
iii	Details of Non-Hazardous waste & its disposal(MSW and others)	No generation of Non-Hazardous waste.
G	**Solvent management**, VOC emissions etc.	
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents	
	➢ No Solvent will be use in existing as well as proposed manufacturing activity.	
ii	**VOC emission** sources and its mitigation measures	
	➢ We will measure VOC level in our manufacturing unit as well as Raw Material Storage area we will also do work place monitoring & according implementation.	

- Technical presentation was made by the project proponent during SEAC meeting dated 06/02/2019.
- Committee deliberated on compliance status of existing project, water balance, HW management, safety aspects etc.
- Committee asked about compliance of existing plant and any legal action taken against unit, PP informed that CCA compliance report submitted by the unit. PP informed that old unit namely M/s Deepwin Dyestuff purchased by unit and also name changed in existing plant by the unit in CCA order. No legal action taken against unit. PP addressed area adequacy, green belt, new proposed products water and waste water management in length. Committee asked about existing and proposed waste water quality to CETP, PP satisfactorily addressed about it.
- Committee noted that for proposed expansion, waste water discharge to CETP is as per CCA and PP is sending their proposed waste water to common spray dryer of M/s Chhatral Enviro Management System Pvt. Ltd, Chhatral.
- Considering the above project details, after detailed discussion, the terms of reference (ToR) were prescribed as below and as per the standard TOR for the Synthetic Organic Chemical projects recommended by SEAC vide letter no. EIA-10-GEN-21/1480 dated 14/09/2017 and approved by SEIAA in its 12th meeting dated 16/09/2017 for the EIA study to be done covering **10 Km** radial distance from the project boundary.

    1. Adequacy of proposed area with respect to plant machineries, EMS, green belt, safety aspect, raw material & product storage considering worst case scenario. Submit proper lay out plan clearly demarcating all activities with scale.
    2. Compliance of MoEFCC's OM dated 01/05/2018 regarding "Corporate Environment Responsibility" (CER). Fund allocation for Corporate Environment Responsibility (CER) shall be made as per MoEFCC's O.M. No. 22-65/2017-IA.III dated 01/05/2018 for various activities

therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.

3. Details with respect to justification for proposed expansion: (1) To address proportionate availability of space for production plant. (2) To address proportionate availability of storage area for raw materials finished goods, utilities and goods carrier movement within premises. (3) To address proportionate captive/common infrastructure available to accommodate additional load due to proposed expansion. (4) Environment impact and its mitigation measures for common/ captive infrastructure due to proposed production.
4. Explore the use of renewable energy to the maximum extent possible. Details of provisions to make the project energy-efficient through of energy efficient devices and adoption of modes of alternative eco-friendly sources of energy like solar water heater, solar lighting etc. Measures proposed for energy conservation.
5. Leak Detection and Repairing Programme (LDAR) for all the volatile organic solvent proposed for use in-house with detailed chemical properties including vapour pressure. LDAR shall endeavour prevention of losses of solvents to the best minimum extent.
6. Qualitative and quantitative analysis of hazardous waste streams generation from the manufacturing process (Product wise). Explore the possibility to reuse such waste streams within premises as raw materials for other products or to convert it into valuable products instead of selling out side. Sound management of such waste streams as per the HW Rules 2016 as amended time to time. Feasibility report for utilization shall be incorporated in EIA report.
7. Justification regarding quality of existing waste water and proposed waste water which is sending to CETP as per CETP norms.
8. Certified Compliance Report (CCR) from the concern authority as per the MoEFCC's Circular no. J-11011/618/2010- IA (II) (I) dated 30/05/2012 and Circular no. J-11013/6/2010-IA-II (Part) vide dated 07/09/2017.

- The TOR prescribed as above and as per the standard TOR approved by SEIAA and the model ToRs available in the MoEFCC's sector specific EIA Manual for **'Synthetic Organic Chemical Industry'** shall be considered as generic TORs for preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006. The project proponent shall have to apply for Environmental clearance through online portal http://environmentclearance.nic.in/ along with final EIA report.

17.	SIA/GJ/IND2/30757/2019	**M/s: Gujarat State Fertilizers And Chemicals Ltd,** P.O. Fertilizernagar-391750, Tal. & Dist. Vadodara	Screening and scoping

Category of the unit: 5(e)

Status of the project: Expansion

- This office has received an application vide their online proposal no. SIA/GJ/IND2/30757/2019 regarding grant of Terms of Reference [ToR] for preparation of EIA/EMP report.
- This is an existing unit engaged in organic chemicals and now proposes for expansion of synthetic organic chemical products i.e. petrochemical based processing as tabulated below:

Sr. no.	Name of the Products	CAS no. / CI no.	Quantity MT/Month			End-use of the products
			Existing	Proposed	Total	
1	Nylon-6 Chips	25038-54-4	2035.4	1735	3770.4	Automobile, Electrical, textile, Hardware etc
	Total		2035.4	1735	3770.4	

- The project falls under Category B of project activity 5(e) as per the schedule of EIA Notification 2006.
- PP was called for presentation in the SEAC meeting dated 06/02/2019.
- The project proponent along with their expert /consultant **M/s. Eco Chem Sales & Services, Surat** attended the meeting and made presentation before the committee.
- Salient features of the project are as under:

Sr. no.	Particulars	Details
A	Total **cost of Proposed** Project (Rs. in Crores):	Proposed:Rs. 20 Cr.
B	**Total Plot area** (sq. meter)	Existing: 3280000 Sq. m. Proposed: 0 Sq. m. Total: 3280000 Sq. m.
	Green belt area (sq. meter)	Existing: 1187000 Sq. m. Proposed: 0 Sq. m. Total: 1187000Sq. m.
C	**Employment generation**	Existing: 5000 Nos Proposed: 19 Nos Total:5019 Nos
D	**Water**	
i	Source of Water Supply (GIDC Bore well, Surface	Water source: French Well (4 Nos.) in Mahi River (GSFC's own source).

	water, Tanker supply etc...)	
	Status of permission from the concern authority.	Permission for the water withdrawal has already being obtained vide letter No.: VID/PB-2/IND/REQ.2018-19/GSFC/853, dated 21/03/2018

ii **Water consumption (KLD)**

	Existing KLD	Proposed (Additional) KLD	Total after Expansion KLD	Remarks
Domestic	10539	0.75	10539.75	
Gardening		0		
Industrial				
Process	3477	20	3497	
Washing	0	0.4	0.4	Exiting project washing included in (A) & (B)
Boiler	18035	15.8	18050.8	
Cooling				
Others	0	0	0	
Industrial Total	**21512**	**36.2**	**21548.2**	
Grand Total (A+B+C)	**32051**	**36.95**	**32087.95**	

22) **Total water requirement** for the project:32087.95KLD

23) Quantity **recycled:**6260.4KLD (Includes Condensate, Process Effluent & STP for gardening)

24) Total **fresh water** requirement: 32087.95KLD

iii **Waste water generation (KLD)**

Category	Existing KLD	Proposed (Additional) KLD	Total after Expansion KLD	Remarks
Domestic	4917	0.5	4917.5	Additional sewage will be sent in existing Soak pit of Nylon 6 Plant
Industrial				

Process	1964	20	1984	Existing to ETP 1 & 2 and Additional to ETP 1	
Washing	0	0.4	0.4	Existing Washing included in Pont No. (A)	
Boiler	7108	1.8	7109.8	Will be sent to VECL	
Cooling					
Others	0	0	0	-	
Total Industrial waste water	**9072**	**22.2**	**9094.2**		
Total	**13989**	**22.7**	**14011.7**		

iv Treatment facility within premises with **capacity [For existing and Proposed]**

[In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..

- ETP-I of 880 KLD provided to treat waste water generated from proposed project

v Mode of Disposal & Final meeting point

Treated waste water from the ETP are sent to Common Effluent Channel of VECL (Vadodara Enviro Channel Limited)

Domestic:	Domestic waste water will be sent to existing Soak pit of Nylon 6 plant
Industrial:	The waste water from the process and washing will be sent to ETP-I and treated waste water is further sent to Common Effluent Channel of VECL (Vadodara Enviro Channel Limited). The Cooling tower blow down is sent to VECL.

vi In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc.

Name of Common facility

- Common Effluent Channel of VECL (Vadodara Enviro Channel Limited).

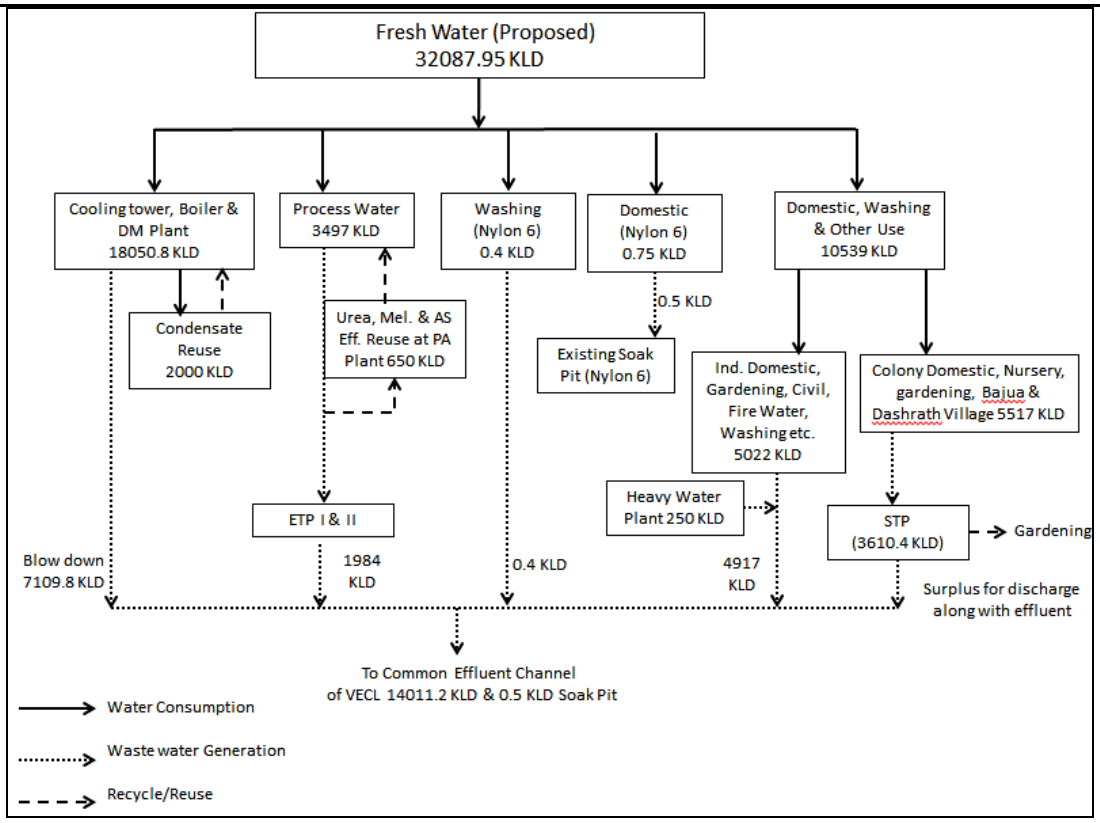
Membership of Common facility (CF): Certificate No.: VECL/13/2018-19, dated 01/04/2018

(For waste water treatment)

Treated waste water is further sent to Common Effluent Channel of VECL (Vadodara Enviro Channel Limited).

vii **Simplified water balance diagram with reuse / recycle of waste water**

Water Balance, After Proposed Expansion:



vii Reuse/Recycle details (KLD) : 6260.4 KLD

[Source of reuse & application area]

Total reuse: 6260.4 KLD

Source of waste water for reuse with quantity in KLD	Application area with quantity in KLD	Remarks regarding feasibility to reuse i.e. w/w characteristics (COD, BOD, TDS etc.)
Condensate Recovery 2000 KLD	Cooling Tower, Boiler & DM plant	--
Process waste water 650 KLD	Reuse at Phosphoric Acid Plant	--
STP 3610.4 KLD	Reuse for gardening	--

-

E **Air**

i Flue gas emission details

No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.

Existing & Proposed

-**Existing**

S. No.	Source of	Stack	Type of	Quantity of Fuel	Type of	Air

	emission With Capacity	Height (meter)	Fuel		emissions i.e. Air Pollutants	Pollution Control Measures
1	Reformer (Furnace)	33	NG	5150 Nm^3/hr for methanol	PM,SO_2, NO_x	Not Applicable
	NG Preheater	18		231 Nm^3/hr		
2	Reformer (Furnace)	30	NG	1071 Nm^3/hr		
	NG Preheater	30	NG	91.9 Nm^3/hr		
3	Reforming Section-100	52	100 % Naphtha 100 % NG	46830 Nm^3/hr 32520 Nm^3/hr		
	Syn. Unit-500	30	PG	2121 Nm^3/hr	NO_x	
	CRG Unit-900	30	CRG/NG	2088/1110 Nm^3/hr		
	CRG Unit-900	30	NG	329 Nm^3/hr		
	Pre-desulphurization	-	TG/NG	1346.5/1445.5 Nm^3/hr		
4	Salt furnace	30	NG	300 Nm^3/hr	PM, SO_2,NO_x	
5	Salt furnace	35	NG	450 Nm^3/hr		
6	Boiler 4 & 5	30	NG + LSHS	NG 3760 Nm^3/hr LSHS 3.92 T/HR (each)		
7	Boiler	70	NG + LSHS	NG 8350 Nm^3/hr LSHS 8.74 T/HR		
8	Boiler	70	NG + LSHS	"		
9	Boiler	35	NG	8570 Nm^3/hr		
10	Waste liquor unit	22	HC	WL–I:4395 KG/HR WL-II : 405 Kg/hr	PM, SO_2,NO_x	
11	IWI Unit	40	HC	5623 Kg/hr OFF GASES 2000 Nm^3/hr+2679 Kg/hr		

	12	New Boiler	70	NG + LSHS	NG: 3580 Nm^3/hr LSHS: 3.36 T/hr		
	Proposed Flue Gas						
	There will be no flue gas emission from Proposed project.						

ii Process gas i.e. Type of pollutant gases (SO_2, HCl, NH_3, Cl_2, NO_x etc.)

Existing & Proposed

S. No.	Specific Source of emission (Name of the Product & Process)	Type of emission	Stack/Vent height (meter)	Air Pollution Control Measures (APCM)
Existing				
1	Prilling Tower	SPM NH_3	38	Water Scrubber
2	Prilling Tower	SPM NH_3	70	Water Scrubber
3	Condenser oxidation column	NH_3	38	H_2SO_4 Scrubber (Eff. 99.5%)
4	Dryer Outlet	SPM NH_3	15	Filter
5	Dryer Outlet	SPM NH_3	17	Filter
6	Rock grinding	SPM	30	Ventury Scrubber
7	Digester	F	20	Fume scrubber
8	Dryer & Dust Scrubber A&B	NH_3 SPM, F	30	Cyclone separator &Ventury scrubber
9	Granulator & Neutralization	NH_3 , F	25	Fume Scrubber
10	Dryer	SPM	19.2	Cyclone Separator
11	Final Absorption Tower	SO_2 Acid	52	Final Absorption Tower
12	Final Absorption Tower	SO_2 Acid	100	Final Absorption tower

			Mist		
13	D-415-3 Tower O/L	SO_2 NH_3	25	Scrubber
14	D-414-3 Tower O/L	NOx NH_3	25	De Nox unit
15	AS Dryer	SPM	30	Cyclone Separator & Scrubber
16	AS Vent Scrubber	SO_2 NH_3	30	Scrubber
17	Process Vessels	PM	30	Scrubber
18	Crusher, Hopper, Mixers	PM	40	Bag Filter
Proposed Process Gas Emission				
There will be no Process gas emission from Proposed project.				

iii **Fugitive emission** details with its mitigation measures.

- None envisaged for proposed project

F **Hazardous waste**

(As per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

Existing & Proposed

i

Sr. No	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Rules.	Quantity (MTPA)	Management of HW
Existing					
1	ETP Sludge				
a	Biological sludge	Biological treatment of effluent	-	40 MTPA	Sell to Farmer as a soil conditioner
b	Chemical sludge	Chemical treatment of effluent & cleaning of collection tanks	34.3		Collection, Storage, Transportation & Disposal at TSDF site i.e. NECL
2	Used Oil	Various existing Plants	5.1	125 MTPA	Collection, Storage, Transportation & Disposal by selling to registered refiners

	3	Discarded Container	Various existing Plants	33.3	180 MTPA	Collection, Storage, Decontamination within factory Premise
	4	Spent Catalyst	Various existing Plants	17.2	35 MTPA	Collection, Storage, Transportation & Disposal by selling to registered recyclers or disposal at TSDF site i.e. NECL
	5	Spent Catalyst	Various existing Plants	18.1	115 MTPA	Collection, Storage, Transportation & Disposal by selling to registered recyclers
	6	Organic Waste	From F & I groups and cleaning activity	1.4	20 MTPA	Collection, Storage, Transportation & Disposal at Incineration Facility.
	7	Sulphur Muck	Filtration of molten sulphur at SA plants	17.1	350 MTPA	Collection, Storage, reuse &/or Transportation and Disposal at TSDF site
	Proposed					
	1	Used Oil	Various existing Plants	5.1	0.3 MTPA	Collection, Storage, Transportation & Disposal by selling to registered refiners

ii	Membership details of **TSDF, CHWIF** etc. **(For HW management)**	Not Applicable for proposed project as no such waste will be generated which requires disposal at TSDF/ CHWIF.
iii	Details of Non-Hazardous waste & its disposal(MSW and others)	NA
G	**Solvent management**, VOC emissions etc. Not Applicable for propose project	
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents	
	➢ Not Applicable for proposed project	
ii	**VOC emission** sources and its mitigation measures	
	➢ Not Applicable for proposed project	

Technical presentation was made by the project proponent during SEAC meeting dated 06/02/2019.

Committee deliberated on compliance status of existing project, water balance, HW management, safety

aspects etc.

Committee deliberated EC conditions compliance verification report of RO Bhopal in length. Committee asked about legal action taken against unit by Board and CPCB letter regarding online monitoring system, PP satisfactorily addressed about it. Committee asked about Public hearing exemption for proposed project, PP submitted Notification letter regarding exemption of public hearing for GSFC plant during meeting.Committeee asked about oligomer waste generated from proposed project or not, PP informed that oligomer waste is not generated from proposed Nylon – 6 chip products. PP addressed area adequacy, green belt, new proposed products water and waste water management in length. Committee asked about waste water generation quantity, PP satisfactorily addressed about it.

The project proponent presented that they have already completed baseline environmental monitoring in Summer 2018 and requested to allow them to use the same for the preparation of the EIA report which was agreed to by the committee.

Considering the above project details, after detailed discussion, the terms of reference (ToR) were prescribed as below and as per the standard TOR for the Synthetic Organic Chemical projects recommended by SEAC vide letter no. EIA-10-GEN-21/1480 dated 14/09/2017 and approved by SEIAA in its 12th meeting dated 16/09/2017 for the EIA study to be done covering 5 Km radial distance from the project boundary.

1. Executive summary of the project – giving a prima facie idea of the objectives of the proposal, use of resources, justification, etc. In addition, it should provide a compilation of EIA report, including EMP and the post-project monitoring plan in brief.
2. Copy of plot holding certificate obtained from GIDC Authority. (If applicable)
3. Present land use pattern of the study area shall be given based on satellite imagery.
4. Layout plan of the factory premises. (Show all the production plants including Raw material & Products storage area). Provision of separate entry & exit and adequate margin all-round the periphery for unobstructed easy movement of the emergency vehicle / fire tenders without reversing back. Mark the same in the plant layout.
5. Technical details of the plant/s along with details on best available technologies (BAT), proposed technology and reasons for selecting the same.
6. Details of manufacturing process / operations of each product along with chemical reactions, mass balance, consumption of raw materials etc. Details on strategy for the implementation of cleaner production activities.
7. Full name and chemical formula of all the raw materials and products. Details on end use of each product.
8. Complete management plan for By-products/Spent acids to be generated, along with the name and address of end consumers to whom the by-product/s will be sold. Copies of agreement / MoU / letter of intent from them, showing their willingness to purchase said by-products/Spent acids from the proposed project.
9. Explore the use of renewable energy to the maximum extent possible. Details of provisions to make the project energy-efficient through of energy efficient devices and adoption of modes of alternative eco-friendly sources of energy like solar water heater, solar lighting etc. Measures proposed for energy conservation.

