

**Minutes of the 449<sup>th</sup> meeting of the State Level Expert Appraisal Committee held on 13/11/2018 at Committee Room, Gujarat Pollution Control Board, Sector 10-A, Gandhinagar.**

The 449<sup>th</sup> meeting of the State Level Expert Appraisal Committee (SEAC) was held on 13<sup>th</sup> November 2018 at Committee Room, Gujarat Pollution Control Board, Sector 10-A, 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. *Dr. V. K. Jain, Member, SEAC*
6. *Shri K. C. Mistry, Secretary, 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.

5.	SIA/GJ/IND2/19758/2017	<b>M/s Indian Oil Corporation Limited,</b> Kandla LPG Import Plant, PO Box No.7, K.K.Road, Near Booster Station, Kandla, Dist- Kutch, Gujarat	Appraisal
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**Project / Activity No.:** 6(b)

**Project status:** Expansion

- PP has submitted online application vide no. SIA/GJ/IND2/19758/2017 dated 07/09/2018 for obtaining Environmental Clearance.
- Project proponent has submitted EIA Report prepared by M/s Hubert Enviro Care Systems Pvt. Ltd based on the TOR issued by SEIAA.
- This is an expansion of Isolated storage and Handling of Hazardous Chemicals and proposed for products as tabulated below:

Sr. no.	Name of the Products	CAS no.	Storage capacity MT & numbers of tanks			End-use of product
			Existing	Proposed	Total	
1	Propane Tank (MT)		1 x 15000	1 x 15000	2 x 15000	LPG
2	Butane Tank (MT)		1 x 15000	1 x 15000	2 x 15000	LPG

- The project falls under Category B2 of project activity 6(b) as per the schedule of EIA Notification

2006.

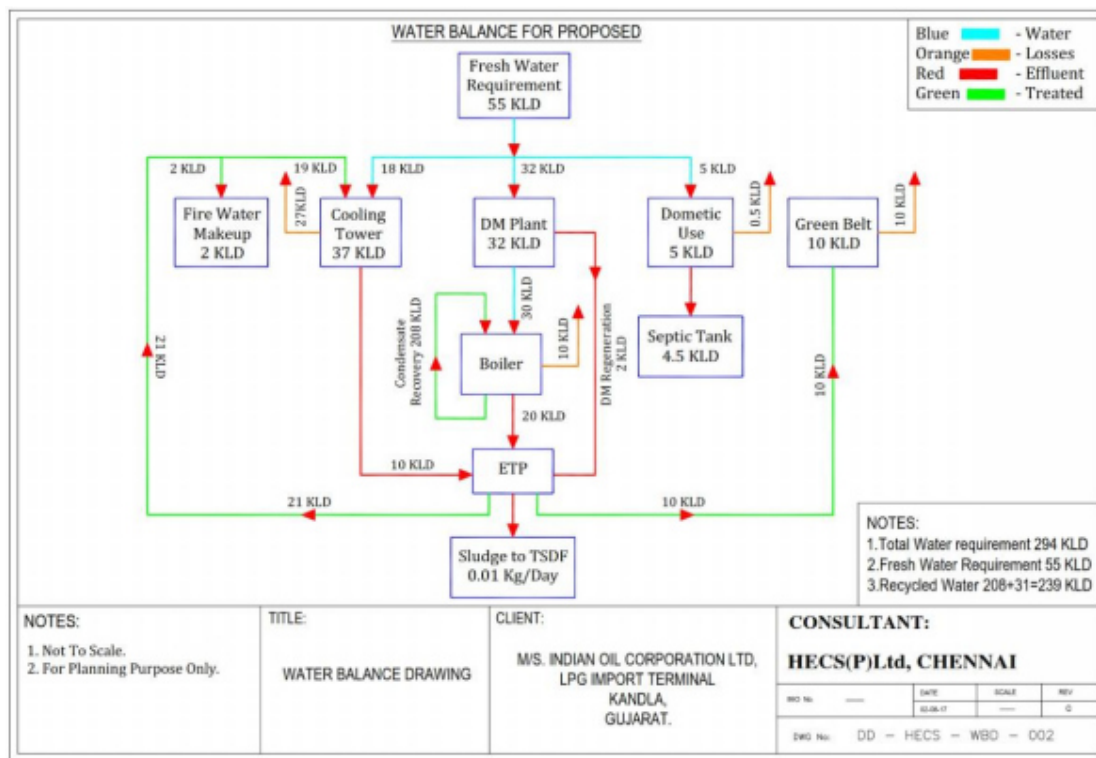
- PP was called for presentation in the SEAC meeting dated 13/11/2018.
- Salient features of the project are as under:

Sr. no.	Particulars	Details			
A	Total <b>cost of Proposed</b> Project (Rs. in Crores):	Existing: 520 Crores Proposed:800 Crores Total: 1320 Crores			
B	<b>Total Plot area</b> ( sq. meter)	Existing: 165.83 Sq. m. Proposed: Nil Total: 165.83 Sq. m.			
	<b>Green belt area</b> ( sq. meter)	Garden to the extent of 3000 sq.m maintained. Existing: 0 Sq. m. Proposed: 0 Sq. m. Total: There is no green belt in the existing facility. Due to salinity of water and soil development of green belt is difficult.			
C	<b>Employment generation</b>	Existing: 175 Proposed: 85 Total: 260			
D	<b>Water</b>				
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	Water sourced from Narmada as well as from road tankers through private vendors			
	Status of permission from the concern authority.	-Nil-			
ii	<b>Water consumption (KLD)</b>				
		<b>Existing KLD</b>	<b>Proposed (Additional) KLD</b>	<b>Total after Expansion KLD</b>	<b>Remarks</b>
	(A) Domestic	1.65	3.35	5	Sent to Septic Tank
	(B) Gardening	10	--	10	
	Industrial				
	Process	--	--	--	

	Washing	1	1	2	DM plant washing
	Boiler	70.2	167.8	238	Condensate recovered and reused.
	Cooling	19	16	35	Blow down Sent to ETP
	Others	2	2	4	Fire Water Makeup
	<b>Industrial Total</b>	<b>92.2</b>	<b>186.8</b>	<b>279</b>	
	<b>Grand Total (A+B+C)</b>	<b>103.85</b>	<b>190.15</b>	<b>294</b>	
	1) <b>Total water requirement</b> for the project: 294 KLD 2) Quantity to be <b>recycled</b> : 239 KLD 3) Total <b>fresh water</b> requirement: 55 KLD				
iii	<b>Waste water generation (KLD)</b>				
	<b>Category</b>	<b>Existin g KLD</b>	<b>Proposed (Additional) KLD</b>	<b>Total after Expansion KLD</b>	<b>Remarks</b>
	(A) Domestic	1.65	3.35	5	Sent to Septic Tank
	Industrial				
	Process				
	Washing	1	1	2	DM Plant regeneration sent to ETP
	Boiler	7	13	20	Treated in ETP
	Cooling	7.6	2.4	10	Treated in ETP
	Others	--	--	--	
	<b>Total Industrial waste water</b>	15.6	16.4	32	
iv	Treatment facility within premises with <b>capacity [For existing and Proposed]</b> [In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc.				
	<ul style="list-style-type: none"> <li>➤ Neutralization pit provided in existing</li> <li>➤ ETP proposed for augmentation.</li> </ul>				
v	Mode of Disposal & Final meeting point				
	Domestic:	Septic Tank / Soak Pit			
	Industrial:	Treated water reuse for process & sludge to TSDF			
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc.				
	Name of Common facility				
	➤ -Nil-				
	Membership of Common facility (CF)				

-Nil- (For waste water treatment)

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



vii 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.)
Cooling Tower (10)	Treated water in ETP will be used for fire water make up. Gardening and Cooling tower	TDS < 2000
Boiler (20)		
DM Plant Regeneration (2)		

**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	Existing DG sets Power backup (1 x 3125 kVA)	20	HSD	0.5 KL/ Month	PM, SO <sub>2</sub> & NO <sub>x</sub>	Adequate stack height as CPCB norms
	DG sets Power backup (1 x 725 kVA)	10	HSD		PM, SO <sub>2</sub> & NO <sub>x</sub>	Adequate stack height as CPCB norms
2	Boilers (2 x 14 TPH)	15	LPG	3TPD	PM, SO <sub>2</sub> & NO <sub>x</sub>	Adequate stack height as CPCB norms
3	Proposed DG (2 x 3125 kVA)	20	HSD	1KL / Month	PM, SO <sub>2</sub> & NO <sub>x</sub>	Adequate stack height as CPCB norms
4	Proposed Boilers (1 x 28 TPH)	15	LPG	3TPD	PM, SO <sub>2</sub> & NO <sub>x</sub>	Adequate stack height as CPCB norms
5	Hot Flare	45	LPG	Provided for Emergency usage		
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ii	Process gas i.e. Type of pollutant gases (SO <sub>2</sub> , HCl, NH <sub>3</sub> , Cl <sub>2</sub> , NO <sub>x</sub> etc.) <b>Existing &amp; Proposed</b>					
-						
	<b>Sr. no.</b>	<b>Specific Source of emission (Name of the Product &amp; Process)</b>	<b>Type of emission</b>	<b>Stack/Vent Height (meter)</b>	<b>Air Pollution Control Measures (APCM)</b>	
	1	Ethyl Mecpatan	Vent	1.5	NA	
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iii	<b>Fugitive emission</b> details with its mitigation measures.					
Fugitive emissions are from DG sets which are used as power backup source only. Individual stack with adequate height is provided. HC emissions are envisaged as fugitive emissions from leakages. LDAR are conducted on regular intervals and leaks are controlled if any.						
<b>F</b>	<b>Hazardous waste</b>					

	(as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016. <b>Existing &amp; Proposed</b>																						
i	<table border="1"> <thead> <tr> <th>Sr. no.</th> <th>Type/Name of Hazardous waste</th> <th>Source of generation</th> <th>Category and Schedule as per HW Rules.</th> <th>Quantity (MT/Annum)</th> <th>Disposal Method</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Existing Used oil/spent oil</td> <td>DG sets</td> <td>5.1</td> <td>4.46</td> <td>Collection, storage &amp; disposal to authorized recyclers</td> </tr> <tr> <td>2</td> <td>Proposed Used oil/spent oil</td> <td>DG sets</td> <td>5.1</td> <td>10.4</td> <td>Collection, storage &amp; disposal to authorized recyclers</td> </tr> </tbody> </table>					Sr. no.	Type/Name of Hazardous waste	Source of generation	Category and Schedule as per HW Rules.	Quantity (MT/Annum)	Disposal Method	1	Existing Used oil/spent oil	DG sets	5.1	4.46	Collection, storage & disposal to authorized recyclers	2	Proposed Used oil/spent oil	DG sets	5.1	10.4	Collection, storage & disposal to authorized recyclers
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1	Existing Used oil/spent oil	DG sets	5.1	4.46	Collection, storage & disposal to authorized recyclers																		
2	Proposed Used oil/spent oil	DG sets	5.1	10.4	Collection, storage & disposal to authorized recyclers																		
ii	Membership details of <b>TSDF, CHWIF</b> etc. (For HW management)		-Nil-																				
iii	Details of Non-Hazardous waste & its disposal(MSW and others)		MSW - Local Bins Sewage waste to Septic tanks/ Soak pits																				
<b>G</b>	<b>Solvent management, VOC emissions</b> etc.																						
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents																						
	Nil																						
ii	<b>VOC emission</b> sources and its mitigation measures																						
	Fugitive emissions are from DG sets which are used as power backup source only. Individual stack with adequate height is provided. HC emissions are envisaged as fugitive emissions from leakages. LDAR are conducted on regular intervals and leaks are controlled if any.																						

- During the meeting dated 13/11/2018, technical presentation made by project proponent.
- Salient features of the project submitted by PP are as mentioned above.

**Observation:**

- Total water consumption will be 294 KLD. Total wastewater generation will be 32 KLD. Total Industrial Wastewater (32 KLD) will be neutralized in into existing ETP and treated in proposed ETP, then reused in utilities.
- LPG will be used as fuel for existing & proposed Boilers.
- Hazardous waste management will be as per the HW Rules.
- 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 2015 to May 2015. Ambient Air Quality monitoring was carried out for PM10, PM2.5, SO2, and 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 AIRMOD. 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).

- Surface water samples are taken from Creeks as wells as Rivers & Lakes. SW1, SW2, SW3, SW4, SW5 are creek water. SW6,SW7 & SW8 are inland water bodies, which are compared with IS: 2296 :1992.
- In the present findings the TDS value varied from 2120 to 2991 mg/l for the ground water all samples exceeds the acceptable limits of IS 10500: 2012 and the permissible limit of IS 10500: 2012. The chloride concentration ranged from 641 mg/L to 1029 mg/L and is below the IS acceptable limit except Bharapur. The desirable limit of the chloride content is 250 mg/l and permissible limit is 1000 mg/l. The Total hardness ranges is between 743 mg/l – 1237 mg/l. for ground water and for most of the samples, it exceed the permissible limit of the IS 10500: 2012.
- 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.

#### **Discussions & Conclusion:**

Committee asked the compliance of the CCA conditions for the existing unit. Process of LPG mixing, addition of ethyl mercaptan addition before supply/dispatch, storage of ethyl mercaptan, safety aspects of storage tanks, ethyl mercaptan tanks. Referring to the through put of the proposed and existing unit, committee deliberated on the available and proposed infrastructure associated with storage tanks and methodology for transport of mercaptan added LPG. It is further noted that propane and butane will be received through import and transported through pipeline to tank farm from jetty. For the proposed expansion, capacity of pipeline from jetty is adequate to cater the supply of butane and propane and no carrying capacity enhancement is required. For the proposed expansion regarding erection of new tanks, committee asked to address all safety measures in detail with present of company's own supervisor with detailed SOP during construction and erection phase. Details of upgraded safety changes adopted for the existing as well as proposed expansion to prevent safety hazard. Referring to the operational aspect, it is noted that during increased pressure condition of tanks which are associated with flare, it will be operated and excess pressure will be vented off to flares and under circumstances, auto ignition of flare will be there. Committee asked the detailed note on safety scenario when tanks becomes pressurized and flares operate.

Committee also asked PP to submit need based budgetary outlay of CER as per the OM of MOEF&CC dated 01/05/2018.

As the proposal include enhancing storage tank capacity of ethyl mercaptan, referring to the baseline data, emission of ethyl mercaptan and its impact is not included, hence PP is asked to submit the baseline study including ethyl mercaptan storage tanks considering one month study with GLC and its impact. Referring to the TOR, it is noted that public hearing is exempted. Committee deliberated the TOR issued to the PP.

**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.**

1. Address applicability of CRZ Notification 2011 for the proposed expansion.
2. Baseline study including ethyl mercaptan storage tanks considering one month study with GLC and its impact and its mitigation measures including odor control measures
3. To address bleed liquor generating from the scrubber of ethyl mercaptan under the haz. waste Rules 2016 with adequate management
4. Need based budgetary outlay of CER as per the OM of MOEF&CC dated 01/05/2018.
5. Detailed plan for green belt development with budgetary provision
6. Revised EMP including capital and recurring expenditure for green belt development plan, environment monitoring recurring cost shall be readdressed.
7. Note on operational aspect of flare including safety measures when storage tanks for butane, propane becomes pressurized and venting occurs to flare

6.	SIA/GJ/IND2/2257/2017	<b>M/s. Stride Industries</b> Plot No. 7613/1, GIDC Estate, Ankleshwar, Dist. Bharuch-393002, Gujarat.	Appraisal
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**Project / Activity No.:** 5(f)

**Project status:** Expansion

- PP has submitted online application vide no. SIA/GJ/IND2/28257/2017 dated 07/09/2018 for obtaining Environmental Clearance.
- MoEF&CC has issued TOR to PP vide letter J-11011/99/2017-IA-II(I) vide 30/05/2017.
- Project proponent has submitted EIA Report prepared by M/s. Aqua-Air Environmental Engineers



Pvt. Ltd., Surat based on the TOR issued by MoEF&CC.

