

**MINUTES OF 17<sup>th</sup> EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) MEETING HELD DURING 26<sup>th</sup> to 29<sup>th</sup> December 2016**

**26<sup>th</sup> December, 2016 (Day 1)**

**17.1 Opening Remarks of the Chairman**

**17.2. Correction in the Minutes of previous meetings:**

**(I). Proposed expansion of Agrochemicals, Fine chemicals and Biotech based co-generation plants and establishment, of Pharmaceutical units, coal based Co-generation plants and Chloralkali unit at Kesavaram,, Venkatanagaram, post, Payakaraopeta Mandal, Visakhapatnam District by Deccan Fine Chemicals (India) Pvt. Ltd. - Environmental Clearance**

The Member Secretary informed that the aforesaid project was recommended for EC in 16<sup>th</sup> EAC meeting held during 8-9<sup>th</sup> December, 2016. The PP vide letter dated 7<sup>th</sup> January, 2017 made a request seeking following corrections in the Minutes of the 16<sup>th</sup> EAC meeting:

<b>S. No</b>	<b>Information as given in MOM</b>	<b>Correction sought</b>
1	Sub: Proposed expansion of Agrochemicals, Fine Chemicals and Biotech based Co-generation plants and establishment, of Pharmaceutical units, coal based Co-generation plants and Chloralkali unit at Kesavaram , Venkatanagaram post, Payakaraopeta Mandal , Visakhapatnam District by Deccan Fine Chemicals (India) Pvt. Ltd.- Environmental Clearance.	Proposed expansion of Agrochemicals , Fine Chemicals, Biotech <b>based organic chemicals</b> , establishment, of Pharmaceutical unit, coal based Co-generation plants and Chloralkali unit at Kesavaram , Venkatanagaram post, Payakaraopeta Mandal , Visakhapatnam District by M/s Deccan Fine Chemicals (India) Pvt. Ltd.- Environmental Clearance
2	Point i. page 96 of 104 The Draft Terms of References (TORs) awarded in the 17 <sup>th</sup>	The Draft Terms of References (TORs) awarded in the 17 <sup>th</sup> Meeting of the Reconstituted Expert Appraisal Committee (Industry) held during 18 <sup>th</sup> -19 <sup>th</sup> March,

	Meeting of the Reconstituted Expert Appraisal Committee (Industry) held during 18 <sup>th</sup> -19 <sup>th</sup> March, 2014 for preparation of EIA-EMP report.	<b>2014 and amended TOR awarded in the 40<sup>th</sup> Meeting of the Reconstituted Expert Appraisal Committee( Industry) held during 18<sup>th</sup> -19<sup>th</sup> May, 2015</b> for preparation of EIA-EMP report.						
3	Point v. page 96 of 104 Following are the list of existing and proposed products :	Following are the list of existing and proposed products :						
		Capacity						
S. No	Description	Unit	Per mitted	Proposed expansion		Total After Expansion		
				Phase I	Phase II			
1	Agro & Fine chemicals	TPD	26.25	43.75	70.00	140.00		
2	Active Pharma Ingredients (API)	TPD	---	10	10	20		
3	Co-generation Power Plant	MW	---	1x 12 1x 25	2X25	87		
4	Chlor-Alkali		---					
A	Caustic (100%)	TPD	---	---	200	200		
B	Chlorine	TPD	---	---	177.2	177.2		
C	Hydrogen	TPD	---	---	5.14	5.14		
D	HCl (33%)	TPD			280	280		
E	Sodium Hypo Chloride	TPD			40	40		
4	Point vii , page 99 of 104 The total power requirement will be met from co-generation power	The total power requirement will be met from co-generation power plants of 1 x 12 MW and 3 x 25 MW capacity and back up DG sets of capacity 20 x 2500 KVA (Phase I: 10 x 2500 KVA and Phase II: 10X 2500						

	plant and back up DG sets of capacity 20 x 2500 (Phase I: 10 x 2500 and Phase II : 10X 2500) proposed in addition to existing 2 x 2000 and 4 x 1000 KVA.	KVA ) proposed in addition to existing 2 x 2000 KVA and 4 x 1000 KVA.
5	Point xii, page 99 of 104 Effluents will be segregated as low TDS and high TDS stream. High COD/TDS stream in a stripper followed by multiple effect evaporator (MEE), and agitated thin film dryer (ATFD). The condensate from stripper is sent to cement plants for co-incineration, while the condensate from MEE and ATFD is mixed with low TDS/COD effluents to be treated in biological system. After treatment waste will be discharged to the sea through pipeline.	Effluents will be segregated as low TDS and high TDS stream. High COD/TDS stream in a stripper followed by multiple effect evaporator (MEE), and agitated thin film dryer (ATFD). The condensate from stripper is sent to cement plants for co-incineration, while the condensate from MEE and ATFD is mixed with low TDS/COD effluents to be treated in biological system. Treated effluent will be discharged to the sea through pipeline. Total quantity of treated effluent discharged into the Sea through marine outfall facilities will be 11,749 KLD (Phase I: 5,592 KLD and Phase II: 6,157 KLD) and quantity of RO Rejects from desalination plants discharged to the Sea through marine outfall facilities will be 56,874 KLD ( Phase I: 23,497 KLD and Phase II: 33,377 KLD).
6	Point viii, page 100 of 104 All the Solvent storage tanks shall be connected with vent condensers with chilled brine circulation	All the Solvent storage tanks shall be provided with breather valves to minimize breathing and evaporation losses.

The committee after deliberation accepted the aforesaid corrections and directed to modify the minutes of 16<sup>th</sup> EAC meeting accordingly.

**(II). Recovery of Styrene at Indian Oil Panipat Refinery & Petrochemical Complex at Panipat, Haryana by M/s Indian Oil Corporation Limited. - reg Site Visit Report**

The Member Secretary informed that the aforesaid project was recommended for EC in 15<sup>th</sup> EAC meeting held during 10<sup>th</sup> November, 2016. The PP vide e.mail dated 6<sup>th</sup> January, 2017 made a request seeking following corrections in the Minutes of the 15<sup>th</sup> EAC meeting:

<b>S. No.</b>	<b>Information as given in MOM</b>	<b>Correction sought</b>
1	Sub: Recovery of Styrene at Indian Oil Panipat Refinery & Petrochemical Complex at Panipat, Haryana by M/s Indian Oil Corporation Limited. - reg <u>Site Visit Report</u>	Recovery of Styrene and Synthetic Olefins Production from RFCC and DCU off gases (from Panipat Refinery) and its integration with Naphtha Cracker Unit and 2) Mounded Bullet Storage for C4 Mix at Indian Oil Panipat Refinery & Petrochemical Complex at Panipat, Haryana by M/s Indian Oil Corporation Limited - - reg Site Visit Report
2	Specific condition ( Viii) : 1700 m <sup>3</sup> /hr	Specific condition ( Viii) : 1700 m <sup>3</sup> /hr(annual average).

The committee after deliberation accepted the aforesaid corrections and directed to modify the minutes of 15<sup>th</sup> EAC meeting accordingly.

**(III). Expansion of the system capacity of MDPL from existing 5.0 MMTPA to 6.9 MMTPA by installation of additional pump facilities at Bachau and Pindwara and laying 280 Kms. extension spur pipeline from Palanpur station to HPCL proposed Marketing terminal Near Vadodara in Districts of Sirohi and Gandinagar in Rajasthan and Gujarat by M/s HPCL - Reconsideration of TOR**

The Member Secretary informed that the aforesaid project was recommended for EC in 12<sup>th</sup> EAC meeting held during 23-24<sup>th</sup> August, 2016. The PP vide letter no. PVPL/MoEF/TOR/2016/1 dated 3<sup>rd</sup> February, 2016 made a request seeking following corrections in the Minutes of the 12<sup>th</sup> EAC meeting:

<b>S. No.</b>	<b>Information as given in MOM</b>	<b>Correction sought</b>
1	Sub: Expansion of the system capacity of MDPL from existing 5.0 MMTPA to 6.9 MMTPA by installation of additional pump facilities at Bachau and Pindwara and laying 280 Kms. extension spur pipeline from Palanpur station to HPCL proposed Marketing	Expansion of the system capacity of MDPL from existing 5.0 MMTPA to <b>8.0</b> MMTPA by installation of additional pump facilities at Bachau and Pindwara and laying 280 Kms. extension spur pipeline from Palanpur station to HPCL proposed Marketing terminal Near Vadodara in Districts of Sirohi and Gandinagar in Rajasthan and Gujarat by M/s HPCL -reg. Reconsideration of TOR

terminal Near Vadodara in Districts of Sirohi and Gandinagar in Rajasthan and Gujarat by M/s HPCL - reg. Reconsideration of TOR	
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The committee after deliberation accepted the aforesaid corrections and directed to modify the minutes of 12<sup>th</sup> EAC meeting accordingly.

**(IV). Phenol Formaldehyde Resin, Melamine Formaldehyde Resin and Urea Formaldehyde Resin manufacturing unit at Survey No. 326P1, NH-27, Ravapar Nadi Village, Morbi Taluka, Morbi Dist., Gujarat by M/s Highborne Laminates Pvt. Ltd.– reg. Environmental Clearance**

The Member Secretary informed that the aforesaid project was recommended for EC in 16<sup>th</sup> EAC meeting held during 8<sup>th</sup>-9<sup>th</sup> December, 2016. The PP vide letter dated 6<sup>th</sup> January, 2017 made a request seeking following corrections in the Minutes of the 16<sup>th</sup> EAC meeting:

<b>S. No.</b>	<b>Information as given in MOM</b>	<b>Correction sought</b>
iv	Total plot area is 21853 m <sup>2</sup> of which 8,234 m <sup>2</sup> area will be developed as green belt. Total project cost including existing facilities is Rs. 94 Lacs.	Total plot area is <b>13962</b> m <sup>2</sup> of which <b>4,620</b> m <sup>2</sup> area will be developed as green belt. Total project cost including existing facilities is Rs. 1.01 crore.
v.	Proposed project will draw 350 KVA electricity	Proposed project will draw <b>300 KVA</b> electricity.
vi	Total 52.5 m <sup>3</sup> /day of fresh water will be used and sourced from ground water but committee suggested to use only surface water. PP agree with that. Against which 23.93 m <sup>3</sup> /day wastewater will be generated.	Total 52.5 m <sup>3</sup> /day of fresh water will be used and sourced from ground water but committee suggested to use only surface water. PP agree with that. Against which <b>20.8</b> m <sup>3</sup> /day wastewater will be generated.
iv	Wet scrubber should be provided to control process emissions. Methanol should be recovered from the process area.	Condenser should be used to control process emission.

The committee after deliberation accepted the aforesaid corrections and directed to modify the minutes of 16<sup>th</sup> EAC meeting accordingly.

**(V). Proposed Resin Manufacturing Project (Phenol Formaldehyde Resin – 700 MT/month, Melamine Formaldehyde Resin – 700 MT/month and Urea Formaldehyde Resin – 500 MT/month) Survey No. 1068, Village: Lavad, Taluka: Dahegam, District: Gandhinagar, Gujarat by M/s Redd Mica Pvt. Ltd. – reg. Environmental Clearance**

The Member Secretary informed that the aforesaid project was recommended for EC in 16<sup>th</sup> EAC meeting held during 8<sup>th</sup>-9<sup>th</sup> December, 2016. The PP vide letter dated 6<sup>th</sup> January, 2017 made a request seeking following corrections in the Minutes of the 16<sup>th</sup> EAC meeting:

<b>S. No.</b>	<b>Information as given in MOM</b>	<b>Correction sought</b>
iv	Wet scrubber should be provided to control process emissions. Methanol should be recovered from the process area.	Condenser should be used to control process emission.
xi	At least 2.5 % of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhopal. As committed, implementation of such program should be ensured for Sadulka village in a time bound manner.	At least 2.5 % of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhopal. As committed, implementation of such program should be ensured for <b>Lavad</b> village in a time bound manner.

The committee after deliberation accepted the aforesaid corrections and directed to modify the minutes of 16<sup>th</sup> EAC meeting accordingly.