10. Leak Detection and Repairing Programme (LDAR) for all the volatile organic solvent proposed for use in-house with detailed chemical properties including vapor pressure. LDAR shall endeavour prevention of losses of solvents to the best minimum extent.
11. Qualitative and quantitative analysis of hazardous waste streams generation from the manufacturing process (Product wise). Explore the possibility to reuse such waste streams within premises as raw materials for other products or to convert it into valuable products instead of selling out side. Sound management of such waste streams as per the HW Rules 2016 as amended time to time. Feasibility report for utilization shall be incorporated in EIA report.
12. Action plan to reuse or consume entire quantity of spent acids/waste streams within premises to convert into valuable products instead of sending such spent acids to outside premises.
13. Detailed mass balance and water balance (including reuse-recycle, if any) along with qualitative and quantitative analysis of the each waste stream from the processes.
14. Assessment of source of the water supply with adequacy of the same to meet with the requirements for the project. Permission obtained from the GIDC for supply of raw water. Undertaking stating that no bore well shall be dug within the premises.
15. Explore the possibility of reuse / recycle and other cleaner production options for reduction of wastes. Details of methods to be adopted for the water conservation.
16. Qualitative and quantitative analysis of waste water to be generated from the manufacturing process of each product to be manufactured along with mass balance.
17. Segregation of waste streams and details on specific treatment and disposal of each stream.
18. Details of ETP including dimensions of each unit along with schematic flow diagram. Inlet, transitional and treated effluent qualities with specific efficiency of each treatment unit in reduction in respect of all concerned/regulated environmental parameters. Inlet effluent quality should be based on worst case scenario considering production of most polluting products that can be manufactured in the plant concurrently.
19. Undertaking stating that a separate electric meter will be provided for the ETP system.
20. Copy of permission letter with quantity from the authority of GIDC drainage network, Dahej regarding confirmation for spare capacity available to take additional effluent load in GIDC drainage for final disposal to deep Sea.
21. Proposal to provide and maintain separate electric meter, operational logbook for effluent treatment systems, online meters for monitoring of flow, pH, TOC/COD, etc.
22. Application wise break-up of effluent quantity to be recycled / reused in various applications like sprinkling for dust control and green belt development etc. In case of land application, details on availability of sufficient open land for utilizing effluent for plantation / gardening. How it will be ensured that treated effluent won't flow outside the premises linked with storm water during high rainy days.
23. Plans for management, collection and disposal of waste streams to be generated from spillage, leakages, vessel washing, used container washing etc. Measures proposed for preventing effluent discharge during unforeseen circumstances.
24. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
25. Anticipated environmental impacts due to the proposed project/production may be evaluated for significance and based on corresponding likely impacts VECs (Valued Environmental Components) may be identified. Baseline studies may be conducted within the study area of 5 km for all the concerned/identified VECs and likely impacts will have to be assessed for their magnitude in order to

identify mitigation measures.

26. One complete season base line ambient air quality data (except monsoon) to be given along with the dates of monitoring. The parameters to be covered shall be in accordance with the revised National Ambient Air Quality Standards as well as project specific parameters. Locations of the monitoring stations should be so decided so as to take into consideration the pre-dominant downwind direction, population zone and sensitive receptors. There should be at least one monitoring station in the upwind direction. There should be at least one monitoring station in the pre dominant downwind direction at a location where maximum ground level concentration is likely to occur.
27. Modeling indicating the likely impact on ambient air quality due to proposed activities. The details of model used and input parameters used for modeling should be provided. The air quality contours may be shown on location map clearly indicating the location of sensitive receptors, if any, and the habitation. The wind rose showing pre-dominant wind direction should also be indicated on the map. Impact due to vehicular movement shall also be included into the prediction using suitable model. Results of Air dispersion modeling should be superimposed on satellite Image / geographical area map.
28. Base linestatus of the noise environment, impact of noise on present environment dueto the project and proposed measures for noise reduction including engineering controls.
29. Specific details of (i) Process gas emission from each unit process with its quantification, (ii) Air pollution Control Measures proposed for process gas emission, (iii) Adequacy of the air pollution control measures for process gas emission, measures to achieve the GPCB norms (iv) Details of the utilities required (v) Type and quantity of fuel to be used for each utility (vi) Flue gas emission rate from each utility (vii) Air Pollution Control Measures proposed to each of the utility along with its adequacy (viii) List the sources of fugitive emission along with its quantification and proposed measures to control it.
30. Details on management of the hazardous wastes to be generated from the project stating detail of storage area for each type of waste, its handling, its utilization and disposal etc. How the manual handling of the hazardous wastes will be minimized. Methodology of de-contamination and disposal of discarded containers and its record keeping.
31. Membership of Common Environmental Infrastructure including the TSDF / Common Incineration Facility, if any.
32. Name and quantity of each type of solvents to be used for proposed production. Details of solvent recovery system including mass balance, solvent loss, recovery efficiency feasibility of reusing the recovered solvents etc. for each type of solvent.
33. A detailed EMP including the protection and mitigation measures for impact on human health and environment as well as detailed monitoring plan and environmental management cell proposed for implementation and monitoring of EMP. The EMP should also include the concept of waste-minimization, recycle/reuse/recover techniques, energy conservation, and natural resource conservation. Total capital cost and recurring cost/annum earmarked for environment pollution control measures.
34. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
35. Occupational health impacts on the workers and mitigation measures proposed to avoid the human health hazards along with the personal protective equipment to be provided. Provision of industrial hygienist and monitoring of the occupational injury to workers as well as impact on the workers. Plan for periodic medical checkup of the workers exposed. Details of work place ambient air quality

monitoring plan as per Gujarat Factories Rules.

36. Details on volatile organic compounds (VOCs) from the plant operations and occupational safety and health protection measures.
37. Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios should be carried out. The worst-case scenario should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the facilities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures including On-Site / Off-Site Emergency Plan should be provided.
38. MSDS of all the products and raw materials.
39. Details of hazardous characteristics and toxicity of raw materials and products to be handled and the control measures proposed to ensure safety and avoid the human health impacts. This shall include the details of Antidotes also.
40. Details of quantity of each hazardous chemical (including solvents) tobe stored, Material of Construction of major hazardous chemical storage tanks, dyke details, threshold storage quantity asper schedules of the Manufacture, Storage &Import of Hazardous Chemicals Rules of major hazardous chemicals, size of the biggest storage tank to be provided for each raw material & product etc. How the manual handling of the hazardous chemicals will be minimized?
41. Details of the separate isolated storage area for flammable chemicals. Details of flame proof electrical fittings, DCP extinguishers and other safety measures proposed. Detailed fire control plan for flammable substances and processes showing hydrant pipeline network, provision of DG Sets, fire pumps, jockey pump, toxic gas detectors etc.
42. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
43. Detailed five year greenbelt development program including annual budget, types & number of trees to be planted, area under green belt development [with map], budgetary outlay; along with commitment of the management to carry out the tree plantation activities outside the premises at appropriate places in the nearby areas and elsewhere.
44. Detailed socio-economic development measures including community welfare program most useful in the project area for the overall improvement of the environment. Submit a detailed plan for social corporate responsibilities, with appropriate budgetary provisions for the next five years and activities proposed to be carried out; specific to the current demographic status of the area.
45. Compliance of MoEFCC's OM dated 01/05/2018 regarding "Corporate Environment Responsibility" (CER). Fund allocation for Corporate Environment Responsibility (CER) shall be made as per MoEFCC's O.M. No. 22-65/2017-IA.III dated 01/05/2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
46. (a) Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report. (b). Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions ? If so, it may be detailed in the EIA.
47. What is the hierarchical system or administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
48. Records of any legal breach of Environmental laws i.e. details of show- cause notices, closure notices etc. served by the GPCB to the existing unit in last five years and actions taken then after for

prevention of pollution.

49. Copies of Environmental Clearances obtained for the existing plant, its point wise compliance report.
50. Certified Compliance Report (CCR) from the concern authority as per the MoEFCC's Circular no. J-11011/618/2010- IA (II) (I) dated 30/05/2012 and Circular no. J-11013/6/2010-IA-II (Part) vide dated 07/09/2017.
51. Does the company have a system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA Report.
52. Phase wise project implementation schedule with bar chart and time frame, in terms of site development, infrastructure provision, EMS implementation etc.
53. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
54. A tabular chart with index for point-wise compliance of above TORs.

The above mentioned project specific TORs/additional TORs and the model TORs available in the MoEFCC's sector specific EIA Manual for **'Petrochemical based processing Industry'** shall be considered as generic TORs for preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006.

The project proponent shall have to apply for Environmental clearance through online portal http://environmentclearance.nic.in/ along with final EIA report.

Validity of ToR:

55. The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report. ToR will lapse after three years from date of issue.
56. The period of validity could be extended for a maximum period of one year provided an application is made by the applicant to the Regulatory Authority, at least three months before the expiry of valid period together with an updated Form-I, based on proper justification and also recommendation of the SEAC.

18.	SIA/GJ/IND2/30595/2019	**M/s: Ambuja Intermediates Pvt. Ltd** Plot No. 41, Phase-II, GIDC Estate, Vatva, Dist-Ahmedabad	Screening and scoping

Category of the unit: 5(f)

Status of the project: Expansion

- This office has received an application vide their online proposal no. SIA/GJ/IND2/30550/2018 dated 19/01/2019 regarding grant of Terms of Reference [ToR] for preparation of EIA/EMP report.
- This is an existing unit engaged in organic chemicals and now proposes for expansion of synthetic organic chemical products as tabulated below:

SR. NO	PRODUCT NAME	Existing MT/Month	Proposed MT/Month	Total MT/Month	End Use
1.	REACTIVE BLACK – 5/B	30	NIL	30	Textile,

2.	REACTIVE BLACK – N150				Colour and Dyes Industries
3.	REACTIVE BLACK – HFGR				
4.	ACID BROWN -14				
5.	ACID BROWN-214				
6.	ACID BLACK -172				
7.	ACID BLACK -194				
8.	ACID BLACK -234				
9.	ACID BLACK -210				
10.	DIRECT BLACK-80				
11.	NOVACRON YELLOW NC [Ambuja Yellow H-14]				
12.	MONOAZO TZ 3948 [Ambuja Monoazo H-10				
13.	MONOAZO TZ 2688 [AmbujaMonoazo H-19]				
14.	MONOAZO SR 4420 [AmbujaMonoazo H-8]				
15.	DISAZO ROE 888 [AmbujaDisazo H-15]				
16.	MONOAZO AE 3978 [Ambujamonoazo H-6]				
17.	Acid Brown 75	NIL	90	90	
18.	Direct Black 22				
19.	Formazon Blue FR				
20.	Reactive Blue 49				
21.	Acid Black 10 BX				
	TOTAL	30	90	120	

- The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.
- PP was called for presentation in the SEAC meeting dated 06/02/2019.
- The project proponent along with their expert /consultant M/s. Satva Environ Consultancy attended the meeting and made presentation before the committee
- Salient features of the project are as under:

Sr. no.	Particulars	Details
A	Total **cost of Proposed** Project (Rs. in Crores):	Existing: 0.71 Cr. Proposed: 1.25 Cr. Total:1.59 Cr.
B	**Total Plot area** (sq. meter)	Existing:1422.20 Sq. m.
	Green belt area (sq. meter)	Proposed: 63.72 Sq. m
C	**Employment generation**	20
D	**Water**	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	GIDC Water

	Status of permission from the concern authority.	
ii	**Water consumption (KLD)**	

SrNO	Category	Water Consumption (KL/Day)		
		Existing	Additional	Total
1	Domestic	5.0	3.0	8.0
2	Industrial			
	Process	14.0	23.0	37.0
	Boiler	2.0	2.0	4.0
	Washing	6.0	6.0	12.0
	Total Water Consumption (Domestic)	**5.0**	**3.0**	**8.0**
	Total Water Consumption (Industrial)	**22.0**	**31.0**	**53.0**

25) Total water requirement for the project: 61.0 KLD
26) Quantity to be recycle: 12.0 KLD
27) Total fresh water requirement: 49.0KLD

iii **Waste water generation (KLD)**

Sr NO	Category	Waste Water Generation(KL/Day)		
		Existing	Additional	Total
1	Domestic	4.0	3.0	7.0
2	Industrial			
	Process	13.0	25.2	38.2
	Boiler	1.0	1.0	2.0
	Washing	6.0	6.0	12.0
	Total Waste Water Generation (Domestic)	**4.0**	**3.0**	**7.0**
	Total Waste Water Generation (Industrial)	**20.0**	**32.2**	**52.2**

iv Treatment facility within premises with **capacity [For existing and Proposed]**
[In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..

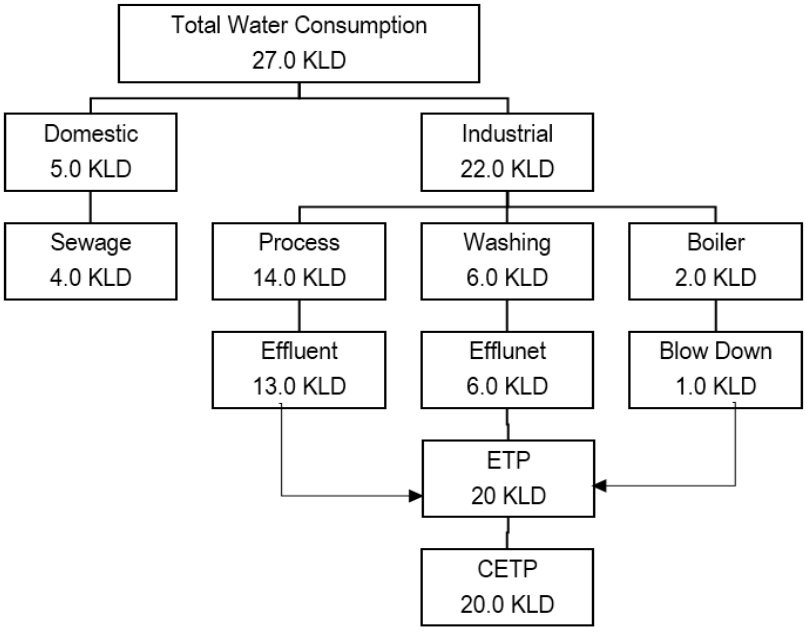
EXISTING

Sr. No.	Name of Unit	Capacity
1	Collection Tank 2 Nos.	6 m^3 and 10 m^3
2	Neutralization Tank	10 m^3
3	Settling Tank	25 m^3 and 10 m^3
4	Holding Sump	7.5 m^3 and 10 m^3
5	C.E.T.P Overhead Tank	30 m^3
6	Sludge Drying Bed	1.5×1.5 (4 Nos.)

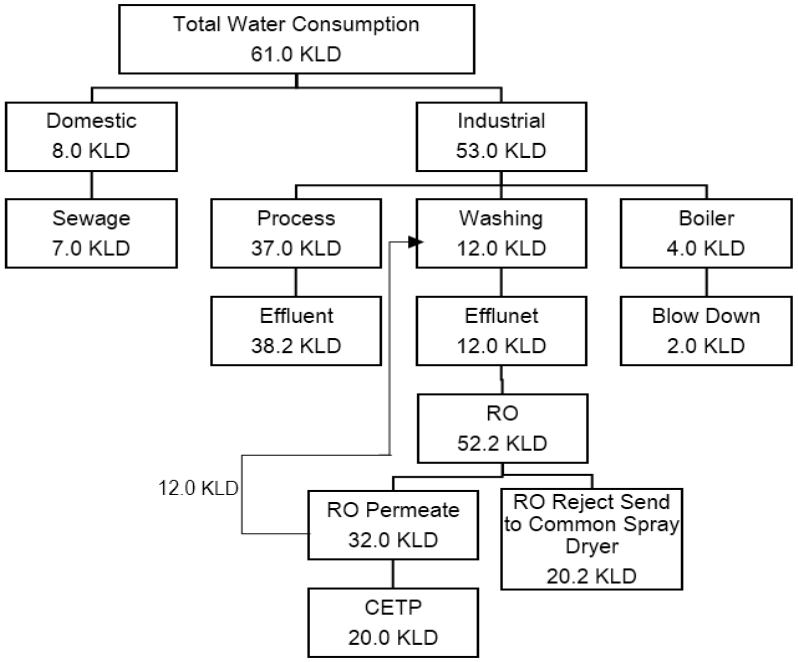
PROPOSED

Sr. No.	ETP Unit	Capacity
1	Equalization cum Neutralization Tank	10, 2 Nos.
2	Filter Press	36" x 36", 48 plates
3	Holding Tank	60 KL
4	R. O. System	3,000 LPH
5	Permeate (Re-use In Utilities) Holding Tank	15
6	Permeate (CETP discharge) Holding Tank	20
7	High Concentration (Reject) Effluent Storage Tank to Common MEE/Spray Dryer Facilities	20

v	Mode of Disposal & Final meeting point	
	Domestic:	The generated sewage will be disposed through soak pit/septic tank.
	Industrial:	
	• Total 52.2 KLD Waste Water Generation from Manufacturing Process and Other Ancillary Operation, The unit has propose Treatment in ETP Plant followed by RO System. • The RO permeate @ 32 KLD will be partially @ 12 KLD will be reuse in washing activity and remaining 20 KLD will be discharge to CETP for further treatment • The RO reject @ 20.2 KLD will be send to Common Spray Drier for further disposal	
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc. Name of Common facility	
	The Green Environment Services Co-op. Soc. Ltd. – CETP	
	The Green Environment Services Co-op. Soc. Ltd. – Common Spray Drier	
	The Society of Clean Earth – Common Spray Drier – Common Spray Drier	
	Membership of Common facility (CF)	
		(For waste water treatment)
vii	**Simplified water balance diagram with reuse / recycle of waste water**	
Exisiting		



After Expansion Water Balance Diagram



vii	Reuse/Recycle details [Source of reuse & application area]		
	Total reuse12 KLD		
	Source of waste water for reuse with quantity in KLD	**Application area with quantity in KLD**	**Remarks regarding feasibility to reuse i.e. w/w characteristics (COD, BOD, TDS etc.)**
	RO Plant (12 KLD)	Washing	COD – <1000-1100 mg/L

			TSS- < 100 mg/L TDS - <1200 mg/L

E **Air**

i Flue gas emission details

No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.

Existing & Proposed

Sr. no	Stack attached to	Stack height in meter	Type of Fuel	Consumption	APCM	Remarks
1	Boiler-1 (1 TPH)	12	PNG	30 SCM/Hr (5 E + 25 P)	Adequate Stack Height	Existing
2	Boiler-2 (1 TPH)	12	PNG	30 SCM/Hr (5 E + 25 P)	Adequate Stack Height	Existing
3	Hot Air Generator (10 Lac Kcal/Hour)	30	PNG	50 SCM/Hr (12 E + 38 P)	Adequate Stack Height	Existing

ii Process gas i.e. Type of pollutant gases (SO_2, HCl, NH_3, Cl_2, NO_xetc.)

Existing & Proposed

-

Sr no	Stack attached to	Stack height in meter	APCM	Type of Emission	Remarks
1.	Spray Dryer (1000 LPH)	30	Cyclone separator followed two stage water scrubber	PM	Existing

iii **Fugitive emission** details with its mitigation measures.

- The entire manufacturing activities will be carried out in the closed reactors and regular checking and maintenance of reactors will be carried out to avoid any leakages.
- The tank vents will be equipped with either a carbon filter or an oil trap to prevent water vapor from entering the tank as it breathes.
- All the motors of pumps for the handling of hazardous chemicals will be flame proof and provided with suitable mechanical seal with stand-by arrangement
- Control of all parameters on a continuous basis will be done by adequate control valves, pressure release valves and safety valves etc.
- All the flange joints of the pipe lines will be covered with flange guards.
- All the raw materials will be stored in isolated storage area and containers tightly closed.