- This is an expansion of synthetic organic chemicals plant and proposed for 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.	Potassium Sulphate	7778-80-5	80.0	0.0	80.0	Fertilizers, Pharmaceutical
2.	Sodium Nitrate	7631-99-4	80.0	0.0	80.0	Fertilizers, Pharmaceutical
3.	Tri Sodium Phosphate	7601-54-9	80.0	0.0	80.0	pH regulator, emulsifier, water softener, Pharmaceutical
4.	Doxofylline and its Intermediates	69975-86-6	0.0	10.0	10.0	Bronchodilator, Treatment of asthma
5.	Acebrophylline and its intermediate	179118-73-1	0.0			Bronchodilator, Treatment of asthma
6.	Levosulpride and its intermediate	23672-07-3	0.0			Anti-psychotic
7.	Amisulpride and its intermediate	71675-85-9	0.0			Anti-psychotic
8.	Duloxetine Hydrochloride and its Intermediate	136434-34-9	0.0			Anti-depressant Treat depression and anxiety
9.	Celecoxib and its Intermediate	169590-42-5	0.0			Anti-inflammatory
10.	Lacosamide and its Intermediate	175481-36-4	0.0			Anti-epileptic
11.	Diclofenac Sodium and its Intermediate	15307-79-6	0.0			Anti-inflammatory
12.	Pantoprazole Sodium and its Intermediate	138786-67-1	0.0			Treat erosive esophagitis
13.	Venlafaxine	99300-78-4	0.0			Anti-depressant

	Hydrochloride and Its Intermediate					Treat depression and anxiety
14.	Sevelamar Hydrochloride and its intermediates	152751-57-0	0.0			Hyperphosphatemia in chronic renal failure
15.	R&D	--	0.0	0.5	0.5	
		<b>TOTAL</b>	<b>240.0</b>	<b>10.5</b>	<b>250.5</b>	

- 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 13/11/2018.
- Salient features of the project are as under:

Sr. no	Particulars	Details
<b>A</b>	Total <b>cost of Proposed</b> Project (Rs. in Crores):	Existing: 1.0 Crores Proposed:2.0 Crores Total: 3.0 Crores
<b>B</b>	<b>Total Plot area</b> ( sq. meter)	Existing: 1459.0Sq. m. Proposed: 0.0 Sq. m. Total: 1459.0 Sq. m.
	<b>Green belt area</b> ( sq. meter)	Existing: 100.0 Sq. m. Proposed: 359.0 Sq. m. Total: 459.0 Sq. m.
<b>C</b>	<b>Employment generation</b>	<b>Direct</b> Existing:05 Proposed:10 Total:15 <b>Indirect</b> Existing:05 Proposed:10 Total:15
<b>D</b>	<b>Water</b>	
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	Water requirement will be met through the GIDC Water Supply

	Status of permission from the concern authority.	No./GIDC/DEE(w/s)/578 date: 20.03.2017			
ii	<b>Water consumption (KLD)</b>				
		<b>Existing</b> KLD	<b>Proposed</b> <b>(Additional)</b> KLD	<b>Total after</b> <b>Expansion</b> KLD	Remarks
	(A) Domestic	1.0	1.0	2.0	
	(B) Gardening	0.3	0.5	0.8	
	(C) Industrial				
	Process	0.3	3.1	3.4	
	Washing	0.0	0.5	0.5	
	Boiler	0.2	3.8	4.0	
	Cooling	0.15	0.85	1.0	
	Scrubber/Others	0.0	1.0	1.0	
	R & D	0.0	0.3	0.3	
	<b>Industrial Total</b>	<b>0.65</b>	<b>9.55</b>	<b>10.2</b>	
	<b>Grand Total (A+B+C)</b>	<b>1.95</b>	<b>11.05</b>	<b>13.00</b>	
	<p>1) <b>Total water requirement</b> for the project: 13.0KLD</p> <p>2) Quantity to be <b>recycled</b>: 0.0 KLD</p> <p>3) Total <b>fresh water</b> requirement: 13.0 KLD</p>				
iii	<b>Waste water generation (KLD)</b>				
	Category	<b>Existin</b> <b>g</b> KLD	<b>Proposed</b> <b>(Additional)</b> KLD	<b>Total after</b> <b>Expansion</b> KLD	Remarks
	(A) Domestic	0.4	0.8	1.0	
	(B) Industrial				
	Process	0.0	2.5	2.5	
	Washing	0.0	0.5	0.5	
	Boiler	0.0	0.2	0.2	
	Cooling	0.0	0.1	0.1	
	*Scrubber/Others	0.0	1.0*	1.0*	
	R & D	0.0	0.2	0.2	
	<b>Total Industrial</b> <b>waste water</b>	<b>0.0</b>	<b>3.5</b>	<b>3.5</b>	

	<p><b>Note-1:</b> Industrial waste water will be sent to <b>Common MEE of M/s. Ankleshwar Cleaner Process Technology Centre Limited, Ankleshwar</b> after giving primary treatment in ETP.</p> <p><b>Note-2:</b> Domestic waste water will be disposed of through septic tank or soak pit.</p> <p><b>Note-3 :</b> Worst case scenario for wastewater generation is based on considering Duloxetine Hydrochloride and its Intermediate</p> <p><b>Note-4 :</b> Scrubber Waste Water are converted into valuable product which is send to end user having Rule-9 permission.</p>										
iv	<p>Treatment facility within premises with <b>capacity [For existing and Proposed]</b></p> <p>[In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..</p> <p>➤ <b>ETP-4.0 KL</b></p>										
v	<p>Mode of Disposal &amp; Final meeting point</p> <table border="1"> <tr> <td>Domestic:</td> <td>Domestic effluent (1.2 KL/Day) will be sent to septic tank/soak pit</td> </tr> <tr> <td>Industrial:</td> <td>Total wastewater generation will be 4.7 KL/Day (Existing: 0.4 KL/Day + Additional: 4.3 KL/Day). Industrial effluent <b>3.5 KL/Day</b> will be sent to ETP consists of primary facility to treat the effluent and then treated effluent shall be sent to Common MEE facility of M/s. ACPTCL.</td> </tr> </table>		Domestic:	Domestic effluent (1.2 KL/Day) will be sent to septic tank/soak pit	Industrial:	Total wastewater generation will be 4.7 KL/Day (Existing: 0.4 KL/Day + Additional: 4.3 KL/Day). Industrial effluent <b>3.5 KL/Day</b> will be sent to ETP consists of primary facility to treat the effluent and then treated effluent shall be sent to Common MEE facility of M/s. ACPTCL.					
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vi	<p>In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc.</p> <p>Name of Common facility</p> <p>➤ <b>M/s. ACPTCL.</b></p> <p>Membership of Common facility (CF)</p> <p><b>(For waste water treatment)</b></p> <p><b>Common MEE of M/s. ACPTCL, Ankleshwar</b></p>										
vii	<p><b>Simplified water balance diagram with reuse / recycle of waste water</b></p> <p><b>No Reuse</b></p>										
vii	<p>Reuse/Recycle details (KLD)</p> <p>[Source of reuse &amp; application area]</p> <p><b>Total reuse 0.0 KLD</b></p> <table border="1"> <thead> <tr> <th>Source of waste water for reuse with quantity in KLD</th> <th>Application area with quantity in KLD</th> <th>Remarks regarding feasibility to reuse i.e. w/w characteristics (COD, BOD, TDS etc.)</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>-</p>		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.)						
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E	<p><b>Air</b></p>										

i	<p>Flue gas emission details</p> <p>No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.</p> <p><b>Existing &amp; Proposed</b></p> <p>-</p> <table border="1" data-bbox="349 367 1299 745"> <thead> <tr> <th>Sr. no.</th> <th>Source of emission With Capacity</th> <th>Stack Height (meter)</th> <th>Type of Fuel</th> <th>Quantity of Fuel MT/Day</th> <th>Type of emissions i.e. Air Pollutants</th> <th>Air Pollution Control Measures (APCM)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>IBR Boiler 600 kg/hr</td> <td>11.0</td> <td>Wood</td> <td>500 kg/Day</td> <td>PM SO2 NOx</td> <td>Adequate Height provided</td> </tr> </tbody> </table> <p>- Proposed</p> <table border="1" data-bbox="341 798 1307 1323"> <thead> <tr> <th>Sr. no.</th> <th>Source of emission With Capacity</th> <th>Stack Height (meter)</th> <th>Type of Fuel</th> <th>Quantity of Fuel MT/Day</th> <th>Type of emissions i.e. Air Pollutants</th> <th>Air Pollution Control Measures (APCM)</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Steam Boiler (1.5T/Hr.)</td> <td>30.0</td> <td>Agro Waste/ coal</td> <td>1500 kg/Day</td> <td>PM SO2 NOx</td> <td>Multicyclone Separator, Bag Filter</td> </tr> <tr> <td>3</td> <td>D.G set (150 kva)</td> <td>11.0</td> <td>Diesel</td> <td>100 Lit/Day</td> <td>PM SO2 NOx</td> <td>Adequate Height</td> </tr> </tbody> </table> <p><b>Note: After proposed expansion Wood will discontinue.</b></p>	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	IBR Boiler 600 kg/hr	11.0	Wood	500 kg/Day	PM SO2 NOx	Adequate Height provided	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)	2	Steam Boiler (1.5T/Hr.)	30.0	Agro Waste/ coal	1500 kg/Day	PM SO2 NOx	Multicyclone Separator, Bag Filter	3	D.G set (150 kva)	11.0	Diesel	100 Lit/Day	PM SO2 NOx	Adequate Height
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		2	Reaction Vessel -2	HBr	15 m	Two Stage Scrubber (water + alkali)																												
iii	<b>Fugitive emission</b> details with its mitigation measures.																																	
	<p>→ Minimum number of flanges, joints and valves in pipelines</p> <p>→ Selection / use of state-of-the art leak proof valves</p> <p>→ Provision of mechanical seals in pumps</p> <p>→ Proper preventive maintenance of roofs and seals for tanks</p> <p>→ Monitoring and preventive maintenance of valves, flanges, joints, etc.</p> <p>→ Fugitive emission over reactors, formulation areas, centrifuges, chemical loading, transfer area, shall be collected through hoods and ducts by induced draft and controlled by dust collector.</p> <p>For particulate / dust emissions from the coal handling system: Water will be sprinkled to control particulate / dust emission from coal storage area.</p>																																	
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							vendors
3	ETP sludge	From ETP	Sch-1/35.3	0.0	36	36	Collection, storage, transportation & disposal to TSDF site
4	Organic residue	From mfg. Process	Sch-1/28.1	0.0	48	48	Collection, storage, transportation & given to cement industries for co-processing or disposal at common incineration site
5	Inorganic solid waste	From mfg. Process	Sch-1/28.1	0.	36	36	Collection, storage, transportation & disposal at nearest TSDF site
6	Spent carbon	From mfg. Process	Sch-1/28.3	0.0	6.0	6.0	Collection, storage, transportation & given to cement industries for co-processing or disposal at TSDF site
7	Dil.HCL (30 %)	From Scrubber	--	0.0	180.0	180.0	Collection, storage, transportation & send to end user having rule-9 permission
8	Sodium bromide soln. (18-20 &)	From scrubber	--	0.0	180.0	180.0	Collection, storage, transportation & send to end user having rule-9 permission.
9	Spent solvents	From mfg. Process	Sch-1/20.2	0.0	1620.0	1620.0	Collection, storage, & in house distillation plant to recovered solvents.
10	Distillation residue	From solvent recovery plan	Sch-1/20.3	0.0	24.0	24.0	Collection, storage, transportation & given to cement industries for co-processing or disposal at common incineration site

	-							
ii	Membership details of <b>TSDF, CHWIF etc. (For HW management)</b>	<b>M/s. BEIL BEIL/ANK/2017 DATE: 23.03.2017</b>						
iii	Details of Non-Hazardous waste & its disposal(MSW and others)	There is no non hazardous waste						
<b>G</b>	<b>Solvent management, VOC emissions etc.</b>							
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents							
	Collection, storage and transportation to In house Distillation or outside job work.							
	<b>Name of Solvent</b>	<b>B.P</b>	<b>V.P</b>	<b>Total Solvent Input MT</b>	<b>Qty of Solvent Recycled MT</b>	<b>Qty of Losses MT</b>	<b>% Recovery</b>	<b>% Losses</b>
	Dichloromethane	39.75°C	46.5 kPa (@ 20°C)	40.0	39.32	0.68	98.3	1.7
	DMF	153°C	0.3 kPa (@ 20°C)	10.0	9.62	0.38	96.2	3.8
	Toluene	110.6°C	3.8 kPa (@ 25°C)	40.0	38.12	1.88	95.3	4.7
	Methanol	64.5°C	12.3 kPa (@ 20°C)	135.0	129.6	5.4	96.0	4.0
	Monoethylene glycol	197.6°C	06 mmHg @ 20 C	20.0	19.18	0.82	95.9	4.1
	Acetone	56.2°C	24 kPa (@ 20°C)	30.0	29.16	0.84	97.2	2.8
	Isopropyl alcohol	82.5°C	4.4 kPa (@ 20°C)	10.0	9.92	0.08	99.2	0.8
	Ethyl acetate	77°C	12.4	120.0	114.84	5.16	95.7	4.3



			kPa (@ 20°C)						
ii	<b>VOC emission</b> sources and its mitigation measures								
	Enclosed process, - Pumps will be having double mechanical seals - Proper ventilation with hood - Regular maintenance & monitoring - Adequate PPE's								

- During the meeting dated 13/11/2018, technical presentation made by project proponent.
- Salient features of the project submitted by PP are as mentioned above.

**Observation:**

- This proposal is for expansion of existing unit and for now proposes for synthetic organic chemical product. This unit is having valid CC&A for existing unit. Copy of CC&A, CC&A compliance report is submitted.
- Total water consumption will be 13 KLD. Total wastewater generation will be 3.5 KLD. Industrial effluent will be treated in Primary Treatment Plant and sent to Common MEE of M/s. ACPTCL.
- Agrowaste/ Coal will be used as fuel for proposed boiler. After expansion wood will be discontinued.
- Multi Cyclone and Bag filter as APCM will be provided with boiler.
- Water and alkali scrubber as APCM will be provided with each reaction vessels.
- Hazardous waste management will be as per the HW Rules.
- 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 & May 2017. Ambient Air Quality monitoring was carried out for PM10, PM2.5, SO2, NOx, O3, Pb, As, Ni, C6H6, NH3, HC, CO 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. 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.

**Discussions & Conclusion:**

The proposal is for expansion. Compliance of CCA conditions, action taken by GPCB were deliberated at

length. PP mentioned that a closure direction was issued during the month of February 2017 and subsequently revoked after compliance. PP was asked to discontinue wood as fuel in existing facilities. It is proposed to send treated waste water having COD: 24000 mg/litre, BOD: 6000 mg/litre, TDS: 28000 mg/litre, Ammonical Nitrogen: 50 mg/litre to ACPTCL for evaporation and following zero liquid discharge. Details of EMP and budget allocation for the activities were discussed at length. It is noted that budget allocation for green belt and plantation is to be revised. Also PP was asked to conduct need base analysis for following CER and submit the detailed outlay of CER for the coming years after performing need based analysis. PP also proposed R&D products where in unit processes involved are not addressed. Committee asked PP to address the all possible unit processes for conducting R&D and submit the details. Committee deliberated the TOR issued to the PP.

**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.**

1. Need based budgetary outlay of CER as per the OM of MOEF&CC dated 01/05/2018.
2. Detailed plan for green belt development with budgetary provision.
3. Revised EMP including capital and recurring expenditure for green belt development plan, environment monitoring recurring cost shall be readdressed.
4. Undertaking for discontinuing the wood as a fuel.
5. Submit details of all possible unit processes for conducting R&D and submit the details.