**17.2.1 Confirmation of the Minutes of the 16<sup>th</sup> Meetings of the EAC (Industry-2) held on 8<sup>th</sup> -9<sup>th</sup> December, 2016 at New Delhi.**

**17.3. Consideration of Proposals:**

17.3.1	<b>Expansion of Fertilizer Blending Unit for Customized NPK Production, Gas</b>
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**Turbine (GT), Heat Recovery Steam Generator (HRSG), Atmospheric Ammonia Storage Tank (AAST) & Urea Granulation Unit for Fertilizers Production at Zuarinagar, Sancoale Village, Mormugao Taluka, South Goa District, Goa by M/s. Zuari Agro Chemicals Ltd.- Reg [IA/GA/IND2/59274/2015, J-11011/186/2015-IA II (I)]-Environmental Clearance**

The PP made a presentation before the committee and informed following:-

1. ZACL operates a fertilizer complex consisting of an Ammonia plant, a Urea plant, NPK plant 'A' and NPK plant 'B'. The Ammonia plant commissioned in 1973 is based on Naphtha as feedstock and fuel. Urea plant was also commissioned in 1973. NPK plant 'A' was commissioned in 1975 and NPK plant 'B' was commissioned in 1984. The present operating capacities are 1210 MTPD for Urea Plant, 702 MTPD for Ammonia Plant, 1100 MTPD for NPK-A and 1300 MTPD for NPK-B Plant. Also off-sites and utilities of required capacity are available to support above mentioned production capacities. ZACL further went ahead with plan for changeover from Naphtha and FO to NG / RLNG as feedstock & fuel and revamp of production units and obtained Environmental Clearance for it in Sept., 2009. The Naphtha and FO to NG/RLNG project was implemented in April, 2011 and received NG with effect from February, 2013" and " Revamp of Production Plants are under development for implementation/implemented. ZACL has received Environmental Clearances from MoEFCC, New Delhi vide F. No. J-11011/217/2008- IA-II (I) dated 01/09/2009. Certified compliance report for environmental clearance conditions by RO, MoEFCC, Bangalore is provided in Chapter 13 of EIA/EMP report.
2. For Expansion purpose, out of total plot area, 14,436 m<sup>2</sup> will be utilized. More than 33% of total plot is covered with greenbelt which will be maintained. No additional land acquisition is required since project is proposed at existing premises. Raw material shall be sourced From Districts (Markets), Tamil Nadu & from MPT. Project site is geographically located in Sancoale Village, Mormugao Taluka, South Goa District of Goa state. Margao is the district headquarters which is located at a distance of 12.5 km towards SE direction. The existing fertilizer complex known as ZACL is located on Survey No. 100 to 252 at Zuarinagar, Mormugao Taluka, South Goa District of Goa State. The proposed expansion is within this complex only.
3. ZACL intends to expand and establish new facilities at its existing fertilizer complex of Zuarinagar, Goa which includes: **(i)** 30 TPH Fertilizer Blending Unit for Customized NPK Grade; **(ii)** 25 MW Gas Turbine (GT) along with Heat Recovery Steam Generator (HRSG) generating MP steam (37 kg/cm<sup>2</sup> g) with unfired capacity of 50 MT/hr. (70 MT/hr. with supplementary firing); **(iii)** 1X5000 MT Atmospheric Ammonia Storage Tank; **(iv)** Urea granulation unit- Expansion of Urea production from 1500 TPD to 1800 TPD i.e. Urea Prilling: 1200 MTPD+ Urea Granulation Unit: 600 MTPD.

S. No.	Plant	Capacity, MTPD (Existing)	Capacity, MTPD (Proposed)	Capacity Total, MTPD (Post-Expansion)
1	Urea	1,500 (All Prilling)	-300 (Prilling) +600 (New Granulation Plant)	1,200 (Prilling)+ 600 (Granulation) = 1,800
2	Complex Fertilizers produced in NPK A Plant	1,600	0	1,600
3	Complex Fertilizers produced in NPK B Plant	1,600	0	1,600
4	Ammonia	1,050	0	1,050
5	By-Products: CO <sub>2</sub> , Argon	104 & 2.2 Million Sm <sup>3</sup>	0	0*
6	Horton Sphere Ammonia Storage Tank	3,000 (1+1)	Atmospheric Ammonia Storage Tank 1 X 5,000	Atmospheric Ammonia Storage Tank 1 X 5,000
7	Customized Blending Plant	0	30 MTPH	30 MTPH
8	GT	0	25 MW	25 MW
9	HRSG	0	Generation of MP Steam (37 Kg/Cm <sup>2</sup> g) - Capacity (Unfired with supplementary firing) = 50 /70 MT/hr	Generation of MP Steam (37 Kg/Cm <sup>2</sup> g) - Capacity (Unfired with supplementary firing) = 50 /70 MT/hr

\* Argon recovery unit has been demolished to facilitate installation of GT + HRSG. As the Urea Production Capacity is increased from 1,500 MTPD to 1,800 MTPD, all CO<sub>2</sub> generated in Ammonia Plant will be consumed in Urea Plant and therefore no By-product CO<sub>2</sub> will be available for sale.

4. Based on the product grade, the Customized NPK Fertilizers will be produced by bulk blending of various raw materials containing N, P & K. Urea granulation plant will be based on New Casale Vortex Granulation technology. The prills from the prilling tower are screened in a Prills Screener to separate the fine product (i.e. prills with a diameter about 1.2-1.3 mm).
5. The fresh water of 7,870 KLD (reduction of 2,100 KLD from actual consumption of 9,970 KLD) and 350 KLD domestic water will be sourced from Resource Department (WRD) Supply, Govt. of Goa & existing Captive Rainwater Harvesting Storage.



6. The additional power requirement of 2 MW will be through Captive power Generation. About 0.17 MMSCMD & 2,000 SCMD NG / RLNG will be used for steam power generation unit & Customized Blending Unit respectively. It shall be arranged from the existing GAIL NG pipeline.
7. Monitoring survey of the study area has been carried out in summer season- from March to May, 2013. Project has gone through a several stages of TOR review, the need for reviewing the TOR was owing to changes in business circumstances evolution of market needs. With reference to office memorandum [F. No. J-11013/41/2006-IA-II (I) (Part)] dated 22nd August'14 issued by the MoEFCC as baseline data being three years old, we have carried out again baseline monitoring of summer season from March to May, 2016.
8. SPM, SO<sub>2</sub> & NO<sub>x</sub> (flue gas stacks), & NH<sub>3</sub> (Cust. Plant & Urea Granulation). Appropriate Stack height, Dry low NO<sub>x</sub> Combustors, appropriate Scrubbing systems will be provided for air emission control. Line Source Emissions: CO, HC, SPM, NO<sub>x</sub> from approximately additional 100 trucks per day.
9. Suitable control measures have factored into the design of the processes so as to control the fugitive emission (primary and secondary) of NH<sub>3</sub> during loading/ unloading, storage and handling of chemicals.
10. The proposed post project monitoring plan is as given below.

S No.	Activity	Schedule/Frequency
<b>Air Pollution Monitoring</b>		
1	Ambient air monitoring of parameters PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , NH <sub>3</sub> from time to time within the site area.	Online AAQM within site.
2	Ambient air monitoring of parameters PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , NH <sub>3</sub> from time to time at nearby project area.	Once every month (except monsoon) at 4 locations by authorized third party
3	Stack monitoring as given in air consent from time to time	Once in 3 month for all stacks by authorized third party.
4	Workplace monitoring	Once in 3 months by authorized third party.
<b>Noise Pollution Monitoring</b>		
5	Workplace monitoring	Once during month (Hourly reading for 24 hours at each location)
<b>Water Pollution Monitoring</b>		
6	Monitoring of water consumed in various activities from raw water intake and waste water generated from various areas of plants	Parameters like pH and flow will be monitored continuous

7	Monitoring of wastewater inlet and outlet at ETP & STP plants for the principal parameters (such as pH, COD, BOD, SS, TDS, color, Ammonical nitrogen) as specified by GSPCB in their water consent from time to time.	Daily
8	Monitoring of other specific parameters as per GSPCB consent conditions.	Weekly
<b>Soil Pollution Monitoring</b>		
9	Soil Monitoring within Site	As required
<b>Solid Waste Generation Monitoring / Record Keeping</b>		
10	Monitoring of solid / hazardous waste from process and ETP/STP and preparation of compilation of records of daily generation.	Quarterly
11	Records of daily generation of Solid / Hazardous Waste.	As required
12	Record of treatment, storage and dispatch, transportation of solid / hazardous waste to recyclers, re-processors, etc.	As required
<b>Environmental Statement</b>		
13	Environmental statement under the EP (Act), 1986.	Once a year

11. No additional waste water generation will occur due to expansion of project. Waste Water (Process Condensate) generated from Ammonia & Urea Plants are treated within the respective plants in dedicated Process Condensate Stripper Packages. The treated condensate is used as BFW make up. ETP & STP, both having 500 KLD capacity each are already provided. No discharge of effluent & Zero liquid discharge status will be maintained;
12. **Hazardous Waste:** Furnace oil tank cleaning residue and washing water & sludge Used/Spent Oil shall be marginally increased. These will be managed as per the applicable Rules, mainly, Hazardous Waste (Management, Handling, Storage and Transboundary) Rules 2016, as amended till date.
13. Approximate Project cost will be around INR 788.60 Crore. It is proposed to complete the project in 24 months from receiving Environment Clearance.
14. Estuary: Zuari Estuary: 2.25 Km, Sea: Site falls under 200 m to 500 m of coastal area. Zuari River: 7.4 Km, Mangroves Near Cortalim: 5.5 Km, Dabolim Airport: 3.5 km from Site, NH17B: 0.8 Km.
15. **Air:** Average PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, HF, NH<sub>3</sub> readings are found to be within norms at all locations. The concentration of VOC were below detectable limit (1 ppm) at all locations.
16. **Surface water (Pond):** TDS, Chloride, Total Hardness, Fluoride, Calcium,

Magnesium are high in stream at Pale. Heavy metals like Cadmium, Iron and Lead are high at Verna pond water; Cadmium, Iron and Nickel are found high in stream near the pale; Iron and Lead are observed high at Zuari dam Water; Total Coliform and Faecal Coliform which is found to be high at pond and Rainwater Catchment Water.

17. **Surface water (River & Estuary):** TDS, Chloride and Electrical conductivity is high in River Water as there is tidal impact on river and it meets estuary; The marine water can be compared with the class SW-II as per the classification for Coastal Water standards. **Ground water:** It was observed from the analysis report that, all the results are below permissible limit except heavy metals at some places. Ground Water at Pale village is showing higher TDS owing to its close proximity to sea.
18. **Noise levels:** During day & night time, in Residential area, noise levels were slightly higher than the CPCB standards which is due to vehicular movements in nearby highway.
19. **Soil:** Porosity and water holding capacity are minimum in Pale area but permeability is very high due to sandy texture of soil. The soil is non-saline and non-sodic as ESP (Exchangeable sodium percentage is <.01) and EC (Salinity is <0.8) except in Sancoale which is 0.33 and 0.987  $\mu\text{mohs/cm}$  for ESP and EC, respectively and for Cortalim EC is 0.996  $\mu\text{mohs/cm}$ . The soil of Nagoa (pH 3.51) and Cortalim (pH 4.80) is highly acidic which require lime as an amendment. The values of water soluble cations is low due to lateritic nature of soil.
20. The individual risk at plant boundary is very much reduced by replacing the Horton spheres by atmospheric Ammonia storage tanks.
21. **Public Hearing-** Eleven (11) person raised their queries and suggestions in public hearing. Concerned issues (environmental) rose during public hearing were regarding Water discharge, Air Emission, Solid Waste Generation and Transportation of Material. Commitments were given by ZACL to rectify all the issues during public hearing and in written replies.
22. CSR Plan - Total provision for CSR budget in 10 years is ~ INR 20 Crores.