There will also be provision of adequate ventilation system in process plant and hazardous chemical storage area

F **Hazardous waste**

(as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

Existing & Proposed

i

Sr. No	Types of Hazardous Waste	Sources	Category	Existing MT/Year	Additional MT/Year	Total MT/Year	Disposal

	1	ETP Sludge	ETP Area	35.3	60.0	20.0	80.0	Collection, storage, Transportation and Dispose to Active TSDF Site
	2	Used Oil	Plant Machinery	5.1	5.0	1.0	6.0	Collection, storage, Reuse within premises or Dispose by Selling to Authorized Re-processors.
	3	Discarded Container	Material Storage and Handling	33.1	12.0	42.0	60.00	Collection, storage, Transportation and Dispose by Selling to Authorized Recycler

ii	Membership details of **TSDF, CHWIF** etc. **(For HW management)**	Saurashtra Enviro Project Pvt. LTD.
iii	Details of Non-Hazardous waste & its disposal(MSW and others)	No
G	**Solvent management**, VOC emissions etc.	
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents	
	➢ There is no any type of solvent required	
ii	**VOC emission** sources and its mitigation measures	
	• Sources of fugitive emissions include storage of chemicals, solvents storage, loading and unloading section, raw material handling and, hazardous waste storage area • The fugitive emissions in terms of handling losses will get reduced by proper storage and handling. • Hazardous chemicals will be stored as per standard criteria. • Periodically monitoring will be carried out as per the post project monitoring plan. • All materials must be stored in suitable packing to prevent contamination of air. • Enclosed system & efficient procedures for materials charging shall be ensured.	

- Technical presentation was made by the project proponent during SEAC meeting dated 06/02/2019.
- Committee deliberated on compliance status of existing project, water balance, HW management, safety aspects etc.
- Committee asked about compliance of existing plant and any legal action taken against unit, PP informed that CCA compliance report submitted by the unit. PP informed that one Notice under Water Act"74 issued by Board and compliance of conditions mentioned in Notice submitted by them . PP addressed area adequacy, green belt, new proposed products water and waste water management in length. Committee

asked about existing and proposed waste water quality to CETP, PP satisfactorily addressed about it.

- Committee noted that for proposed expansion, waste water discharge to CETP is as per CCA and PP is sending their proposed waste water to common spray dryer of M/s GSECL, Vatva and common spray dryer of M/s Society for clean earth, Vatva. Committee deliberated on compliance status of existing project, water balance, HW management, safety aspects etc.

Considering the above project details, after detailed discussion, the terms of reference (ToR) were prescribed as below and as per the standard TOR for the Synthetic Organic Chemical projects recommended by SEAC vide letter no. EIA-10-GEN-21/1480 dated 14/09/2017 and approved by SEIAA in its 12th meeting dated 16/09/2017 for the EIA study to be done covering 10 Km radial distance from the project boundary.

1. Adequacy of proposed area with respect to plant machineries , EMS, green belt , safety aspect, raw material & product storage considering worst case scenario. Submit proper lay out plan clearly demarcating all activities with scale.
2. Compliance of MoEFCC's OM dated 01/05/2018 regarding "Corporate Environment Responsibility" (CER). Fund allocation for Corporate Environment Responsibility (CER) shall be made as per MoEFCC's O.M. No. 22-65/2017-IA.III dated 01/05/2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
3. Details with respect to justification for proposed expansion: (1) To address proportionate availability of space for production plant. (2) To address proportionate availability of storage area for raw materials finished goods, utilities and goods carrier movement within premises. (3) To address proportionate captive/common infrastructure available to accommodate additional load due to proposed expansion. (4) Environment impact and its mitigation measures for common/ captive infrastructure due to proposed production.
4. Explore the use of renewable energy to the maximum extent possible. Details of provisions to make the project energy-efficient through of energy efficient devices and adoption of modes of alternative eco-friendly sources of energy like solar water heater, solar lighting etc. Measures proposed for energy conservation.
5. Leak Detection and Repairing Programme (LDAR) for all the volatile organic solvent proposed for use in-house with detailed chemical properties including vapor pressure. LDAR shall endeavour prevention of losses of solvents to the best minimum extent.
6. Qualitative and quantitative analysis of hazardous waste streams generation from the manufacturing process (Product wise). Explore the possibility to reuse such waste streams within premises as raw materials for other products or to convert it into valuable products instead of selling out side. Sound management of such waste streams as per the HW Rules 2016 as amended time to time. Feasibility report for utilization shall be incorporated in EIA report.

7. Justification regarding quality of existing waste water and proposed waste water which is sending to CETP as per CETP norms.

- The TOR prescribed as above and as per the standard TOR approved by SEIAA and the model ToRs available in the MoEFCC's sector specific EIA Manual for **'Synthetic Organic Chemical Industry'** shall be considered as generic TORs for preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006. The project proponent shall have to apply for Environmental clearance through online portal http://environmentclearance.nic.in/ along with final EIA report.

Meeting ended with thanks to the Chair.

Minutes approved by:

1.	Dr. Dinesh Misra, Chairman, SEAC	
2.	Shri S. C. Srivastav, Vice Chairman, SEAC	
3.	Shri V. N. Patel, Member, SEAC	
4.	Shri. R. J. Shah, Member, SEAC	
6.	Shri A.K. Muley, Member, SEAC	

Minutes of the 480th (A) meeting of the State Level Expert Appraisal Committee held on 06/02/2019 at Committee Room, GEER Foundation, Gandhinagar.

The 480th (A) meeting of the State Level Expert Appraisal Committee (SEAC) was held on 6thFebruary 2019 at Committee Room, GEER foundation, Gandhinagar. Following members attended the meeting:

1. Dr. Dinesh Misra, Chairman, SEAC
2. Shri S. C. Srivastav, Vice Chairman, SEAC
3. Shri V. N. Patel, Member, SEAC
4. Shri. R. J. Shah, Member, SEAC
5. Shri A.K. Muley, Member, SEAC

The additional agenda of reconsideration for appraisal cases were taken up. The Committee considered the applications made by project proponents, additional details submitted as required by the SEAC/SEIAA and details furnished in the Form-1, PFR, EIA-EMP reports.

1	SIA/GJ/IND2/30050/2017	M/s. Surya Life Sciences Ltd. Plot No. 3606 & 3616, GIDC Ind. Estate, Ankleshwar, Tal-Ankleshwar, Dist-Bharuch, State: Gujarat.	EC – Reconsideration

Category of the unit : 5(f)
Project status: Expansion
Project proponent (PP) has submitted online application vide no. SIA/GJ/IND2/30050/2017 dated 17/01/2019 for obtaining Environmental Clearance.
The SEAC had recommended TOR to SEIAA and SEIAA issued TOR to PP vide their letter dated 31/07/2018.
Project proponent has submitted EIA Report prepared by Earthcare Enviro Solutions Pvt. Ltd. based on the TOR issued by SEIAA.
This is an existing unit engaged in Synthetic organic chemicals and now proposes for expansion as tabulated below:

Sr. no.	Name of the Products	CAS no.	Quantity MT/Month			End-use of the products
			Existing	Proposed	Total	
	Meta Bromo Anisole	2398-37-0	05	495	500.00	Bulk Dugs Intermediates
	2-Methallyl Acetate	820-71-3	--	500.00		Bulk Dugs Intermediates
	2-Methyl 2-Phenyl Propyl Acetate	18755-52-7				Bulk Dugs Intermediates
	Poly Aluminium Chloride Solution	7446-70-0				Bulk Dugs Intermediates
	Meta Anisidine	536-90-3				Bulk Dugs Intermediates
	a, a-Dimethyl-4-[1-oxo-1-cyclopropyl] phenylacetic acid	162096-54-0				Bulk Dugs Intermediates
	Methyl 2-(4-(4-Chlorobutanoyl) Phenyl)-2-Methyl Propanoate (D-9)	154477-54-0				Bulk Dugs Intermediates

		Meta Bromo Nitro Benzene	585-79-5				Bulk Dugs Intermediates
		4-(2-Methoxy Ethyl) Phenol	56718-71-9				Bulk Dugs Intermediates
		Methyl 2-(4-(4-(4-(Hydroxyl Diphneyl Methyl) Piperidin-1-yl) Butanoyl) Phenyl)-2-Methyl Propanoate (D-10)	154477-55-1				Bulk Dugs Intermediates
		Meta Phenoxy Benzyl Alcohol	13826-35-2				Bulk Dugs Intermediates
		2-(4-hydroxyl-4-(4-hydroxy diphneylmethyl)piperidin-1-yl)butyl)phenyl)-2-Methyl propanoic acid (D-12)	83799-24-0				Bulk Dugs Intermediates
		Benzhydrol	91-01-0				Bulk Dugs Intermediates
		4-(Cyclopropyl Carbonyl)-A,A-Dimethylphenyl Acetic Acid	162096-54-0				Bulk Dugs Intermediates
		CisBomo Benzoate	61397-56-6				Bulk Dugs Intermediates
		Imidazole Alcohol	84682-23-5				Bulk Dugs Intermediates
		Cis-Tosylate	154003-23-3				Bulk Dugs Intermediates
		Ketoconazole	65277-42-1				Bulk Dugs Intermediates
		Benzocaine	94-09-7				Bulk Dugs Intermediates
		Meta Bromo Aniline	591-19-5				Bulk Dugs Intermediates
		Guaifenesin	93-14-1				Bulk Dugs Intermediates
		MannichHCl	15409-60-6				Bulk Dugs Intermediates
		Para Amino Benzoic Acid	150-13-0				Bulk Dugs Intermediates
		Meta Amino Benzoic Acid	150-13-0				Bulk Dugs Intermediates
		Metoprolol Base	37350-58-6				Bulk Dugs Intermediates
		Metoprolol Tartrate	56392-17-7				Bulk Dugs Intermediates
		Phenyl Ethyl Methyl Ether	3558-60-9				Bulk Dugs Intermediates
		Azacyclonol	115-46-8				Bulk Dugs Intermediates
		Meta Bromo Phenol	591-20-8				Bulk Dugs Intermediates

		Meta Amino Benzophenone	2835-77-0				Bulk Dugs Intermediates
		Benzyl Alcohol	100-51-6				Bulk Dugs Intermediates
		Ketoprofen	22071-15-4				Bulk Dugs Intermediates
		Ethyl Nitro Benzoate	99-77-4				Bulk Dugs Intermediates
		Para Anisyl Alcohol	105-13-5				Bulk Dugs Intermediates
		BromhexineHCl	611-75-6				Bulk Dugs Intermediates
		Mesalamine	89-57-6				Bulk Dugs Intermediates
		Finofibrate	49562-28-9				Bulk Dugs Intermediates
		Tramadol HCl	36282-47-0				Bulk Dugs Intermediates
		Phenyl Ethyl Alcohol	60-12-8				Bulk Dugs Intermediates
		Para Fluoro Anisole	459-60-9				Bulk Dugs Intermediates
		Nitazoxanide	55981-09-4				Bulk Dugs Intermediates
		Flurbiprofen	5104-49-4				Bulk Dugs Intermediates
		1-[2-(2-hydroxyethoxy)ethyl] piperazine	13349-82-1				Bulk Dugs Intermediates
		Raspberry Ketone	5471-51-2				Bulk Dugs Intermediates
		Meta Amino Acetophenone	99-03-6				Bulk Dugs Intermediates
		Para ChloroBenzophenone	134-85-0				Bulk Dugs Intermediates
		Nitro Chloro Benzoic Acid	96-99-1				Bulk Dugs Intermediates
		Para Hydroxy Benzyl Alcohol	90-05-1				Bulk Dugs Intermediates
		Sucralfate	54182-58-0				Bulk Dugs Intermediates
		Cinnamyl Alcohol	104-54-1				Bulk Dugs Intermediates
		Para Phenoxy Benzyl Alcohol	13826-35-2				Bulk Dugs Intermediates
		2,3 Lutidine	583-61-9				Bulk Dugs Intermediates
		3,5 Lutidine	591-22-0				Bulk Dugs Intermediates
		Carbamezapine	298-46-4				Bulk Dugs Intermediates
		9-hydroxy-9H-fluorene-9-carboxylic acid	467-69-6				Bulk Dugs Intermediates

	Tetra Butyl Ammonium Bromide	99-03-6				Bulk Dugs Intermediates
	Phenylephrine HCl	61-76-7				Bulk Dugs Intermediates
	Rosuvastatin Calcium	147098-20-2				Bulk Dugs Intermediates
	Fluconazole	86386-73-4				Bulk Dugs Intermediates
	Glimepiride HCl	93479-97-1				Bulk Dugs Intermediates
	LidocaineHCl	73-78-9				Bulk Dugs Intermediates
	Metoprolol Succinate	98418-47-4				Bulk Dugs Intermediates
	Mebendazole	31431-39-7				Bulk Dugs Intermediates
	Aceclofenac	89796-99-6				Bulk Dugs Intermediates
	Itraconazole	84625-61-6				Bulk Dugs Intermediates
	Cinnamaldehyde	14371-10-9				Bulk Dugs Intermediates
	AllylIsothiocyanate	57-06-7				Bulk Dugs Intermediates
	Acetohydrazide	1068-57-1				Bulk Dugs Intermediates
	Benzylidene Acetone	122-57-6				Bulk Dugs Intermediates
	Amlodipine Besylate	111470-99-6				Bulk Dugs Intermediates
	R & D Product (hydrogenation, bromination etc.)	--	--	10.00	10.00	Bulk Dugs Intermediates
	Total		5.00	500.00	500.00	

The project falls underCategory B of project activity 5(f) asper the schedule of EIA Notification 2006.
Earlier, PP was called for presentation in the SEAC meeting dated 11/01/2019.
Salient features of the project are as under:

Sr. no.	Particulars	Details
A	Total cost of Proposed Project (Rs. in Crores):	Existing: Rs. 25.0 Crores Proposed: Rs. 127.10 Crores Total: Rs. 152.10 Crores
B	Total Plot area (sq. meter)	Existing: 15,650.00 Sq. m. Proposed: -- Total: 15,650.00 Sq. m.
	Green belt area (sq. meter)	Existing: 415.00 Sq. m. Proposed: 4835.00 Sq. m. Total: 5250.00 Sq. m.
C	Employment generation	Existing: 56 (Male- 53 + Female- 03) Proposed: 162 (Male- 147 + Female- 15) Total: 218 (Male- 200 + Female- 18)

D	Water	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	GIDC
	Status of permission from the concern authority.	Unit has requested to GIDC for additional water requirement.
ii	Water consumption (KLD)	

	Existing KLD	Proposed (Additional) KLD	Total after Expansion KLD	Remarks
Domestic	1.00	8.80	9.80	--
Gardening	1.66	19.34	21.00	--
Industrial				
Process	0.22	250.00	250.22	--
Washing	1.28	5.00	6.28	--
Boiler	2.25	120.00	122.25	--
Chilling Plant	0.50	30.00	30.50	--
DM Plant	0.25	6.00	6.25	--
Cooling Tower	2.00	38.00	40.00	--
Scrubber	--	2.00	2.00	--
Industrial Total	6.50	451.00	457.50	
Grand Total (A+B+C)	9.16	479.14	488.30	

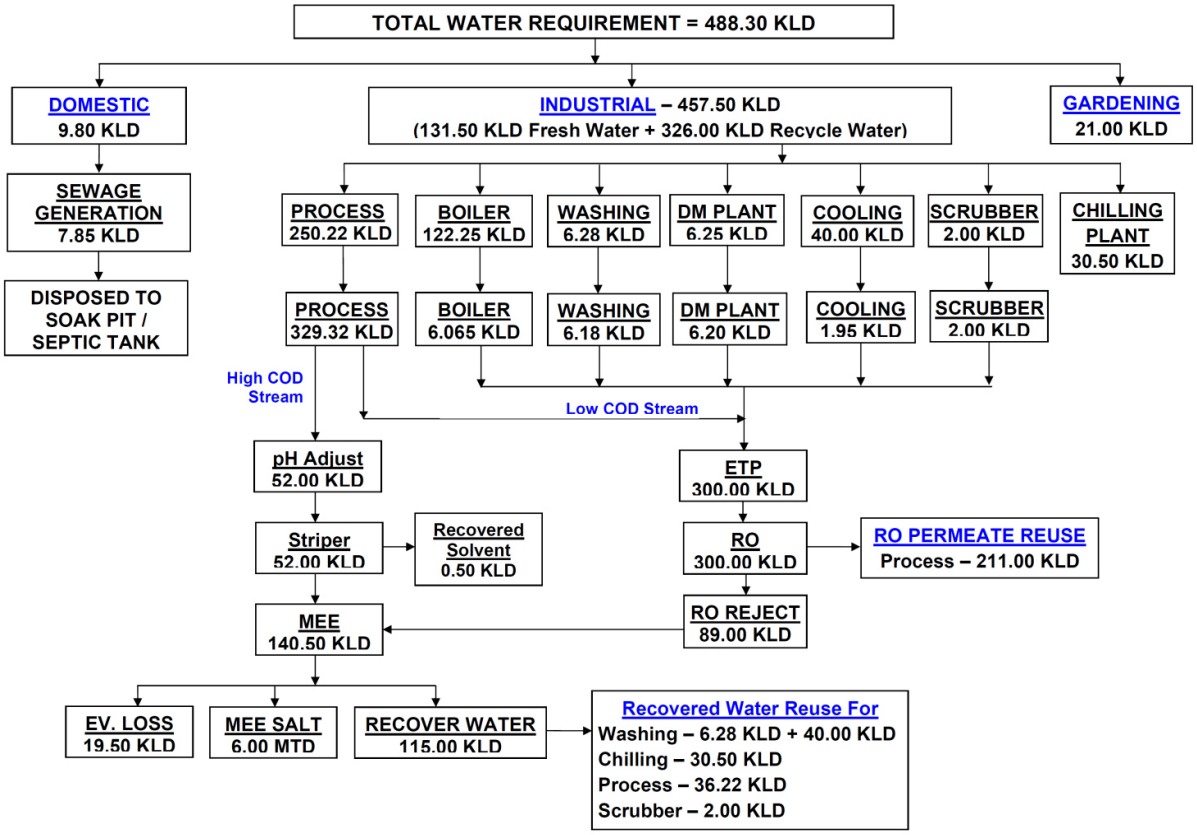
Total water requirement for the project: 488.30 KLD
Quantity to be recycled: 326.00 KLD
Total fresh water requirement: 162.30 KLD

iii	Waste water generation (KLD)

Category	Existing KLD	Proposed (Additional) KLD	Total after Expansion KLD	Remarks
Domestic	0.90	6.95	7.85	--
Industrial				
Process	0.32	329.00	329.32	--
Washing	1.18	5.00	6.18	--
Boiler	0.065	6.00	6.065	--
Chilling Plant	-	-	-	--
DM Plant	0.20	6.00	6.20	--
Cooling Tower	0.05	1.90	1.95	
Scrubber	--	2.00	2.00	
Total Industrial waste water	1.815	349.90	351.715 ≈ 352.00	

iv	Treatment facility within premises with capacity [For existing and Proposed] [In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..

		Existing: In-house ETP of Capacity 20.00 m3/day having Primary, Secondary & Tertiary Treatment. Proposed: In-house ETP of Capacity 400.00 m3/day having Primary, Secondary & Tertiary Treatment. MEE Capacity: 5 KL/hr	
	v	Mode of Disposal & Final meeting point	
		Domestic:	Into Septic Tank / Soak Pit system.
		Industrial:	After expansion, Industrial wastewater generated from manufacturing process and other ancillary operation shall be segregated in two different streams like low COD and high COD stream. Low COD stream of effluent will be treated into ETP having primary, secondary & tertiary treatment and then sent to RO plant from where RO permeate water will be again reused in process and RO rejected water will be sent to MEE. High COD stream of effluent, after pH adjustment sent to stripper followed by MEE from where water will be concentrated to recover mixed solvent, salt and condensed water will be reused for washing, scrubber, chilling plant & process.
	vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc. Name of Common facility	
		Not Applicable	
		Membership of Common facility (CF)	
		(For waste water treatment) Not Applicable	
	vii	Simplified water balance diagram with reuse / recycle of waste water	



vii Reuse/Recycle details (KLD)
[Source of reuse & application area]

Total reuse – 326.00 KLD

Source of waste water for reuse with quantity in KLD	Application area with quantity in KLD	Remarks regarding feasibility to reuse i.e. w/w characteristics (COD, BOD, TDS etc.)
RO Permeate – 211.0 KLD	Process – 211.00 KLD	COD: < 80 BOD: < 30 TDS: < 100
MEE recovered water – 115.0 KLD	Washing – 46.28 KLD Chilling Plant – 30.50 KLD Process – 36.22 KLD Scrubber – 2.00 KLD	COD: < 1000 BOD: < 300 TDS: < 500

E Air

i Flue gas emission details
No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.
Existing & Proposed

Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
Existing						
1	Boiler (Capacity: 1 TPH)	18.0 m	Natural Gas	100 m3/day	PM SO2 NOx	Adequate stack height provided
2	D. G Set – 01 No. (Stand By) (Capacity: 200 KVA)	6.00 m	HSD	55 Lit/hr		Adequate stack height provided
Proposed						
3	Boiler (Capacity: 5 TPH)	18.0 m	Natural Gas	2000 m3/day	PM SO2 NOx	Adequate stack height will be provided
4	D. G Set – 01 No. (Stand By) (Capacity: 500 KVA)	8.00 m	HSD	135 Lit/hr		Adequate stack height will be provided

ii Process gas i.e. Type of pollutant gases (SO2, HCl, NH3, Cl2, NOx etc.)
Existing & Proposed

Sr. no.	Specific Source of emission (Name of the Product & Process)	Type of emission	Stack/Vent Height (meter)	Air Pollution Control Measures (APCM)
Existing				
--				
Proposed				
1.	Process Vent – 1	HCl	10.0 m	Two stage Alkali Scrubber
2.	Process Vent – 2	HBr	10.0 m	
3.	Process Vent – 3	SO2	10.0 m	
4.	Process Vent – 4	Br2	10.0 m	
5.	Process Vent – 5	NH3	10.0 m	Acid Scrubber
6.	Process Vent – 6	Nitrogen CO2	10.0 m	-

iii Fugitive emission details with its mitigation measures.