7.	IA/GJ/IND2/62346/2017	<b>M/s. Mahrshee Laboratories Pvt. Ltd. (Unit-1)</b> Plot No. 3014-3015 , Phase-III, GIDC, Panoli – 394 116, Dist: Bharuch, Gujarat	Appraisal
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**Project / Activity No.:** 5(f)

**Project status:** Expansion

- PP has submitted online application vide no. IA/GJ/IND2/62346/2017 dated 07/09/2018 for obtaining Environmental Clearance.
- MoEF&CC has issued TOR to PP vide letter no J-11011/90/2017-IA.II(I) vide dated 31/05/2018.
- 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 expansion of synthetic organic chemicals plant and proposed for products as tabulated below:

Sr.	Name of the Products	CAS no. /CI	Quantity (MT/Month)	End-use of
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No.		no.	Existing	Additional Proposed	Total	products
1	Metoclopramide HCl	7232-21-5	0.5	--	--	Antieimetic
2	Cyproheptadine HCl	969-33-5	0.1	--	--	Appetite stimulant
3	Amitryptiline HCl	50-48-6	0.2	--	--	Antidipressant
4	Chlorpheniramine Maleate	113-92-8	2.5	50	50	Anti-histamine
5	Diphenhydramne HCl	147-24-0	1			Anti-histamine
6	Pheniramine Maleate	86-21-5	-			Anti-histamine
7	Cetirizine 2HCl	130018-87-0	-			Anti-histamine
8	Miconazole	22916-47-8	-			Antifungal
9	Miconazole Nitrate	22832-87-7	-			Antifungal
10	Econazole Nitrate	68797-31-9	-			Antifungal
11	Dexchlorpheniramine Maleate	2438-32-6	-			Anti-histamine
12	Brompheniramine Maleate	32865-01-3	-			Anti-histamine
13	Domperidone	57808-66-9	-			Antieimetic
14	Dimethyl amino ethyl chloride HCL	4584-46-7	-			In Organic Synthesis
15	Ondansetron HCL	103639-04-9	-			Antieimetic
16	$\alpha$ -Phenyl-2-Pyridyl Acetonitrile	5005-36-7	-			In Organic Synthesis
17	$\alpha$ -Phenyl-2-Pyridyl Acetamide	7251-52-7	-			In Organic Synthesis
<b>TOTAL</b>			<b>4.3</b>	<b>50</b>	<b>50</b>	

- 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 13/11/2018.
- Salient features of the project are as under:

Sr. no.	Particulars	Details
<b>A</b>	Total <b>cost of Proposed Project</b> (Rs. in Crores):	Existing: 3.80 Proposed: 3.70 Total: 7.50

<b>B</b>	<b>Total Plot area</b> ( sq. meter)	Existing: 2000 Sq. m. Proposed: Total: 2000 Sq. m.			
	<b>Green belt area</b> ( sq. meter)	Existing: 280 Sq. m. Proposed: 260 Sq. m. Total: 540 Sq. m.			
<b>C</b>	<b>Employment generation</b>	Existing: 30 Proposed: 20 Total: 50			
<b>D</b>	<b>Water</b>				
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 from GIDC for water supply vide letter no NO/GIDC/DEE/PNL/1358 dated 21/01/2017.			
ii	<b>Water consumption (KLD)</b>				
		<b>Existing KLD</b>	<b>Proposed (Additional) KLD</b>	<b>Total after Expansion KLD</b>	<b>Remarks</b>
	(A) Domestic	0.5	0.5	1	
	(B) Gardening	Nil	1	1	
	(C) Industrial				
	Process	1.4	18.6	20	
	Washing	0.1	0.9	1	
	Boiler	0.4	0.1	0.5	
	Cooling	0.1	0.2	0.3	
	Others	Nil	Nil	Nil	
	<b>Industrial Total</b>	<b>2</b>	<b>19.8</b>	<b>21.8</b>	
	<b>Grand Total (A+B+C)</b>	<b>2.5</b>	<b>21.3</b>	<b>23.8</b>	
	<p>1) <b>Total water requirement</b> for the project: 23.8 KLD</p> <p>2) Quantity to be <b>recycled</b>: 0 KLD</p> <p>3) Total <b>fresh water</b> requirement: 23.8 KLD</p>				

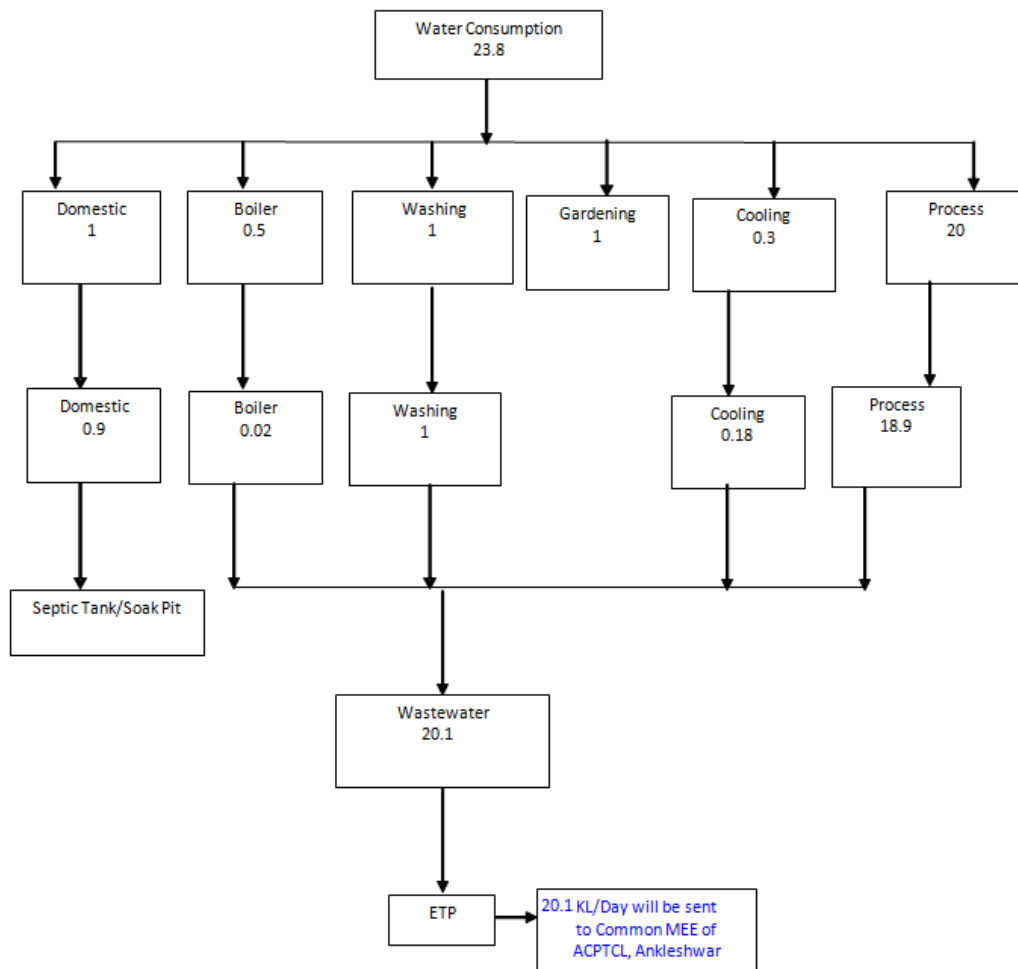
iii	<b>Waste water generation (KLD)</b>				
	Category	Existing KLD	Proposed (Additional) KLD	Total after Expansion KLD	Remarks
	(A) Domestic	0.4	0.5	0.9	
	(B) Industrial				
	Process	1.82	17.08	18.9	
	Washing	0.1	0.9	1.0	
	Boiler	0.02	0	0.02	
	Cooling	0.06	0.12	0.18	
	Others	Nil	Nil	Nil	
	<b>Total Industrial waste water</b>	<b>2.0</b>	<b>18.1</b>	<b>20.1</b>	
iv	Treatment facility within premises with <b>capacity [For existing and Proposed]</b> [In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..				
	ETP DETAILS				
	<b>M/s. Maharshee Laboratories Pvt. Ltd. (Unit-1)</b> shall have an Effluent treatment plant consisting of primary unit. The details of ETP are as follows:				
	<b>Stream I (Low COD &amp; TDS Stream) = 20.1 KL/Day</b>				
	First all non-toxic and biodegradable streams (low & medium COD & TDS) of wastewater shall pass through Screen Chamber where floating material shall be removed with help of Screen. Then effluent shall be passed through Oil & Grease Removal Tank. Automatic mechanical Oil Skimmer shall be provided in the OGRT to remove floating oil and grease from the wastewater to Oil & Grease Collection Tank. Then effluent shall be collected in Collection cum Equalization tank-1. Pipe grid is provided at bottom of the CET-01 to keep all suspended solids in suspension and to provide proper mixing. 2 nos. of Air Blowers (1W+1 stand-by) shall supply air through to pipe grid.				
	Then after, equalized wastewater shall be pumped to Neutralization Tank-1 where the continuous addition and stirring of Caustic solution is done to maintain neutral pH of wastewater from Caustic Dosing Tanks as per requirement by gravity. Then after, neutralized wastewater shall go to Flash Mixer-1 by gravity. Alum and Polyelectrolyte shall be dosed from Alum Dosing Tank and Polyelectrolyte Dosing Tank respectively by gravity into FM-1 to carry out coagulation by using a Flash Mixer. Then after, coagulated wastewater shall be settled in Primary Clarifier. Treated effluent will be sent to CMEE of M/s. ACPTCL, Ankleshwar for further treatment.				
v	Mode of Disposal & Final meeting point				

Domestic:	0.9 KL/Day domestic wastewater will be disposed through Septic Tank/Soak Pit.
Industrial:	1) Existing Industrial Effluent (12.4 KL/Day) will be treated in ETP (neutralized) and then disposed off to CETP of M/s. PETL, Panoli for further treatment and disposal. 2) Additional Industrial Effluent of Low COD & TDS Stream (12.4 KL/Day) will be treated in ETP (neutralized) and then disposed off to Common MEE of M/s ACPTCL, Ankleshwar for further treatment and disposal.

vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc. Name of Common facility
	Common MEE membership of M/s. ACPTCL, Ankleshwar.
	Membership of Common facility (CF)
	Unit has obtained Common MEE membership of M/s. ACPTCL, Ankleshwar vide letter no ACPTCPL/1300000111/2017-18/71 dated 13/11/2017.

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

All figures are in KL/Day



vii Reuse/Recycle details (KLD)

	[Source of reuse & application area]																					
	<p><b>Total reuse 0 KLD</b></p> <table border="1"> <thead> <tr> <th>Source of waste water for reuse with quantity in KLD</th> <th>Application area with quantity in KLD</th> <th>Remarks regarding feasibility to reuse i.e. w/w characteristics (COD, BOD, TDS etc.)</th> </tr> </thead> <tbody> <tr> <td colspan="3">We shall explore the possibility of recycle or reuse</td> </tr> </tbody> </table>	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.)	We shall explore the possibility of recycle or reuse																	
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ii	<p>Process gas i.e. Type of pollutant gases (SO<sub>2</sub>, HCl, NH<sub>3</sub>, Cl<sub>2</sub>, NO<sub>x</sub> etc.)</p> <p><b>Existing &amp; Proposed</b></p>																					
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	us waste	(Name of the Activity, Product etc.)	ule as per HW Rules.	Exist ing	Propo sed	Total	
1	ETP Sludge	ETP	Sch-I/ 35.3	0.48	53.52	54	Collection, Storage, Transportation & Sent to TSDF site of M/s. PSWML, Panoli or M/s. BEIL, Ankleshwar
2	Used Oil	Equipment and Machinery	Sch-I/ 5.1	--	180	180	Collection, Storage, Transportation & Sale to registered re-processor or used for lubrication within premises
3	Spent Carbon	Process (Cetirizine Dihydrochlorid e)	Sch-I/ 28.3	--	30	30	Collection, Storage, Transportation & co-processing in cement industries or Send to M/s. BEIL, Ankleshwar for incineration
4	Discarde d Containers	Raw material and Storage	Sch-I/ 33.1	1.08	9.72	10.8	Collection, Storage, Transportation, Decontamination & given to registered vendors
5	Discarde d Liners	Raw material and Storage	Sch-I/ 33.1	2.4	15.6	18	Collection, Storage, Transportation, Decontamination & given to registered vendors
6	Distillatio n Residue	Distillation Unit	Sch-I/ 36.1	0.01	119.9 9	120	Collection, Storage, Transportation & Sent to Co-Processing in Cement Industries or Common Incineration of M/s. BEIL, Ankleshwar
7	Ammoni um	Scrubber	Sch-I/ 28.1	-	300	300	Collection, Storage & Sold to re-processors or end

		Sulphate						users having permission under Rule-9
	8	Sodium Bromide	Process (Diphenhydramine Hydrochloride)	Sch-II/ B-36	-	180	180	
	9	Sodium Sulfite	Scrubber	Sch-I/ 28.1	-	540	540	
	10	Sodium Chloride	Process (Pheniramine Maleate)	Sch-I/ 28.1	-	240	240	Collection, Storage and sent to ETP.
	11	Spent Solvent	Process	Sch-I/ 28.6	-	500	500	Collection, Storage, Re-process and Reuse within premises.
-								
ii	Membership details of <b>TSDF, CHWIF</b> etc. <b>(For HW management)</b>			Company has membership of TSDF of M/s. BEIL, Ankleshwar vide letter No. BEIL/ANK/2016 dated 23/12/2016.				
iii	Details of Non-Hazardous waste & its disposal(MSW and others)			No such waste will be generated.				
<b>G</b>	<b>Solvent management, VOC emissions etc.</b>							
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents							
		<b>Name of Solvent</b>	<b>Total Input (Kg)</b>	<b>Qty. of Recovered Solvent (Kg)</b>	<b>Qty. of Losses (Kg)</b>	<b>% Recovery</b>	<b>% Losses</b>	
		Acetone	365	360	5	98.63	1.37	
		Toluene	9454	8630	824	91.28	8.72	
		IPA	3320	3085	235	92.92	7.08	
		Methanol	2450	2310	140	94.29	5.71	
		Ethyl Acetate	1100	1030	70	93.64	6.36	
		MCB	500	470	30	94	6	
		DMF	140	130	10	92.86	7.14	
ii	<b>VOC emission sources and its mitigation measures</b>							
	<b>During operation stage</b> , 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.
- Breather valves will be provided on solvent tanks.

- During the meeting dated 13/11/2018, technical presentation made by project proponent.
- Salient features of the project submitted by PP are as mentioned above.

**Observation:**

- This proposal is for expansion of existing unit and for now proposes for synthetic organic chemical product. This unit is having valid CC&A for existing unit. Copy of CC&A, CC&A compliance report is

submitted.

- Total water consumption will be 23.8 KLD. Total wastewater generation will be 20.1 KLD. After proposed expansion, Industrial effluent will be treated in ETP and treated effluent will be sent to Common MEE of M/s ACPTCL for further treatment and disposal.
- Natural gas will be used as fuel for boiler.
- Adequate APCM will be provided with process vents.
- Hazardous waste management will be as per the HW Rules.
- 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, O3, Pb, NH3, CO, C6H6, BaP, As, Ni, HCl, Cl2, 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 ISCST3. 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).
- The results of Ground Water Sample are found to be within the norms prescribed in GPCB Standards. The results of Surface Water Samples are found to be within the norms prescribed in GPCB Standards.
- 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.

**Discussions & Conclusion:**

The proposal is for expansion. Compliance of CCA conditions, action taken by GPCB were deliberated at length. PP mentioned that there is no SCN or closure issued by the GPCB. It is further noted that PP proposes to follow zero liquid discharge for existing as well as proposed industrial waste water generation. PP mentioned that existing steam boiler of 600 kg/hr capacity will be replaced by new steam boiler having capacity of 1000 kg/hour. Referring to the product profile, PP mentioned that spent HCL is generating from the product Cyproheptadine HCl which will be dropped hence there will not be generation of spent HCL. Committee deliberated for the hazardous chemicals storage methods with incompatibility criteria to prevent safety hazards. Further committee asked PP to submit the details of environmental cost benefits addressed under the TOR 44 under Air emission chapter of Rs 1,40,000 by pursuing the best available technology and revised EMP addressing budgetary provision of capital and recurring cost with details of each components. PP was asked to conduct need based analysis for following CER and submit the detailed outlay of CER for

the coming years after performing need based analysis. Committee deliberated the TOR issued to the PP.