**The committee** after detailed deliberations suggested the PP to submit revised EIA/EMP report in terms of following:

- i. Revision of Layout plan earmarking green belt within plant premises over 33 % of the total project area with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- ii. Rework on drift losses from cooling tower and reduced it to 20%
- iii. Revision of existing water balance to reduce fresh water requirement.
- iv. Arrangements for continuous monitoring system around working place, STP.
- v. Provision for treatment of colony waste water in STP.
- vi. Year wise CSR Plan @2.5% for five years.
- vii. No ground water will be used even for recharging.
- viii. Issues raised during public hearing regarding waste water through

- pipeline.
- ix. Provision for ZLD.
  - x. No bore well for RWH.
  - xi. Submission of SCZMA recommendations

The EAC decided to defer the proposal.

**17.3.2 Proposed Expansion of Technical Pesticide Manufacturing (from 517.4 MT/month to 1117.4 MT/month) at S.P. 3-7/B (B1+B2), Keshwana Industrial Estate, Tal: Kothputli, Dist. Jaipur, Rajasthan by M/s Agrow Allied Ventures Pvt. Ltd.-Environmental Clearance. [IA/RJ/IND2 /31492/2015, J-11011/264/2015-IA II (I)]**

The project proponent made a presentation before the EAC and informed that:

1. **M/s. Agrow Allied Ventures Pvt. Ltd.** is an existing unit located at S.P. 3-7/B (B1+B2), Keshwana Industrial Estate, Tal: Kothputli, Dist. Jaipur, Rajasthan. Unit is engaged in manufacturing of pesticide formulation – 20,000 MT/annum & Agro technical products with production capacity of 517.4 MT/month. Now, unit proposed to expand production capacity of Agro technical products with addition of some new technical products in the same plant premises. Ministry has issued Environment Clearance to M/s Agrow Allied Ventures Pvt. Ltd. vide No.J-11011/261/2012-IA-II(I) dated 30<sup>th</sup> January 2015.
2. So after expansion, total production capacity of the unit will be 1117.4 MT/month. HCl and Di chloro phenol is recovered as by-products. Total Area of project is 40400 m<sup>2</sup>. Proposed expansion will be done in existing premises only.

**Products and capacities –**

Sr. No.	Name of products	Quantity (MT/month)		
		Existing	Proposed	Total
1.	2,4-D Sodium Salt	173	00	173
2.	2,4-D Acid Technical	141	00	141
3.	2,4-D Amine Salt	150	00	150
4.	2,4-D Ethyl Ester Technical	50	00	50
5.	Clodinafop- Propargyl Chloride Technical	1.7	00	1.7
6.	Lambda Cyhalothrin Technical	1.7	00	1.7
<b>Herbicides</b>				
7.	Glyphosate	00	50	50
8.	Pretilachlor	00	20	20
9.	Atrazine	00	10	10
10.	Imizathypr	00	10	10
11.	Sulphosulpron	00	2.5	2.5

12.	Metsulphron	00	2.5	2.5
13.	Metribuzin	00	10	10
14.	Quizalafop - p- ethyl	00	10	10
15.	Oxyflurofen	00	10	10
16.	Pendimathalien	00	20	20
17.	Bispyribac Sodium	00	10	10
<b>Insecticides</b>				
18.	Diafenthuron	00	20	20
19.	Imidacloprid	00	10	10
20.	Acetamiprid	00	10	10
21.	Thiamethoxam	00	10	10
22.	Cypermethrin	00	20	20
23.	Permethrin	00	10	10
24.	Delta Cypermethrin	00	10	10
25.	Buprofezin	00	10	10
26.	Fipronil	00	10	10
27.	Thiophenate methyl	00	10	10
28.	Emamectin benzoate	00	10	10
29.	Bifenthrin	00	10	10
30.	DDVP	00	10	10
31.	Chlorpyriphos	00	20	20
32.	Indoxacarb	00	05	05
33.	Novaluron	00	10	10
34.	Fenpyroximate	00	10	10
<b>Fungicides</b>				
35.	Azoxystrobin	00	15	15
36.	Tricyclozole	00	10	10
37.	Hexacanazole	00	10	10
38.	Mancozeb	00	150	150
39.	Metalexyl	00	10	10
40.	Diafenaconzole	00	10	10
41.	Propiconazole	00	10	10
42.	Tebuconazole	00	10	10
<b>Intermediates</b>				
43.	MPBD	00	25	25
<b>Total</b>		<b>517.4</b>	<b>600.0</b>	<b>1117.4</b>
<b>By-Products</b>				
1	HCl (28 to 30%)	100	50	150
2	Recovered Di Chloro Phenol (30%)	60	00	60
<b>Total</b>		<b>160</b>	<b>50</b>	<b>210</b>

2. Project Cost - Cost of existing project is 40 crore & additional cost for the proposed expansion is around Rs. 12 crore; Out of which around 3.0 crore will

be used for development of EMS (Environmental Management Systems) as capital cost & around Rs. 1.61 crore as recurring cost per annum.

3. At present, total water requirement (industrial + domestic + greenbelt) is 40.5 KLD. After expansion; it will be increased by 108.5 KLD, thereby summing up to total consumption of water as 149.0 KLD; out of which 55 KL/day will be fresh water requirement & 94 KL/day will be met from recycle/treated water (product water from RO & condensate recovery from MEE). Unit is satisfying its fresh water requirement from bore well. After expansion source of fresh water consumption will remain same.
4. At present, power requirement is 800 kVA and after expansion it will be increased up to 1200 kVA. Total power requirement will be fulfilled from Rajasthan Electricity Board. Unit has already installed 2 nos. of D.G. sets (300 kVA each) and after expansion, it will install 500 kVA of stand by D.G. sets (2 nos.) to meet emergency power requirement and used only during failure of power supply.
5. At present, Coal is used as fuel 30 tons/day. After proposed expansion, 50 tons/day Coal + Pet coke will be used. HSD @ rate of 300 lit/day is used in stand by D.G. sets of 300 kVA each & after expansion 500 lit/day will be used in newly installed D.G. sets of 500 kVA each. Fuel details are tabulated in below table.

Sr. No.	Equipment	Type of fuel	Fuel consumption		
			Existing	Proposed (Additional )	Total
1	Boiler + HAG	Coal + Pet Coke	30 TPD	20 TPD	50 TPD
2	Stand by D. G. Set	HSD	300 lit/day	200 lit/day	500 lit/day

#### 7. Wastewater Generation:

Sr. No.	Source	Wastewater Generation (KL/day)	
		Existing	Total after expansion
<b>1.</b>	<b>Domestic</b>	6.0	13.0
<b>2.</b>	<b>Industrial</b>		
i)	Process	8.7	75.0
ii)	Scrubber	2.0	2.0
iii)	Washing	3.0	10.0
iv)	Cooling	1.0	10.0
v)	Boiler	0.75	1.5
<b>Total Industrial</b>		<b>15.45</b>	<b>98.5</b>
<b>Total (1+2)</b>		<b>21.45</b>	<b>111.5</b>

#### 8. Details of Stacks pollutants:

Sr. No.	Stack attached to	Stack Height (m)	Fuel	Fuel consumption rate	APC measures	Probable Emission
<b>➤ Flue Gas Stacks - Existing</b>						
1.	Boiler (2 tons/hour)	30	Coal	30 TPD	Cyclone + Bag filter	PM<150 mg/NM <sup>3</sup> SO <sub>2</sub> <100 ppm NO <sub>x</sub> <50 ppm
2.	Hot Air Generator					
3.	D.G. Set (2 nos.) (300 KVA each)	11	HSD	300 lit/day	--	
<b>➤ Process Gas Stacks - Existing</b>						
1.	Chlorination vessel of phenol	15	--	--	Two stage water, one stage Alkali scrubber	HCl<20 mg/m <sup>3</sup> Cl <sub>2</sub> <9 mg/m <sup>3</sup>
<b>➤ Flue Gas Stacks - Proposed</b>						
1.	Boiler (5 TPH)	30	Coal + pet coke	50 TPD	Cyclone + Bag filter	PM<150 mg/NM <sup>3</sup> SO <sub>2</sub> <100 ppm NO <sub>x</sub> <50 ppm
2.	D.G. Set (2 nos.) (500 KVA each)	11	HSD	500 lit/day	--	
<b>➤ Process Gas Stacks - Proposed</b>						
1.	Reaction vessel of Pretilachlor & Metalexyl	11	-	-	Two stage water, one stage Alkali scrubber	HCl<20 mg/m <sup>3</sup>
2.	Reaction vessel of Pendimathalin	11	-	-	Alkali (Soda ash) scrubber	NO <sub>x</sub> <25 mg/m <sup>3</sup>
3.	Reaction vessel of Permethrin & Delta Methrin	11	-	-	Two stage water, one stage Alkali scrubber	HCl<20 mg/m <sup>3</sup>

### 9. Details of Hazardous Waste Generation:

Sr. No.	Type of Waste	Category of waste as per	Quantity		Disposal facility
			Existing	Total after	

		<b>HWM Rules 2016</b>		<b>expansion</b>	
1.	ETP waste	35.3	5 MT/mont h	30 MT/mont h	Collection, storage, Transportation and disposal to TSDF.
	MEE salt	-	2.5 MT/mont h	35 MT/mont h	
	Inorganic salt from process	-	0	115 MT/mont h	
2.	Process residue	29.1	-	40 MT/mont h	Collection, Storage, Transportation, Disposal at CHWIF approved by SPCB
3.	Used Oil	5.1	0.5 kl/yr.	1.0 Kl/yr.	Collection, storage & reuse for internal lubrication purpose. In case of excess, sell to registered re- processors.
4.	Discarded Containers / Liners	33.1	500 Nos./mon th	2000 Nos./mont h	Collection, storage and disposal by selling to authorized dealers.
			250 kg/mont h	1000 kg/month	
5.	Distillation Residue	20.3	5.5 MT/mont h	10 MT/mont h	Collection, storage, transportation and disposal at CHWIF site or send to cement industry for co-processing.
6.	HCl (28 – 30%)	29.6	100 MT/mont h	150 MT/mont h	Collection, storage, captive use/ sell to actual users.

10. The ambient air quality monitoring was carried out at eight AAQM locations, to assess existing sub regional air quality status during the month of March, 2016 to May, 2016. The parameters calculated are as follows:

i. Particulate Matter (PM<sub>10</sub>)

An average and 98<sup>th</sup> percentile value of 24-hourly PM<sub>10</sub> values at all the locations varied between 61.5-73.0 µg/m<sup>3</sup> and 66.6-79.4µg/m<sup>3</sup>, which are well within the stipulated standard of CPCB, 100 µg/m<sup>3</sup>.

ii. Particulate Matter (PM<sub>2.5</sub>)



An average and 98<sup>th</sup> percentile value of 24-hourly PM<sub>2.5</sub> values at all the locations varied between 33.2-41.6 µg/m<sup>3</sup> and 35.7-47.8µg/m<sup>3</sup>, which are well within the stipulated standard of CPCB, 60 µg/m<sup>3</sup>.

iii. Sulphur Dioxide (SO<sub>2</sub>)

An average and 98<sup>th</sup> percentile value of 24-hourly SO<sub>2</sub> value of arithmetic mean at all the locations ranged between 13.5-15.9 µg/m<sup>3</sup> and 14.9-19.7 µg/m<sup>3</sup> respectively, which are well within the stipulated standards of 80 µg/m<sup>3</sup>.

iv. Oxides of Nitrogen (NO<sub>x</sub>)

An average and 98<sup>th</sup> percentile value of 24 hourly NO<sub>x</sub> value of arithmetic mean at all the locations ranged between 15.0-17.7 µg/m<sup>3</sup> and 16.7-20.3 µg/m<sup>3</sup> respectively, which are much lower than the standards i.e. 80 µg/m<sup>3</sup>, stipulated by CPCB.

11. Public hearing - Public hearing is exempted as per para 7(i) III stage (3) (i) (b) of EIA Notification, 2006 for preparation of EIA/EMP Report, being site is located in the Notified industrial area.