Sources of fugitive emissions will be from raw material storage area, handling of chemicals, manufacturing process and from vehicle movement on internal road.
To minimize fugitive emission, powder material will be allowed in a vessel through closed loop while liquid material will be charged through pipeline.
Transportation of raw materials & products will be carried out by trolley within premises and minimum manual material handling will be carried, so the fugitive emission due to process activity and material handling will be negligible.

F Hazardous waste
(as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

Existing & Proposed

i

Sr. no.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc)	Category and Schedule as per HW Rules.	Quantity (MT/Annum)			Management of HW
				Existing	Proposed	Total	
	ETP Sludge	Effluent Treatment Plant	35.3 (Sch. I)	12.0 MT/year	298.00 MT/year	310.00 MT/year	Collection, Storage, Transportation & Disposal at TSDF site for landfilling
	Used Oil	D. G Set	5.1 (Sch. I)	0.050 MT/year	0.125 MT/year	0.175 MT/year	Collection, Storage, Transportation & Disposal by Selling to registered Re-Refiners.
	Empty barrels / containers / liners contami-nated with hazardous chemicals /wastes	Raw material & Finished product packing material	33.1 (Sch. I)	0.50 MT/year	8.50 MT/year	9.00 MT/year	Collection, Storage, Transportation and Disposal by selling to registered re-cyclers approved by GPCB / CPCB OR Collection, Storage, Decontamination and reuse within premises /sell to local scrap vendor.
	Process Waste / Residue	Process (so many products)	28.1 (Sch. I)	--	2100.00 MT/year	2100.00 MT/year	Collection, Storage, Transportation and Disposal for incineration.
	Sludge from Scrubber (Inorganic Salt)	Scrubber	35.1 (Sch. I)	--	9.50 MT/year	9.50 MT/year	Collection, Storage, Transportation & Disposal at TSDF site for landfilling.
	Spent Catalyst	Process (so many products)	28.2 (Sch. I)	--	300.00 MT/year	300.00 MT/year	Collection, Storage, Transportation and Disposal at TSDF site for secured landfill OR Collection, Storage, Transportation

								and Sell to Registered Recyclers.
		MEE Salt	MEE	35.3 (Sch. I)	5.10 MT/year	2154.90 MT/year	2160.00 MT/year	Collection, Storage, Transportation & Disposal by sending to TSDF site.
		Distillation Residues	Process (so many products)	20.3 (Sch. I)	3.00 MT/year	3000.00 MT/year	3003.00 MT/year	Collection, Storage, Transportation and Disposal for co-processing/incineration
		Spent Carbon	Process (Product No. 5,18,35,57, 60,62,63,64)	28.3 (Sch. I)	--	540.00 MT/year	540.00 MT/year	Collection, Storage, Transportation and Disposal for co-processing
		Salt (Sodium Chloride) (85-90%)	Process (Product No. 2,4,6,7,14,15, 35,46,51,61)	28.1 (Sch. I)	--	19800.00 MT/year	19800.00 MT/year	Collection, Storage, Transportation and Disposal at TSDF site –for secured landfill OR Sell to Registered Recycler
		Aluminium Chloride (30-40%)	Process (Product No. 6,14,32,46)	28.4 (Sch. I)	--	40200.00 MT/year	40200.00 MT/year	Maximum quantity (10800 MTA) will be reused in process within premises and balance quantity (29400 MTA) will be disposed by selling to Authorized end user as per Haz. Waste Rule-9 and after getting prior permission from GPCB.
		Sodium	Process	28.4	--	33300.0	33300.0	Maximum

				Acetate (10-15%)	(Product No. 6,14,32,46)	(Sch. I)		0 MT/year	0 MT/year	quantity (4500 MTA) will be reused in process within premises and balance quantity (28800 MTA) will be disposed by selling to Authorized end user as per Haz. Waste Rule-9 and after getting prior permission from GPCB.
				Manganese Dioxide (75-80%)	Process (Product No. 6)	28.4 (Sch. I)	--	2280.00 MT/year	2280.00 MT/year	Collection, Storage, Transportation & Disposal by selling to Authorized end user as per Haz. Waste Rule-9 and after getting prior permission from GPCB.
				Sodium Bromide (30-35%)	Process (Product No. 8,35,40)	28.4 (Sch. I)	--	16380.00 MT/year	16380.00 MT/year	Collection, Storage, Transportation & Disposal by selling to Authorized end user as per Haz. Waste Rule-9 and after getting prior permission from GPCB.
				Spent Sulphuric Acid (60%)	Process (Product No. 8,9,45,47)	B 15 (Sch. II)	--	32040.00 MT/year	32040.00 MT/year	Maximum quantity (9900 MTA) will be reused in process and ETP within premises and balance quantity (22140 MTA) will be disposed by selling to Authorized end user as per Haz. Waste Rule-9 and after getting prior permission from GPCB.
				Ammoniu	Process	28.4	--	1320.00	1320.00	Maximum

	m Chloride (40-45%)	(Product No. 38)	(Sch. I)		MT/year	MT/year	quantity (1200 MTA) will be reused in process within premises and balance quantity (120 MTA) will be disposed by selling to Authorized end user as per Haz. Waste Rule-9 and after getting prior permission from GPCB.
	Spent Solvent	Process (so many products) & stripper	28.6 (Sch. I)	--	39900.00 MT/Year	39900.00 MT/Year	Collection, storage, recovered through in-house distillationORsent for distillation job worker to authorized recycler

ii	Membership details of TSDF, CHWIF etc. (For HW management)	Unit has got membership of TSDF site operated by M/s. BEIL. Unit has also got membership of M/s. SEPPL, Bhachau.
iii	Details of Non-Hazardous waste & its disposal (MSW and others)	

Sr. No.	Type of Waste	Source of Generation	Category of Waste	Disposal
1.	Domestic Waste (Food waste, Plastic, Paper etc.)	Employees working in the premises	MSW	Collected in separate bin and disposed to bin of GIDC.
2.	Industrial Waste (Glass wool [Insulating Material, Scrap])	Steam Pipe & Vessels	ISW	Sell to local scrap vendor
3.	Industrial Waste (Wooden pellets)	From Raw Material & Product storage area	ISW	Sell to local scrap vender

G	Solvent management, VOC emissions etc.
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents
	In house solvent recovery plant will be installed and recovered solvent will be again reused in process and waste residue will be sent for co-processing.
ii	VOC emission sources and its mitigation measures
	VOCs generation will be from storage and usage of raw materials. VOC analysers will be provided to detect any solvent leakages during storage and handling.

During the meeting dated 07/01/2019, technical presentation made during the meeting by project proponent. During the meeting, the project was appraised based on the information furnished in the EIA Report, various issues raised during the public hearing and details presented during the meeting.

The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect. The baseline environmental study has been conducted for the study area of 10 km radial distance from project site for the period March 2017 to May 2017. Ambient Air Quality monitoring was carried out for PM10, PM2.5, SO2, NOx, NH3, VOC, HCl, CO at eight locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using AERMOD view model. The resultant concentrations are within the NAAQS. The modelling study proved that the air emissions from the proposed plant would not affect the ambient air quality of the region in any significant manner. The ambient air quality around the proposed project site will remain within the National Ambient Air Quality Standards (NAAQS). Analysis of ground water samples shows that TDS is higher than the desirable limit but within the permissible limit specified by IS:10500. Hardness is higher than the desirable limit but at one location higher than the permissible limit. Chloride is marginally higher than the desirable limit at one location.

Analysis of surface water samples shows that Turbidity and TDS in canal water is higher than the desirable limit but within the permissible limit specified by IS:10500. Total coliform is higher than the permissible limit at all locations.

Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios has been carried out. The detail proposed safeguard measures including On-Site / Off-Site Emergency Plan has been covered in the RA report.

Committee deliberated on waste water management, APCM, Spent acid & HW management, spent solvent management, Baseline study, CER, EMP, safety aspects etc.

While discussing regarding R & D products, PP informed that they will manufacture 1 MT/Month of R & D products instead of 10 MT/Month.

After deliberation, it was unanimously decided to consider the project for further consideration only after

satisfactory submission of the following:
Methods for segregation of waste water streams based on characteristics at source and its sound management.
Treatability of the proposed waste water management scheme.
Keeping in view direction under section 18 (1) (b) of the Water (Prevention and Control of Pollution) act, 1974 issued by CPCB regarding compliance of CETP.
Technical justification for proposal SSE – Single Stage Evaporator instead of MEE – Multi Effect Evaporator.
Complete details of spent solvent management as per the ToR no. 42
Project specific safety details as per ToR no. 53
PP has submitted reply for the above additional details sought vide letter on 29/01/2019.
The project was considered in SEAC meeting dated 06/02/2019.
PP has submitted their reply as below:
PP submitted that after expansion, Industrial wastewater generated from manufacturing process and other ancillary operation shall be segregated in two different streams like low COD and high COD stream for which we will provide two separate collection tank for the same. Wastewater generated from utility having low COD and wastewater generated from manufacturing process having low COD will be sent to in-house ETP. Low COD stream of effluent will be treated into ETP having primary, secondary & tertiary treatment and then sent to RO plant from where RO permeate water will be again reused in process and RO rejected water will be sent to MEE. Wastewater generated from manufacturing process having high COD will be sent for pH adjustment. After pH adjustment it will be sent to stripper followed by MEE from where water will be concentrated to recover mixed solvent, salt and condensed water will be reused for washing, scrubber, chilling plant & process (non-reaction part).
This condition is not applicable to unit. PP submitted that at present unit is ZLD. And also after expansion, unit has proposed to install MEE to achieve ZLD.
PP submitted that at present we have installed double stage evaporator to achieve ZLD. In past, due to oversight we have mentioned it as single stage. For expansion of project unit has proposed Multi Effect Evaporator (MEE). Technical specification of MEE is mentioned in EIA report (in chapter-2 of EIA). After expansion, double stage evaporator will be kept as stand-by.
PP has addressed spent solvent management along with generated quantity, distillation residue, loss and recovery efficiency. PP has addressed project specific safety details.
Compliance of the ToR was found satisfactory.
After detail deliberation the committee unanimously decided to recommend the proposal for grant of EC to SEIAA.

2	SIA/GJ/IND2/21133/2017	M/s. Dharti Enterprise Plot No. D-2/CH-326, GIDC Dahej – II, Village – Jolva, Ta. – Vagra, Dist.- Bharuch, Gujarat.	EC – Reconsideration

Category of the unit : 5(f)
Project status: Expansion

Project proponent (PP) submitted online application vide no. SIA/GJ/IND2/21133/2017 dated 20/10/2018 for obtaining Environmental Clearance.
SEIAA issued TOR to PP vide letter SEIAA/GUJ/TOR/5(f)/535/2018 dated 31/5/2018.
Project proponent has submitted EIA Report prepared by Envisafe Environment Consultants based on the TOR issued by SEIAA.
This is an existing unit engaged in Synthetic organic chemicals and now proposes for expansion as tabulated below:

Sr. No.	Name of Products	CAS No.	Production Capacity, MT/Month			End Use of Product
			Existing	Proposed	Total after proposed Expansion	
	Mono Ammonium Phosphate	7722-76-1	1500.00	Nil	1500.00	Fertilizer
	Di Ammonium Phosphate	7783-28-0				Fertilizer

	Tri Sodium Phosphate	7601-54-9				Fertilizer
	Sodium Nitrate	7631-99-4				Dyestuff
	Potassium Sulphate	7778-80-5				Fertilizer
	Copper Sulphate	7758-99-8				Fertilizer
	Nickel Sulphate	7786-81-4				Fertilizer
	Zinc Sulphate	7733-02-0				Fertilizer
	Manganese Sulphate	7785-87-7				Fertilizer
	Ammonium Sulphate	7783-20-2				Fertilizer
	Magnesium Sulphate	7487-88-9				Fertilizer
	Potassium Nitrate	7757-79-1				Fertilizer
	Potassium Chloride	7447-40-7				Fertilizer
	Soil Conditioner Granule/Powder (Ca: MgO: S different types of grade)	---	3000.00		3000.00	Fertilizer
	NPK Granulation	66455-26-3	2000.00		2000.00	Fertilizer
	Sodium Chloride	7647-14-5	800.00		800.00	Dyestuff
A-1	N,N-Di-[2-Hydroxyethyl]-m-Chloroaniline	92-00-2	Nil	500	500	Mfg of Disperse Dyes
A-2	N,N-Di-[2-Hydroxyethyl]-m-Toluidine	91-99-6				
A-3	N,N-Di-[2-Acetoxyethyl]-m-Toluidine	91-99-6				
A-4	N,N-Dihydroxyethyl Meta Amino Acetanilide	90-02-4				
A-5	N,N-DiAcetoxyethyl Meta Amino Acetanilide	99-57-0				
A-6	N,N-Dihydroxyethyl Aniline	120-07-0				
A-7	3,N,N-Dihydroxyethyl 4-Methoxy Acetanilide	24530-67-4				
A-8	3,N,N-Diacetroxyethyl 4-Methoxy Acetanilide (M5)	24530-67-4				
A-9	3,N[2-Cyanoethyl]-N-[2-Acetoxyethyl]-Amino-4-Methoxy Acetanilide - M 6	22588-78-9				
A-10	N-Cyanoethyl Aniline9NCEA)	---	Nil			Mfg of Disperse Dyes
A-11	N-Cyano -Hydroxy ethyl Aniline (M-7A)	92-64-8				
A-12	N-Cyanoethyl N-Acetoxyethyl Aniline (M-7)	22031-33-0				
A-13	N-Ethyl N-CyanoEthylAiline(m-8)	148-87-8				

A-14	3,N,N-Diethyl Amino 4-Methnoxy Acetamilide	19433-93-3				
A-15	N-Cyanoethyl Meta Amino Acetanilide	---				
A-16	N-Cyanoethyl N-Acetocxy Ethyl Meta Amino Acetanilide	28505-89-7				
A-17	N-Ethyl,N-[2-Hydroxyethyl]Aniline - M15	92-50-2				
A-18	N-[2-Cyanoethyl]-N-Ethyl-m-Toluidine - M17	148-69-6				
A-19	N-Ethyl,N-2-Hydroxyethyl -m-Toluidine - M21	91-88-3				
A-20	N,N - Biscyano ethyl Aniline (M-22)	1555-66-4				
A-21	N,N - Discyano ethyl Meta toluidine (M-23)	---				
A-22	3 N,N - Diallyl Amino -4-Methoxy -Acetanilide (M 24)	51868-45-2				
A-23	N-Cyano Ethyl m-Toluidine-M 38 A	27618-25-3				
A-24	N -Cyano Ethyl N-Benzyl Aniline (M-38)	26322-20-3				
A-25	N-Cyano Ethyl N-Hydroxy Meta Toluidine	119-95-9				
A-26	N-Cyano Ethyl N-Acetoxy Ethyl Meta Toluidine	----				
B-1	Ethyl Pyridone	28141-13-1	Nil	50	50	Mfg of Disperse Dyes
B-2	Methyl Pyridone	---				
B-3	Butyl Pyridone	39108-47-9				
B-4	Propoxy Ethyl Pyridone	---				
B-5	3 Methoxy Propyl Pyridone	---				
C-1	Disperse Orange SGS	---	Nil	10	10	Textile and Printing Ind.
C-2	Disperse Red 6B	---		10	10	
C-3	Disperse Scarlet R	---		15	15	
C-4	Disperse Blue DBR	---		10	10	
D-1	2:6 DBPNA (2:6 Di Bromo 4-Nitro Aniline)	827-94-1	Nil	15	15	Mfg of Disperse Dyes
D-2	2:6 DCPNA (2:6 Di Chloro 4-Nitro Aniline)	99-30-9		10	10	
D-3	DEMT (Di Ethyl Meta Toluidine)	91-67-8		25	25	
D-4	NNDEMAA (N,N,Di Ethyl Meta Amino Acetanilide)	6375-46-8		245	245	
D-5	2-Carbonyl Pyridone	29047-12-9		24	24	Reactive Dyes
D-6	Sulfomethyl Pyridone	40306-70-5		13	13	

D-7	Sulphanilic Acid	121-57-3		552	552	Acid & Direct Dyes
D-8	2:6 DBPT (2:6 Di Bromo Para Toluidine)	6968-24-7		45	45	Mfg of Disperse Dyes
D-9	4-CAP (4 Chloro 2 Amino Phenol)	95-85-2		40	40	
D-10	6-Bromo 2:4 Dinitro Aniline	1817-73-8		30	30	Reactive Dyes
D-11	2:4 Dinitro Aniline	97-02-9		20	20	
D-12	3-Amino Crotanonitrile	1118-61-2		30	30	
D-13	Dispersing Agent Nks	9084-06-4		400	400	Mfg of Disperse Dyes
D-14	Dispersing Agent 045	9003-35-4		50	50	
D-15	Castor Oil Ethoxylates	61791-12-6		150	150	Textile Auxiliary
D-16	Nonyl Phenol Ethoxylates	9016-45-9		150	150	
D-17	Lauryl Alcohol Ethoxylates	---		150	150	
TOTAL			7300	2544	9844	

The project falls underCategory B of project activity 5(f) asper the schedule of EIA Notification 2006.
PP was called for presentation in the SEAC meeting dated 26/12/2018.
Salient features of the project are as under:

Sr. no.	Particulars	Details
A	Total cost of Proposed Project (Rs. in Crores):	Existing (for inorganic products) : 1.97 Proposed (for Synthetic organic chemicals) : 4.27 Total: 6.24
B	Total Plot area (sq. meter)	Existing(for inorganic products): 13,562.85 Proposed(for Synthetic organic chemicals): Nil Total: 13,562.85
	Green belt area (sq. meter)	Existing(for inorganic products): 2,200 Proposed(for Synthetic organic chemicals): 2,286 Total: 4,486
C	Employment generation	Existing: 17 Proposed: 44 Total:61
D	Water	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	GIDC
	Status of permission from the concern authority.	Permission obtained from GIDC
ii	Water consumption (KLD)	

Category	Existing KL/day	Proposed (Additional) KL/day	Total after Expansion KL/day	Remarks
Domestic	4.0	1.5	5.5	Fresh
Gardening	1.0	14.0	14.0	Earlier 1.0 KLD water was reused

				which will be replaced with fresh water during expansion
Industrial				
Process	Nil	56.0	56.0	Fresh : 36 Condensate reuse : 20
Boiler	3.0	39.0	42.0	Fresh : 36 Reuse : 3
Cooling	2.0	20.0	22.0	Fresh
Washing	Nil	4.0	4.0	Reuse : 4
Total (A+B+C)	10.0 (Fresh : 9.0 + Reuse : 1.0)	134.5 (Fresh : 104.5+ Reuse : 30.0)	143.5 (Fresh :113.5 + Reuse : 30.0)	

Total water requirement for the project: 143.5.KLD
Quantity to be recycle: 20.0 KLD (condensate reuse) + 10.0 KLD (treated effluent reuse in boiler and washing)
Total fresh water requirement: 123.5 KLD

iii Waste water generation (KLD)

Category	Existing KL/Day	Proposed (Additional) KL/day	Total after Expansion KL/day	Remarks
Domestic	1.5	3.0	4.5	
Industrial				
Process	Nil	65.5	65.5	
Boiler	0.5	3.5	4.0	
Cooling	0.5	2.0	2.5	
Washing	Nil	4.0	4.0	
Total Industrial waste water	1.0	75.0	76.0	Generation: 76.0 Reuse: 10.0 Discharge : 65.0 MEE salt : 1.0

iv Treatment facility within premises with capacity [For existing and Proposed]
[In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..