**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.**

1. Addendum to EIA mentioning surrendering of Cyproheptadine HCl and its associated impacts.
2. Revised EMP with details of environmental cost benefits addressed under the TOR 44 for Air emission chapter of Rs 1,40,000 by pursuing the best available technology and budgetary provision of capital and recurring cost with details of each components.
3. Need based budgetary outlay of CER as per the OM of MOEF&CC dated 01/05/2018.

8.	IA/GJ/IND2/62351/2017	<b>M/s. Amar Pigments</b> Plot No. 3012-3013 , Phase-III, GIDC, Panoli – 394 116, Dist: Bharuch, Gujarat	Appraisal
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**Project / Activity No.:** 5(f)

**Project status:** Expansion

- PP has submitted online application vide no. IA/GJ/IND2/62351/2017 dated 07/09/2018 for obtaining Environmental Clearance.
- MoEF&CC has issued TOR to PP vide letter no J-11011/92/2017-IA.II(I) vide dated 10/07/2017.
- 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 expansion of synthetic organic chemicals plant and proposed for products as tabulated below:

Sr. No.	Name of the Products	CAS no. /CI no.	Quantity MT/Month			End-use of products
			Existing	Additional Proposed	Total	
1	Pigment Beta Blue	147-14-8	3.5	--	--	In Ink and Paints
2	$\alpha$ -Ph nyl-2 Pyridyl Acetonitrile	5005-36-7	--	40	40	For organic preparation
3	$\alpha$ -Phenyl-2-Pyridyl Acetamide	7251-52-7	--			For organic preparation
4	L-(+) 4-Nitro Tartranilic Acid	60908-35-2	--			For organic preparation
5	9-Methyl-1,2,3,9-Tetrahydro-4H-	27387-31-1	--			For organic preparation

	Carbazol-4-One					
6	2,2',4'-Trichloro Acetophenone	4252-78-2	-			For organic preparation
7	1-(2,4-Dichloro Phenyl)- 2-(1H-Imidazol-yl) Ethanol	24155-42-8	-			For organic preparation
8	Ritanilic Acid	19395-41-6	-			For organic preparation
9	α-Phenyl-2-Piperidyl Acetamide	19395-39-2	-			For organic preparation
10	P-Chloro Benzophenone	134-85-0	-			For organic preparation
11	P-Chlorobenzhydryl Chloride	134-83-8	-			For organic preparation
12	p-Chlorobenzhydryl Piperazine	303-26-4	-			For organic preparation
13	2-[4-(4- Chlorobenzhydryl)-1- Piperazinyl] Ethanol	109806-71-5	-			For organic preparation
14	Lamotrigine	84057-84-1	-			Anticonvulsant
15	Roxithromycin EP/BP	80214-83-1	-			Antibacterial
	<b>TOTAL</b>		<b>3.5</b>	<b>40</b>	<b>40</b>	

- 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 13/11/2018.
- Salient features of the project are as under:

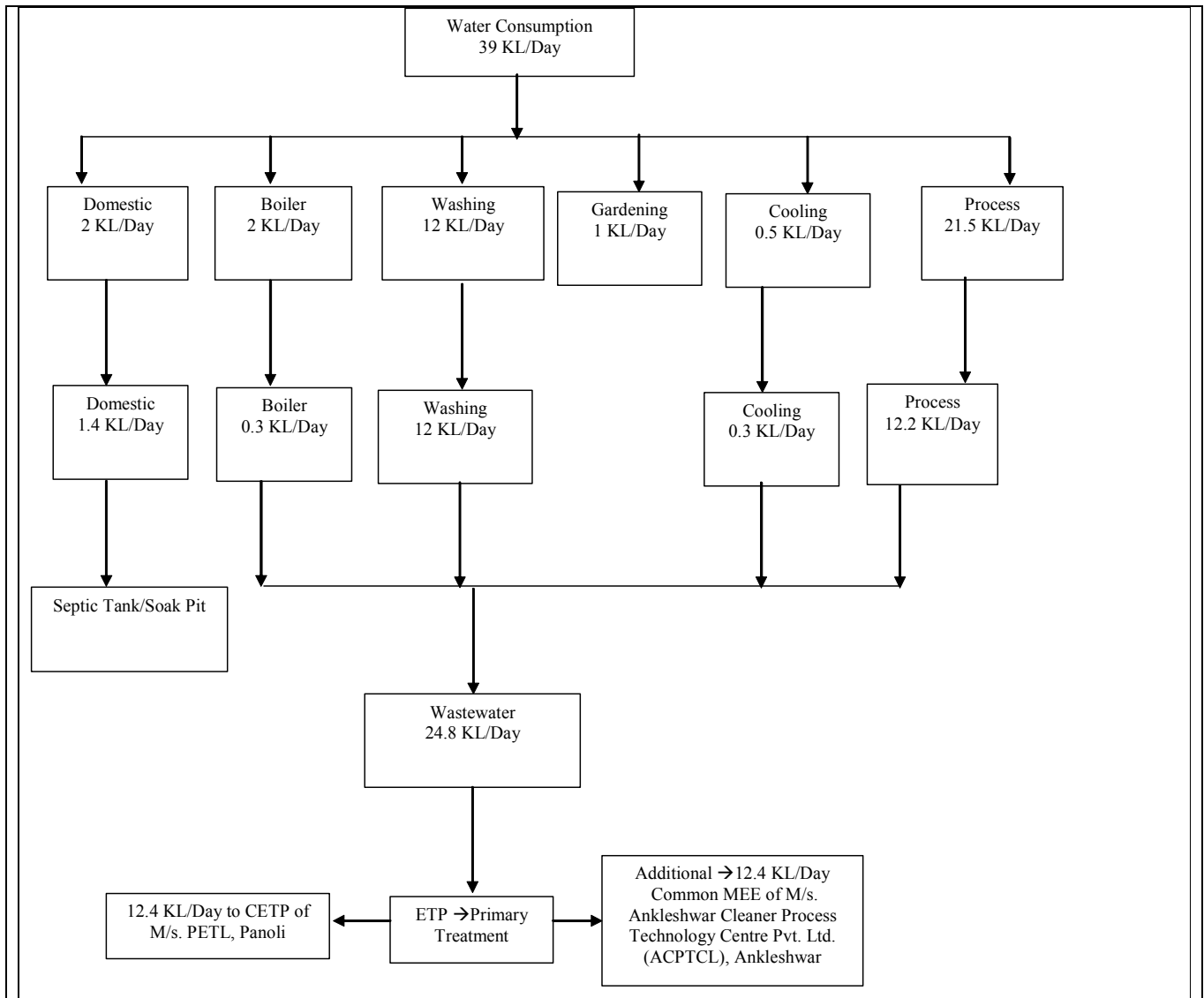
Sr. no.	Particulars	Details
<b>A</b>	<b>Total cost of Proposed Project</b> (Rs. in Crores):	Existing: 3.75 Proposed: 3.75 Total: 7.50
<b>B</b>	<b>Total Plot area</b> ( sq. meter)	Existing: 1000 Sq. m. Proposed: 1000 Sq. m. Total: 2000 Sq. m.
	<b>Green belt area</b> ( sq. meter)	Existing: 160.32 Sq. m. Proposed: 39.68 Sq. m.

		Total: 200 Sq. m.			
<b>C</b>	<b>Employment generation</b>	Existing: 40 Proposed: 10 Total: 50			
<b>D</b>	<b>Water</b>				
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 from GIDC for water supply vide letter no NO/GIDC/DEE/PNL/1357 dated 21/01/2017.			
ii	<b>Water consumption (KLD)</b>				
		<b>Existing KLD</b>	<b>Proposed (Additional) KLD</b>	<b>Total after Expansion KLD</b>	<b>Remarks</b>
	(A) Domestic	1	1	2	
	(B) Gardening	Nil	1	1	
	(C) Industrial				
	Process	1.5	20	21.5	
	Washing	11	1	12	
	Boiler	1.5	0.5	0.2	
	Cooling	Nil	0.5	0.5	
	Others	Nil	Nil	Nil	
	<b>Industrial Total</b>	<b>14</b>	<b>22</b>	<b>36</b>	
	<b>Grand Total (A+B+C)</b>	<b>15</b>	<b>24</b>	<b>39</b>	
	1) <b>Total water requirement</b> for the project: 39 KLD				
	2) Quantity to be <b>recycled</b> : 0 KLD				
	3) Total <b>fresh water</b> requirement: 39 KLD				
iii	<b>Waste water generation (KLD)</b>				
	Category	<b>Existin g KLD</b>	<b>Proposed (Additional) KLD</b>	<b>Total after Expansion KLD</b>	<b>Remarks</b>
	(A) Domestic	0.7	0.7	1.4	
	(B) Industrial				
	Process	1.2	11	12.2	
	Washing	11	1	12	

	Boiler	0.2	0.1	0.3	
	Cooling	Nil	0.3	0.3	
	Others	Nil	Nil	Nil	
	<b>Total Industrial waste water</b>	<b>12.4</b>	<b>12.4</b>	<b>24.8</b>	
iv	Treatment facility within premises with <b>capacity [For existing and Proposed]</b> [In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..				
	<p><b>M/s. Amar Pigments</b> shall have an Effluent treatment plant consisting of primary unit. The details of ETP are as follows:</p> <p><b>DETAILS OF EXISTING ETP</b></p> <p><b>STREAM I (EXISTING LOW COD &amp; TDS STREAM) = 12.4 KL/DAY</b></p> <p>First all non-toxic and biodegradable streams (low &amp; medium COD &amp; TDS) of wastewater shall pass through Oil &amp; Grease Trap(OGT-01)where floating oil and grease shall be removed from the wastewater from the top. Then effluent shall be collected in Equalization cum Neutralization Tank-1(ENT-01) where addition and stirring of Caustic solution is done to maintain neutral pH of wastewater from Caustic Dosing Tanks as per requirement by gravity. Mixer is provided in the Tank all suspended solids in suspension and to provide proper mixing. Then after, equalized wastewater shall be pumped to Flash Mixer-1 (FM-01) by gravity. Alum and Polyelectrolyte shall be dosed from Alum Dosing Tank and Polyelectrolyte Dosing Tank respectively by gravity into FM-1 to carry out coagulation by using a Flash Mixer. Then after, coagulated wastewater shall be settled in Primary Settling Tank. Clear supernatant is collected in Treated Effluent Sump-1 (TES-01) before sent to CETP of PETL, Panoli for further treatment.</p> <p><b>DETAILS OF PROPOSED ETP</b></p> <p><b>Stream II (Low COD &amp; TDS Stream) = 12.4 KL/Day</b></p> <p>Additional non-toxic streams of wastewater shall be collected Equalization cum Neutralization Tank-2 (ENT-02) where caustic is added from Caustic Dosing Tank to maintain neutral pH of wastewater. Mixer is provided in ENT-01 to keep all suspended solids in suspension and to provide proper mixing.</p> <p>Then after, equalized wastewater shall be pumped to Flash Mixer-2where Alum and Polyelectrolyte shall be dosed from Alum Dosing Tank and Polyelectrolyte Dosing Tank respectively by gravity to carry out coagulation by using a Flash Mixer. Then after, coagulated wastewater shall be allow to settle in Primary Settling Tank-2(PST-02). Clear supernatant is collected in Treated Effluent Sump - 02 (TES-02) before sent to common MEE facility of M/s ACPTCL for further treatment and disposal.</p>				
v	Mode of Disposal & Final meeting point				
	Domestic:	1.4 KL/Day domestic wastewater will be disposed through Septic Tank/Soak Pit.			
	Industrial:	1) Existing Industrial Effluent (12.4 KL/Day) will be treated in ETP (neutralized) and			



	<p>then disposed off to CETP of M/s. PETL, Panoli for further treatment and disposal.</p> <p>2) Additional Industrial Effluent of Low COD &amp; TDS Stream (12.4 KL/Day) will be treated in ETP (neutralized) and then disposed off to Common MEE of M/s ACPTCL, Ankleshwar for further treatment and disposal.</p>
vi	<p>In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc.</p> <p>Name of Common facility</p> <p>CETP membership of M/s. PETL, Panoli and Common MEE membership of M/s. ACPTCL, Ankleshwar.</p> <p>Membership of Common facility (CF)</p> <p>Unit has obtained membership of CETP of M/s. PETL, Panoli vide letter no. PETL/17/2016 dated 29/12/2016 and Common MEE membership of M/s. ACPTCL, Ankleshwar vide letter no ACPTCPL/1300000111/2018-19/12 dated 13/05/2018.</p>
vii	<b>Simplified water balance diagram with reuse / recycle of waste water</b>



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

**Total reuse 0 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.)
We shall explore the possibility of recycle or reuse		

**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							
-							
	<b>Sr. no.</b>	<b>Source of emission With Capacity</b>	<b>Stack Height (meter)</b>	<b>Type of Fuel</b>	<b>Quantity of Fuel MT/Day</b>	<b>Type of emissions i.e. Air Pollutants</b>	<b>Air Pollution Control Measures (APCM)</b>
	1	Boiler (1 TPH)	15	Natural Gas	700 Nm <sup>3</sup> /day	SPM, SO <sub>2</sub> , NO <sub>x</sub>	Adequate Stack Height
	2	DG Set (62 KVA)	8	LDO	500 Lit/day	SPM, SO <sub>2</sub> , NO <sub>x</sub>	Adequate Stack Height
-							
ii	Process gas i.e. Type of pollutant gases (SO <sub>2</sub> , HCl, NH <sub>3</sub> , Cl <sub>2</sub> , NO <sub>x</sub> etc.)						
<b>Existing &amp; Proposed</b>							
-							
	<b>Sr. no.</b>	<b>Specific Source of emission (Name of the Product &amp; Process)</b>	<b>Type of emission</b>	<b>Stack/Vent Height (meter)</b>	<b>Air Pollution Control Measures (APCM)</b>		
	1	Process Vent-1 (Chlorination)	HCl	11	Two Stage Water + Alkali Scrubber		
	2	Process Vent-2 (Amination)	NH <sub>3</sub>	11	Acid Scrubber		
	<ul style="list-style-type: none"> <li>- Worst Case Scenario for HCl gas emission is p-CHLORO BENZOPHENONE</li> <li>- Worst Case Scenario for NH<sub>3</sub> gas emission is α-Phenyl-2-Pyridyl Acetonitrile</li> </ul>						
iii	<b>Fugitive emission</b> details with its mitigation measures.						
<b>Following measures will be adopted to prevent and control fugitive emissions...</b>							
<ol style="list-style-type: none"> <li>1. Airborne dust at all transfers operations/ points will be controlled either by spraying water or providing enclosures.</li> <li>2. Raw materials loading and unloading will be done in covered area</li> <li>3. Care will be taken to store construction material properly to prevent fugitive emissions, if any.</li> <li>4. Regular maintenance of valves, pumps, flanges, joints and other equipment will be done to</li> </ol>							