**12. CSR plan:**

**Budgetary provisions for socio economic activities**

**First five years(Every Year)**

<b>Sr. No.</b>	<b>Activity</b>	<b>Budgetary provision (Rs. in Lakhs)</b>
1	Educational activities	7
2	Drinking water and sanitation facilities	4.5
3	Public Health and family welfare	6.5
4	Women Empowerment & children Development activities	3.5
5	Preservation of the Environment and Sustainable Development	4.5
6	Miscellaneous as per the demand of surrounding villages	4
<b>Total</b>		<b>30.0</b>

The Committee noted the submissions made by the PP. After deliberations the Committee sought the following additional information:

- i. Action taken report on certified compliance report.
- ii. CGWA permission for withdrawal of ground water, as the proposed project is located in Tal: Kothputli i.e., water deficit area of Rajasthan. earlier permission is expired on 21.11.2016.

	The EAC decided to defer the proposal.
17.3.3	<p><b>Proposed Expansion of Sugar Plant from 4900 TCD to 6000 TCD &amp; Co-generation Power Plant from 15 MW to 21 MW By M/s Shri Gurudatt Sugars Ltd. At Gut No.61/A, Akiwat Takaliwadi Road, Takaliwadi, Taluka Shirol, District-Kolhapur, Maharashtra- Environmental Clearance [IA/MH/IND2/59911/2014, J-11011/41/2015-IA-II(I)]</b></p> <p>The project proponent made a presentation before the EAC and informed following:-</p> <ol style="list-style-type: none"> <li>1. The project involves expansion of Sugar Plant from 4900 TCD to 6000 TCD &amp; Co-generation Power Plant from 15 MW to 21 MW By M/s Shri Gurudatt Sugars Ltd. At Gut No.61/A, Akiwat Takaliwadi Road, Takaliwadi, Taluka Shirol, District-Kolhapur, Maharashtra. Project is already established at Takaliwadi and there is no proposal to acquire additional land. The required raw material will be available from cane growing area near &amp; around factory.</li> <li>2. The TOR letter was issued by the MoEFCC 36<sup>th</sup> reconstituted Expert Appraisal Committee (Industry-2) meeting held during 16 &amp; 17 March, 2015 New Delhi.</li> <li>3. This EIA included collection of baseline data with respect to major environmental components, viz. air, noise, water, land, biological and socio-economic components for winter season of year 2015-2016.</li> <li>4. Power requirement is 6 Mw/day for sugar &amp; co-gen unit, the same is met through own generation.</li> <li>5. The total requirement of water for sugar &amp; cogeneration is 1405.25 m<sup>3</sup> /day for process, cooling, boiler and domestic purpose. Fresh water requirement is 112 m<sup>3</sup>/day which supplied by Irrigation Dept, Kolhapur. For the same necessary permission has been obtained. Balance water shall be met through recycling of condensate water. Under no circumstances ground water shall be used in the factory.</li> <li>6. No. of Working Days in Year 160 Days of sugar plant 160+124 days of cogen plant</li> <li>7. Basic Raw Material is Sugarcane &amp; Bagass.</li> <li>8. Total Land Area 55 Acre. Man Power requirement is 511 Nos.</li> <li>9. Boiler Capacity &amp; Fuel Boiler       <ol style="list-style-type: none"> <li>1: 70 TPH Boiler</li> <li>2 : 40 TPH</li> </ol>       Fuel Quantity: Bagasse : 36.9 T/Hrs 12.     </li> <li>10. Water Requirement 300 m<sup>3</sup> /day 13.</li> <li>11. The ambient Air Quality Monitoring was carried out for winter-summer season October-2015 to December 2015 as mandated by TOR issued by EAC. Ambient quality monitoring was taken at 9 different locations within the study area. The locations for ambient air quality monitoring were decided based on the guidelines given in the EIA manual prepared by MoEFCC. Maximum stations were selected in the down wind direction based on wind rose of earlier year. The frequency of air monitoring was 24 hrs twice a week at each station spread over the entire season with gaseous</li> </ol>

samples being changed six times (at 8-hour intervals). The observations indicate that air quality within the 10 km radius was good and all the measured air quality parameters were within prescribe limits of MoEFCC guidelines. Maximum concentration of SO<sub>2</sub> was 9.2 µg/m<sup>3</sup> at Project Site & minimum concentration was 7.1 µg/m<sup>3</sup> at Shahapur as well as Manjari. Maximum concentration of NO<sub>x</sub> was 11.1µg/m<sup>3</sup> at at project site & minimum concentration was 8.6 µg/m<sup>3</sup> at Akiwat. Maximum concentration of PM<sub>10</sub> was 47.8 µg/m<sup>3</sup> at Project Site & minimum concentration was 25 µg/m<sup>3</sup> at Shahapur. Maximum concentration of PM<sub>2.5</sub> was 18.5 µg/m<sup>3</sup> at Project Site & minimum concentration was 7.5 µg/m<sup>3</sup> at Akiwat. Maximum concentration of CO was 0.16µg/m<sup>3</sup> at Project site & minimum concentration was 0.09µg/m<sup>3</sup> at Takali.

12. Effluent Treatment Facility Screens, Oil skimmer, Equalization Tank, Anaerobic Filters, Aeration tank, Secondary Clarifier Condensate Polishing Unit, Final Collection tank etc.
13. The total project cost is 86.34 Cr, EMP cost- 11.23 Cr, CSR Cost- 1.1 Cr. Time of Completion: The Project shall be completed in 12 months time after grant of EC & Consent to Establish.
14. Power Requirement & its source : 15 MW, Source: In-house production and excess will be met by MSEB. 14. CSR cost (Rs.) Rs.14,85,500
16. Area for Green Belt 15 Acers.
17. Nearest River is Krishna River at 3 km towards East direction, Panchganga River 5 km towards North West Direction and Dudhganga River 7 Km towards South West direction.
18. Existing industries in study area are:
  - i. Jawahar SSK Ltd. Hupari South South West 30 Km
  - ii. Shri. Renuka Sugar Ltd. Ichalkaranji East South East 25 Km
  - iii. Shri. Datta SSK Shirol East 17 Km
  - iv. Shirguppi Sugars Ltd. Shirguppi. Karnataka. North West East 30 Km
  - v. Shivshakti Sugar Ltd. Yadrav Karanataka. North West 35 Km
  - vi. Dudhganga SSK Ltd. Chikodi, Karanataka West 25 Km
19. There is no forest land, Heritage site, Defence establishment, eco-sensitive zone & Habitat.
20. Public Hearing was conducted by the Maharashtra Pollution control Board on 24/08/2016 at plant site Gut No.61/A, Akiwat Takaliwadi Road, Takaliwadi, Taluka Shirol, District-Kolhapur, Maharashtra under the Chairmanship of Addtional District Magistrate, Kolhapur. The issues raised by general pubic were about employment appertunities, pollution due to waste water discharge from plant etc.
21. CSR plan - SGSL has allocated a fund of Rs.1.1 cr. For CSR activities

The committee deliberated on the EIA/ EMP report and found it in order and as per the TOR prescribed by the Ministry. The Committee also noted that the State Pollution Control Board, Maharashtra has issued CTE vide letter no. 1.0/BO/CAC-CELL/EIC No. KP-15740-14/EIC. 4729 dated 27/04/2015 and CTO vide letyter no. 1.0/BO/CAC CELL/EIC-KP-17292-15/ O&R/CAC-418 dated 8/10/2016 with validity up to 31.07.2016. The committee examined the issues raised during public hearing and observed that though there are many

participants supported the proposal but there were concerns about soil and water pollution due to waste water discharge from the plant. The committee sought justification from the PP in this regard. The PP in response informed that they are not discharging any type of waste water outside. The waste water discharge is used for irrigation of agricultural fields owned by the project proponent. The Committee thereafter suggested the PP that they should discharge the industrial waste water even on their own agricultural fields only after proper treatment and after assurance that the discharge water is all within the standards prescribed. The Committee asked the PP to submit a certificate by SPCB clearly mentioning that the effluent/wastewater generated by the existing plant is well within the prescribed limit. The PP submitted a letter no. MPCB/RO/KOP- 2878/2016 dated 28/07/2016 issued by the Regional Officer, Kolhapur, Maharashtra Pollution Control Board.

The Committee noted that the Regional Officer, Kolhapur has certified in the said letter that the industry has provided online monitoring system for air monitoring & treated effluent monitoring as per guidelines of Central Pollution Control Board. The Online monitoring system is connected to MPCB & CPCB server. It is also mentioned in the letter that the industry has also provided full-fledged ETP consisting of primary, secondary & tertiary treatment facilities. The treated effluent is utilized for irrigation on 35 acres land owned by the industry. The analysis results of Joint Vigilance Samples collected in the month of December, 2015, January, 2016, February, 2016 & April, 2016 are found to be within prescribed limits. Consent of Industry was valid up to 31.07.2016. Application for renewal is submitted and same is under consideration of the Board. The letter of RO, Kolhapur was issued as per request letter of the industry dated 26.12.2016 & report submitted by Sub Regional Officer, Kolhapur dated 28.12.2016. The PP also informed that application for renewal of Consent to Operate was filed before Maharashtra Pollution Control Board and issued under Auto-Renewal policy of State Government.

After examining the facts and detailed deliberations the committee decided to recommend the proposal for grant of environmental clearance subject to compliance of following conditions along with other specific and general environmental conditions relevant to the project proposal:

- i. Zero liquid Discharge System to be installed.
- ii. Water requirement to be reduced at extent possible by using latest process methodology being used world wide.
- iii. Fly Ash generated shall be sent to nearby cement industry.
- iv. Green belt (10 m wide) of perennial plant species like Neem, Sesam, Teak etc., to be developed around the plant periphery ensuring the 33% area of the plant as green area. The Forest department may be consulted in this regard.
- v. Air emissions from all point source to be controlled by latest technology instruments. The emissions shall conform to the limits imposed by Maharashtra Pollution Control Board (MPCB).
- vi. Periodic soil and water sampling in nearby villages and water bodies to be

	<p>done by the Project Authorities through 3<sup>rd</sup> part expert and report shall be submitted to the concerned regional office of the Ministry.</p> <p>vii. RO plant of sufficient capacity to be installed in the nearby villages to ensure safe drinking water supply. Maintenance of the RO plant will be owned by the Project Authorities.</p> <p>viii. Health check-up camps to be organised periodically in nearby villages.</p> <p>ix. A regular environmental manager having PG qualification in environmental sciences/environmental engineering to be appointed for looking after the environmental management practices in the plant.</p>
17.3.4	<p><b>Setting up of Caustic Soda, Chlorine, Hydrogen Peroxide, Synthetic Organic, Inorganic, Specialty Chemicals along with Coal based Captive Power Plant (100 MW) at Survey No. 169, 170, 175, 190, 191 of Village: Varsana, Taluka: Anjar, Distt. Kachchh, Gujarat by M/s Kutch Chemical Industries Limited.-reg- [IA/GJ/IND2/51468/2016, J-11011/101/2016- IA II(I)]-Environmental Clearance</b></p> <p>The project proponent made a presentation before the EAC and informed that:-</p> <ol style="list-style-type: none"> <li>1. The project involves Manufacturing of new Caustic Soda, Chlorine, Hydrogen Peroxide, Synthetic Organic, Inorganic, Specialty Chemicals along with Coal based Captive Power Plant near their existing Unit at Survey No. 169, 170, 175, 190, 191 of Varsana Village, Anjar Taluka, of Kachchh district, Gujarat state by M/s. Kutch Chemical Industries Limited (Unit 2). The project proposal was granted Terms of Reference vide letter no. J-11011/101/2016-IA II(I)] dated 15<sup>th</sup> July, 2016 for preparation of EIA/EMP report.</li> <li>2. Thus, the proposed products falls under 4(d), Chlor-Alkali Industry, 5(f) – Synthetic Organic Chemicals Industry &amp; 1(d), Thermal Power Plant ‘Project or Activities’ listed within the Category to the EIA Notification dated September 14th, 2006 (amended till date). This project is classified as Category “A” project. Plot Area is 74 Acres (~ 2,99,475 m<sup>2</sup> ).Total cost of the project is ~ 1,000 Crore. Project shall be implemented in phased manner.</li> <li>3. No Critically Polluted Areas, National Park / Wildlife Sanctuary, Tiger Reserve / Elephant Reserve / Turtle Nesting Ground, Core Zone of Biosphere Reserve, Reserved / Protected / Social Forests, Habitat for migratory birds, Mangroves, Mountains / Hills, Archaeological Sites (as per ASI), Defense Installation are identified in study area.</li> <li>4. Their existing plant is situated adjoining the proposed plant at Village-Padana near Gandhidham in Kutch district. It is engaged in manufacturing of chlorination, Nitration and hydrogenation of hydro carbon. Various Chlorine based chemicals like CPW, Chloro-Benzenes, Thionyl Chloride, Chloro-Sulfonic acid etc. are manufactured. It also has a Sulfuric acid plant of 15,000 MTA capacity. Both the units are different, having separate entry and exit points, admin building, management and manpower. Both units will their own ETPs, utilities and consents to operate from GPCB.</li> <li>5. Power requirement will be sourced from proposed 100 MW CPP having backup source of PGVCL. Two DG Sets of 1,000 KVA each will be installed and used as standby back-up supply for emergency conditions &amp; safe</li> </ol>

shutdown of Chemical plants in case of main power failure only.