MEE Capacity – 75 KLD
ETP hydraulic capacity - 90 KLD (Primary, Secondary and Tertiary treatment units)

v Mode of Disposal & Final meeting point

Domestic:	4.5 KLD To soak pit through septic tank
Industrial:	To common disposal system of GIDC for final disposal into deep sea after necessary treatment

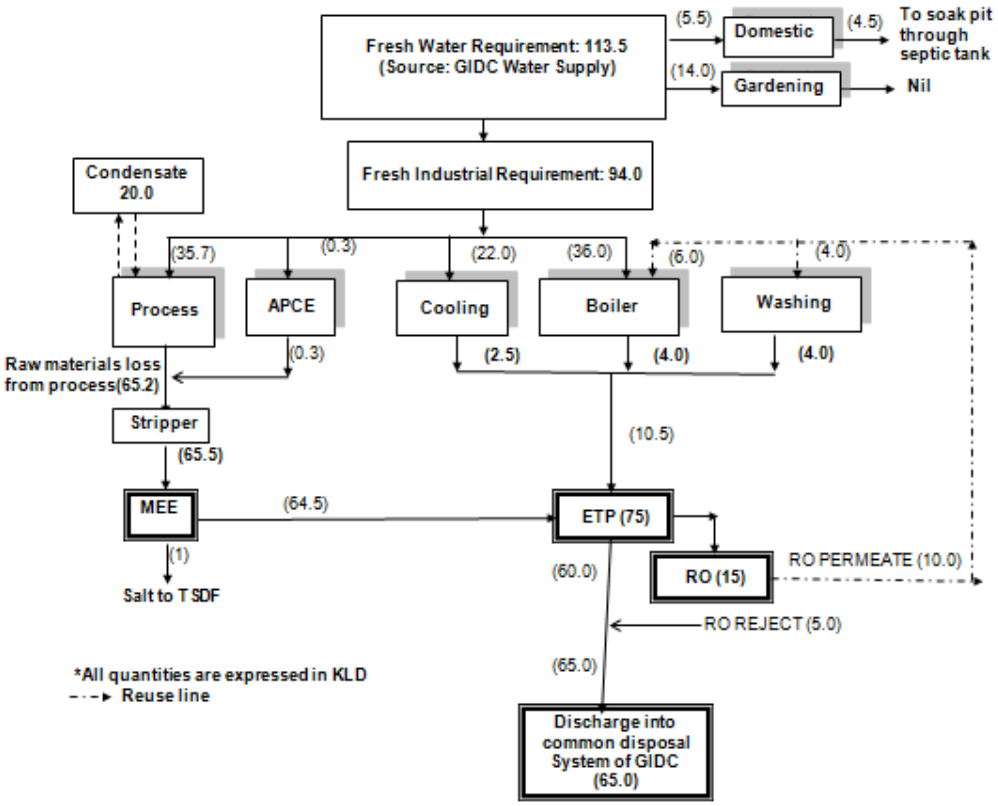
vi In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc.
Name of Common facility

Common disposal system of GIDC for final disposal into deep sea

Membership of Common facility (CF)

(For waste water treatment)
Permission letter of GIDC for discharge of treated effluent obtained

	Simplified water balance diagram with reuse / recycle of waste water



viii Reuse/Recycle details (KLD)
[Source of reuse & application area]

Total reuse…….KLD

Source of waste water for reuse with quantity in KLD	Application area with quantity in KLD	Remarks regarding feasibility to reuse i.e. w/w characteristics (COD, BOD, TDS etc.)
Condensate / filtrate water reuse 20 KLD	Reuse in next batch of the same product	Condensate water : pH : 4.5 - 7.0 TDS : 150 – 200 mg/l COD : 300 – 450 mg/l Filtrate water : pH : 4.5 - 8.0 TDS : 6,000 – 8,000 mg/l COD : 12,000 – 15,000 mg/l
Treated effluent reuse 10 KLD	6 KLD in boiler 4 KLD for washing	pH : 6.5 – 7.5 TDS : 1,000 mg/l COD : 95 mg/l

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E	Air
i	Flue gas emission details

No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc. Existing & Proposed

-

SR. no.	Source of emission With Capacity	Stack Height (meter)	Type of the fuel	Quantity of Fuel MT/hr& MT/Day	Type of emissions i.e. Air Pollutants	APCM
Existing						
1	Steam boiler (1 TPH)*	11.0	Coal	0.6 TPD	PM SO2 NOx	Stack of adequate height
2	Hot Air Generator*	11.0	Wood	0.4 TPD		Stack of adequate height
Proposed						
3	Steam boiler (5 TPH)	20.0	Coal & / OR Biofuel (Agro waste)	Coal -20.0 TPD & / OR Biofuel (Agro waste) - 23.4 TPD AVG. 21.7 TPD	PM SO2 NOx	Multicyclone Separator followed by bag filter
4	Thermic fluid heater (5.0 Lac Kcal/hour)	30.0				Cyclone separator
5	Hot Air Generator (10.0 Lac Kcal/hour (for spray dryer))	11.0				Multicyclone
6	Hot Air Generator (2 x 1.0 Lac Kcal/hour)	11.0 (Common stack)	Biofuel (Agro waste)	1.0 TPD		Cyclone Separaztor
7	DG Set (250 KVA)	5	Diesel	55 Lit/hr	PM SO2 NOx	Adequate Stack Height as per CPCB guidelines

*Note : Existing steam boiler and hot air generator to be dismantled after proposed expansion.

ii Process gas i.e. Type of pollutant gases (SO2, HCl, NH3, Cl2, NOx etc.) Existing & Proposed

-

Sr. no.	Source of emission	Type of emission	Stack/Vent Height (meter)	APCM
Existing				
1	Drier	PM	11.0	Dust Collector
Proposed				
2	Reactor of Proposed Products	NH3, SO2, Br2, Cl2 & HCl	4.0	Two stage alkali scrubber

3	Tray Dryer- 2 Nos. 400 Lit/500 Kg of product (Proposed)	PM	11.0	Dust Collector
4	Spin Flash Dryer 400 Lit/hr (Proposed)	PM	11.0	Dust Collector
5	Spray Dryer 1000 Lit/hr (Proposed)	PM	15.0	Cyclone followed by Wet scrubber

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iii Fugitive emission details with its mitigation measures.

There are chances of fugitive emission and odour nuisance during manufacturing process as well as due to storage & handling of raw materials and products in existing as well as expansion phase.The unit has taken following precaution for the control of fugitive emission and same will be adopted for the proposed expansion.

Probable Sources	Control Measures
Manufacturing activities during charging into reactors	Liquid raw materials are charged by pumping & closed loops. Dosing is done by metering system to avoid fugitive emissions. Dedicated measuring tanks are provided to each reactor. Usage of closed handling system for odorous chemicals /solvents as far as possible.
Solvent recovery during filling and withdrawal from tanks and vessels	Breather valves, PSVs, Rupture discs will be installed for process/storage tank vents. Vapor recovery systems shall be provided at required locations. Proper Control of the operating parameters, mainly temperature, vacuums, cooling media circulation, during plant operation and solvent recovery.
Chemical vapor from wet cake in filtration and drying area	Covered transfer systems will be adopted, workers shall be provided PPE. Fume extraction systems will be provided, wherever required
Emission from bulk storage tanks during storage, loading, unloading	Breather valves, PSVs, Rupture disc, Vapor recovery system are installed for process/storage tank vents. Unit adopts bulk handling of odorous chemicals and avoid usage of drums/carboys for such materials
Hazardous chemical storage area	Dedicated storage area is provided Adequate ventilation systems are provided All the containers are kept tightly closed Trolley/Forklift is used for transfer of drums and containers Transfers of odorous waste is preferably during day time. Transfers during odd hours is avoided.

Solvent recovery During filling and withdrawal from tanks and vessels	Breather valves, PSVs, rupture discs are installed for process/storage tank vents. Vapor recovery systems are provided at required locations. Operating parameters are controlled properly, mainly temperature, vacuums, cooling media circulation, during plant operation.
Chemical vapor from wet cake in filtration and drying area	Covered transfer systems are adopted, workers are provided with PPE. Fume extraction systems are provided, wherever required.
Pump and compressor Emissions	Mechanical seals are provided in pumps and agitators Standby arrangement for critical equipment and parts is ensured. Drip trays will be placed for each pump to collect leakages and spillages.
Pressure relief valve emission from pipelines	For highly pressurized lines, vent pipes of PRVs are connected in case of toxic gases.
Valves, Flanges, plugs and instrument connections	Welded pipes are used wherever feasible. Suitable gasket materials are used. Suitable glad packing is used in valves. Periodic inspection and maintenance of pipes and pipe fittings is carried out.
Release from sampling lines	Closed loop system is used.
Hazardous chemical storage area	Provision of dedicated storage area Adequate ventilation system to be provided All the containers will be kept tightly closed Trolley/Forklift will be used for transfer of drums and containers

F Hazardous waste
(as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
Existing & Proposed

i -

Sr. No.	Type of waste	Source	Category	Quantity per Annum		
				Existing	Proposed	Total
1	ETP Sludge	ETP	Sch - 1 35.3	Nil	100 MT	100 MT
2	MEE Salt			Nil	310 MT	310 MT
3	Inorganic Process waste	Mfg.of Prod. C2, C4	Sch-I 26.1	24.0 MT	61.0 MT	85.0 MT
4	Iron sludge	Mfg.of Prod.D9	Sch - 1 26.1	Nil	960 MT	960 MT
5	Organic Process waste (Methanol + Water)	Mfg.of Prod.B1 to B5	Sch-I 26.1	Nil	184 MT	184 MT

	6	Spent solvent	ETP-Stripper	Sch –I 26.4	Nil	100 KL	100 KL
	7	Spent Sulfuric Acid	Mfg.of Pro.D5	Sch-II B-15	Nil	1,405 MT	1,405 MT
	8	Bleed Liquor from Scrubbers	APCM	Sch-II B36	-	94 KL	94 KL
	9	Discarded Containers/ Bags	Raw Material Storage & Handling	Sch - 1 33.1	8.49 MT	31.51 MT	40 MT
	10	Spent oil	Plant and Machineries	Sch-I, 5.1	12 Lit	200 Lit	212 Lit

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ii	Membership details of TSDF, CHWIF etc. (For HW management)	Existing for inorganic products: TSDF - BEIL Proposed for EC application (Synthetic organic chemicals) TSDF & CHWIF- BEIL (will be obtained prior to commencement) Co-processing: Cement industries & RSPL
iii	Details of Non-Hazardous waste & its disposal(MSW and others)	--
G	Solvent management, VOC emissions etc.	
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents	

Product Code	Name of Solvent	Solvent Requirement, TPM			Solvent Requirement %		
		Fresh	Recovered	Total	Fresh	Recovered	Total
C-2	Dimethyl Formamide	1.00	15.00	16.00	6.25	93.75	100.0
C-4		0.70	14.30	15.00	4.67	95.33	100.0
C-4	Methanol	0.25	4.75	5.00	5.00	95.00	100.0
D-12	Toluene	0.96	18.25	19.21	5.00	95.00	100.0
Total / Average		2.91	52.30	55.21	5.23	94.77	100.00

ii	VOC emission sources and its mitigation measures
	As mentioned in section E (iii) above.

During the meeting dated 26/12/2018, technical presentation made by the Project proponent.
During the meeting, the project was appraised based on the information furnished in the EIA Report and details presented during the meeting.
The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect for the study area of 10 km radial distance from project site for the period Dec'16 – Feb' 17. Ambient Air Quality monitoring was carried out for PM10, PM2.5, SO2, NO2, NH3, HCl, Cl2 and Br2 at Nine locations, including the project site. Baseline concentration of PM2.5, SO2& NO2, in the ambient air were within the norms specified for NAAQs at all the monitoring locations. PM10 were recorded beyond the NAAQS at Suva Village and Jolva Village. NH3, HCl, Cl2 and Br2 were found below detectable limit at all locations. The incremental Ground Level Concentration (GLC) has been computed using AERMOD View

model. It is revealed that the parameters viz., SO2, NO2, NH3, HCl, Cl2 and Br2 are well within the NAAQS / GPCB norms after consideration of incremental concentration due to proposed expansion project. The resultant concentrations are within the NAAQS.
They have valid CC&A for existing unit. Copy of CC&A, its compliance report is submitted. PP ensured that there are no court cases pending and no public complaints against the project.
The proposal is for expansion. Unit has valid CC&A and compliance of CCA conditions were deliberated at length. After expansion, effluent from manufacturing process and APCM will be sent to stripper followed by MEE. MEE condensate will be sent to ETP for further treatment. Boiler blow down, cooling bleed off and effluent from washing will be sent to ETP along with MEE condensate. Hence, total wastewater will be treated in ETP and discharged into Common disposal system of GIDC, which will be finally disposed to deep sea, after confirming norms prescribed by GPCB. PP informed that condensate water/ filtrate generated from products will be recycled in the next batch of the same products however characteristics of condensate w/w and its adequacy for reuse in next batch is not submitted. Committee asked PP to explore possibility of reuse of treated w/w within the premises in order to reduce fresh water consumption. Two stage alkali scrubber will be provided with reactor of proposed product. Coal and agro waste will be used in proposed project. Multicyclone followed by Bag filter will be provided as an APCM with proposed steam boiler whereas Cyclone separator will be provided as an APCM with proposed 2nos. Hot Air Generators of 1.0 Lac Kcal/hour as well as TFH of 5 Lac Kcal/hour. Multicyclone will be provide as an APCM with Hot Air Generator of 10.0 Lac Kcal/hour. Committee found that unit has not addressed details of management of hazardous wastes under the HWM,2016. Committee deliberated all the TOR in detail with details of baseline data, GLC of, PM2.5, SO2, NO2, NH3, HCl, Cl2 and Br2 impact on surface water and ground water quality and Noise, EMP, CER with details of budgetary provisions. Committee found that risk assessment for EO storage and chlorine with all safety measures in accordance to the PESO standards is not addressed.
After deliberation, PP was asked to submit following details and it was unanimously decided to consider the proposal in one of the upcoming SEAC meeting after submission of the said details.
Details of characteristics of condensate w/w and its adequacy for reuse in next batch.
Details of management of generated hazardous wastes under the HWM, 2016.
To explore possibility of reuse of treated w/w within the premises.
To address adequacy of proposed ETP for the proposed expansion of the project.
To address the risk assessment for EO storage and chlorine with all safety measures in accordance to the PESO standards.
PP has submitted reply for the above additional details sought vide letter on 30/01/2019.
The project was considered in SEAC meeting dated 06/02/2019.
PP has submitted their reply as below:
PP has submitted characteristic of condensate wastewater and its adequacy for reuse in next batch.
PP has submitted management of HW as per HWR – 2016.
PP has submitted the possible reuse of treated effluent for washing and boiler make up @ 10 KLD; the net quantity of disposal of treated effluent will be @ 65 KLD.
PP has submitted adequacy certificate of proposed ETP which is designed to handle 90 KLD against effluent generation of 75 KLD.
PP has submitted revised risk assessment report for EO storage in tank farm instead of cylinder and chlorine cylinder will be below the threshold limit of attracting PESO provision.
During the meeting Committee considered this proposal and reply submitted by PP found satisfactory.
Compliance of the ToR was found satisfactory.
After detail deliberation the committee unanimously decided to recommend the proposal for grant of EC to SEIAA.

3	SIA/GJ/IND2/17574/2016	M/s. VINAYAK INDUSTRIES Survey/Block No.: 191, Village: Zekada, Tal: Bavla, Dist: Ahmedabad State: Gujarat.	EC - Reconsideration

Category of the unit : 5(f)
Project status: New
Project proponent (PP) has submitted online application vide no. SIA/GJ/IND2/17574/2016 dated 18/10/2016 for obtaining Environmental Clearance.
The SEAC had recommended TOR to SEIAA and SEIAA issued TOR to PP vide their letter SEIAA/GUJ/TOR/5(f)/24/2017 vide dated 24/03/2017.
Project proponent has submitted EIA Report prepared by Green circle Inc. based on the TOR issued by SEIAA.

Public Hearing was conducted by Gujarat Pollution Control Board on 19/06/2018 at project site of M/s. VINAYAK INDUSTRIES at Survey/Block No.: 191, Village: Zekada, Tal: Bavla, Dist: Ahmedabad.

This is a new unit and now proposes for Synthetic Organic Chemicals as tabulated below:

Sr. No.	Name of the Products	CAS no. /CI no.	Quantity MT/Month	End-use of products
1	Binders	8002-74-2	500	Washing and dying of fabrics and yarns, and finishing, printing and sizing of fabric
2	Adhesives	78279-10-4	200	
3	Wetting agents	577-11-7	200	
4	O.T. Paste	1314-13-2	100	

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.

PP was called for presentation in the SEAC meeting dated 18/12/2018.

Salient features of the project are as under:

Sr. no.	Particulars	Details
A	Total cost of Proposed Project (Rs. in Crores):	1.5 Crores
	Capital cost for EMS (Environmental Management System):. 0.27 Crores Recurring cost towards the environmental protection measures:0.085 Crores per Annum.	
B	Total Plot area (sq. meter)	6267 Sq. m.
	Green belt area,/Tree Plantation area (sq. meter)	2100 Sq. m.
C	Employment generation	
	Direct	10
	Indirect	-
	Total	10
D	Water	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	Tanker supply
	Status of permission from the concern authority.	Not applicable
ii	Water consumption (KLD)	

Category	Water Consumption KLD	Remarks
Domestic	1.0	
Gardening	2.0	
Industrial	13.24	
Process	9.24	
Washing	-	
Boiler	2.0	
Cooling	1.0	
Others	1.0	
Industrial Total	13.24	
Total (A + B + C)	16.24	

Total water requirement for the project: 16.24 KLD

Quantity to be recycle: 2.0 KLD

Total fresh water requirement: 14.24 KLD

iii	Waste water generation (KLD)	

-

Category	KLD	Remarks
Domestic	1.0	
Industrial	2.0	
Process	-	
Washing	-	

		Boiler	0.5	
		Cooling	0.5	
		Others	1.0	
		Total waste water (A+B)	3.0	
	-			
iv	Treatment facility with capacity (ETP, CETP, MEE, STP, Spray Dryeretc).			ETP Collection Tank/ Neutralization Tank - 2.00 m3 Filtration System 2000 liters / day Holding Tank (For Reuse of Treated Water) 2.00 m3
v	Mode of Disposal & Final meeting point			Domestic: Soak pit
				Industrial: - Reused in plant
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE etc. , name of CF			Not applicable
	Membership of Common facility (CF)			Not applicable
vii	Reuse/Recycle details (KLD)			2 KLD
E	Air			
i	Flue gas emission details No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.			

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Sr. No.	Description	Fuel	Quantity	Stack		APCM	Type of emissions i.e. Air Pollutants
				Dia (m)	Ht. (m)		
1.	Boiler – 1TPH	Agro-Waste Briquettes	50 Kg/Hour	0.20	10	Cyclone Separator	PM SO2, NOx
2.	D.G.Set – 125 KVA	HSD	20 LPH	0.10	7.0	-	

ii Process gas i.e. Type of pollutant gases (SO2, HCl, NH3, Cl2, NOx etc.) - PM SO2, NOx

Sr. No.	Description	Stack		APCM	Concentration of Pollutants
		Dia (m)	Ht. (m)		
1.	Process Vents	0.20	5	Alkali scrubber	SO2

iii Fugitive emission details with its mitigation measures.

As below:

Controlled emissions and provision of PPEs for the workers.
Regular maintenance of valves, pumps and other equipment to prevent leakage.
Entire process is carried out in the closed reactors with proper maintenance of pressure and temperature.
Regular periodic monitoring of work area to check the fugitive emission.
About 33.5 % of the total area of project area will be developed for green belt.

F Hazardous waste
(as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

i

Sr.	Type of	Source of	Category and	Quantity	Disposal

no.	Hazardous waste	generation	Schedule as per HW Rules.	(MT/Annum)	Method
	ETP Sludge	ETP	35.3	0.10	Collection, Storage, Transportation& Disposal through co-processing /at TSDF site.
	Used / Spent Oil	Process	5.1	0.050	Collection, Storage, Transportation & reused as self-lubricant or sold to registered re-refiners.
	Discarded Bags / Containers / Barrels	Packing /raw materials	33.1	1.500	Collection, Storage, Transportation & reused or sold to registered recyclers.