	<p>prevent leakages and thus minimizing the fugitive emissions of VOCs.</p> <ol style="list-style-type: none"> <li>5. Entire process will be carried out in the closed reactors with proper maintenance of pressure and temperature.</li> <li>6. Periodic monitoring of work area will be carried out to check the fugitive emission.</li> <li>7. Breather valves will be provided on solvent tanks.</li> <li>8. To eliminate chances of leakages from glands of pumps, mechanical seal will be provided at all solvent pumps.</li> <li>9. Close feeding system will be provided for centrifuges. Centrifuge and filtrate tank vents will be connected to vent chillers.</li> <li>10. Minimum number of flanges, joints and valves in pipelines.</li> <li>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.</li> <li>12. Adequate ventilation will be provided.</li> <li>13. Periodic monitoring of work area will be carried out to check the fugitive emission as per the norms of Gujarat Factory Rules.</li> </ol>																											
<b>F</b>	<p><b>Hazardous waste</b> (as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016. <b>Existing &amp; Proposed</b></p>																											
<b>i</b>	<table border="1"> <thead> <tr> <th rowspan="2">Sr. no.</th> <th rowspan="2">Type/ Name of Hazardous waste</th> <th rowspan="2">Specific Source of generation (Name of the Activity, Product etc.)</th> <th rowspan="2">Category and Schedule as per HW Rules.</th> <th colspan="3">Quantity (MT/Annum)</th> <th rowspan="2">Management of HW</th> </tr> <tr> <th>Existing</th> <th>Proposed</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ETP Waste</td> <td>ETP</td> <td>Sch-I/ 35.3</td> <td>0.20</td> <td>119.8</td> <td>120</td> <td>Collection, Storage, Transportation &amp; Sent to TSDF site of M/s. PSWML, Panoli or M/s. BEIL, Ankleshwar</td> </tr> <tr> <td>2</td> <td>Used Oil</td> <td>Equipment and Machinery</td> <td>Sch-I/ 5.1</td> <td>20.04</td> <td>195.96</td> <td>216</td> <td>Collection, Storage, Transportation &amp; Sale to registered re-</td> </tr> </tbody> </table>	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	Sch-I/ 35.3	0.20	119.8	120	Collection, Storage, Transportation & Sent to TSDF site of M/s. PSWML, Panoli or M/s. BEIL, Ankleshwar	2	Used Oil	Equipment and Machinery	Sch-I/ 5.1	20.04	195.96	216	Collection, Storage, Transportation & Sale to registered re-
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	Sch-I/ 35.3	0.20	119.8	120	Collection, Storage, Transportation & Sent to TSDF site of M/s. PSWML, Panoli or M/s. BEIL, Ankleshwar																					
2	Used Oil	Equipment and Machinery	Sch-I/ 5.1	20.04	195.96	216	Collection, Storage, Transportation & Sale to registered re-																					

							processor or used for lubrication within premises
3	Spent Catalyst	Process ( $\alpha$ -Phenyl-2-Piperidyl Acetamide)	Sch-I/ 28.2	--	4.8	4.8	Collection, Storage, Transportation and sent to registered regenerator
4	Empty Bags	Raw Material and Storage	Sch-I/ 33.1	16.2	25.8	42	Collection, Storage, Transportation, Decontamination & sale to registered vendors
5	Discarded Containers	Raw Material and Storage	Sch-I/ 33.1	--	3.6	3.6	Collection, Storage, Transportation, Decontamination & sale to registered vendors
6	Discarded Liners	Raw Material and Storage	Sch-I/ 33.1	--	6	6	Collection, Storage, Transportation, Decontamination & sale to registered vendors
7	Distillation Residue	Distillation Unit	Sch-I/ 36.1	--	96	96	Collection, Storage, Transportation & Sent to Cement industries for Co-Processing or Common Incineration of M/s. SEPPL, Dahej or M/s. BEIL, Ankleshwar
8	Aluminium Chloride Soln. (25%)	Process (2, 2', 4'-Trichloro Acetophenone)	Sch-II/ B-10	--	960	960	Collection, Storage & Sold to end users having permission under Rule-9
9	Ammonia	Scrubber	Sch-I/ 33.1	--	168	1680	

	um Sulphate		28.1		0		
10	Dil. HCl. (23%)	Scrubber	Sch-II/ B-15	--	660	660	Collection, Storage and Sent to ETP
11	Sodium Chloride	Process (p-Chlorobenz hydryl Piperazine)	Sch-I/ 28.1	--	864	864	Collection, Storage and Sent to ETP
12	Spent Solvent	Process	Sch-I/ 28.6	--	600	600	Collection, Storage, Re-process and Reuse within premises
13	Spent Carbon	Process (DL-Ritanilic Acid)	Sch-I/ 28.3	--	1.08	1.08	Collection, Storage, Transportation & co-processing in cement industries or Send to TSDF of M/s. PSWML, Panoli or M/s. SEPL, Jambusar or M/s. BEIL, Ankleshwar
-							
ii	Membership details of <b>TSDf, CHWIF</b> etc. <b>(For HW management)</b>			Company has membership of TSDf of M/s. BEIL, Ankleshwar vide letter No. BEIL/ANK/2016 dated 23/12/2016.			
iii	Details of Non-Hazardous waste & its disposal(MSW and others)			No such waste will be generated.			
<b>G</b>	<b>Solvent management, VOC emissions etc.</b>						
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents						
	<b>Name of Solvent</b>	<b>Total Input (Kg)</b>	<b>Qty. of Recovered Solvent (Kg)</b>	<b>Qty. of Losses (Kg)</b>	<b>% Recovery</b>	<b>% Losses</b>	
	Toluene	3570	3380	190	94.68	5.32	
	IPA	300	270	30	90.00	10.00	
	Methanol	2245	2135	110	95.10	4.90	
	EDC	600	540	60	90.00	10.00	
	MDC	600	540	60	90.00	10.00	

	TEA	400	380	20	95.00	5.00	
	Acetic Acid	660	600	60	90.91	9.09	
	Iso Butanol	400	370	30	92.50	7.50	
ii	<b>VOC emission</b> sources and its mitigation measures						
	<p><b>During operation stage</b>, 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.</p> <ul style="list-style-type: none"> <li>• Solid raw material charging will be done through closed system.</li> <li>• Entire process will be carried out in the closed reactors with proper maintenance of pressure and temperature.</li> <li>• Close feeding system will be provided for centrifuges. Centrifuge and filtrate tank vents will be connected to vent chillers.</li> <li>• 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.</li> <li>• Emphasis will be given to solvent management/solvent loss prevention.</li> <li>• Control by having proper scrubbing system.</li> <li>• Condenser to trap VOC.</li> <li>• 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.</li> <li>• Proper maintenance schedule will be adhered to avoid emissions through flange joints, pump seals etc.</li> <li>• Minimum number of flanges, joints and valves in pipelines.</li> <li>• Proper gland packing will be maintained for pumps and valves and to the extent possible pumps with mechanical seal.</li> <li>• All the raw materials will be pneumatically transfer to the reactor.</li> <li>• All rotating equipments like pumps will be installed with mechanical seals to arrest any sort of emissions.</li> <li>• 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.</li> <li>• Periodic monitoring of work area will be carried out to check the fugitive emission.</li> <li>• Solvent tank vents will be connected to vent chillers.</li> <li>• Adequate ventilation will be provided.</li> <li>• Airborne dust at all transfers operations/ points will be controlled either by spraying water or</li> </ul>						

providing enclosures.

- Breather valves will be provided on solvent tanks.

- During the meeting dated 13/11/2018, technical presentation made by project proponent.
- Salient features of the project submitted by PP are as mentioned above.

**Observation:**

- This proposal is for new unit proposes for a synthetic organic chemical product.
- Total water consumption will be 39 KLD. Total wastewater generation will be 24.8 KLD. Existing 12.4 KLD will be treated in ETP and sent to CETP of M/s. PETL, Panoli. Additional quantity of 12.4 KLD will be treated in ETP and sent to CMEE of M/s. ACPTCL.
- Natural gas will be used as fuel for proposed boiler.
- Two stage water scrubbers will be provided as APCM with process vents.
- Hazardous waste management will be as per the HW Rules 2016.

**Discussions & Conclusion:**

The proposal is for expansion. Compliance of CCA conditions, action taken by GPCB were deliberated at length. PP mentioned that there was a closure direction for making non-consented product during January 2016 which was revoked during March 2016. PP has proposed to discontinue Pigment beta blue of 3.5 MTPM and informed committee to follow zero liquid discharge for entire quantity of industrial effluent after treatment. Committee deliberated the TOR issued to the PP.

**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.**

1. Addendum to EIA mentioning total zero liquid discharge details for the industrial effluent of 24.80 KLPD instead of partly (12.40 KLPD) discharge to CETP and its associated changes in environmental impacts with mitigation measures.
2. Revised EMP with details of environmental cost benefits and budgetary provision of capital and recurring cost with details of each components.
3. Need based budgetary outlay of CER as per the OM of MOEF&CC dated 01/05/2018.

9.	SIA/GJ/IND2/28469/2018	<b>Amita Chemical Industries</b> Plot No.- 4784, GIDC ESTATE, Ankleshwar Bharuch District, Gujarat-393002	Screening and scoping
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**Project / Activity No.:** 5(f)

**Project status:** Expansion



- This office has received an application vide their online proposal no. SIA/GJ/IND2/28469/2018 dated 29/08/2018 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 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 product
			Existing	Proposed	Total	
1	Alpha Blue	147-14-8	7	-2	5	Used in Textile Printing.
2	Beta Blue	147-14-8	7	8	15	
3	Azo pigments (Orange / Red / Yellow)		Nil	20	20	
	Pigment Red – 2	6041-94-7				
	Pigment Red – 3	2525-85-6				
	Pigment Red – 4	2814-77-9				
	Pigment Red – 5	6410-41-9				
	Pigment Red – 8	6410-30-6				
	Pigment Red – 12	6410-32-8				
	Pigment Red – 31	6448-96-0				
	Pigment Red – 32	6410-29-3				
	Pigment Red 48 – 1	7585-41-3				
	Pigment Red 48 – 2	7026-61-2				
	Pigment Red 48 – 3	15782-05-5				
	Pigment Red 48 – 4	5280-66-0				
	Pigment Red 53 – 1	5160-02-1				
	Pigment Red 57 – 1	5281-04-9				
	Pigment Red – 112	6535-46-2				
	Pigment Red – 146	5280-68-2				
	Pigment Red – 170	2786-76-7				
	Pigment Red – 210	61932-63-6				
	Pigment Orange – 5	3468-63-1				
	Pigment Orange – 13	3520-72-7				
	Pigment Orange – 34	15793-73-4				

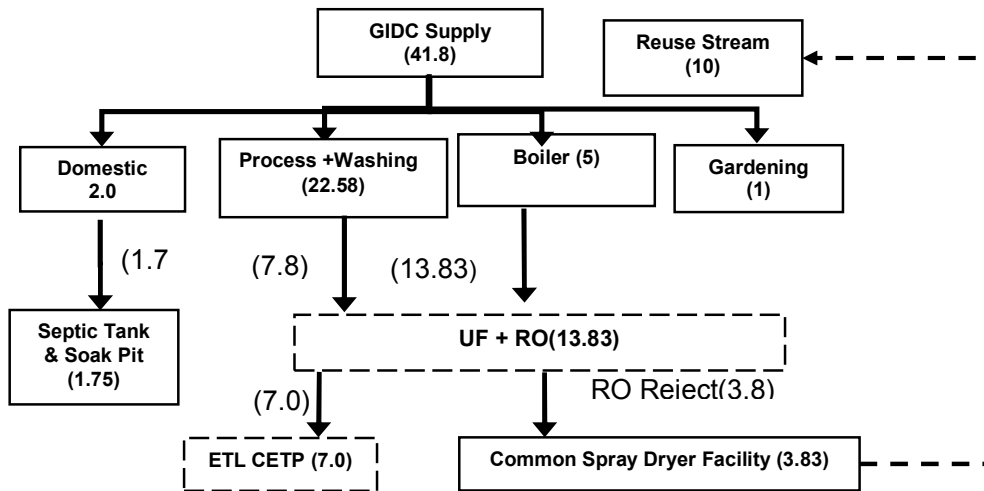
	Pigment Yellow – 1	2512-29-0				
	Pigment Yellow – 3(10G)	6486-23-3				
	Pigment Yellow - 12	6358-85-6				
	Pigment Yellow – 13	5102-83-0				
	Pigment Yellow – 14	5468-75-7				
	Pigment Yellow – 17	4531-49-1				
	Pigment Yellow – 62	12286-66-7				
	Pigment Yellow – 65	6528-34-3				
	Pigment Yellow – 74	6358-31-2				
	Pigment Yellow – 83	5567-15-7				
	Pigment Yellow – 168	71832-85-4				
	Pigment Yellow – 183	65212-77-3				
	Pigment Yellow – 191:1	129423-54-7				
	Total		14	26	40	

- 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 05/09/2018.
- The project proponent along with their expert /consultant **M/s. Ramans Enviro Services Pvt. Ltd, Ahmedabad** attended the meeting and made presentation before the committee
- Salient features of the project are as under:

Sr. no	Particulars	Details
<b>A</b>	Total <b>cost of Proposed</b> Project (Rs. in Crores):	Existing:0.33 Proposed:1.2 Total: 1.5
<b>B</b>	<b>Total Plot area</b> ( sq. meter)	Existing: 1000 .Sq. m. Proposed: Nil.Sq. m. Total: 1000 Sq. m.
	<b>Green belt area</b> ( sq. meter)	Since our unit is located within GIDC estate, development of green belt within premises is not possible. However, we

		will actively participate in community green belt development.			
<b>C</b>	<b>Employment generation</b>	Existing:20 Proposed:5 Total:25			
<b>D</b>	<b>Water</b>				
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	GIDC Supply			
	Status of permission from the concern authority.	Will be incorporated in REIA report			
ii	<b>Water consumption (KLD)</b>				
		<b>Existing KLD</b>	<b>Proposed (Additional) KLD</b>	<b>Total after Expansion KLD</b>	Remarks
	(A) Domestic	0.2	1.8	2.0	
	(B) Gardening	0	1	1	
	(C) Industrial				
	Process	9.0	13.58	22.58	10 KLD treated water will be reused in process & washing.
	Washing				
	Boiler	0.8	4.2	5.0	
	Cooling	--	--	--	
	Others	--	--	--	
	<b>Industrial Total</b>	9.8	17.78	27.58	
	<b>Grand Total (A+B+C)</b>	10	20.58	30.58	
	<p>1) <b>Total water requirement</b> for the project: 30.58KLD</p> <p>2) Quantity to be <b>recycled</b>:10 KLD</p> <p>3) Total <b>fresh water</b> requirement: 20.58 KLD</p>				
iii	<b>Waste water generation (KLD)</b>				
	Category	<b>Existing KLD</b>	<b>Proposed (Additional) KLD</b>	<b>Total after Expansion KLD</b>	Remarks
	(A) Domestic	0.15	1.6	1.75	
	(B) Industrial				
	Process	7.6	13.53	21.13	Net disposal will be 11.6

	Washing				KLD.
	Boiler	0.2	0.3	0.5	7.8 KLD will disposed to CETP & 3.83 KLD will be disposed through common spray drier of Abad Group of companies. 10 KLD will be reuse in the plant.
	Cooling	--	--	--	
	Others	--	--	--	
	<b>Total Industrial waste water</b>	7.8	13.83	21.63	
iv	Treatment facility within premises with <b>capacity [For existing and Proposed]</b> [In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..]				
	<b>Present System:</b> The present system consisting of 1. Collection cum equalization cum neutralization tank 2. Plate & frame type of filter press (1200 X 1200 X 48 plates) 3. Final treated collection tank for sending effluent to ETL				
	<b>Proposed System:</b> Proposed system will include secondary & tertiary treatment followed by UF+RO.RO reject will be disposed through common spray drier of Abad Group of Companies.				
v	Mode of Disposal & Final meeting point				
	Domestic:	Domestic sewage will continue to be disposed to septic tank/Soak pit system.			
	Industrial:	<ul style="list-style-type: none"> <li>● The currently consented wastewater quantity (@ 7.8 KLD) will continue to be subjected to primary treatment followed by disposal to CETP of ETL.</li> <li>● The additional wastewater quantity @ 13.83 KLD will be subjected to primary and secondary treatment, followed by tertiary treatment through ultrafiltration and RO.</li> <li>● The final treated water from the UF+RO, @ 10.0 KLD will be reused back within the plant.</li> <li>● Balance concentrate from the treatment, @ 3.83 KLD will be collected and sent to common spray dryer facility.</li> </ul>			
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc.				
	Name of Common facility				
	➤ Enviro Infrastructure Limited, Ankleshwar				
	Membership of Common facility (CF)				
	<b>(For waste water treatment)</b>				
vii	<b>Simplified water balance diagram with reuse / recycle of waste water</b>				