6. Imported Indonesian/ South African Coal having 0.5 % sulphur and 7.5% ash content will be used for the proposed CFBC Boilers and HSD will be used for DG Sets. In principle approval for procurement of coal is obtained from ADI Tradelink (Adani).
7. Radioactive elements in coal and fly ash should not be sources of alarm. The vast majority of coal and the majority of fly ash are not significantly enriched in radioactive elements, or in associated radioactivity, compared to common soils or rocks.1 Though a letter is submitted to Department of Atomic Energy as provided in Annexure 7, for analysis of Radioactive material content in coal. Analysis report is awaited and shall be provided as and when available.
8. The total fresh water requirement would be 6,304 KLD by maximizing recycle and reuse concept & achieving ZLD which will be met from GWIL (Narmada Canal). In-principle approval for 7 MLD is been obtained. Principle areas of water consumption are DM Plant (5053 KLD), Process, Boiler (300KLD), Cooling Tower (2160), Caustic Soda & other Plants (3000 KLD) and gardening (170KLD).
9. In the proposed project, ZLD concept will be adopted. Sewage generated from the domestic use will be disposed into soak pit and septic tank. There will be no disposal of waste water outside the premises in normal situation. Separate waste water stream and storm water line will be provided. The waste water to be generated from synthetic organic plant to be sent to ETP-1 followed by MEE & ATFD. Whereas, waste water from DM Plant, Cooling Tower to ETP-2 followed by RO & Reject from RO sent to MEE.
10. From the proposed project, it is envisaged that different type of hazardous waste like Used/spent oil, Distillation residue, Process waste from  $\text{CaCl}_2$  Plant, Chemical containing residue arising from decontamination, Discarded containers/barrels/liners contaminated with hazardous waste, Chemical sludge from waste water treatment, ATFD / Spray Dryer Solid Waste, Inorganic acids (HCl) shall be generated. Based on the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016, as amended till date, categorization, storage and disposal of both process and non-process wastes shall be done.
11. Non-hazardous solid waste like Brine Sludge will be stored in in-house SLF and disposed to authorized TSDF. Distillation residue (200 MT/Y) will be sent to incinerator. In-principal approval for receiving landfilling / incineration waste by Saurashtra Enviro Projects Pvt. Ltd., Kutch Facility is received. Fly ash shall be given to Brick/Cement manufacturing Industries. Used/spent oil (10MT/Y) shall be sold to authorized Recyclers.
12. During the construction phase around 1,000 workers will be hired. During operation phase, project will generate direct employment for more than 500 people and indirect employment for approx. 500 people. They may be hired locally. First preference shall be given to skilled, semi-skilled work force of local community.
13. Approximately, 250 trucks per day carrying raw material and finished goods shall be using the national highways (NH – 6 & NH-50) connecting Site to Gandhidham and Ahmedabad. Employees and contract workers (~2 staff buses, 50 cars & 100 two wheelers & 100 bicycles) shall use the same route during peak hours.

14. The parameters monitored were PM10, PM2.5, SO<sub>2</sub>, NO<sub>x</sub>, HCl, Cl<sub>2</sub>, HC (Methane and Nonmethane) & VOC. Other parameters as specified in ToR, i.e. CO<sub>2</sub>, CO, acid mist were not analyzed as source for the same is not envisaged from the project. Average concentration of PM10 recorded ranged from minimum 54 µg/m<sup>3</sup> (At Pashuda Village) to maximum 134 µg/m<sup>3</sup> (At Project Site); Average concentration of PM2.5 recorded ranged from minimum 13 µg/m<sup>3</sup> (At Padana) to maximum 75 µg/m<sup>3</sup> (At Varsana Village). It is noted that the average PM10 & PM2.5 results does not exceeds the permissible limits of 100 µg/m<sup>3</sup> & 60 µg/m<sup>3</sup> respectively for 24 Hrs. at all locations except at KCIL, Unit – 1 (only PM10) which could be due to: (i) Operation of existing unit (industrial activities); (ii) Near coastal regional, influence of windy atmosphere; (iii) Vehicular movement on the “kaccha” road connecting site to main highway.
15. The concentration of SO<sub>2</sub> (8.0 – 11.7 µg/m<sup>3</sup> ), NO<sub>x</sub> (18.1 – 44.8 µg/m<sup>3</sup> ), HCl ( < 1.0 – 8.6 µg/m<sup>3</sup> ), Cl<sub>2</sub> (< 1.0 – 12.2 µg/m<sup>3</sup> ) & HC Methane (994 – 1,411 µg/m<sup>3</sup> ) are within permissible limits as prescribed by CPCB & Factories act. The concentration of NMHC – Non-Methane & VOC were below detectable limit.
16. SPM emissions from coal stock piles may be a volume source emission. Fugitive emissions may arise from storage & handling of various hazardous chemicals also used as either raw material or finished product in MCB/ODCB/PDCB/TCB units.
17. During the manufacture of some of the products gaseous Hydrogen chloride are evolved. These gases are absorbed in water/ caustic soda solution. Hydrogen chloride gas is absorbed in water producing 31% Hydrochloric acid solution. The absorber system is designed for absorbing a mixture of HCl. The system comprises of two FFA, one Ventury absorber and a packed column as a tail gas absorber. The first FFA is for concentrating HCl to 31% before it goes to the storage tank. In this dilute HCl solution is circulated as the absorbent. Both HCl gas and absorbent liquid enters at the top (co-currently) and flows down as a film through the tubular passage formed by the multi-block graphite absorber. The heat generated is removed by the cooling water circulating through the utility passage. The acid solution runs down into the circulating liquid holding tank and the unabsorbed gases go to a ventury scrubber which absorbs part of the HCl and also creates a suction effect for the gas flow. The exit gases from the ventury scrubber enters the second FFA where almost all the HCl is absorbed in water. The gas and the absorbent liquid (caustic soda solution) flows counter-currently in the tower. The top outlet of the scrubber will be practically free of HCl.
18. Expenditure to be incurred by KCIL on environmental monitoring and management shall include capital cost of ~ INR 43.57 Crore and ~ INR 15.63 Crore recurring cost (annually).
19. Fugitive emissions from storage & handling area for raw materials, solvents, finished products is envisaged due to proposed project. Odor of raw materials & finished goods shall be limited to plant area. Fugitive emissions shall be controlled by taking following steps:
  - i. All liquid raw materials and intermediates shall be charged into Reactors with pumps or under gravity through closed pipes.

- ii. All vents of holding tanks and dosing vessels shall be connected to a Vent Scrubber system comprising of a suction Blower, Alkali Scrubber and an Activated Carbon Column before venting through a tall stack.
- iii. All process emissions will be passed through properly designed scrubber and finally released in to atmosphere through adequate stack height;
- iv. VOC present in the vent gas stream shall be absorbed in the Activated Carbon tower.
- v. Suction Hoods shall be placed near the Man-holes & Charging funnels of Reactors & Filters so that chemical vapors and dust do not escape into the Plant & surroundings, when the man-hole covers are opened for inspection or charging of RM.
- vi. All storage tanks of low boiling solvents / chemical shall be provided with Conservation Vents.
- vii. Vents of HCl storage tanks shall be provided with a Water filled trap to prevent Acid fumes from escaping out.
- viii. All pumps handling hazardous chemicals shall be provided with mechanical seals to prevent fugitive emission. Wherever possible magnetic coupled pumps will be used.
- ix. Any spillage from drums etc. will be absorbed with saw dust / soda ash and moped clean. The contaminated absorbent will be safely disposed off along with hazardous waste. Storage tank will be provided with level gauge, dyke wall, automated loading and unloading for the chemicals to avoid human contact. All storage tank will be designed and placed according to the Industrial Safety & Health Department. Measuring Instruments with sound alarm and having strategically placed sensing elements will be provided for alerting the personnel in case of any escape of gases like Chlorine, HCl vapors.
- x. Carbon Tower (to remove organic traces).

**19. Socio Economic:** There are 17 villages, with a total population of 57,544 persons and 13,093 households; Sex Ratio: 829 females per 1,000 males; Literacy Level: male literacy is 65.91% and female literacy is 34.09% of total population; Drinking water: Most of the villages are provided with water through the Private Water Tankers. These tankers are brought from Anjar or Bhuj. Now most of the villages are connected with Narmada Canal water;

**20. Hazards Identification** - During operation of the proposed Pesticide facility, following activities can pose hazards and risk to human and surrounding environment:

- Storage of Chlorine, Methanol, Benzene, HSD;
- Loading and unloading hazardous waste - mechanical movements;
- Contact with hazardous chemicals;
- Storage of Incinerable Waste.

**21. Public Hearing** - 15 written queries received before and at the time of public hearing, 8 person raised their queries and suggestions. Concerned issues (environmental & non environmental) rose during public hearing were regarding Land Possession, Risk to human health, raw water consumption, safety features, CSR activities, job opportunities, training for youths & unemployed villagers, firefighting related help, insurance policy for family of employee, rain water harvesting, regarding greenbelt & tree plantation,



regarding NABET related & EIA report issue, land use of site & related to air pollution.

**22. CSR Plan** - The project proponent has earmarked ~ INR 157 Lacs per year with 10% increase in the amount each year towards community development program in the study area. Thus, a budget of ~ 25 Crores (2.5% of total project cost) is earmarked to be spent on ESC/CSR Activities based on the yearly need based assessment in 10 years.

**23.** The following products and by-products shall be manufactured:

<b>S. No.</b>	<b>Name of Product/Byproduct</b>	<b>Production Capacity (MTPA)</b>
<b>1</b>	<b>Caustic Chlorine Plant</b>	
1(a)	Caustic Soda (100%) Lye / Prills / Flakes	2,16,000
1(b)	Caustic Potash (100%) Lye / Flakes	36,000
1.1	Chlorine Gas / Liquid	2,12,900
1.2	Hydrogen	6,050
1.3	Hydrochloric acid (32%)	1,80,000
1.4	Sulphuric acid (78-80%)	12,000
1.5	Sodium Hypochlorite	12,000
1.6	Gypsum	3,600
2	Hydrogen Peroxide (100% H <sub>2</sub> O <sub>2</sub> Basis)	36,000
3	Anhydrous Aluminum Chloride	36,000
4.1	Poly Aluminum Chloride (18%)	18,000
4.2	Poly Aluminum Chloride (30%)	18,000
5	Calcium Chloride (100%)	60,000
6	Para Amino Phenol	36,000
7	Hydrogenation of Hydrocarbon, Nitro Hydrocarbon & Chloro Hydrocarbon like: Aniline, Chloro Aniline, OA/PA, DCA / PCA / MCA, OPDA / PPDA, Toluidene, Cumidiene, Xyldine.	1,20,000*
8	Chlorination of hydrocarbon such as MCB, DCB, ODCB, PDCB, TCB.	90,000*
9	Chlorination of toluene such as Benzyl Chloride, Benzal Chloride, Benzo Trichloride.	
10	Chlorination of Acetic Acid - MCA.	
11	Chlorination of Paraffins - CPW	
12	Hydrochloric Acid (30%)	
13	Coal based Captive Power Plant	100 MW (Capacity)

\* Total Overall Capacity combining all the products. Product mix will be based on market requirement.