Quantity of discarded containers must be in MT/Annum.

ii	Membership details of TSDF, CHWIF etc.	Not applicable
ii	Details of Non-Hazardous waste & its disposal (MSW and others)	Not applicable
G	Solvent management& VOC emissions etc.	
i	Details of Solvent recovery (As per respective ToR) Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents	Not applicable
ii	VOC emission sources and its mitigation measures	Not applicable

During the meeting dated 07/01/2019, technical presentation made during the meeting by project proponent. During the meeting, the project was appraised based on the information furnished in the EIA Report, various issues raised during the public hearing and details presented during the meeting.

The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect. The baseline environmental study has been conducted for the study area of 10 km radial distance from project site for the period March 2017 to May 2017. Ambient Air Quality monitoring was carried out for PM10, PM 2.5, SO2, NOx, CO, VOCs, Ozone, ammonia, Benzene, Lead, Arsenic, Nickel, Benzopyrene at eight locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using ISCST3 model. The resultant concentrations are within the NAAQS. The modelling study proved that the air emissions from the proposed plant would not affect the ambient air quality of the region in any significant manner. The ambient air quality around the proposed project site will remain within the National Ambient Air Quality Standards (NAAQS).

Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios has been carried out. The detail proposed safeguard measures including On-Site / Off-Site Emergency Plan has been covered in the RA report.

Committee deliberated on waste water management, APCM, HW management, Baseline study, CER, EMP, safety aspects etc.

Committee asked PP for clarification regarding compliance of small units as defined in the amendment to EIA Notification, 2006 vide SO 1599 (E) dated 25/06/2014.
Upon asking about the clarification of wrong values of TDS in EIA report, PP could not reply satisfactorily.
After deliberation, it was unanimously decided to consider the project for further consideration only after satisfactory submission of the following:
Compliance of all three conditions of small units as defined in the amendment to EIA Notification, 2006 vide SO 1599 (E) dated 25/06/2014. i.e. (i) Water consumption less than 25 M3/day; (ii) Fuel consumption less than 25 TPD; and (iii) not covered in the category of MAH units as per the Management, Storage, Import of Hazardous Chemical Rules (MSIHC Rules), 1989 as per the legal undertaking submitted with EIA report.
Clarification regarding wrong values of TDS analysis report as well as any other wrong values in EIA report with technical justification.
Project proponent submitted reply vide their letter dated 18/01/2019. PP has submitted as below:
PP has submitted Compliance of all three conditions of small units as defined in the amendment to EIA Notification, 2006 vide SO 1599 (E) dated 25/06/2014. (1) Fresh Water Consumption: 16.240 m3/day (Less than 25 m3/day), (2) Fuel Consumption – 1.2 TPD (Less than 25 TPD), (3) No any raw material covered under MSIHC Rules as per legal undertaking submitted by the unit.
PP submitted that error in multiplication factor was caused due to which abnormal reporting occurred, strict disciplinary action was taken against the concerned chemist.
During the SEAC meeting dated 06/02/2019, the said reply was considered by the Committee.
Committee found that reply submitted by PP was satisfactory.
After detailed discussion, it was decided to recommend the project to SEIAA Gujarat for grant of Environmental Clearance.

4	SIA/GJ/IND2/29667/2018	M/s: Meridian Chem Bond Pvt. Ltd. (Unit-III) Plot No. 5906/4, GIDC-Ankleshwar, Bharuch.	TOR – Reconsideration

Category of the unit : 5(f)
Project status: Expansion

This office has received an application vide their online proposal no. SIA/GJ/IND2/29667/2018 dated 18/11/2018 made by project proponent (PP) regarding grant of Terms of Reference [ToR] for preparation of EIA/EMP report.
Project proponent (PP) has submitted Form-1, PFR and relevant details/information.
This is an expansion unit and proposes for expansion of Synthetic Organic Chemicals manufacturing plant as tabulated below:

Sr. No.	Name of Products	CAS No.	*Capacity, TPM			End-Use
			E	P	T	
Synthetic Organic Chemicals						
	Mono Chloro Acetic Acid (MCAA)	79-11-8	700	2,100	2,800	Intermediate for Pharmaceuticals
	ChloroAcetyle Chloride (CAC)	79-04-9	Nil	250	250	
	Try ChloroAcetyle Chloride (TCAC)	76-02-8	Nil	750	750	
	Sulphur Mono Chloride (SMC)	10025-67-9	Nil	750	750	Intermediate for Sulphur Dyes
	Sodium Mono Chloro Acetate	3926-62-3	Nil	750	750	Intermediate for Pharmaceuticals, Dye stuff, Textile chemicals
Total			700	4,600	5,300	
Inorganic Chemical						

	Calcium Chloride	10043-52-4	Nil	2,500	2,500	For manufacturing of specialty chemicals
	Di Calcium Phosphate	7757-93-9	Nil	1,000	1,000	
	Chlorosulphonic Acid	7790-94-5	Nil	1,000	1,000	
Total			Nil	4,500	4,500	
Grand Total (Synthetic Organic Chemicals + Inorganic Chemicals)			700	9,100	9,800	
*E: Existing, P: Proposed, T: Total after proposed expansion						

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.
PP was called for presentation in the SEAC meeting dated 23/10/2018.
Salient features of the project are as under:

Sr. No.	Particulars	Details
A	Total cost of proposed Project (Rs. in Crores):	Existing: 10.53Cr. Proposed: 24.55 Cr . Total: 35.08 Cr.
B	Total Plot area (sq. meter)	Existing: 30,613 Sq. m. Proposed: 0 Sq. m. Total: 30,613 Sq. m.
	Green belt area,/Tree Plantation area (sq. meter)	Existing: 4000 Sq. m. Proposed: 6200 Sq. m. Total: 10,200 Sq. m.
C	Employment generation	Existing: 103 Nos. Proposed: 112 Nos. Total: 215 Nos.
D	Water	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc.)	GIDC water supply
	Status of permission from the concern authority.	Permission obtained from GIDC
ii	WATER CONSUMPTION (KLD)	

Sr. No.	Particulars	Stream	*Water Requirement, KLD		
			E	P	T

I	Domestic	Fresh	5.0	5.0	10.0
II	Other Use (Gardening)	Fresh	8.0	12.6	20.6
Industrial					
A	APCE	Fresh	47.5	267.9	315.4
		Reuse	3.5	14.1	*17.6
B	Boiler	Fresh	18. 0	6.0	24.0
C	Cooling	Fresh	25.0	5.0	30.0
D	Washing	Fresh	2.0	3.0	5.0
Industrial Consumption & Generation		Fresh+ Reuse	96.0	296.0	392.0
		Reuse	3.5	14.1	17.6
		Fresh	92.5	281.9	374.4
Total Water Consumption (I +II +III)		Fresh	105.5	299.5	405.0

Total water requirement for the project: 422.6 KLD
Quantity to be recycle: 17.6
Total Fresh water requirement: 405.0 KLD

Iii Waste water generation (KLD)

Sr. No.	Particulars	Stream	*W/W Generation, KLD		
			E	P	T
I	Domestic	Fresh	5.0	3.0	8.0
II	Other Use (Gardening)	Fresh	Nil	Nil	Nil
Industrial					
A	APCE	Fresh	#Nil	#Nil	#Nil
		Reuse			
B	Boiler	Fresh	1.0	1.6	*2.6
C	Cooling	Fresh	0.5	14.5	*15.0
D	Washing	Fresh	2.0	3.0	5.0
Industrial Consumption & Generation		Fresh+ Reuse	3.5	19.1	22.6
		Reuse	3.5	14.1	*17.6
		Fresh	Nil	#5.0	#5.0
Total Water Consumption (I +II +III)		Fresh	5.0	3.0	8.0

Note:
The output from APCE will be recovered as hazardous wastes and will be captively reused or sold to GPCB authorized end-users
*Effluent generated from boiler blow down @ 2.6 KLD and cooling @ 15.0 KLD will be reused in APCE.
#Washing @ 5.0 will be treated in proposed ETP and will be completely evaporated by means of Thermic Fluid based forced evaporator.

E: Existing, P: Proposed, T: Total after proposed expansion

iv Treatment facility within premises with capacity
[In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc.

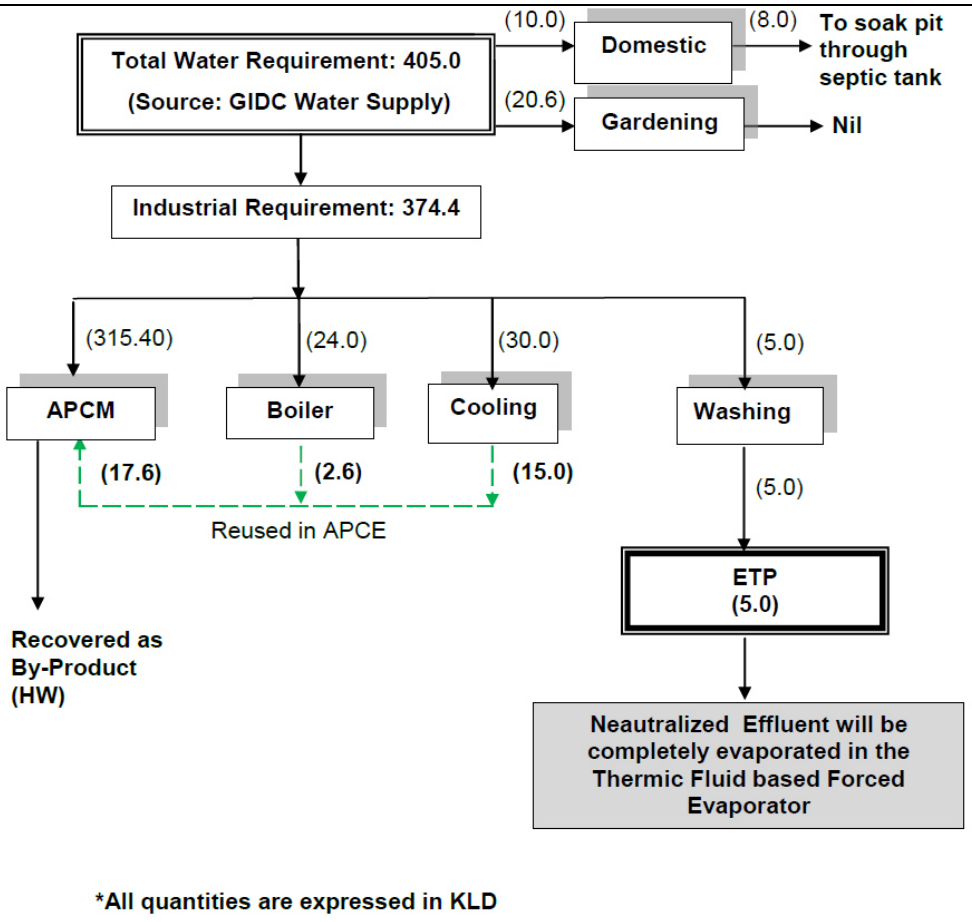
ETP: Hy. Load: 5.0 KLD, Design Cap.: 5.0 KLD
Evaporator: Hy. Load: 5.0 KLD, Design Capacity: 400 Lit/Hr.

v	Mode of Disposal & Final meeting point	
	Domestic:	8.0 KLD (To soak pit through septic tank)
	Industrial:	ZLD
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE etc. , Name of CF	
	Zero Liquid Discharge	
	Membership of Common facility (CF) (For waste water treatment)	
	Zero Liquid Discharge	
Vii	Reuse/Recycle details (KLD)	

Total reuse 17.6 KLD

Source of waste water for reuse with quantity in KLD	Application area with quantity in KLD	Remarks regarding feasibility to reuse i.e. w/w characteristics (COD, BOD, TDS etc.)		
		TDS	COD	BOD
Cooling Blowdown: 15 Boiler Blowdown: 2.6	APCM: 17.6	1485	31	6

Simplified water balance diagram with reuse / recycle of waste water



E	Air

i Flue gas emission details

No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.

Sr. No.	Stack Attach to	Status	Height (m)	Dia. (m)	Conc. of Polluants	Air Pollution Control Mesures
1	Steam Boiler-1 (3 TPH)	Existing	11	0.6	PM ≤ 150 mg/Nm3 SO2 ≤ 100 ppm NOx ≤ 50 ppm	Stack of Adequate Height
2	Steam Boiler-2 (10 TPH)	Proposed	30	1.5		Stack of Adequate Height
3	DG Set (600 kVA)	Proposed (Standby)	7.0	0.15		Stack of Adequate Height
4	DG Set (1250 kVA)	Proposed (Standby)	7.	0. 5		Stack of Adequate Height

ii Process gas i.e. Type of pollutant gases (SO2, HCl, NH3, Cl2, NOx etc.)

Sr No.	Stack attached to Reactor	Status	Height& Dia. (m)	Pollutant Con. mg/Nm3	Air Pollution Control Measures		
					First Stage	Second Stage	Third Stage
1	Reactor of Product 1, 3 & 4	Existing / Proposed	12 & 0.08	HCl≤ 20 Cl2≤ 09	Water Scrubber (A)	Water Scrubber (B)	Alkali Scrubber (C)
1.	Reactor of Product 2	Proposed	12 & 0.08	HCl≤ 20 Cl2≤ 09 SO2≤ 200	Water Scrubber (D)	Alkali Scrubber (E)	Alkali Scrubber (F)
2.	Fumes Extraction System of Inorganic Plant and Haz.Chem. Storage & Handling	Proposed	12 & 0.08	HCl ≤ 20	Water Scrubber (G)	--	--

iii Fugitive emission details with its mitigation measures.

As below:

There will be a chance of fugitive emission and odor nuisance during manufacturing process as well as due to storage & handling of raw materials and products. The unit takes following precaution for the control of fugitive emission and will implement the same for the proposed expansion.

Probable Sources	Control Measures
Manufacturing activities during charging into reactors	Liquid raw materials are charged by pumping & closed loops. Dosing is done by metering system to avoid fugitive emissions. Dedicated measuring tanks are provided to each reactor. Usage of closed handling system for odorous chemicals /solvents as far as possible.

Chemical vapor from wet cake in filtration and drying area	Covered transfer systems will be adopted, workers shall be provided PPE. Fume extraction systems will be provided, wherever required
Emission from bulk storage tanks during storage, loading, unloading	Breather valves, PSVs, Rupture disc, Vapor recovery system are installed for process/storage tank vents. Unit adopts bulk handling of odorous chemicals and avoid usage of drums/carboys for such materials
Hazardous chemical storage area	Dedicated storage area is provided Adequate ventilation systems are provided All the containers are kept tightly closed Trolley/Forklift is used for transfer of drums and containers Transfers of odorous waste is preferably during day time. Transfers during odd hours is avoided.
Pump and compressor Emissions	Mechanical seals are provided in pumps and agitators Standby arrangement for critical equipment and parts is ensured. Drip trays will be placed for each pump to collect leakages and spillages.
Pressure relief valve emission from pipelines	For highly pressurized lines, vent pipes of PRVs are connected in case of toxic gases.
Valves, Flanges, plugs and instrument connections	Welded pipes are used wherever feasible. Suitable gasket materials are used. Suitable glad packing is used in valves. Periodic inspection and maintenance of pipes and pipe fittings is carried out.
Release from sampling lines	Closed loop system is used.
Hazardous chemical storage area	Provision of dedicated storage area Adequate ventilation system to be provided All the containers will be kept tightly closed Trolley/Forklift will be used for transfer of drums and containers

F Hazardous wastes
(as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

i

Type of waste	Source	Category	Quantity per Annum			Method of Disposal
			Existing	Proposed	Total	
Evaporation Salt	ETP (Evaporator)	Sch - I 35.3	Nil	2 MT	2 MT	Collection, Storage, Transportation and Disposal by land filling at TSDF
Process Residue	Process (Product 2 & 3)	Sch - I 28.1	Nil	123 MT	123 MT	Collection, Storage, Transportation, Disposal by co-processing on priority, if not available, Disposal by incineration at GPCB approved

						CHWIF
Solid Waste (Inorganic Waste)	Process (Product 6 & 7)	Sch - I 28.1	Nil	3,433 MT	3,433 MT	Collection, Storage, Transportation and Disposal by land filling at TSDF
Mother Liquor of MCAA	Process (Product 1)	Sch-II C2	3,000 MT	9,466 MT	12,465 MT	Collection, Storage, Transportation & Disposal by sell to GPCB authorized end-user having permission under Rule 9.
NaHSO3 Solution (21%)	APCM-(Product 2)	Sch-II C2	--	14,498 MT	14,498 MT	
NaOCl Solution (14.5%)	APCM-(Product 1, 3 & 4)	Sch-II C2	4,200 MT	46,527 MT	50,727 MT	
Hydrochloric Acid (30%)	APCM (Product 1, 2, 3)	Sch-II C2	16,800 MT	63,474 MT	80,274 MT	Collection, Storage, Transportation & Disposal by sell to GPCB authorized end-user having permission under Rule 9 OR Captively reused within premises for manufacturing of Inorganic Chemicals
Spent Oil/ Used Oil	Plant & Machineries	Sch - I 5.1	2 Lit	5 Lit	7 Lit	Collection, Storage, Transportation, sell to registered Re-processor / MoEF&CC approved recyclers on priority, if not available Reused as Lubricant within premises
Discarded Bags/ Liners/Drums/ Carboys/ Containers	Raw Material Storage	Sch-I 33.1	360 Nos	4,890 Nos	5,250 Nos	Collection, Storage, and Disposal by selling to scrap vendors

ii	Membership details of TSDF, CHWIF etc. (For HW management)	Unit will obtain permission for disposal of additional hazardous waste generated from GPCB approved CHWIF/TSDF.
iii	Details of Non-Hazardous waste & its disposal (MSW and others)	Not applicable
G	Solvent management, VOC emissions etc.	Not applicable
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents	
	Not Applicable	

ii	VOC emission sources and its mitigation measures
	As mentioned in section E (iii) above.

Technical presentation was made by the project proponent.
Committee deliberated on water balance, waste water & HW management, Safety aspects for Chlorine & other Hazardous chemicals, Process hazard for Hydrogenation, Adequacy of ZLD, CEMS etc.
Committee found that management of waste streams like spent HCl, justification for adequacy of area & compliance status with respect to Notices/ Closure issued by GPCB is not satisfactorily addressed.
After detailed discussion, it was decided to consider the proposal in one of the upcoming SEAC meeting only after submission of the following:
Details with respect to justification for proposed expansion: (1) To address proportionate availability of space for production plant. (2) To address proportionate availability of storage area for raw materials finished goods, utilities and goods carrier movement within premises. (3) To address proportionate captive/common infrastructure available to accommodate additional load due to proposed expansion. (4) Environment impact and its mitigation measures for common/ captive infrastructure due to proposed production.
Action plan for compliance of notices/Closure issued by GPCB in last 2 years.
Sound management of hazardous waste streams like spent HCl.
PP has submitted reply for the above additional details sought vide letter on 05/02/2019.
The project was considered in SEAC meeting dated 06/02/2019.
PP has submitted their reply as below:
PP has satisfactorily address proposed expansion proportionately with availability of space for storing raw materials, products, goods carrier movement, erection of new plant/ vertical expansion of existing plant and available common/ captive environmental infrastructure with mitigation measures of environmental impacts.
PP has submitted compliance of notices/closer issued by GPCB in last two years.
PP has submitted Letter of Intent (LOI) for proposed end users and MoU for existing end users for sound management of hazardous waste stream like spent HCL.
Considering the above project details, after detailed discussion, the terms of reference (ToR) were prescribed as below and as per the standard TOR for the Synthetic Organic Chemical projects recommended by SEAC vide letter no. EIA-10-GEN-21/1480 dated 14/09/2017 and approved by SEIAA in its 12th meeting dated 16/09/2017 for the EIA study to be done covering 10 Km radial distance from the project boundary.
Compliance of MoEFCC's OM dated 01/05/2018 regarding "Corporate Environment Responsibility" (CER). Fund allocation for Corporate Environment Responsibility (CER) shall be made as per MoEFCC's O.M. No. 22-65/2017-IA.III dated 01/05/2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
Explore the use of renewable energy to the maximum extent possible. Details of provisions to make the project energy-efficient through energy efficient devices and adoption of modes of alternative eco-friendly sources of energy like solar water heater, solar lighting etc. Measures proposed for energy conservation.
PP shall address spent solvent with details of storage, handling and re-use under the Hazardous and other Waste (Management and Transboundary Movement) Rules 2016.
Leak Detection and Repairing Programme (LDAR) for all the volatile organic solvent proposed for use in-house with detailed chemical properties including vapor pressure. LDAR shall endeavor prevention of losses of solvents to the best minimum extent.
PP shall furnish status of all the applicable rules, acts, regulation, clearances in a tabular form
Safety precautions including flame proof electric fittings to be taken to avoid fire hazard during unloading, storage, transportation, handling and processing of Solvents
Treatability & adequacy report for complete ZLD for additional waste water. Feasibility report for complete reuse condensate waste water for industrial purpose.
MoU with proposed end users for spent HCL shall be produce at the time of EC – Appraisal for which the Letter of Intent (LOI) has been submitted.
The TOR prescribed as above and as per the standard TOR approved by SEIAA and the model ToRs available in the MoEFCC's sector specific EIA Manual for 'Synthetic Organic Chemical Industry' shall be considered as generic TORs for preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006.
The project proponent shall have to apply for Environmental clearance through online portal http://environmentclearance.nic.in/ along with final EIA report.