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

**Total reuse:10 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.)
10 KLD secondary treated wastewater followed by ACF,PSF & UF+RO	To be mixed with fresh water being received from GIDC for various uses in manufacturing process and Washing:18.5 KLD	COD: Practically Nil BOD: Practically Nil TDS:100-200 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.	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 (1 TPH)	11	Natural Gas	100 m3/hr	PM :150mg/NM3 SO2:100 ppm NOx:50 ppm	--	
	2	Thermic Fluid Heater (6 lakh kcal/hr)	6	Natural Gas			--	
-								
ii	Process gas i.e. Type of pollutant gases (SO <sub>2</sub> , HCl, NH <sub>3</sub> , Cl <sub>2</sub> , NO <sub>x</sub> etc.) <b>Existing &amp; Proposed</b>							
-								
	<b>Sr. no.</b>	<b>Specific Source of emission (Name of the Product &amp; Process)</b>	<b>Type of emission</b>	<b>Stack/Vent Height (meter)</b>	<b>Air Pollution Control Measures (APCM)</b>			
	1	Air Classifier Mill Pulverizer)	PM	07	In-built bag Filter			
	2	Common fume extraction hood with reaction vessel	NOx	07	Caustic Scrubber			
-								
iii	<b>Fugitive emission</b> details with its mitigation measures.							
No fugitive emissions are envisaged due to proposed expansion project.								
<b>F</b>	<b>Hazardous waste</b> (as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.) <b>Existing &amp; Proposed</b>							
i								
	<b>Sr. no.</b>	<b>Type/Name of Hazardous waste</b>	<b>Specific Source of generation (Name of the Activity, Product etc.)</b>	<b>Category and Schedule as per HW Rules.</b>	<b>Quantity (MT/Annun)</b>			<b>Management of HW</b>
					Existin g	Propose d	Tota l	
	1	Discarded	Raw	33.1	1	4	5	Collection, storage,

	containers / bags / liners	Material					transportation and disposal to authorized recycler.
2	ETP Sludge	ETP Plant	35.1	--	50	50	Collection, storage, transportation and disposal at TSDF.
3	Used Oil	Plant & Machinerie s	5.1	0.07	7.63	7.7	Collection, storage, transportation and disposal to authorized recycler.
4	Spent Sulfuric Acid	Mfg. Process	26.3	960 KL	-240 KL	720 KL	Collection, storage, transportation and disposal to authorized recycler
-							
ii	Membership details of <b>TSDF, CHWIF</b> etc. <b>(For HW management)</b>			At present, there is no ETP sludge generation in absence of physio-chemical treatment. However, after expansion membership of TSDF site will be obtained for sludge disposal.			
iii	Details of Non-Hazardous waste & its disposal(MSW and others)			--			
<b>G</b>	<b>Solvent management, VOC emissions</b> etc.						
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents						
	<ul style="list-style-type: none"> <li>Not Applicable</li> </ul>						
ii	<b>VOC emission</b> sources and its mitigation measures						
	<ul style="list-style-type: none"> <li>Not Applicable</li> </ul>						

- During the meeting dated 13/11/2018, technical presentation made by project proponent.
- At present unit is engaged in manufacturing of organic products for which they have obtained CC&A of the Board. The proposal is for expansion of Synthetic Organic Chemicals.
- Salient features of the project submitted by PP are as mentioned above.

**Observation:**

- This proposal is for expansion of existing unit and for now proposes synthetic organic chemical product. This unit is having valid CC&A for existing unit. Copy of CC&A, CC&A compliance report is submitted. PP ensured that there are no court cases pending and no public complaints against the project.

- Total water consumption will be 30.58 KLD. Total wastewater generation will be 21.63 KLD. Existing wastewater quantity (@ 7.8 KLD) will continue to be subjected to primary treatment followed by disposal to CETP of ETL. The additional wastewater quantity @ 13.83 KLD will be subjected to primary and secondary treatment, followed by tertiary treatment through ultrafiltration and RO. The final treated water from the UF+RO, @ 10.0 KLD will be reused back within the plant. Balance concentrate from the treatment, @ 3.83 KLD will be collected and sent to common spray dryer facility
- Natural gas will be used as fuel for boiler and thermic fluid heater.
- Adequate APCM will be provided as APCM with process gas emission.
- Hazardous waste management will be as per the HW Rules 2016.

### **Discussions & Conclusion:**

The proposal is for expansion. Compliance of CCA conditions, action taken by GPCB were deliberated at length. PP mentioned that no closure is issued to the unit. The unit was issued show cause notice dated 28.03.2016 & 20.06.2018 for not obtaining CTE/CCA for installed NG based TFH & for not submitting MOU Copies for spent sulphuric acid & application under rule-9. Further PP mentioned that they have obtained CTE amendment & CCA amendment for the TFH & disposing of spent sulphuric acid to recyclers having permission under Rule 9.

PP mentioned that treated waste water disposal will be 11.6 KLD. Out of 11.60 KLPD, 7.8 KLD will be disposed to CETP & 3.83 KLD will be disposed through common spray drier of **Abad Group** of companies. PP was asked to submit the CCA of Abad Group of companies along with details of spare capacity to accommodate the proposed unit's waste water for spray drying. Rest quantity of 10 KLD will be reused in the plant. Details of flue gas emission, process gas emission with APCM along with Hazardous waste management were deliberated at length.

**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. 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.
2. 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.
3. Enlist all applicable statutory clearances for the proposed project in tabular form.



4. Permission of Board for utilization of spent sulphuric acid for Manganese sulphate production under Rule- 9 of Hazardous Waste Rules-2016.
5. 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.
6. 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.
7. Safety precautions including flame proof electric fittings to be taken to avoid fire hazard during unloading, storage, transportation, handling and processing of Solvents.
8. Submit status of compliance of Environmental norms of existing Common Infrastructure of M/s: Abad group of companies for the following details :
  - a) Compliance of CCA
  - b) Total capacity of the spray dryer.
  - c) Actual load at present (Qualitative and Quantitative – KL per day).
  - d) Spare capacity of spray dryer

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/IND2/29010/2018	<b>M/s. Karunesh Remedies</b> Plot No. 417/2, Phase-II, GIDC Industrial Estate, Panoli-394 116, Tal: Ankleshwar, Dist: Bharuch, Gujarat	Screening and scoping
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**Project / Activity No.:** 5(f)

**Project status:** Expansion

- This office has received an application vide their online proposal no. SIA/GJ/IND2/29010/2018 dated 21/09/2018 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 existing unit engaged in Synthetic Organic Chemicals and now proposes for expansion as tabulated below:

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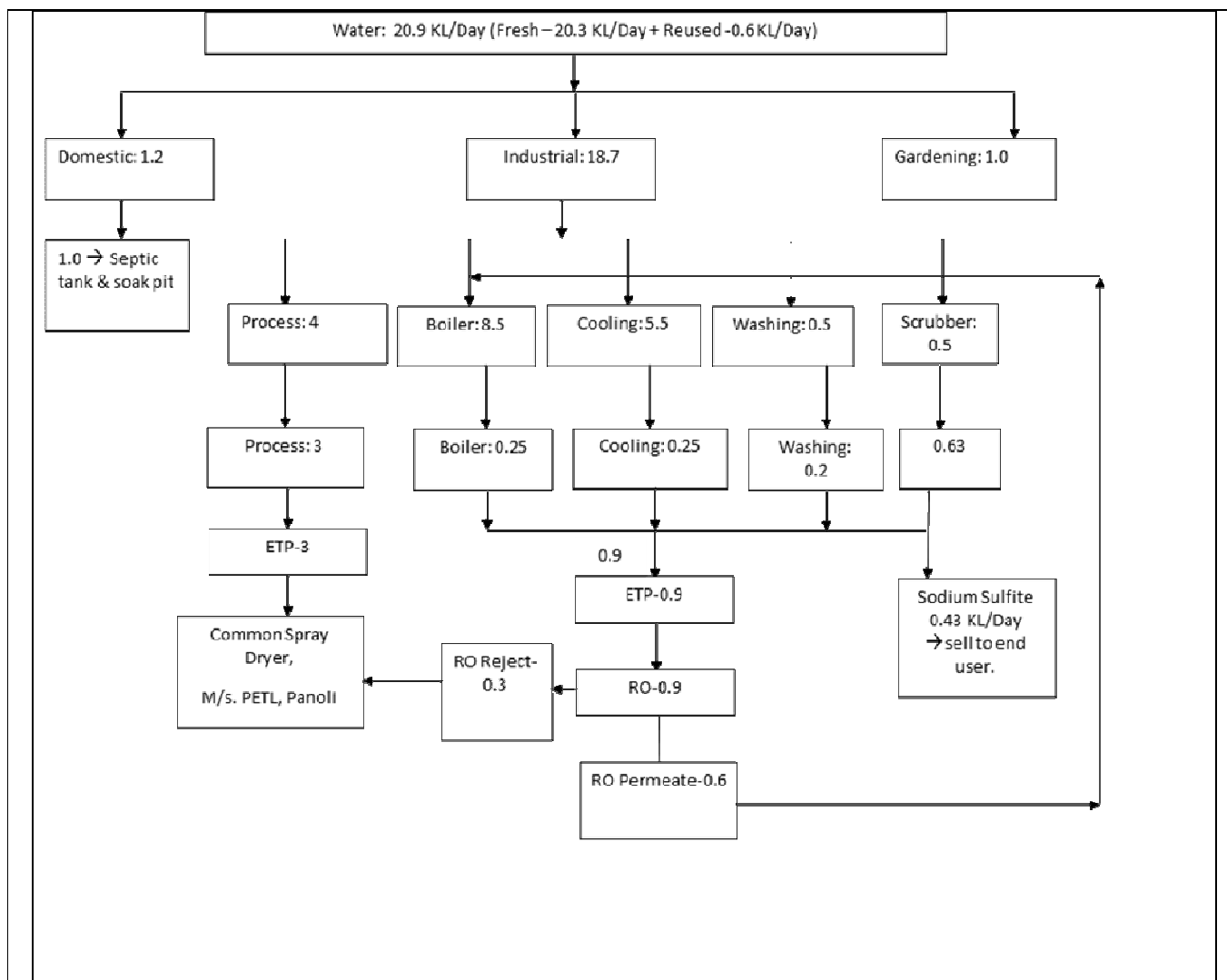
no.		CI no.	Existing	Proposed	Total	products
1	Lamotrigine Intermediates (2,3 Dichlorophenyl (oxo) acetonitrile)	77668-42-9				Lamotrigine
2	Cetirizine Dihydrochloride Intermediates (4-Chlorophenyl phenyl)methyl]piperazine	300543-56-0	03	00	03	Cetirizine Dihydrochloride
3	Clopidogrel Bisulphate Intermediates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

- 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 13/11/2018.
- 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
<b>A</b>	Total <b>cost of Proposed</b> Project (Rs. in Crores):	Existing: 0.80 Proposed:3.5 Total: 4.30

<b>B</b>	<b>Total Plot area</b> ( sq. meter)	Existing: 1500 Sq. m. Proposed: 00 Sq. m. Total: 1500.Sq. m.			
	<b>Green belt area</b> ( sq. meter)	Existing: 300 Sq. m. Proposed: 00.Sq. m. Total: 300 Sq. m.			
<b>C</b>	<b>Employment generation</b>	Existing:15 Proposed:20 Total:35			
<b>D</b>	<b>Water</b>				
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	<b>Water consumption (KLD)</b>				
		<b>Existing</b> KLD	<b>Proposed</b> <b>(Additional)</b> KLD	<b>Total after</b> <b>Expansion</b> KLD	Remarks
	(A) Domestic	0.05	1.15	1.2	
	(B) Gardening	0.00	1.00	1.00	
	(C) 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	
	<b>Industrial Total</b>	<b>1.23</b>	<b>17.47</b>	<b>18.70</b>	
	<b>Grand Total (A+B+C)</b>	<b>1.28</b>	<b>19.62</b>	<b>20.90</b>	
	1) <b>Total water requirement</b> for the project: 20.9 KLD 2) Quantity to be <b>recycled</b> : 0.6 KLD 3) Total <b>fresh water</b> requirement: 20.3 KLD				
iii	<b>Waste water generation (KLD)</b>				
	Category	<b>Existing</b> KLD	<b>Proposed</b> <b>(Additional)</b> KLD	<b>Total after</b> <b>Expansion</b> KLD	Remarks

	(A) Domestic	0.04	0.96	1.00		
	(B) Industrial					
	Process	0.765	2.235	3.00		
	Washing	0.05	0.150	0.20		
	Boiler	0.01	0.24	0.25		
	Cooling	0.01	0.24	0.25		
	Others	0.03	0.60	0.63		
	<b>Total Industrial waste water</b>	<b>0.865</b>	<b>3.465</b>	<b>4.33</b>		
iv	Treatment facility within premises with <b>capacity [For existing and Proposed]</b> [In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc.. In-house ETP (Primary Treatment) – 5.5 KL/Day					
v	Mode of Disposal & Final meeting point					
	Domestic:	1.0 KL/Day → Soak Pit				
	Industrial:	3.3 KL/Day → Common Spray Dryer Plant of M/s. PETL, Panoli G.I.D.C.				
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc. Name of Common facility Common Spray Dryer Plant of M/s. PETL, Panoli G.I.D.C. Membership of Common facility (CF) Common Spray Dryer Plant of M/s. PETL, Panoli G.I.D.C.					
vii	<b>Simplified water balance diagram with reuse / recycle of waste water</b>					



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 ETP followed by RO.	0.6 KLD RO permeate will be re-used in Boiler	COD:-20 mg/L BOD:-5 mg/L TDS:-100 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.							
	<b>Existing &amp; Proposed</b>							
	-							
	<b>Sr. no.</b>	<b>Source of emission With Capacity e.g. Boiler (8 TPH)</b>	<b>Stack Height (meter)</b>	<b>Name of the fuel</b>	<b>Quantity of Fuel MT/hr &amp; MT/Day</b>	<b>Type of emissions i.e. Air Pollutants</b>	<b>APCM</b>	<b>NAAQS (National Ambient Air Quality Standards)</b>
	<b>Existing</b>							
	1	Small Industrial Boiler	18	Wood	3 MT/Day	SPM SO2 Nox	Cyclone Separator	150 mg/Nm <sup>3</sup> 262 mg/Nm <sup>3</sup> 94 mg/Nm <sup>3</sup>
	<b>Proposed</b>							
	1	Small Industrial Boiler	18	Agro Waste	3 MT/Day	SPM SO2 Nox	Cyclone Separator	150 mg/Nm <sup>3</sup> 262 mg/Nm <sup>3</sup> 94 mg/Nm <sup>3</sup>
	2	Steam Boiler -1.5 TPH	18	Agro waste	5 MT/Day	SPM SO2 Nox	Cyclone Separator with bag filter	150 mg/Nm <sup>3</sup> 262 mg/Nm <sup>3</sup> 94 mg/Nm <sup>3</sup>
3	Thermopack Fluid Heater (1 Lac Kcal/Hr)	18	LDO	1 MT/Day	SPM SO2 Nox	Adequate Stack Height	150 mg/Nm <sup>3</sup> 262 mg/Nm <sup>3</sup> 94 mg/Nm <sup>3</sup>	
4	D.G. Set (125 KVA)	11	HSD	25 Liter/Hr	SPM SO2 Nox	Adequate Stack Height	150 mg/Nm <sup>3</sup> 262 mg/Nm <sup>3</sup> 94 mg/Nm <sup>3</sup>	
-								
ii	Process gas i.e. Type of pollutant gases (SO <sub>2</sub> , HCl, NH <sub>3</sub> , Cl <sub>2</sub> , NO <sub>x</sub> etc.)							
	<b>Existing &amp; Proposed</b>							
-								
	<b>Sr. no.</b>	<b>Specific Source of emission (Name of the Product &amp;</b>			<b>Type of emission</b>	<b>Stack/Vent Height</b>	<b>Air Pollution Control</b>	