The committee deliberated on the proposal and observed that there are some mangroves patches at 5 k.m. distance from plant. The Committee also assessed the need for reduction of fresh water demand of the proposed plant as

	<p>the project is being located in fresh water gray area of Gujarat. PP confirmed that proposed project site is outside of CRZ. The Committee also celebrated on the public hearing report and found that all issues raised during public hearing have been satisfactorily responded by the project authorities.</p> <p>After examining the facts and detailed celebrations the committee decided to recommoned the proposal for grant of environmental clearance subject to compliance of following conditions along with other specific and general environmental conditions relevant to the project proposal:</p> <ol style="list-style-type: none"> <li>i. Mangroove, situated 5 km away from the site, would be conserved.</li> <li>ii. Zero Liquid Discharge system as aproposed to be operated with full efficiency.</li> <li>iii. During the presentation PP has given commitment to reduce the fresh water by 10%. After this fresh water requirement will be 6050 m/day.</li> <li>iv. 10 metre width with green belt planting Neem and Shisham, Tickwood, Chewsnut trees. The Committee has also advised to avoid the coconut tree plantation.</li> <li>v. HCL internal transfer should be done through pipeline.</li> <li>vi. CSR plan as proposed shall be implemented in five years.</li> </ol>
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### **Reconsideration of EC**

17.3.5	<p><b>Expansion of Existing Distillery (from 60 KLPD to 150 KLPD) at Village Alaganchi, Taluka Nanjangud, District Mysore, Karnataka by M/s Bannari Amman Sugars Limited {J-11011/71/2013-IA II(I); IA/KA/IND2/54195/2013}- Environment Clearance</b></p> <p>The PP did not attend the meeting. The EAC decided to defer the proposal.</p>
17.3.6	<p><b>Proposed enhancement of existing molasses based distillery unit from 30 KLPD to 60 KLPD at Nasik Babhulgaon, Post: Rakshi, Tal.: Shevgaon, Dist.: Ahmednagar, Maharashtra by M/s. Gangamai Industries and Constructions Ltd. (GIACL) - reg. {J-11011/14/2015/IA II (I); } - Environment Clearance</b></p> <p>The Member Secretary informed the EAC that the proposal was awarded Terms of References (TORs) in the 34<sup>th</sup> Reconstituted Expert Appraisal Committee (Industry -2) meeting held during 17<sup>th</sup> – 19<sup>th</sup> February, 2015 for preparation of EIA-EMP report. The proposal for grant of environmental clearance has also been discussed during 12<sup>th</sup> EAC meeting held during 23-24<sup>th</sup> August 2016. During the presentation on 12<sup>th</sup> EACmeeting, the committee asked to submit the following information:</p> <ol style="list-style-type: none"> <li>1. Detailed action taken report with documentary proof on the non complied</li> </ol>

	<p>points as reported by Regional office report w.r.t. existing EC issued vide letter no F. No J-11011/598/2010-IA-II(I) dated 2nd September, 2014 for molasses based distillery (30 KLPD).</p> <p>2. Detailed action plan under ESR activity to be drawn to tune of 5% of project cost on the items arising from public hearing. Projected physical and financial plan to be drawn on social and developmental activity for nearby area.</p> <p>The project proponent and their consultant (M/s. Equinox Environments (India) Pvt. Ltd.) during 17<sup>th</sup> EAC meeting held during 26<sup>th</sup>-29<sup>th</sup> December, 2016 produced the action taken report on the non compliance points reported by the R.O. Nagpur vide letter 5-48/2014(ENV)/364 dated 11/05/2016.</p> <p>The EAC examined the action taken report and assessed that the PP should produce the action taken report verified by the R.O. Nagpur.</p> <p>The EAC decided to defer the proposal for want of above additional information. The Committee also recommended to the Ministry to take up the matter with R.O. Nagpur.</p>
17.3.7	<p><b>Exploratory / Appraisal Drilling in KG-OSN-2009/3 Block in Offshore KG Basin, Prakasam &amp; Guntur Districts, Andhra Pradesh by M/s Cairn Energy India - reg – Environment Clearance [F. No. J- 11011/363/2014-IA(I)]</b></p> <p>The Member Secretary informed the EAC the proposal has been discussed during 12<sup>th</sup> meeting of the EAC held during 23-24<sup>th</sup> August 2016. During the presentation the PP was asked to submit the following information :</p> <ol style="list-style-type: none"> <li>i. Coordinates of proposed well locations to be provided.</li> <li>ii. Distance of each well from Krishna Wildlife sanctuary along with location map.</li> <li>iii. Whether wildlife clearance is being sought w.r.t. location of drill within 10 km distance. If so provide the copy of letter submitted to NBWL clearance.</li> <li>iv. Type of drilling mud will be used and its disposal plan.</li> <li>v. Action plan to reduce the impact on nearby protected areas.</li> </ol> <p>During presentation before the EAC in its 17<sup>th</sup> meeting held during 26<sup>th</sup> - 29<sup>th</sup> December, 2016 the PP informed that they have submitted all the above information.</p> <p>After examining the facts and detailed deliberations the committee decided to recommend the proposal for grant of environmental clearance subject to compliance of following conditions along with other specific and general environmental conditions relevant to the project proposal:</p> <ol style="list-style-type: none"> <li>i. The present EC is for Exploratory Drilling only. In case Development drilling is to be done in future, prior environmental clearance must be obtained from</li> </ol>

the Ministry.

- ii. Ambient air quality shall be monitored near the closest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, methane & Non-methane HC etc.
- iii. Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.
- iv. Approach road shall be made pucca to minimize generation of suspended dust.
- v. The company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosure shall be provided to DG sets and proper stack height shall be provided as per CPCB guidelines.
- vi. Total water requirement shall not exceed 19 m<sup>3</sup>/day and prior permission shall be obtained from the concerned agency.
- vii. The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- viii. Drilling wastewater including drill cuttings wash water shall be collected in disposal pit lined with HDPE lining evaporated or treated and shall comply with the notified standards for on-shore disposal. The membership of common TSDF shall be obtained for the disposal of drill cuttings and hazardous waste. Otherwise, secured land fill shall be created at the site as per the design approved by the CPCB and obtain authorization from the SPCB. Copy of authorization or membership of TSDF shall be submitted to Ministry's Regional Office at Bhopal.
- ix. Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/ soak pit.
- x. Oil spillage prevention scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- xi. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30<sup>th</sup> August, 2005.
- xii. The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous

emissions during operation.

- xiii. The company shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self containing breathing apparatus.
- xiv. On completion of drilling, the company have to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.
- xv. Blow Out Preventer (BOP) system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.
- xvi. Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.
- xvii. The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored to the original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.
- xxviii. Abandoned well inventory and remediation plan shall be submitted within six months from the date of issue of letter.
- xix. Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.
- xx. Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office at Bhopal.
- xxi. Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office at Bhopal.
- xxii. Under Enterprise Social Commitment (ESC), sufficient budgetary provision shall be made for health improvement, education, water and electricity supply etc. in and around the project.
- xxiii. An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to the Ministry's Regional Office.
- xxiv. All personnel including those of contractors shall be trained and made fully aware of the hazards, risks and controls in place.
- xxv. Company shall have own Environment Management Cell having a post of environmental manager with PG qualification in environmental

	<p>science/environmental engineering decipline.</p> <p>xxvi. Company shall prepare operating manual in respect of all activities. It shall cover all safety &amp; environment related issues and system. Measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office.</p>
17.3.8	<p><b>Setting up of Molasses based Distillery Unit (60 KLPD) along with Cogeneration Power Plant (3 MW) at Village Yeregal, Taluka Muddebihal, District Bijapur, Karnataka by M/s Shri Balaji Sugars and Chemicals Pvt. Ltd. - reg. [J-11011/159/2014-IA II (I), IA/KA/IND2/32158/2014]-reconsideration for Environment Clearance</b></p> <p>The Member Secretary informed the EAC that the proposal has been discussed during 6<sup>th</sup> EAC meeting on 1<sup>st</sup> April 2016; after detailed deliberation, the Committee sought following additional information:</p> <ol style="list-style-type: none"> <li>i. Fresh ambient air quality monitoring shall be carried out for one season alongwith fresh wind rose data.</li> <li>ii. Availability of molasses from the market</li> <li>iii. Detailed plan of water uses linking existing sugar unit to be drawn and finalized with revised water balance chart.</li> <li>iv. Submission of Certified compliance report from Regional Office for compliance to environmental conditions mentioned in the EC dated 10.10.2012 for sugar unit.</li> </ol> <p>Now PP submitted the above information and discussed in the meeting during 26<sup>th</sup> to 29<sup>th</sup> December 2016 as follows;</p> <p>PP committed that the Project will not start the operation till the green belt in 10 m depth of peripheral total amount of 33% of project covered area is development and also pp committed to construction of strom water drain by March 2017.</p> <p>After examining the facts and detailed delebrations the committee decided to recommoned the proposal for grant of environmental clearance subject to compliance of following conditions along with other specific and general environmental conditions relevant to the project proposal:</p> <ol style="list-style-type: none"> <li>i) Total fresh water requirement shall not exceed the limt as proposed.</li> <li>ii) Spent wash generation from molasses based distillery shall not exceed 8 Kl/Kl of alcohol. The spent wash from molasses based distillery shall be evaporated in MEE and concentrated spent wash will be incinerated in the incineration boiler to achieve 'Zero' discharge. Evaporator</li> </ol>

Condensate shall be treated in polishing pond and recycled/reused in process. Sewage shall be treated in the STP. No effluent shall be discharged outside the premises and 'Zero' discharge shall be maintained.

- iii) Spent wash shall be stored in impervious RCC lagoons with proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. The storage of spent wash shall not exceed 5 days capacity.
- iv) As proposed, no effluent from distillery shall be discharged outside the plant premises and Zero discharge shall be adopted. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- v) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- vi) Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area and compost yard shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and this Ministry. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and total dissolved solids shall be monitored. Sampling and trend analysis monitoring must be made on monthly basis and report submitted to the Ministry's Regional Office at Bhopal and SPCB.
- vii) Bagasse/coal storage shall be done in such a way that it does not get air borne or fly around due to wind.
- viii) Boiler ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing alongwith the storm water. Direct exposure of workers to fly ash & dust shall be avoided. Bagasse ash and coal ash shall be stored separately.
- ix) Fire fighting system shall be as per the norms and cover all areas where alcohol is produced, handled and stored. Provision of foam system for fire fighting shall be made to control fire from the alcohol storage tank. DMP shall be implemented.
- x) Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre shall be strengthened and the regular medical test records of each employee shall be maintained separately.
- xi) Dedicated parking facility for loading and unloading of materials shall be provided in the factory premises. Unit shall develop and implement good traffic management system for their incoming and outgoing vehicles to

	<p>avoid congestion on the public road.</p> <p>xii) As proposed, green belt over 33% of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.</p> <p>xiii) All the commitments made during the Public Hearing/Public Consultation meeting held on 29<sup>th</sup> July, 2015 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.</p> <p>xiv) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner.</p>
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#### 17.4 Terms of Reference (TOR)

17.4.1	<p><b>Proposed Distillery project (90 KLPD), Co-gen 35MW, Sugar 8000 TCD ha. at Sonavade -Bambavade, Tal - Shahuwadi, Dist. Kolhapur, Maharashtra by M/s Athani Sugar Ltd., [IA/MH/IND2/59551/2016, J-11011/324/2016-IA.II(I)] (Old F.No.- 11011/85/2015-IA.II(I))</b></p> <p>The project proponent made a presentation before the EAC and informed following:-</p> <p>(i) The project involves proposed Distillery project (90 KLPD), Co-gen 35MW, Sugar 8000 TCD ha. at Sonavade -Bambavade, Tal - Shahuwadi, Dist. Kolhapur, Maharashtra by M/s Athani Sugar Ltd.</p> <p>(ii) <b>Products and capacities scenario existing and after expansion</b> is as below:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">#</th> <th rowspan="2">Product</th> <th colspan="3">Production</th> <th rowspan="2">Unit</th> </tr> <tr> <th>Existing</th> <th>New</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Crystalline Sugar</td> <td>2500</td> <td>5500</td> <td>8000</td> <td>TCD</td> </tr> <tr> <td>2</td> <td>Co-gen power</td> <td>-</td> <td>35</td> <td>35</td> <td>MW</td> </tr> <tr> <td>3</td> <td>Ethyl Alcohol</td> <td>-</td> <td>90</td> <td>90</td> <td>KLPD</td> </tr> </tbody> </table> <p>(iii) The raw material and utilities requirement with source of supply can be</p>	#	Product	Production			Unit	Existing	New	Total	1	Crystalline Sugar	2500	5500	8000	TCD	2	Co-gen power	-	35	35	MW	3	Ethyl Alcohol	-	90	90	KLPD
#	Product			Production				Unit																				
		Existing	New	Total																								
1	Crystalline Sugar	2500	5500	8000	TCD																							
2	Co-gen power	-	35	35	MW																							
3	Ethyl Alcohol	-	90	90	KLPD																							



quantitatively stated as:

#	Raw Material	Total Quantity MT/month
A	Distillery Unit	
1.	Molasses T	360
3.	Lime	12
B	Sugar Unit	
1.	Sugarcane T	8000
2.	Sulfur T	2.5
C	Co-gen Unit	
1.	Bagasse TPD	1800

Land:  
The

- (v). Company owns 89.5 acre land. The proposed project will be accommodated in the premises of existing factory.
- (vi). Water: Fresh Water need daily is 721 m<sup>3</sup>. Permission of Irrigation Department is obtained. Water source is Kadvi – Warna river
- (vii). Power: Available through Govt. Electricity Board and own generation.
- (viii). Fuel: Bagasse, available with self and from the vicinity (if needed).
- (ix). Process description in brief:

(A) Sugar: Sugar is prepared in five steps. (a) Juice extraction from sugarcane, (b) Clarification of juice, (c) Evaporation of water from juice, (d) Crystallization of sugar syrup and (e) Centrifugation of massecuite.

(B) Co-gen: Steam is generated from boiler at high pressure. This high pressure steam is then supplied to turbines to produce electricity. Tail steam is also used for process.

(C) Distillery: There are four major steps in preparation of alcohol. (a) Substrate (feed) preparation for fermentation, (b) Yeast propagation and continuous fermentation, (c) Multi-pressure distillation and (d) Dehydration of RS to anhydrous alcohol or purified to get ENA.

- (x). This will generate three types of waste namely liquid, gaseous and solid. Responsible care of these will be taken.

1) **Liquid Effluent:** There will be four types of effluent. (a) Sober effluent from cooling, boiler blow down, purging water, (b) Moderate effluent from vessel/floor washing, process, spent lees stream, (c) Condensate water from MEE and (d) Industrial highly polluted water (spent wash) from distillery.

2) **Gaseous Emission:**

#	Source	Pollutant	In-plant Measures	Control Equipment
1	Molasses Yard	SPM road dust,	Levelled Roads and land, rubber tire, slow speed.	--

		HC	Less waiting	
2	Boiler	SPM, CO, SO <sub>2</sub>	Feed Bagasse/husk more dry, also will be used methane. Improved quality of water	ESP/Wet Scrubber, Light ash through stack of height 70 m and 40 m.
3	Fermentati on	CO <sub>2</sub>	Tank covered	Collected and scrubbed
4	Distillation	HC	Closed circuit	
5	Spent- wash	HC, Heat	Heat Exchanger	(Not open to sky cooling)
6	Bio- digester	HC, CO <sub>2</sub> , H <sub>2</sub> S	Covered transfer	Fully closed
6	Other effluents	H <sub>2</sub> O, CO <sub>2</sub>	Closed transfer	Fully Aerobic regime.

3) **Solid waste:**

#	Waste	Disposal	Remark
1	Canteen	Own garden	Organic
2	Colony	Own garden	Mixed
3	ETP sludge	On Land after composting	Organic, Non-Haz
4	Office	Sales	Non-Haz.
5	Yeast Sludge	On greening belt	Organic, and Non-Haz.
6	Ash	Sale to farmers after composting,	Takers available
7	Lube oil	Own boiler (with Bagasse)	In season

4) **Hazardous waste** - The only hazardous waste generated that needs to be disposed of is spent oil. The spent oil is used for either burning in boiler, lubricant or sent to authorized recycler.

(xi). **Capital cost of the project, estimated time of completion** - Capital cost of proposed project is Rs. 378Crores. The estimated time for completion is one year. Production will be commenced only after obtaining all required permissions.

(xii). The proposed project will be established in premises of existing industry and infrastructure will be optimized. The land of area 89.5 acre is owned by

	<p>company. The project location has good accessibility. State Highway Kolhapur – Ratanagiri is 1.5 km away from site. Population is predominantly rural.</p> <p><b>(xiii). Wildlife Issues</b> - There are no eco-sensitive zones and major industries.</p> <p>(xiv). The Public Hearing was conducted on 27.01.2016 and the response from local people was positive.</p> <p>(iii) <b>CSR plan</b> - CSR plan is prepared for expenditure of 2.5% of project cost.</p> <p>The committee after going through the project details observed that there are two separate sites for distillery and sugar unit at considerable distance. The committee was of the view that one EIA for both units can not address the environmental concerns adequately; hence, both units can not be treated as one project. Therefore, committee suggested the PP to apply for getting TOR for both units separately.</p>
<p><b>17.4.2</b></p>	<p><b>Proposed Greenfield Ammonium Phosphate Fertilizer complex – 1.0 MTPA(2 X 0.51 Million TPA) at Village: Biliya , Tehsil:Chittorgarh District:Chittorgarh, Rajasthan by M/s HZL Fertilizer Project [IA/RJ/IND2/60077/2016, J- 11011/350/2016-IA.II(I)]</b></p> <p>The project proponent informed following:-</p> <ol style="list-style-type: none"> <li>1. Hindustan Zinc Limited operates a Primary Lead Zinc Smelter of production capacity 0.525 Mtpa of Zinc, 0.85 Mtpa of Lead and 0.8 Mtpa of Sulphuric Acid and CPP of 274 MW located at Chanderia near Chittorgarh, Rajasthan.</li> <li>2. The proposed project is for installing a Di-ammonium Phosphate Fertilizer plant of capacity 2 X 0.51 MTPA along with 2 X 0.24 Mtpa Phosphoric acid plant, 2 X 9000 TPA Aluminum Fluoride plant along with off sites &amp; utilities facilities.</li> <li>3. In this process, Sulphuric acid produced at Chanderia Lead Zinc Smelter shall be converted to Phosphoric Acid and further to Di-ammonium Phosphate(DAP) fertilizer/NPK/Ammonium Sulphate by granulation with Ammonia &amp; Potash.</li> <li>4. The project shall be installed at village Biliya adjacent to Chanderia Lead Zinc Smelter.</li> <li>5. The bi-product Fluoro-Silicic Acid shall be converted to Aluminum Fluoride &amp; Gypsum shall be sold to local Cement producers. 2.1.2 Project Proponent Hindustan Zinc Limited is among the largest producer of Zinc-Lead-Silver in India and also a major producer of Sulphuric acid, with total metal production of over 1.14 Mtpa and Sulphuric Acid production of over 1.5 Mtpa.</li> <li>6. The Zinc Smelter at Chanderia is operational since 1989 and has expanded from an initial capacity of 0.1 Mtpa to 0.525 Mtpa in 2009. It has a combined metal capacity of 0.625MTPA HZL has secured agreement with RSM (Rajasthan State Mines &amp; Minerals) for the supply of 4 lac MTPA rock phosphate concentrate ( 30% grade) and balance shall be sourced from International market.</li> <li>7. The Sulphuric acid produced from Chanderia Lead Zinc Smelter shall be</li> </ol>

converted to Phosphoric Acid and the additional acid required shall be sourced from the HZL's other Zinc smelter sites in Rajasthan. The Di-ammonium phosphate (DAP)/NPK/APS fertilizer will cater to domestic market & thus reduce dependency on import market .

8. The proposed project is on the existing land at nearby Lead Zinc Smelter at Chanderia owned by HZL. It is a barren land so no demolition of any kind of structures and clearing of vegetation shall be required.
9. The area is industrial site and would continue to be the same, although with additional facilities for the proposed project.
10. The construction of proposed project include construction of large concrete and steel structure buildings, tall stacks, Office buildings, Water storage tanks and augmentation of the Residential township for about 100 families, as required. The approximate Quantity of concrete (1,00,000 m<sup>3</sup>) and steel (10,000 MT) is estimated to be used in the project.
11. Di-Ammonium Phosphate/ NPK/Ammonium Phosphate Sulphate (APS) fertilizer shall be produced through Pipe reactor technology, using Phosphoric Acid and Liquid Ammonia. Phosphoric Acid will be produced from Rock Phosphate & Sulphuric acid using Hemi-Di-hydrate Technology (HDH), with fluoro-Silicic acid as byproducts & Phospho-Gypsum as waste. The fluoro-Silicic acid will further be converted to Aluminum Fluoride.
12. A new railway line shall be laid from the nearest rail head at Chanderia Lead-Zinc smelter to develop a new railway siding. The present RIICO road infrastructure from the highway to the project site shall be augmented to cater to the requirement of the project. The existing railway siding within the plant boundary shall be augmented.
13. in construction phase approx 2000 people will be sourced locally. After commissioning 250 persons will work.
14. About 15 Ha of land shall be required for construction of a new railway line about 3 kms long.
15. No ground water. Water source will be from gosunda 2 \*6925m<sup>3</sup>/day. The water requirement for the proposed project is 2 X 6925 KLD. Water requirement for industry shall be met from the existing source at Gosunda Dam & Chittorgarh City STP within the existing permission for withdrawal.
16. Some of the hazardous substances that shall be handled includes Sulphuric Acid, Phosphoric Acid, Fluoro Silicic Acid, Aluminium Fluoride & Ammonia and shall adopt safe operating methods and precautions.
17. The Municipal Solid waste generated during the construction phase of will be about 600 kg/ day. During operation phase of the proposed project, an additional Municipal solid Waste generation will be about 500 kg/day.
18. About 10TPA of sewage sludge shall be generated from domestic sewage. The

process ETP is estimated to generate about 10,000 TPA of sludge from the proposed project.

19. During construction, about 5,000 m<sup>3</sup> of construction waste is estimated to be generated from demolition of existing sheds/structure which will be utilized in low lands filling & scrap will be sold.
20. Some of the major pollutants release to air includes as follows, a) Emission from Phosphoric acid plant: Fluorine emission shall be limited to 25 mg/Nm<sup>3</sup> as total fluoride b) SPM: 50 mg/NM<sup>3</sup> c) Ammonia: 10 mg/NM<sup>3</sup>.
21. The sewage water will be treated in Sewage Treatment Plant(STP) and treated STP water will be used in plantation. Sludge of STP will be used as manure. ETP will be used and zero discharge will be maintained.
22. The proposed project site falls in Zone-II (IS 1893 Part-I:2002). Hence, seismically it is a Low seismic zone.
23. About 1600 personnel from the nearby villages will be employed as unskilled labours resulting in higher income levels and thus improved socio-economic status. Since this is a developed industrial area in the outskirts of Chittorgarh city, no major impact is envisaged.
24. There are no major protected areas under international conventions or local legislation for its ecological, landscape, cultural or other related values exists within 15 km radius.
25. No Wetlands, coastal zone & biospheres present in the study area. One seasonal river berach, Chittorgarh fort and few Reserve forest are nearby.
26. Nearest place with fair density of population is Chanderia 1,16,530 (2011 census) at a distance of 9.0 kms from the project site.
27. Annual production capacities of proposed project are as given below:

Type	Particulars	Capacity (TPA)
Products	Ammonium Phosphate(DAP, 18:46:0)	2 X 5,10,000
	NPK(12:32:16 / 10:26:26)	2 X 5,00,000
	Ammonium Phosphate Sulphate, APS (20:20:0 / 20:20:0:13)	2 X 2,00,000
	Phosphoric acid	2 X 2,40,000*
	Aluminium Fluoride	2 X 9,000*
By Product	Hydro fluosilicic acid	2 X 9,100
	Waste Gypsum	2 X 13,50,000