5	SIA/GJ/IND2/21548/2018	M/s. Kanoria Chemicals & Industries Ltd. Plot No. 3407, GIDC Estate, Ankleshwar, Dist: Bharuch - 393002, Gujarat.	TOR – Amendment

Category of the unit : 5(f)
Project status: Expansion

SEIAA has accorded ToR [Terms of Reference] to M/s. Kanoria Chemicals & Industries Ltd. vide letter no. SEIAA/GUJ/TOR/5(f)/781/2018 dated 31/07/2018.
Now, project proponent has applied online vide proposal no. SIA/GJ/IND2/21548/2018 dated 29/11/2018 for amendment in ToR.
Project proponent has applied to add one product "(1) Calcium Format – 1500 MT/Month" in product list.
This proposal was considered in the SEAC meeting dated 06/02/2018. During the meeting, Committee observed that there is addition of product in the product profile and raw material.
After deliberations committee decided to call the PP for presentation along with their expert/consultant in the upcoming meeting of SEAC.

6	SIA/GJ/IND2/28247/2018	M/s. EcopetPolyplast Industry Plot No: 121, G.I.D.C.Kalol, Dist: Gandhinagar.	Withdrawal - TOR

This office has received an application vide their online proposal no. SIA/GJ/IND2/28247/2018 dated 10/08/2018 regarding grant of Terms of Reference (ToR) for preparation of EIA/EMP report.
Earlier, PP was called for presentation dated 01/10/2018.
PP has submitted a letter requesting withdrawal of an application in this regard vide dated 02/02/2019.
Proposal was considered in the SEAC meeting dated 06/02/2019.
PP requested to withdraw their application because they approached to GPCB for disposal of 26.5 KLD waste water to be generated from synthetic inorganic dyes to CETP, Kalol. This demand is based on disposable quantity of treated waste water generate from existing product PET Flakes manufacturing activity. GPCB has informed that CETP Kalol is not functioning as per the GPCB norms and GPCB is not ready to allow such alternate effluent quantity for disposal into CETP.
They have work out feasibility of ZLD (Zero Liquid Discharge) for generated effluent 26.5 KLD from synthetic organic dyes. Current market and price scenario, ZLD is not viable in their case; hence they have decided to drop the project of S. O. Dyes at this location. They will revert back very soon with low / no liquid pollution load products with new application. Hence, they request to close down their current application of ToR.
In view of the above, Committee decided to delist the proposal from the list of pending applications & to close the file.

7	SIA/GJ/IND2/29725/2013	Borax Morarji Limited Plot No. CH-5/1, GIDC Estate, Dahej, Tal: Vagra, Dist: Bharuch	Withdrawal – EC-Amendment

This office has received an application vide their online proposal no. SIA/GJ/IND2/29725/2013 dated 25/12/2018 regarding grant of Terms of Reference (ToR) for preparation of EIA/EMP report.
PP has submitted a letter requesting withdrawal of an application in this regard vide dated 04/02/2019.
Proposal was considered in the SEAC meeting dated 06/02/2019.
PP requested to withdraw their application because of minor changes are required in EC – Amendment application.
In view of the above, Committee decided to delist the proposal from the list of pending applications & to close the file.

8	SIA/GJ/MIS/19236/2017	M/s.The Narol Dyestuff Enviro Society (Common Effluent Treatment Plant) Plot No.108/4, Near Kumar Cotton Mills, Narol court, Narol, Dist-Ahmedabad	EC - Reconsideration

Category of the unit : 7(h)
Project status: Expansion

PP has submitted online application vide no. SIA/GJ/MIS/19236/2017 dated 25/12/2018 for obtaining Environmental Clearance.

The SEAC had recommended TOR to SEIAA and SEIAA issued TOR to PP vide their letter SEIAA/GUJ/7h/327/2018, dated 28/03/2018.
Project proponent has submitted EIA Report prepared by SUNRISE ENVIRONMENT CONSULTANT based on the TOR issued by SEIAA.
Public Hearing was conducted by Gujarat Pollution Control Board on 30/10/2018 at project site of M/s.TheNarol Dyestuff Enviro Society (CETP),Plot No.108/4, Near Kumar Cotton Mills, Narol court, Narol, Dist-Ahmedabad.
This is an existing CETP and now proposes for expansion of CETP capacity as tabulated below:

Sr. no.	Name of the Products	Quantity MT/Month			End-use of the products
		Existing KLD	Proposed KLD	Total KLD	
1	Treatment of Effluent From Various Industries (Design Capacity)	40	410	450	Treatment of industrial Effluent

The project falls underCategory B of project activity 7(h) asper the schedule of EIA Notification 2006.
PP was called for presentation in the SEAC meeting dated 07/01/2019.
Salient features of the project are as under:

Sr. no.	Particulars	Details
A	Total cost of Proposed Project (Rs. in Crores):	Existing: Rs. 40 Lakhs Proposed: Rs. 305 Lakhs Total: Rs. 345 Lakhs (3.45 Crore)
B	Total Plot area (sq. meter)	Existing: 1600 Sq. m. Proposed: Nil Total: 1600 Sq. m.
	Green belt area (sq. meter)	Existing: 50 sq.m. Proposed: 500 (outside premises) Total: 50 sq.m. + 500 sq.m
C	Employment generation	Existing:10 Proposed:02 Total Manpower:12
D	Water	
i	Source of Water Supply (GIDC, Bore well, Surface water, Tanker supply etc.)	Tanker supply
	Status of permission from the concern authority.	Not Applicable
ii	Water consumption (KLD)	

Category	Stream	Existing KLD	Proposed (Additional) KLD	Total after Expansion KLD	Remarks
Domestic	Fresh	2.0	0.5	2.5	--
Gardening	Recycle	1.0	1.0	2.0	--
Industrial					
Process	Fresh	--	---	---	--
Washing (Floor washing)	Fresh	2.0	3.0	5.0	--
Boiler	---	---	---	---	--
Cooling	---	---	---	---	--
Laboratory	Fresh	2.0	3.0	5.0	--

Industrial Total		4.0	6.0	10.0	--
Grand Total (A+B+C)		7.0	7.5	14.5	--

Total water requirement for the project: 14.5 KLD
Quantity to be recycled: 1.0 KLD
Total fresh water requirement: 13.5 KLD

iii Waste water generation (KLD)

Category	Existing KLD	Proposed (Additional) KLD	Total after Expansion KLD	Remarks
Domestic	1.70	0.45	2.15	
Industrial				
Process	--	--	--	
Washing	2.0	3.0	5.0	
Boiler	--	--	--	
Cooling	--	--	--	
Laboratory	--	--	--	
Total Industrial waste water	3.70	3.45	7.15	

iv Treatment facility within premises with capacity [For existing and Proposed]
[In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc.

The effluent generated shall be taken to proposed CETP inlet and shall be treated along with effluent and disposed into mega pipeline.
Details of the ETP Units (ETP Adequacy)

Sr. No.	Description	Nos.	Dia, (m)	Length, (m)	Width	Depth, (m)	Volume, (m3	Detention Time, hrs.
1.	Equalization Tank	2	--	14	3.0	4.50	378.0	25.92
2.	Flash Mixer	1	--	3.0	3.0	3.0	27.0	1.85
3.	Flocculator	1	--	3.0	3.0	3.0	27.0	1.85
4.	Primary Clarifier	1	6.00	--	--	3.50	99.0	6.79
5.	Aeration Tank	1	--	15.0	6.50	5.50	536.3	36.77
6.	Secondary Clarifier	1	7.00	--	--	3.50	134.7	9.24
7.	Treated Water Sump	1	--	17.50	4.00	4.50	315.0	21.60
8.	Sand Filter	1	2.00	--	--	2.80	8.8	0.60
9.	Carbon Filter	1	2.20	--	--	2.80	10.6	0.73
10.	Sludge Sump	1	4.00	--	--	4.00	50.3	--
11.	Lab Room & Office Room	1	--	6.50	3.00	3.50	36.0	--
12.	Filter Press	1	--	6.00	6.00	--	--	2.47
13.	Effluent Discharge Pipeline	---	0.11	--	--	--	--	--

-

v Mode of Disposal & Final meeting point

Domestic	Domestic : 2.15 KLD

		The effluent generated shall be taken to proposed CETP inlet and shall be treated along with effluent.
	Industrial:	Industrial : 5.0 KLD The effluent generated shall be taken to proposed CETP inlet and shall be treated along with effluent and disposed into mega pipeline.
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc. Name of Common facility	
	None	
	Membership of Common facility (CF)	
	None	
	(For waste water treatment)	
vii	Simplified water balance diagram with reuse / recycle of waste water The Proposed Project is for Common Effluent Treatment Plant; The effluent generated shall be taken to proposed CETP inlet and shall be treated along with effluent and disposed into mega pipeline.	
vii	Reuse/Recycle details (KLD) [Source of reuse & application area]	
	The Proposed Project is for Common Effluent Treatment Plant; The effluent generated shall be taken to proposed CETP inlet and shall be treated along with effluent and disposed into mega pipeline.	
E	Air	
i	Flue gas emission details No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc. Existing & Proposed	

Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
1	D.G. Set (250 KVA)	9.0 m	Diesel		PM, SO2, NOX	Stack height

The flue gas emission from DG set will be released through adequately designed stacks of 9.0 m
The DG set shall be used only during emergency situation.

ii	Process gas i.e. Type of pollutant gases (SO2, HCl, NH3, Cl2, NOx etc.) Existing & Proposed: Nil (Proposed project is CETP)
	-

Sr. no.	Specific Source of emission (Name of the Product & Process)	Type of emission	Stack/Vent Height (meter)	Air Pollution Control Measures (APCM)
1.				

	-
iii	Fugitive emission details with its mitigation measures.
	For suppression of dust during construction & Operation phase, water will be sprinkled at regular interval. Adequate plantation in and around premises.
F	Hazardous waste

(as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
Existing & Proposed

i

Sr. no.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Rules.	Quantity (MT/Annum)			Management of HW
				Existing	Proposed	Total	
1	ETP Sludge	Effluent Treatment Plant	35.3	3.6 MT/Year	32.4 MT/Year	36.0 MT/ Year	Collection, Storage, Transportation, disposal at TSDF
2	Discarded bags & Container	Raw materials	33.1	480 Nos/Year	6.0 MT/Year	6.0 MT/ Year	Collection, storage, Decontamination, transportation & disposal by selling to authorized recycler
3	Used oil	Plant & Machineries	5.1	0.005 MT/Year	0.055 MT/Year	0.060 MT/ Year	Collection, Storage, Transportation, disposal by selling to registered refiner

-

ii	Membership details of TSDF, CHWIF etc. (For HW management)	Membership of SEPPL
iii	Details of Non-Hazardous waste & its disposal(MSW and others)	--
G	Solvent management, VOC emissions etc.	
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents	
	There will be no solvent used in the manufacturing process.	
ii	VOC emission sources and its mitigation measures	

During the meeting dated 07/01/2019, technical presentation made during the meeting by project proponent. During the meeting, the project was appraised based on the information furnished in the EIA Report, various issues raised during the public hearing and details presented during the meeting.
The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect. The baseline environmental study has been conducted for the study area of 10 km radial distance from project site for the period October 2017 to December 2017. Ambient Air Quality monitoring was carried out for PM10, PM2.5, SO2, NOx at eight locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using AERMOD view model. The resultant concentrations are within the NAAQS. The modelling study proved that the air emissions from the proposed plant would not affect the ambient air quality of the region in any significant manner. The ambient air quality around the proposed project site will remain within the National Ambient Air Quality Standards (NAAQS).
Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios has been carried out. The detail proposed safeguard measures including On-Site / Off-Site Emergency Plan has been covered in the RA report.
Committee deliberated on compliance of existing CETP, Conveyance system, types of member units, inlet

norms disciplinary policy, CEMS, CER, Public hearing issues etc.
Committee noted that compliance of notices served by GPCB is not addressed by PP.
After deliberation, it was unanimously decided to consider the project for further consideration only after satisfactory submission of the following:
Compliance of SCN/Notices issued by GPCB.
Justification for proposed Size of CETP.
Analysis reports for last 1 year.
Undertaking for CEMS on final discharge line.
Action plan to achieve inlet norms from the unit & outlet norms.
PP has submitted reply for the above additional details sought vide letter on 0/02/2019.
The project was considered in SEAC meeting dated 06/02/2019.
PP has submitted their reply as below:
PP has submitted compliance of SCN/Notices issued by GPCB.
PP has submitted Justification for proposed size of CETP
PP has submitted analysis reports for last one year.
PP has submitted legal undertaking for CEMS on final discharge line.
PP has submitted action plan to achieve inlet norms from the unit & outlet norms.
During the SEAC meeting dated 06/02/2019, the said reply was considered by the Committee.
Committee found that reply submitted by PP was satisfactory.
After detailed discussion, it was decided to recommend the project to SEIAA Gujarat for grant of Environmental Clearance.

9.	SIA/GJ/IND2/28667/2018	M/s: Pasupati Industries Plot No. 169/1/A2, Phase –1, Near Telephone Exchange, GIDC Naroda, Ahmedabad – 382330.	EC – Reconsideration

Category of the unit : 5(f)
Project status: Expansion

This office has received an application vide their online proposal no. SIA/GJ/IND2/28667/2018 dated 25/12/2018 made by project proponent (PP) regarding grant of Terms of Reference [ToR] for preparation of EIA/EMP report.
Project proponent (PP) has submitted Form-1, PFR and relevant details/information.
This is an expansion unit and proposes for expansion of Synthetic Organic Chemicals manufacturing plant as tabulated below:

Sr. no.	Name of the Products	CAS no. / CI no.	Quantity MT/Month			End-use of the products
			Existing	Proposed	Total	
	MPD (Meta Phenylene Di Amine)	108-45-2	2.5	-	2.5	Dyeing & Printing
	Reactive Dyes (Navy Blue Rx. Yellow MUG)	Mixed Dyes	5.0	-	5.0	
REACTIVE DYES						
	Reactive Black 8	12225-26-2	-	400	400	
	Reactive Black 31	12731-63-4				
	Reactive Black 39	-/205071				
	Reactive Black 5/Mix	12225-25-1				
	Reactive Black WNN	Mixed Dyes				
	Reactive Red 3.1	23211-47-4				
	Reactive Red 21	11099-79-9				
	Reactive Red 24.1	72829-25-5				
	Reactive Red 31	12237-00-2				
	Reactive Red 45	12226-22-1				
	Reactive Red 111	88232-20-6				
	Reactive Red 120	61951-82-4				

		Reactive Red 141	61931-52-0					
		Reactive Red 195	93050-79-4					
		Reactive Red 198	145017-98-7					
		Reactive Red 218	113653-03-5					
		Reactive Red 222	93051-45-7					
		Reactive Red 223	93051-43-5					
		Reactive Red 245	340977-00-6					
		Reactive Red 250	125830-49-1					
		Reactive Red CD	91-56-5					
		Reactive Yellow 15	12226-47-0					
		Reactive Yellow 18	12226-48-1					
		Reactive Yellow 42	12226-63-0					
		Reactive Yellow 44	12270-91-6					
		Reactive Yellow 57	61969-35-5					
		Reactive Yellow 84	61951-85-7					
		Reactive Yellow 85	71872-81-6					
		Reactive Yellow 86	61951-86-8					
		Reactive Yellow 95	71838-98-7					
		Reactive Yellow 135	77907-38-1					
		Reactive Yellow 145	93050-80-7					
		Reactive Yellow 160	129898-77-7					
		Reactive Yellow 186	84000-63-5					
		Reactive Yellow 210	Mixed Dyes					
		Reactive Yellow XLR	5809-16-7					
		Reactive Yellow HEXL	Mixture of 59112-78-6, 77907-38-1, & 93050-80-7					
		Reactive Yellow HE4G	59112-78-6					
		Reactive Yellow W3R	12220-12-1					
		Reactive Yellow RR	93050-80-7					
		Reactive Orange 12	35642-64-9					
		Reactive Orange 13	12225-85-3					
		Reactive Orange 16	12225-83-1					
		Reactive Orange 35	12270-76-7					
		Reactive Orange 84	91261-29-9					
		Reactive Orange 107	90597-79-8					
		Reactive Orange 122	79809-27-1					
		Reactive Orange 2R	79809-27-1					
		Reactive Orange W3R	12220-12-1					
		Reactive Orange R	12220-12-1					
		Reactive Blue 13	12236-84-9					
		Reactive Blue 21	12236-86-1					
		Reactive Blue 39	12225-53-5					
		Reactive Blue 49	12236-92-9					
		Reactive Blue 160	71872-76-9					
		Reactive Blue 171	77907-32-5					
		Reactive Blue 194	93050-78-3					
		Reactive Blue 198	124448-55-1					
		Reactive Blue 203	147826-71-9					
		Reactive Blue 220	128416-19-3					
		Reactive Blue 221	93051-41-3					
		Reactive Blue 222	93051-44-6					

	Reactive Blue 250	93951-21-4				
	Reactive Blue FNG	Mixed Dyes				
	Reactive Blue XLE	2580-78-1				
	Reactive Brown 11	12225-68-2				
	Reactive Scarlet W2R	Mixed Dyes				
	Reactive Violet 46	-/17175				
	Reactive Violet ME2RL	Mixed Dyes				
	Reactive Magenta MERL	Mixed Dyes				
ACID DYES						
	Acid Black 2	80316-29-6		200	200	
	Acid Black 113	3351-05-1				
	Acid Black 193	12392-64-2				
	Acid Black 194	61931-02-0				
	Acid Black 210	99576-15-5				
	Acid Black 234	157577-99-6				
	Acid Black 10BX	1820-82-5				
	Acid Red 97	10169-02-5				
	Acid Red 131	12234-99-0				
	Acid Orange 7	633-96-5				
	Acid Brown 75	8011-86-7				
	Acid Brown 83	13011-68-2				
	Acid Brown 355	60181-77-3				
	Acid Brown 425	119509-49-8				
SOLVENT DYES				42.5	42.5	
	Solvent Black 5	11099-03-9				
	Solvent Black 7	8005-02-5				
DIRECT DYES						
	Direct Black 22	6473-13-8		150	150	
	Direct Black 168	85631-88-5				
	Direct Black 179	143549-91-1				
	Direct Blue 71	4399-55-7				
	Direct Blue 86	1330-38-7				
	Direct Blue 199	12222-04-7				
	Direct Orange 26	3626-36-6				
	Direct Red 81	2610-11-9				
	Direct Red 80	2610-10-8				
	Direct Red 239	60202-35-9				
	Direct Red 253	12222-51-4				
INTERMEDIATES						
	M.P.D.	108-45-2	-	50	50	Raw materials for Dyes
	Metanilic Acid	121-47-1				
	Orthanilic Acid	88-21-1				
	Quinizarine	81-64-1				
	4,4 Diamino Di Phenyl Aine Sulphate	139-65-1				
	2 Chloro, 5 Chloro Methyl Thiozone	70258-18-3				
	Meta Ureido Aniline	59690-88-9				
	4 NADAPSA	91-29-2				
TOTAL			7.5	842.5	850	

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.
PP was called for presentation in the SEAC meeting dated 11/01/2019.
Salient features of the project are as under:

Sr. no.	Particulars	Details
A	Total cost of Proposed Project (Rs. in Crores):	Existing: 1.0 Crores Proposed: 1.0 Crores Total: 2.0 Crores
B	Total Plot area (sq. meter)	Existing: 3476 Sq. m. Proposed:- Total: 3476 Sq. m.
	Green belt area (sq. meter)	Existing:150 Sq. m. Proposed:372 Sq. m. Total:522 Sq. m.
C	Employment generation	Existing: 8 Proposed: 22 Total: 30
D	Water	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	GIDC Water supply
	Status of permission from the concern authority.	-

ii Water consumption (KLD)