		Process)		(meter)	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	SO <sub>2</sub>	11	Two Stage Alkali Scrubber
-					
iii	<b>Fugitive emission</b> details with its mitigation measures.				
	<p>Fugitive emissions are expected to be generated during construction and operation.</p> <p><b>During construction stage</b>, main source of fugitive emission is dust which is expected mainly due to movement of vehicles carrying construction material and vehicles used for construction.</p> <ul style="list-style-type: none"> <li>• Mitigate by allowing the vehicles entering the premises under cover.</li> <li>• Control by spraying water.</li> <li>• Hosing down the wheels of the vehicles with water and providing washing troughs for them would further mitigate the amount of dust generated.</li> </ul> <p><b>During operation stage</b>, 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.</p> <ul style="list-style-type: none"> <li>• Solid raw material charging will be done through closed system.</li> <li>• Entire process will be carried out in the closed reactors with proper maintenance of pressure and temperature.</li> <li>• Close feeding system will be provided for centrifuges. Centrifuge and filtrate tank vents will be connected to vent chillers.</li> <li>• 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.</li> <li>• Emphasis will be given to solvent management/solvent loss prevention.</li> <li>• Control by having proper scrubbing system.</li> <li>• Condenser to trap VOC.</li> <li>• 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</li> </ul>				

	<p>collector to be ensured.</p> <ul style="list-style-type: none"> <li>Nitrogen blanketing will be provided, besides special care needs to be taken for control in respect of odorous chemicals.</li> <li>Proper maintenance schedule will be adhered to avoid emissions through flange joints, pump seals etc.</li> <li>Minimum number of flanges, joints and valves in pipelines.</li> <li>Proper gland packing will be maintained for pumps and valves and to the extent possible pumps with mechanical seal.</li> <li>All Flange joints of the pipe lines which carry solvents will be covered with flange guards.</li> <li>All rotating equipments like pumps will be installed with mechanical seals to arrest any sort of emissions.</li> <li>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.</li> <li>Periodic monitoring of work area will be carried out to check the fugitive emission.</li> <li>Solvent tank vents will be connected to vent chillers.</li> <li>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.</li> <li>Regular inspection of floating roof seals and proper preventive maintenance of roofs and seals for tanks.</li> </ul> <p>Adequate ventilation will be provided.</p>																			
<b>F</b>	<p><b>Hazardous waste</b> (as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016. <b>Existing &amp; Proposed</b></p>																			
i	<table border="1"> <thead> <tr> <th rowspan="2">Sr. no.</th> <th rowspan="2">Type/Name of Hazardous waste</th> <th rowspan="2">Specific Source of generation (Name of the Activity, Product etc.)</th> <th rowspan="2">Category and Schedule as per HW Rules.</th> <th colspan="3">Quantity (MT/Annum)</th> <th rowspan="2">Management of HW</th> </tr> <tr> <th>Existing</th> <th>Proposed</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ETP Sludge</td> <td>ETP</td> <td>SCH-I/35.3</td> <td>0.24</td> <td>35.76</td> <td>36.00</td> <td>Collection, Storage, transportation</td> </tr> </tbody> </table>	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
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	Machinerics	SCH-I/5.1	0.06	0.24	0.30	Collection, Storage, transportation and Disposal by selling to registered reprocessor
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 Solution (28%)	Scrubber	SCH-II/B-15	0.000	20.00	20.00		
12.	Sodium Sulphite (18%)	Scrubber	SCH-I/28.1	0.000	18.00	18.00		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		
-								
ii	Membership details of <b>TSDF, CHWIF</b> etc. <b>(For HW management)</b>			Company will obtain the membership of TSDF, CHWIF.				
iii	Details of Non-Hazardous waste & its disposal(MSW and others)			There is no generate non – hazardous waste.				
<b>G</b>	<b>Solvent management, VOC emissions</b> etc.							
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents							
	<b>Name of Solvent</b>	<b>Total Input (Kg)</b>	<b>Qty. of Recovered Solvent (Kg)</b>	<b>Qty. of Losses (Kg)</b>	<b>% Recovery</b>	<b>% Losses</b>		

	Acetone	1700	1620	80	95.29	4.71
	Acetonitrile	12600	11970	630	95	5
	Ethyl Acetate	16800	15960	840	95	5
	Hexane	670	630	40	94.03	5.97
	MCB	3000	2850	150	95	5
	Methanol	700	660	40	94.28	5.72
	Methylene dichloride	19950	18950	1000	94.98	5.02
	Toluene	12900	12260	640	95.04	4.96
ii	<b>VOC emission sources and its mitigation measures</b>					
	<ul style="list-style-type: none"> <li>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.</li> </ul>					

- During the meeting dated 13/11/2018, technical presentation made by project proponent.
- Salient features of the project submitted by PP are as mentioned above.

#### **Observation:**

- This proposal is for expansion of existing unit and for now proposes synthetic organic chemical product. This unit is having valid EC & CC&A for existing unit. Copy of EC, CC&A, CC&A compliance report is submitted. PP assured that Compliance report of EC from RO will be submitted during Appraisal. PP ensured that there are no court cases pending and no public complaints against the project.
- Total water consumption will be 20.9 KLD. Total wastewater generation will be 4.33 KLD. Industrial Effluent will be treated in ETP and then sent to Common Spray Dyer Plant of M/s. PETL for further treatment and disposal.
- Agro waste will be used as fuel for proposed boilers and LDO will be used as fuel for proposed thermopack.
- Adequate APCM will be provided with proposed boilers.
- Adequate APCM will be provided as APCM with each process vents.
- Hazardous waste management will be as per the HW Rules 2016.

#### **Discussions & Conclusion:**

The proposal is for expansion. Compliance of CCA conditions, action taken by GPCB were deliberated at length. No closure directions/SCN Issued by GPCB in last 3 years. After proposed expansion, 3.3 KL/Day of

treated waste water is proposed to be sent to Common Spray Dryer Plant of M/s. PETL, GIDC, Panoli. Reuse water of 0.6 KLPD will be having COD:20 mg/L, BOD:5 mg/L and TDS:100 mg/L. Details of flue gas emission, process gas emission with APCM along with Hazardous waste management were deliberated at length. PP was asked to replace wood with cleaner fuel.

**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. 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.
2. 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.
3. Enlist all applicable statutory clearances for the proposed project in tabular form.
4. 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.
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 endeavor prevention of losses of solvents to the best minimum extent.
6. Safety precautions including flame proof electric fittings to be taken to avoid fire hazard during unloading, storage, transportation, handling and processing of Solvents.
7. Submit status of compliance of Environmental norms of existing Common Infrastructure of M/s: ACPTCL, Ankleshwar. Submit the following details of Common Facility (CF).
  - e) Total capacity of the CF.
  - f) Copy of CC&A of the CF.
  - g) Actual load at present (Qualitative and Quantitative – KL per day).
  - h) Booked quantity & Spare capacity of CF
8. As HCl is proposed to be treated in ETP, Impact of high chloride content in waste water on spray drying during its evaporation and its mitigation measures
9. To discontinue wood in utility as fuel and explore clean fuel.

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.

11.	SIA/GJ/IND2/28709/2018	<b>M/s. ANMOL CHEMICALS (GUJ.) PVT.LTD</b> PLOT NO: A-2/4006, GIDC ESTATE, ANKLESHWAR, DIST:BHARUCH STATE:- GUJARAT	Screening and scoping
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**Project / Activity No.:** 5(f)

**Project status:** Expansion

- This office has received an application vide their online proposal no. SIA/GJ/IND2/28709/2018 dated 21/09/2018 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 existing unit engaged in Synthetic Organic Chemicals and now proposes for expansion as tabulated below:

Sr. No	Name of Products	CAS No.	Quantity (MT/Month)			End Use of Product
			Existing MT/Month as per AWH-88615	Proposed MT/Month	Total MT/Month	
<b>LIST OF PRODUCTS</b>						
<b>AZO DYES</b>						
1	ANASOL OIL RED-2B EITHER /OR	70223-61-2	3	7	10 (MT/MONTH) ) (Unit will manufacturing either individually 10 MT/Month or Total 10	For Petroleum, Plastic, & Soap Industries
2	ANASOL OIL RED-RB EITHER /OR	1320-06-5	3	7		
3	ANASOL OIL ORANGE-E EITHER /OR	8008-57-9	3	7		
4	ANASOL OIL ORANGE-A EITHER /OR	8008-57-9	3	7		

5	ANASOL OIL RED-G EITHER /OR	1320-06-5	3	7	MT/Month)	
6	ANASOL OIL YELLOW-3G EITHER /OR	12671-74- 8	3	7		
7	ANSOL OIL YELLOW- 2G EITHER /OR	6359-98-4	3	7		
8	GARNET GBC EITHER /OR	97-56-3	3	7		
9	ACID YELLOW EITHER /OR	6375-55-9	3	7		
10	ACID ORANGE	633-96-5	3	7		
<b>SOLVENT DYES</b>						
1	SOLVENT BROWN 1 EITHER /OR	6416-57-5	0	40	40 (MT/MONTH ) (Unit will manufacturin g either individually 40 MT/Month or Total 40 MT/Month)	For Petroleum , Plastic, & Soap Industries
2	SOLVENT ORANGE 7 EITHER /OR	3118-97-6	0	40		
3	SOLVNET YELLOW 72 EITHER /OR	61813-98- 7	0	40		
4	SOLVENT RED 27 EITHER /OR	1320-06-5	0	40		
5	SOLVENT RED 25 EITHER /OR	3176-79-2	0	40		
6	SOLVENT RED 26 EITHER /OR	4477-79-6	0	40		
7	SOLVENT RED 1 EITHER /OR	1229-55-6	0	40		
8	SOLVENT YELLOW 16 EITHER /OR	119371- 24-3	0	40		
9	SOLVENT ORANGE 1 EITHER /OR	2051-85-6	0	40		
10	SOLVENT PINK EITHER /OR	509-34-2	0	40		
11	SOLVENT YELLOW 56 EITHER /OR	2481-94-9	0	40		

12	SOLVENT YELLOW 124 EITHER /OR	34432-92- 3	0	40			
13	SOLVENT YELLOW 18 EITHER /OR	6407-80-3	0	40			
14	SOLVENT ORANGE 2 EITHER /OR	2646-17-5	0	40			
15	SOLVENT BLUES EITHER /OR	17354-14- 2	0	40			
16	FLUORESCEIN EITHER /OR	2321-07-5	0	40		For Paper Industry ,Ink etc	
17	ACID YELLOW 73 EITHER /OR	518-47-8	0	40			
18	ACID YELLOW 73 LIQUID EITHER /OR	518-47-8	0	40			
19	EOSINE EITHER /OR	17372-87- 1	0	40			
20	TETRA CHLORO FLUORESCEIN EITHER /OR	6262-21-1	0	40			
21	ERYTHROCINE EITHER /OR	114-07-8	0	40			
22	ACID RED 92	18472-87- 2	0	40			
<b>COOLANT DYES</b>							
1	COOLANT RED EITHER /OR	--	0	10	10 (MT/MONTH ) (Unit will manufacturin g either individually 10 MT/Month or Total 10		For Radiator Coolant
2	COOLANT YELLOW EITHER /OR	--	0	10			
3	COOLANT GREEN EITHER /OR	--	0	10			
4	COOLANT ORANGE EITHER /OR	--	0	10			
5	COOLANT PINK EITHER /OR	--	0	10			

6	COOLANT BLUE EITHER /OR	--	0	10	MT/Month)	
7	SOAP YELLOW	--	0	10		
	<b>TOTAL</b>		<b>3</b> <b>MT/MONTH</b>	<b>57</b> <b>MT/MONTH</b>	<b>60</b> <b>MT/MONTH</b>	--

- 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 13/11/2018.
- The project proponent along with their expert /consultant M/s. Jyoti Om Chemical Research Centre Pvt. Ltd. attended the meeting and made presentation before the committee
- Salient features of the project are as under:

Sr. no.	Particulars	Details			
<b>A</b>	Total <b>cost of Proposed</b> Project (Rs. in Crores):	Existing: 50 lacs Proposed:-- 182 lacs Total: 232 lacs			
<b>B</b>	Total Plot area ( sq. meter)	Existing: 1804.43 Sq. m. Proposed: -- Sq. m. Total: 1804.43 Sq. m.			
	Green belt area,/Tree Plantation area ( sq. meter)	Existing: 162.10 Sq. m. Proposed: --Sq. m. Total: 162.10 Sq. m.			
<b>C</b>	<b>Employment generation</b>	Existing:19 Proposed:15 Total:34			
<b>D</b>	<b>Water</b>				
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	GIDC water will be source of water.			
	Status of permission from the concern authority.				
ii	<b>Water consumption (KLD)</b>				
		<b>Existing KLD As per CCA- AWH-88615</b>	<b>Proposed (Additional) KL/Day</b>	<b>Total after Expansion KL/Day</b>	<b>REMARKS</b>
	DOMESTIC	1	1	2	Unit will use 2 KLD fresh



				water for this purpose.
GARDENING	--	3	3	Unit will use 3 KLD fresh water for this purpose.
<b>INDUSTRIAL WATER CONSUMPTION</b>				
PROCESS	5.2	12.8	18	Unit will use 13 KLD RO permeate water for this purpose. Unit will use 5 KLD fresh water.
WASHING	0.8	1.2	2	Unit will use 2 KLD fresh water for washing.
BOILER	1	2	3	Unit will use 3 KLD RO Permeate water.
COOLING	1	6	7	Unit will use 7 MEE & ATFD condensate water.
TOTAL (INDUSTRIAL)	8	22	30	Total water requirement for industrial purpose is 30 KLD. Unit will use only 7 KLD fresh water. Remaining 23 KLD water will be from RO permeate and MEE & ATFD condensate.
GRAND TOTAL	9	26	35	Total Water requirement of industrial, Domestic and Gardening purpose will be 35 KLD.
<p>1) Total water requirement for the project: 35 KLD</p> <p>2) Quantity to be recycle:23 KLD</p> <p>3) Total fresh water requirement: 12 KLD</p>				
iii	<b>Waste water generation (KLD)</b>			
	<b>Existing KLD As per CCA-</b>	<b>Proposed (Additional) KL/Day</b>	<b>Total after Expansion KL/Day</b>	<b>REMARKS</b>