Category	Existing (KLD)	Proposed (KLD)	Total after Proposed(KLD)	Remarks
Domestic	0.7	2.0	2.7	-
Gardening	0.5	0.5	1.0	-
Industrial				
Process	5.0	45.0	50.0	-
Washing	1.0	7.0	8.0	-
Boiler	0.5	5.0	5.5	-
Cooling	0.0	2.0	2.0	-
Scrubber	0.0	2.0	2.0	-
Industrial Total	7.0	61.0	67.5	-
Total (A + B + C)	7.5	63.5	71.2	-

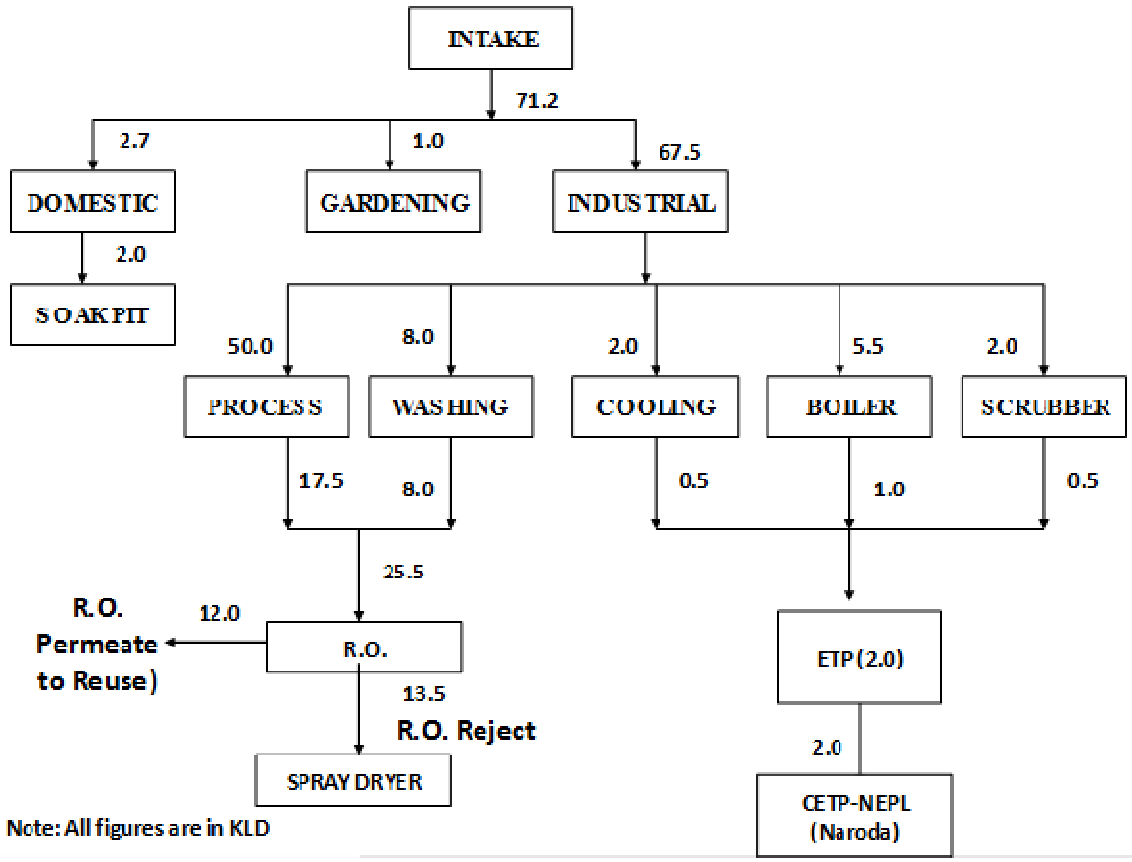
Total water requirement for the project: 71.2 KLD
Quantity to be recycled:12.0 KLD
Total fresh water requirement: 59.2 KLD

iii Waste water generation (KLD)

Category	KLD	Proposed (KLD)	Total after Proposed(KLD)	Remarks
Domestic	0.5	1.5	2.0	-
Gardening	0.0	0.0	0.0	-
Industrial				
Process	0.5	17.0	17.5	-
Washing	1.0	7.0	8.0	-
Boiler	-	1.0	1.0	-
Cooling	-	0.5	0.5	-
Scrubber	-	0.5	0.5	-
Industrial Total	1.5	26	27.5	-
Total (A + B + C)	2.0	26.5	29.5	-

iv	Treatment facility within premises with capacity [For existing and Proposed] [In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc.	
	ETP: Primary treatment : 27.5 KLD R.O. System: 5.0 KL/Hr. Spray Dryer: 2.0 KL/Hr.	
v	Mode of Disposal & Final meeting point	
	Domestic:	Soak pit
	Industrial:	CETP, Naroda as per CC&A Self-Spray Drying Facility
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc. Name of Common facility	
	CETP: NEPL, Naroda, Ahmedabad Self-Spray Drying Facility	
	Membership of Common facility (CF)	
	(For waste water treatment) Membership for waste water discharge as per &A : CETP, NEPL is Enclosed as Annexure-X Membership certificate of Novel, Vatva	
vii	Simplified water balance diagram with reuse / recycle of waste water	

WATER BALANCE DIAGRAM



vii Reuse/Recycle details (KLD)
[Source of reuse & application area]

Total reuse 12 KLD

Source of waste water for reuse with quantity in KLD	Application area with quantity in KLD	Remarks regarding feasibility to reuse i.e. w/w characteristics (COD, BOD, TDS etc.)
Source of Water: GIDC Supply Quantity of waste water Reused: 12 KLD	Process: 5KLD Cooling:2KLD Washing:5KLD	pH: 7.5 COD: 80 mg/l BOD: 21 mg/l TSD : 1500 mg/l TSS: 8 mg/l O & G: 0.5

-

E Air

i Flue gas emission details
No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.
Existing & Proposed

-

Sr. no.	Source of emission With Capacity	Stack Height (meter)	Fuel Consumption		Type of emissions i.e. Air Pollutants	APCM
			Existing	Proposed		
1.	IBR Boiler (1 Ton)	15	Agro Waste : 1 kg/hour or Lignite : 4 kg/hour	Agro Waste :10 kg/hour or Lignite : 50 kg/hour	Agro Waste :10 kg/hour or Lignite : 50 kg/hour	Cyclone Separator & Bag Filter
2.	Hot Air Generator – 1 4 Lac K cal.	13		Natural Gas500 SCM/day	Natural Gas500 SCM/day	Adequate Stack Height
3.	Hot Air Generator – 2 4 Lac K cal	13		Natural Gas500 SCM/day	Natural Gas500 SCM/day	Adequate Stack Height

-

ii Process gas i.e. Type of pollutant gases (SO2, HCl, NH3, Cl2, NOx etc.)
Existing & Proposed

-

Sr No.	Specific Source of emission (Name of the Product & Process)	Type of emission	Stack/Vent Height (meter)	Air Pollution Control Measures (APCM)
1	Spray Dryer (Existing 1 KL + Proposed 1.5 KL)	PM<10 mg/Nm3	20	Cyclone Separator + Wet Scrubber + Secondary Scrubber + Closed

					room
2	Manufacturing of Metanilic Acid, Qunizarinne, 4,4 Diamino Di Phenyl Amine Sulphate	SO2<40 mg/Nm3 , HCl <20 mg/Nm3	20	Water Scrubber, Ventury Scrubber and Adequate stack height	

-

iii Fugitive emission details with its mitigation measures.

Proposed project is of manufacturing of S. O. Dyes &Intermediates . Followings measures will take for existing & proposed project.
Maintaining the house keeping regularly
Transferring the liquid materials by pump
To carry out regular leak detection and repair activities
Proper routine maintenance of equipment reduces the likelihood of leaks

F Hazardous waste
(as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
Existing & Proposed

i

Sr. no.	Type/ Name of Hazardous waste	Source of generation	Category and Schedule as per HW Rules.	Quantity (MT/Annum)			Disposal Method
				Existing	Proposed	Total	
1.	ETP Sludge	ETP Operation	34.3	7.2 MT/ Annum	140 MT/ Annum	147.2 MT/ Annum	Collection, Storage, Transportation, Disposal at TSDF.
2.	Used oil	Plant Machinery & DG set	5.1	0.040 MT/ Annum	0.160 MT/ Annum	0.200 MT/ Annum	Collection, Storage, Transportation, Disposal by selling to registered re processor.
3.	Discarded Containers/ Drums/ Liners	Raw material storage	33.3	50 Nos./ Annum 0.12	1200 Nos./ Annum 1.5	1250 Nos./ Annum	Collection, Storage, Decontamination, Transportation, Disposal by selling to authorized recycler.
4.	Iron sludge	Manufacturing Process of Meta Urida Aniline &	26.1	24 MT/ Annum	740 MT/ Annum	764 MT/ Annum	Collection, Storage, Transportation, Disposal at TSDF.

			MPD					
	5	Evaporation Residue	Spray Drying	36.3	-	12.0 MT/ Annum	12.0 MT/ Annum	Collection, Storage, Reusing in Blending mixing of dyes
	6	Spent Acid	Manufacturing Process of Metanilic Acid & 4 NADAPSA	26.3	-	1200 MT/ Annum	1200 MT/ Annum	Collection, Storage, Transportation, Disposal at Novel, Vatva, Ahmedabad..
	-							
ii	Membership details of TSDF, CHWIF etc. (For HW management)					TSDF Site: SEPPL, Bhachau, Kutch Spent Acid: Novel Spent Acid Management, Vatva, Ahmedabad. Membership certificates are enclosed in Annexure-X.		
iii	Details of Non-Hazardous waste & its disposal(MSW and others)					Fly Ash will be sold to the bricks manufacturer. Paper and Plastic will be sold to the authorized		
G	Solvent management, VOC emissions etc.							
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents							
	No use of solvent							
ii	VOC emission sources and its mitigation measures							
	There is no any Solvent will use though we will provide closed transferring system of raw materials during manufacturing to avoid any VOC.							

Technical presentation was made by the project proponent dated 11/01/2019.
Committee noted that unit has valid CC&A for existing unit. Unit is complying conditions of CC&A. PP informed that there are no court cases pending and no public complaints against the project.
It is noted that proposal is for expansion from existing capacity of 7.5 MTPM with additional production of 842.5 MTPM reaching total production capacity to 850 MTPM. PP has plot area of 3476 sq. meter. PP has proposed in house RO and spray drier for pursuing zero liquid discharge and existing waste water will be sent to CETP, Naroda without change in quality after expansion.
PP has proposed lignite 50 kg/hour for proposed addition. Committee asked PP to explore for clean fuel.
After detailed discussion, it was decided to ask PP to submit the following details and after receipt of which, committee decided to consider the proposal in one of the upcoming SEAC meeting.
Details of Membership of NOVEL, Vatva with quantity for disposal of spent sulfuric acid. Latest certificate with quantity.
Justification of expansion from 7.5 MTPM to 850 MTPM of products.
PP has submitted reply for the above additional details sought vide letter on 04/02/2019.
The project was considered in SEAC meeting dated 06/02/2019.
PP has submitted their reply as below:
PP has submitted New Membership Certificate of NOVEL, Vatva for disposal of spent sulfuric acid 100 MT/Month obtained dated 12/01/2019.
PP has submitted Justification of expansion from 7.5 MTPM to 850 MTPM with area adequacy and Layout Plan.

Considering the above project details, after detailed discussion, the terms of reference (ToR) were prescribed as below and as per the standard TOR for the Synthetic Organic Chemical projects recommended by SEAC vide letter no. EIA-10-GEN-21/1480 dated 14/09/2017 and approved by SEIAA in its 12th meeting dated 16/09/2017 for the EIA study to be done covering 10 Km radial distance from the project boundary.
Compliance of MoEFCC's OM dated 01/05/2018 regarding "Corporate Environment Responsibility" (CER). Fund allocation for Corporate Environment Responsibility (CER) shall be made as per MoEFCC's O.M. No. 22-65/2017-IA.III dated 01/05/2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
Explore the use of renewable energy to the maximum extent possible. Details of provisions to make the project energy-efficient through energy efficient devices and adoption of modes of alternative eco-friendly sources of energy like solar water heater, solar lighting etc. Measures proposed for energy conservation.
PP shall address spent solvent with details of storage, handling and re-use under the Hazardous and other Waste (Management and Transboundary Movement) Rules 2016.
Leak Detection and Repairing Programme (LDAR) for all the volatile organic solvent proposed for use in-house with detailed chemical properties including vapor pressure. LDAR shall endeavor prevention of losses of solvents to the best minimum extent.
PP shall furnish status of all the applicable rules, acts, regulation, clearances in a tabular form
Safety precautions including flame proof electric fittings to be taken to avoid fire hazard during unloading, storage, transportation, handling and processing of Solvents
Segregation of waste water streams based on characteristics and its proper management keeping in view direction under section 18 (1) (b) of the Water (Prevention and Control of Pollution) act, 1974 issued by CPCB regarding compliance of CETP.

The TOR prescribed as above and as per the standard TOR approved by SEIAA and the model ToRs available in the MoEFCC's sector specific EIA Manual for 'Synthetic Organic Chemical Industry' shall be considered as generic TORs for preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006.
The project proponent shall have to apply for Environmental clearance through online portal http://environmentclearance.nic.in/ along with final EIA report.

10	SIA/GJ/IND2/18982/2017	M/s. Ramdev Chemical Industries Unit - II Plot No. 3440, 3443, J-3439, 3441/A, GIDC Estate, Ankleshwar, Bharuch	EC-Reconsideration Refer back case

The case was referred back by the SEIAA, Gujarat vide no. SEIAA/GUJ/EC/5(f)/353/2018 dated 28/03/2018 with the following point:
To verify the project with respect to minutes of meeting of GPCB dated 07/02/2018 regarding Ankleshwar, Dahej & Vadodara region.
Earlier, this proposal was considered during the meeting dated 05/07/2018 &05/09/2018.
Committee deliberated on minutes of meeting dated 11/06/2018 of GPCB regarding dual discharge policy. Refereeing to the said MoM, Committee noted that Dual discharge policy which was discontinued earlier will be re-implemented in Ankleshwar and Panoli region with the conditions mentioned therein.
In the instant case there will be no additional discharge to CETP of M/s NCT and Existing waste water discharge to M/s NCT remain unchanged. However, Committee noted that looking to the proposed product profile i.e. CPC Blue, GPCB Circular dated 04/04/2018 shall be considered. The said circular restricts expansion of CPC blue manufacturing in Ankleshwar-Panoli area.
In view of the above, Committee unanimously decided to consider the proposal only after satisfactory submission of the following:

Compliance of GPCB Office order no. ગુપ્રનિબોર્ડ/એએનકે/સી-૬૭૭)૬/(આઈડી-૨૯૫૦૯ /૪૪૯૮૧૧dated 04/04/2018 regarding manufacturing of CPC Blue.
During the SEAC meeting dated 06/02/2019, Committee deliberated on the GPCB circular dated 04/04/2018 regarding CPC Blue.
As per said GPCB Circular, Expansion in Manufacturing of CPC – Blue is not permitted in

Ankleshwar/Panoli area due to high concentration ammonical nitrogen in FETP.
In view of the above, Committee decided to de-list this proposal no. SIA/GJ/IND2/18982/2017 on temporary basis at SEAC. This proposal will be re-opened only after satisfactory submission by PP or further order/circular from GPCB in this regards.

11	SIA/GJ/IND2/21454/2017	M/s. Dhanlaxmi Pigments Pvt Ltd. Plot No. 3020-21, GIDC Estate, Panoli, Bharuch.	EC-Reconsideration

Earlier, this proposal was considered in the SEAC meeting dated 04/04/2018 & 21/06/2018.
Committee decided to recommend the project to SEIAA Gujarat for grant of Environmental Clearance.
Meantime, Committee noted GPCB Circular dated 04/04/2018 regarding CPC Blue manufacturing.
Again, during the meeting dated 05/09/2018, the proposal was considered.
Earlier, in the SEAC meeting dated 05/07/2018, Committee deliberated on minutes of meeting dated 11/06/2018 of GPCB regarding dual discharge policy. Refereeing to the said MoM, Committee noted that Dual discharge policy which was discontinued earlier will be re-implemented in Ankleshwar and Panoli region with the conditions mentioned therein.
In the instant case there will be no additional discharge to CETP of M/s PETL and Existing waste water discharge to M/s PETL remain unchanged. However, Committee noted that looking to the proposed product profile i.e. CPC Blue, GPCB Circular dated 04/04/2018 shall be considered. The said circular restricts expansion of CPC blue manufacturing in Ankleshwar-Panoli area.
In view of the above, Committee unanimously decided to consider the proposal only after satisfactory submission of the following:

Compliance of GPCB Office order no. ગુપ્રનિબોર્ડ૪૪૯૮૧૧ /૨૯૫૦૯-આઇઈડી/(૬)૬૭૭-સી/એએનકે/dated 04/04/2018 regarding manufacturing of CPC Blue.

During the SEAC meeting dated 06/02/2019, Committee deliberated on the GPCB circular dated 04/04/2018 regarding CPC Blue.
As per said GPCB Circular, Expansion in Manufacturing of CPC – Blue is not permitted in Ankleshwar/Panoli area due to high concentration ammonical nitrogen in FETP.
In view of the above, Committee decided to de-list this proposal no. SIA/GJ/IND2/21454/2017 on temporary basis at SEAC. This proposal will be re-opened only after satisfactory submission by PP or further order/circular from GPCB in this regards.

12	SIA/GJ/IND2/22182/2017	M/s. Narayan Organics Pvt Ltd. Plot No. 1107/1 & 2, GIDC Estate Ankleshwar-393002, Dist: Bharuch.	EC-Reconsideration

Earlier this proposal was considered in the SEAC meeting dated 05/09/2018.
During the meeting, Committee unanimously decided to consider the proposal only after satisfactory submission of the following:

Compliance of GPCB Office order no. ગુપ્રનિબોર્ડ૪૪૯૮૧૧ /૨૯૫૦૯-આઇઈડી/(૬)૬૭૭-સી/એએનકે/dated 04/04/2018 regarding manufacturing of CPC Blue.

During the SEAC meeting dated 06/02/2019, Committee deliberated on the GPCB circular dated 04/04/2018 regarding CPC Blue.
As per said GPCB Circular, Expansion in Manufacturing of CPC – Blue is not permitted in Ankleshwar/Panoli area due to high concentration ammonical nitrogen in FETP.
In view of the above, Committee decided to de-list this proposal no. SIA/GJ/IND2/22182/2017 on temporary basis at SEAC. This proposal will be re-opened only after satisfactory submission by PP or further order/circular from GPCB in this regards.

13	SIA/GJ/IND2/18604/2017	Heubach Colour Pvt. Ltd. (Unit-1) Plot no: Plot No. 9002-9010, GIDC	EC-Reconsideration

		Estate, Ankleshwar, Dist:-Bharuch.	Refer back case

Earlier, this proposal was considered in the SEAC meeting dated 09/10/2018.
During the meeting, Committee unanimously decided to consider the proposal only after satisfactory submission of the following:

Compliance of GPCB Office order no. ગુપ્રનિબોર્ડ/એએનકે/સી-૬૭૭(૬)/આઈડી-૨૯૫૦૯/ ૪૪૯૮૧૧dated 04/04/2018 regarding manufacturing of CPC Blue.
The proposal was again considered in the SEAC meeting dated 06/02/2018.
During the SEAC meeting dated 06/02/2019, Committee deliberated on the GPCB circular dated 04/04/2018 regarding CPC Blue.
As per said GPCB Circular, Expansion in Manufacturing of CPC – Blue is not permitted in Ankleshwar/Panoli area due to high concentration ammonical nitrogen in FETP.
In view of the above, Committee decided to de-list this proposal no. SIA/GJ/IND2/18604/2017on temporary basis at SEAC. This proposal will be re-opened only after satisfactory submission by PP or further order/circular from GPCB in this regards.

Meeting ended with thanks to the Chair.

Minutes approved by:

1.	Dr. Dinesh Misra, Chairman, SEAC	
2.	Shri S. C. Srivastav, Vice Chairman, SEAC	
3.	Shri V. N. Patel, Member, SEAC	
4.	Shri. R. J. Shah, Member, SEAC	
5.	Shri A.K. Muley, Member, SEAC	