	<b>AWH-88615</b>			
DOMESTIC	0.8	1.2	2	Domestic effluent generation will be 2 KLD. It will be treated in unit's own effluent treatment plant.
<b>INDUSTRIAL WATER CONSUMPTION</b>				
PROCESS	4.8	17.2	22	Process effluent generation will be 22 KLD. It will be treated in unit's own effluent treatment plant.
WASHING	0.8	1.2	2	Washing will be 2 KLD. It will be treated in unit's own effluent treatment plant.
BOILER	0.2	2.3	2.5	Boiler blow down will be 2.5 KLD. It will be treated in unit's own effluent treatment plant.
COOLING	0.2	1.3	1.5	Cooling blow down will be 1.5 KLD. It will be treated in unit's own effluent treatment plant.
TOTAL (INDUSTRIAL )	6	22	28	Total Industrial effluent generation will be 28 KLD. It will be treated in unit's own effluent treatment plant along with 2 KLD Domestic effluent. Total 6.8 KLD effluent will be discharged into M/s. ETL after primary, secondary & tertiary treatment. Remaining 23.2 KLD effluent will be subjected to RO & MEE where 23.2 KLD effluent will be became ZLD.
GRAND TOTAL	6.8	23.2	30	Total Industrial effluent generation will be 28 KLD. It will be treated in unit's own effluent treatment plant along

					with 2 KLD Domestic effluent. Total 6.8 KLD effluent will be discharged into M/s. ETL after primary, secondary & tertiary treatment. Remaining 23.2 KLD effluent will be subjected to RO & MEE where 23.2 KLD effluent will be became ZLD.
iv	Treatment facility within premises with <b>capacity [For existing and Proposed]</b> [In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..				
	Total Industrial effluent generation will be 28 KLD. It will be treated in unit's own effluent treatment plant along with 2 KLD Domestic effluent. Total 6.8 KLD effluent will be discharged into M/s. ETL after primary, secondary & tertiary treatment. Remaining 23.2 KLD effluent will be subjected to RO & MEE where 23.2 KLD effluent will be became ZLD. Capacity of the RO is 30 KLD. Capacity of MEE is 10 KLD.				
v	Mode of Disposal & Final meeting point				
	Domestic:	Total Industrial effluent generation will be 28 KLD. It will be treated in unit's own effluent treatment plant along with 2 KLD Domestic effluent. Total 6.8 KLD effluent will be discharged into M/s. ETL after primary, secondary & tertiary treatment. Remaining 23.2 KLD effluent will be subjected to RO & MEE where 23.2 KLD effluent will be became ZLD.			
	Industrial:	Total Industrial effluent generation will be 28 KLD. It will be treated in unit's own effluent treatment plant along with 2 KLD Domestic effluent. Total 6.8 KLD effluent will be discharged into M/s. ETL after primary, secondary & tertiary treatment. Remaining 23.2 KLD effluent will be subjected to RO & MEE where 23.2 KLD effluent will be became ZLD.			
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc.				
	Name of Common facility				
	M/s.ETL & M/s.BEIL				
	Membership of Common facility (CF)				
	M/s.ETL & M/s.BEIL				
vii	Reuse/Recycle details (KLD)				
	23 KL				
<b>E</b>	<b>Air</b>				
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 FLUE GAS EMISSION AS PER CONSENT AWH-88615							
Sr. No.	Stack attached to	Stack Height (m)	Type of fuel	Quantity of fuel MT/Day	Type of emission	Permissible Limit	APCM
1.	Boiler (400 Kg/hr)	12	Natural Gas	40 NM <sup>3</sup> /Day	PM SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm	Adequate stack height
2.	Hot Air Generator ( 1 Lac Kcal)	12	Natural Gas	40 NM <sup>3</sup> /Day	PM SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm	Adequate stack height
3.	D.G.Set	9	Diesel	5 Lit/Hr	PM SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm	Adequate stack height
FLUE GAS EMISSION AFTER PROPOSED EXPANSION							
1.	Boiler (600 Kg/hr)	12	Natural Gas	80 NM <sup>3</sup> /Day	PM SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm	Adequate stack height
2.	Hot Air Generator ( 1 Lac Kcal)	12	Natural Gas	80 NM <sup>3</sup> /Day	PM SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm	Adequate stack height
3.	D.G.Set	9	Diesel	10 Lit/Hr	PM SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm	Adequate stack height
ii	Process gas i.e. Type of pollutant gases (SO <sub>2</sub> , HCl, NH <sub>3</sub> , Cl <sub>2</sub> , NO <sub>x</sub> etc.)						
Existing & Proposed							
-							
Sr. No.	Stack Attached To	Stack Height (m)	Air Pollution Control System	Parameter	Permissible Limit		
NO EXISTING PROCESS GAS EMISSION.							
PROCESS GAS EMISSION AFTER PROPOSED EXPANSION							
1	REACTION VESSEL *	15	ALKALI	Br <sub>2</sub> ,	---		

				SCRUBBER	I <sub>2</sub>		
	<p><b>*Note:</b> - During the manufacturing activity, there will be no process gas emission. It will be generated during the charging of raw material. It will be a fugitive emission. Unit has proposed to provide Alkali Scrubber to curb it. Saturated solution will be treated in unit's own effluent treatment plant.</p>						
iii	Fugitive emission details with its mitigation measures.						
	Unit will install alkali scrubber to curb the process gas emission.						
<b>F</b>	<p><b>Hazardous waste</b> (as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016. <b>Existing &amp; Proposed</b></p>						
i	<b>Sr. No.</b>	<b>Type of Waste</b>	<b>Category</b>	<b>Existing as per CCA AWH-88615</b>	<b>As per Proposed Expansion</b>	<b>Quantity after Expansion (MT/Year)</b>	<b>Mode of Disposal</b>
	1.	ETP sludge	35.3	5 MT/Year	7 MT/Year	12 MT/Year	Collection, Storage, Transportation, Disposal at TSDF M/s. BEIL.
	2.	Used Oil	5.1	--	200 lit	200 lit	Collection, Storage, Transportation, Reused, Disposal at by Selling registered refiners.
	3.	Discarded containers/ Empty barrels/Liners contaminated with hazardous chemicals/wastes	33.1	6 MT/Year	6 MT/Year	12 MT/Year	Collection, Storage, Disposal by send it to authorized decontamination facility/ recycler or reuse or send

							back to supplier
	4.	MEE Sludge	35.3	--	65 MT/Year	65 MT/Year	Collection, Storage, Transportation, Disposal at TSDF M/s. BEIL.
	5	Spent Carbon	36.2	--	1 MT/Year	1 MT/Year	Collection, Storage, Transportation, and send to M/s. BEIL for incineration or for co-processing.
ii	Membership details of <b>TSDF, CHWIF</b> etc.				Unit will obtain it.		
iii	Details of Non-Hazardous waste & its disposal (MSW and others)				--		
<b>G</b>	<b>Solvent management, VOC emissions etc.</b>						
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents						
	No solvent will be used.						
ii	VOC emission sources and its mitigation measures						
	Unit will install alkali scrubber to curb the process gas emission.						

- During the meeting dated 13/11/2018, technical presentation made by project proponent.
- Salient features of the project submitted by PP are as mentioned above.

**Observation:**

- This proposal is for expansion of existing unit and for now proposes a new synthetic organic chemical product. This unit is having valid CC&A for existing unit. Copy of CC&A, CC&A compliance report is submitted.
- Total water consumption will be 35 KLD. Total wastewater generation will be 30 KLD. It will be treated in ETP. Existing 6.8 KLD effluent will be discharged into M/s. ETL. Remaining 23.2 KLD effluent will be subjected to RO & MEE where 23.2 KLD effluent will be became ZLD.
- Natural gas will be used as fuel for boiler and hot air generator.

- Adequate APCM will be provided as APCM with each process reactors.
- Hazardous waste management will be as per the HW Rules 2016.

### **Discussions & Conclusion:**

The proposal is for expansion. Compliance of CCA conditions, action taken by GPCB were deliberated at length. PP mentioned that show cause notices were issued by the GPCB and corrective measures are taken by the PP. IT is noted that total water requirement for the project is 35 KLD. After treatment, quantity to be recycled is 23 KLD and total fresh water requirement is 12 KLD

Total Industrial effluent generation will be 28 KLD. It will be treated in unit's own effluent treatment plant along with 2 KLD Domestic effluent. Total 6.8 KLD effluent will be discharged into M/s. ETL after primary, secondary & tertiary treatment. Remaining 23.2 KLD effluent will be sent to RO & MEE. After /expansion there will be no change in existing treated waste water quality being sent to CETP. PP was asked to address bleed liquor containing bromine and iodine compound as per the HWR 2016 and address its management.

Details of flue gas emission, process gas emission with APCM along with Hazardous waste management were deliberated at length. .

**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. 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.
2. 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.
3. Enlist all applicable statutory clearances for the proposed project in tabular form.
4. 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.
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 endeavor prevention of losses of solvents to the best minimum extent.
6. Safety precautions including flame proof electric fittings to be taken to avoid fire hazard during

unloading, storage, transportation, handling and processing of Solvents.

7. To address bleed liquor containing Iodine and Bromine compound under the HWR 2016.

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.

12.	SIA/GJ/IND2/29049/2018	<b>A.S. INDUSTRIES</b> Plot No.1114 Phase-III, GIDC Estate, Vatva, Ahmedabad, Gujarat – 382415.	Screening and scoping
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**Project / Activity No.:** 5(f)

**Project status:** New

- This office has received an application vide their online proposal no. SIA/GJ/IND2/29049/2018 dated 17/09/2018 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 a new unit proposes for Synthetic Organic Chemicals plant as tabulated below:

Sr. no.	Name of the Products	CAS no. / CI no.	Quantity MT/Month Proposed	End-use of the products
1	Acid Black 194	61931-02-0	20	Dyes Manufacturing
2	Acid Blue 193	12392-64-2		
3	Direct Red 239	60202-35-9	5	Dyes Manufacturing
<b>TOTAL</b>			<b>25</b>	

- 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 13/11/2018.
- The project proponent along with their expert /consultant **M/s B. S. Rana** attended the meeting and made presentation before the committee
- Salient features of the project are as under:

Sr. no.	Particulars	Details
<b>A</b>	Total <b>cost of Proposed</b> Project (Rs. in Crores):	150 lac



<b>B</b>	<b>Total Plot area ( sq. meter)</b>	500 Sq. m.		
	<b>Green belt area ( sq. meter)</b>	45 Sq. m.		
<b>C</b>	<b>Employment generation</b>	Proposed: 14 Total:14		
<b>D</b>	<b>Water</b>			
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	Vatva GIDC		
	Status of permission from the concern authority.	-		
ii	<b>Water consumption (KLD)</b>			
		<b>Water Consumption quantity</b> KLD	<b>Remarks</b>	
	(A) Domestic	1	GIDC supply	
	(B) Gardening	0.1		
	(C) Industrial			
	Process	3.5	GIDC supply	
	Washing	1.5		
	Boiler / Cooling	1		
	Others	1		
	<b>Industrial Total</b>	<b>7</b>		
	<b>Grand Total (A+B+C)</b>	<b>8.1</b>		
	1) <b>Total water requirement</b> for the project: 8.1 KLD			
	2) Quantity to be <b>recycled</b> : 0.0.KLD			
	3) Total <b>fresh water</b> requirement: 8.1 KLD			
iii	<b>Waste water generation (KLD)</b>			
		<b>Category</b>	<b>Waste water generation quantity</b> KLD	<b>Remarks</b>
	(A) Domestic		0.4	-
	(B) Industrial			
	Process		0.7	-
	Washing		1.5	-
	Boiler / cooling		0.1	-
	Others		1.0	-

		<b>Total Industrial</b>	3.3	-
	Generated domestic effluent will be discharged to the soak pit. Generated industrial effluent will be treated in ETP and spray dried in own spray dryer in premises.			
iv	Treatment facility within premises with <b>capacity</b> [In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..			
	ETP Capacity : 3.3 KLD ETP Treatment: Primary Spray Dryer: 1.5 KL/Hr.			
v	Mode of Disposal & Final meeting point			
	Domestic:	Sock Pit		
	Industrial:	ZLD by means of spray drying of primary treated effluent in premise		
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc. Name of Common facility			
	Self spray dryer of capacity 1.5 KL/Hr.			
	Membership of Common facility (CF)			
	<b>(For waste water treatment)</b>			
vii	<b>Simplified water balance diagram with reuse / recycle of waste water</b>			
	<pre> graph TD     Intake["INTAKE (8.1)"] -- 1.0 --&gt; Domestic["DOMESTIC"]     Intake -- 0.1 --&gt; Gardening["GARDENING"]     Intake -- 7.0 --&gt; Industrial["INDUSTRIAL"]     Domestic -- 0.4 --&gt; SoakPit["SOAK PIT"]     Industrial -- 3.5 --&gt; Process["PROCESS"]     Industrial -- 1.0 --&gt; Boiler["BOILER / COOLING"]     Industrial -- 1.5 --&gt; Washing["WASHING"]     Industrial -- 1.0 --&gt; Scrubber["SCRUBBER"]     Process -- 0.7 --&gt; ETP["ETP (3.3)"]     Boiler -- 0.1 --&gt; ETP     Washing -- 1.5 --&gt; ETP     Scrubber -- 1.0 --&gt; ETP     ETP --&gt; SprayDrying["SPRAY DRYING PREMISES"] </pre> <p><b>Note: All figures are in KLD</b></p>			
viii	Reuse/Recycle details (KLD) [Source of reuse & application area]			
	<b>Total reuse 0.0 KLD</b> -			
<b>E</b>	<b>Air</b>			
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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	<p>Proposed project is of manufacturing of S. O. Dyes. Followings measures will take for existing &amp; proposed project.</p> <ul style="list-style-type: none"> <li>• Maintaining the house keeping regularly</li> <li>• Transferring the liquid materials by pump</li> <li>• To carry out regular leak detection and repair activities</li> </ul> <p>Proper <u>routine maintenance</u> of equipment reduces the likelihood of leaks</p>																					

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ii	Membership details of <b>TSDF, CHWIF</b> etc. <b>(For HW management)</b>	Membership of TSDF site of M/S Ecocare Infrastructures Pvt. Ltd at Parshwnath Kutir, Survey No. 11, Village: Ghaspur (Patdi), Ta: Dasada (Patdi), Dist: Surendranagar will be Obtain at a time of CTE Application / before CTE application.																														
iii	Details of Non-Hazardous waste & its disposal(MSW and others)	Paper and plastic will be sold to the actual authorized users																														
<b>G</b>	<b>Solvent management, VOC emissions</b> etc.																															
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	There shall no use of solvent. We will provide closed transferring system of raw materials during manufacturing to avoid any																															

leakages.
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- During the meeting dated 13/11/2018, technical presentation made by project proponent.
- Salient features of the project submitted by PP are as mentioned above.

**Observation:**

- Total water consumption will be 8.1 KLD. Total wastewater generation will be 3.3 KLD. It will be treated in ETP and treated wastewater will be sent to in-house spray dryer.
- Natural Gas will be used as fuel for boiler and hot air generator.
- Adequate APCM will be provided as APCM with each process reactors.
- Hazardous waste management will be as per the HW Rules 2016.

**Discussions & Conclusion:**

Proposal is new. Committee noted that plot area is 500 sq. meter. Generation of industrial effluent is 3.3 KLPD which after treatment will be spray dried within premises. Natural gas will be used as fuel. Details of flue gas emission, process gas emission with APCM along with Hazardous waste management were deliberated at length.

During presentation, PP mentioned that capacity of spray dryer is 800 litre/hour and that was mentioned in presentation was 1200 litre/hour. PP was asked to address the actual capacity of spray dryer for evaporation. Pp also mentioned that a tank of 25 KL capacity will be installed for holding treated waste water. Committee asked PP not to store the treated waste water instead it should be evaporated on daily basis and a proposal in this regard shall be submitted along with undertaking. Details of flue gas emission, spray dryer emission with APCM along with Hazardous waste management were deliberated at length.

**After deliberation, PP was asked to submit the following details and it was decided to consider the proposal after submission of the said details.**

1. Adequacy of area for erection of in-house spray dryer and its capacity.
2. Revised proposal with undertaking of not storing treated waste water in 25 KL tank and to be spray dried on day to day basis.

**ADDITIONAL AGENDA**

1.	SIA/GJ/IND2/22262/2017	ZCL Chemicals Limited, P NO: 3102/B, GIDC, Ankleshwar, Dist: Bharuch	TOR Amendment
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The aforementioned proposal is for amendment in TOR for exempting the public hearing as the proposed unit is located within GIODC, Ankleshwar. PP mentioned that standard TOR under category 5 (f) were issued from MOEF&CC vide letter IA-J-11011/585/2017–IA-II(I) on 14/08/2017 including public hearing. Further PP mentioned that for the amendment in TOR for exempting public hearing, they applied to

MOEF&CC for exemption of public hearing to which MOEF&CC asked them to apply for the said amendment to SEIAA. Henceforth they have made application for TOR amendment for exemption of public hearing. Committee deliberated the proposal for amendment in TOR in detail and noted that proposed location is within GIDC, Ankleshwar which is existing before 14/09/2006.

Considering the above and referring to the clause 7 III (i) b of EIA Notification 2006 dated 14/09/2006,

**Committee unanimously decided to recommend for grant of TOR amendment for exemption of public hearing for the aforementioned proposal**

*Meeting ended with thanks to the Chair and the Members.*

**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.	Dr. V. K. Jain, Member, SEAC	
6.	Shri K.C. Mistry, Secretary, SEAC	

*APPROVED ON:*