	<p>*Will be consumed within the process and surplus quantity shall be sold.</p> <p>The committee examined the project details and observed that the lay out plan of the project site is in draft stage. During presentation PP also informed that they have added some new land therefore, committee suggested the PP to come with final layout plan and apply afresh.</p>
17.4.3	<p><b>Installation of Ethylene Recovery Unit (ERU) and Mono Ethylene Glycol Unit (MEG) at IOCL Paradip Refinery cum Petrochemical Complex by M/s Indian Oil Corporation Limited [IA/OR/IND2/59973/2016, J-11011/344/2016-IA.II(I)] -Terms of Reference</b></p> <p>The project proponent made a presentation before the EAC and informed that:-</p> <ol style="list-style-type: none"> <li>1. The IOCL requesting for grant of TOR for preparation of EIA/EMP report for the proposed installation of Ethylene Recovery Unit (ERU) and MonoEthylene Glycol Unit (MEG) at IOCL Paradip Refinery cum Petrochemical Complex, Village- Abhayachandrapur, District Jagatsingpur, State – Odisha.</li> <li>2. The proposed project of Paradip refinery will include installation of following units :       <ol style="list-style-type: none"> <li>a) Ethylene Recovery Unit: 180 KTPA.</li> <li>b) Mono-ethylene Glycol Unit: 332 KTPA</li> </ol> </li> <li>3. During Construction Phase indirect employment will be generated for approximately 500 - 1000 labourers/ day.</li> <li>4. ERU &amp; MEG project is coming within the refinery and no additional land is required.</li> <li>5. Additional water requirement for proposed ERU &amp; MEG project is 150 m<sup>3</sup>/hr. The water shall be sourced from Mahanadi Barrage.</li> <li>6. Total power requirement shall be 34.15 MW. The requirement will be met from power generated from refinery and state grid.</li> <li>7. No fuel requirement is for the proposed project.</li> <li>8. The total SOx emission from refinery post ERU &amp; MEG is 1000kg/hr which is within stipulated limit prescribed by MoEFCC.</li> <li>9. Additional liquid process effluent of 25 m<sup>3</sup>/hr will be generated. The present ETP is adequate to handle the extra flow. In addition, 550 m<sup>3</sup>/hr cooling tower blow down will go to downstream of ETP for processing at RO. About 125 m<sup>3</sup>/hr RO reject will be discharged to sea. If necessary, augmentation of existing ETP and associated facilities shall be carried out.</li> <li>10. There will be non hazardous waste generation which will be disposed to authorized recyclers.</li> <li>11. Capital cost of the project is Rs 3750 Crores</li> <li>12. Estimated time of completion of ERU &amp; MEG is 36 months</li> <li>13. Last baseline data was collected during October 2014 to December 2014 for Petcoke project.</li> <li>14. From proposed ERU &amp; MEG project, catalyst will be generated every 3-4</li> </ol>

- years. The spent catalyst will be sent to CPCB authorized recyclers.
15. There will be no impact on environment as there is no emission from the proposed project.
  16. Emergency Preparedness Plan has been prepared for the existing refinery and the same will be updated after Post ERU & MEG project.
  17. Public Hearing was conducted for Oil Jetty at Paradip Port by Paradip Port Trust for Indian Oil Corporation Limited on 29.06.2011.
  18. Presently various Occupational Health programs are conducted periodically by IOCL Paradip refinery. The same will be continued after post ERU & MEG project also.
  19. A dedicated Environment Monitoring Cell looks after the environmental and project safety functions. The existing practice shall be extended for the proposed project. All required parameters for air, water, noise and soil will be carried out by IOCL Paradip refinery post ERU & MEG project.
  20. EC for South Oil Jetty (an IOCL installation) was taken by Paradip Port Trust (PPT) vide document No. 11-117/2009-IA-III dated 13/07/2012, compliance status is "complied".
  21. **CSR Plan** - IOCL Paradip Refinery CSR programs shall be continued post ERU & MEG project.

The committee noted that Standard TOR has already been granted to the project. The PP requested for exemption of public consultation process as Public Hearing was conducted for Oil Jetty at Paradip Port by Paradip Port Trust for Indian Oil Corporation Limited on 29.06.2011, which committee accepted and recommended following additional TOR for preparation of EIA/EMP report.

- i. The recommendations of the SCZMA shall be submitted.

17.4.4

**Proposed expansion project of Manufacturing of Chemical intermediates at S. No.: 9-24, Wasarang 34-36, Khopoli, District: Raigad, Maharashtra by M/S INNOVASSYNTH TECHNOLOGIES (I) LTD [IA/MH/IND2/58796/2016, J-11011 /347/2016-IA.II(I)]-Terms of Reference**

The project proponent made a presentation before EAC and informed following:-

ITIL proposed expansion project in the category of Chemicals intermediates at existing manufacturing facility located at S. No.: 9-24, Wasarang 34-36, Chinchwali, and Khopoli Dist: Raigad, Maharashtra.

Products and Production Capacity MT/month are given as under-

Group of Product	Sr no	Name of Products	Existing Qty (MT/M)	Proposed Qty (MT/M)	Total Qty (MT/M)
Halogenation / sulphonation	1	4 - FluoroIsoquinoline	0.0084	-0.0034	0.0050

	<b>n</b>	2	5-Bromo indole	0.3330	-0.3030	0.0300
		3	Isosulphan Blue (2,5-Disulfophenyl Isomer)	0.0084	0.0016	0.0100
		4	2 methyl Sulphonyl 4,6 Dimethoxy Pyrimidine	3.0000	-3.0000	0.0000
		5	4,5-Dichloro phthalic acid	0.0000	0.0083	0.0083
		6	6-Bromo-Iso-indolin-1-one	0.0000	0.0083	0.0083
		7	Ethyl-2,2-difluoropropionate	0.0000	0.0416	0.0416
		<b>Reduction</b>	8	2,6-Dimethyl phenyl isothiocyanate	0.1670	-0.1670
	9		2,4-Dimethoxy Aniline	0.1670	-0.1670	0.0000
	10		Benzoic acid,4-(4-Propyl-1-piperaziny)	0.1670	-0.1670	0.0000
	11		2 CYANOPHENOL	0.1670	-0.1670	0.0000
	12		3'-Amino-5' OH Thymidine (Amino - T)	0.0084	-0.0079	0.0005
	13		N-Methyl 4 chloropiperridine HCL	1.0000	-1.0000	0.0000
	14		Syringaldehyde	2.0000	-2.0000	0.0000
	15		Indoline	2.0000	-2.0000	0.0000
	16		4- AMINOBENZONIT RILE	0.0000	0.1660	0.1660
	17		DIETHYLAMINO MALONATE HCl	0.0000	0.2500	0.2500
	<b>oxidation</b>	18	2-(4-Morpholinyl)-8-Phenyl-[4H-1] - benzopyran-4-one	0.0084	0.0000	0.0084
		19	Norcamphor	0.0166	0.0000	0.0166
		20	9,10-Dihydro-10[2,3di(hydroxycarboxyl)propyl]-9-oxa-10-phosphaphenanthrane-10-oxide(DDP)	0.0420	-0.0420	0.0000



		21	p-Nitro Phenyl Phosphate – Ditriss Salt	0.0833	-0.0733	0.0100
		22	L-METHIONINE SULFOXIME	0.0100	0.0000	0.0100
		23	NOOTKATONE	0.0000	0.4000	0.4000
	<b>Alkylation/ Acylation</b>	24	Cyclopropyl Methyl Bromide (CMB)	0.0840	0.9160	1.0000
		25	Bis (n-butylcyclopentadienyl) Zirconium dichloride	0.0420	-0.0420	0.0000
		26	4-Methyl -2-Thiomethyl Pyrimidine	0.4170	-0.3770	0.0400
		27	rac-Ethylenebis(indenyl)Zirconium dichloride	0.0420	-0.0420	0.0000
		28	N <sup>2</sup> Phenyl Acetyl Guanosine	0.0416	-0.0376	0.0040
		29	EURO-5031 BLS DICYCLOPENTADIENEZIRCONIUM DICHLORIDE	0.0420	-0.0420	0.0000
		30	CALONE [7-METHYL-3,4-DIHYDRO-2H-1,5-BENZODIOXEPIN-3-1	0.0084	-0.0084	0.0000
		31	2,2 BIS [(2INDENYL)BIPHENYL]ZIRCONIUM(I V) CHLORIDE	0.0100	0.0400	0.0500
		32	O- Methyl Isoorea Hemisulphate	2.0000	-2.0000	0.0000
		33	AD-Lactone	0.3000	-0.3000	0.0000
		34	2,4Dihydroxy Benzophenone	0.0000	200.0000	200.0000
		35	4-Tert-butylphenoxyAcetic Acid	0.0000	1.0000	1.0000
		36	2,2 BIS [(2INDENYL)BIPHENYL]ZIRCONIUM(I V) CHLORIDE ON SILICA SUPPORT	0.0000	2.5000	2.5000

			37	9,9-bis(methoxymethyl)fluorene (FLU)	0.0000	1.0000	1.0000
			38	CMPT	0.0000	0.0400	0.0400
			39	CMIMT	0.0000	0.0400	0.0400
			40	MTSCNE	0.0000	0.1000	0.1000
			41	ONT-7-D & ONT-7-L	0.0000	0.1000	0.1000
			42	(Diethoxy methyl)-2-Ethoxy benzene	0.0840	-0.0840	0.0000
		<b>Protection/Deprotection</b>	43	5'-ODMT-NBZ-deoxycytidine-3'-(2-cyano ethyl N,N diisopropylamino) Phosphoramidite (dCAmidite)	0.0420	-0.0420	0.0000
			44	5'-ODMT-NiBu-deoxyguanosine-3'-(2-cyano ethyl N,N diisopropylamino) Phosphoramidite (dGAmidite)	0.0420	-0.0420	0.0000
			45	5'-ODMT-NBZ-deoxyadenosine-3'-(2-cyano ethyl N,N diisopropylamino) Phosphoramidite (dAAmidite)	0.0420	-0.0420	0.0000
			46	5'-ODMT-NBZ-deoxythymidine-3'-(2-cyano ethyl N,N diisopropylamino) Phosphoramidite (dmt- T)	0.0420	-0.0420	0.0000
			47	DMT-MOET(4,4'-dimethoxy trityl)-(methoxyethyl-thymidine)	0.0833	-0.0833	0.0000
			48	N-Bz-DMTMOEC (N-Benzoyl-(4,4'-dimethoxytrityl)(methoxy ethyl)-cytidine	0.0833	0.0000	0.0833
			49	N-Bz-DMT-Dc (N-Benzoyl-(4,4'-	0.0833	-0.0833	0.0000

			Dimethoxytrityl)- dooxycytidine			
		50	N-Benzoyl – 3 – Tritylamino 5 Phosphoramidite 2 – deoxy Adenosine (dA)	0.0040	-0.0035	0.0005
		51	3 – Tritylamino 5 – Phosphoramidite N-Bz-Dc	0.0040	-0.0035	0.0005
		52	N – Isobutyryl – 3- Tritylamino 5 – Phosphoramidite 2 – deoxyGuanosine (dG)	0.0040	-0.0035	0.0005
		53	3 – Tritylamino 5 – Phosphoramidite Thymidine (dT)	0.0040	-0.0035	0.0005
		54	5' – ODMT, 2' – O – Cpep, 6N – Pivaloyl Adenosine	0.0080	-0.0070	0.0010
		55	5' – ODMT, 2' – O – Cpep, N <sup>2</sup> – Ph – Ac - Guanosine	0.0080	-0.0070	0.0010
		56	5' – ODMT, 2' – O – Cpep, 4 – N – BzCytidine	0.0080	-0.0070	0.0010
		57	5' – ODMT, 2' – O – Cpep, Uridine	0.0080	-0.0070	0.0010
		58	5'-ODMT-2'MOE- T[5'-0 (4,4'- DIMETHOXY TRITYL) – 2'-0-(2- METHOXYETHYL) – THYMIDINE]	0.0580	0.9420	1.0000
		59	N – BZ – 5' – ODMT – 2' – MOE – 5 – Me – C 5'-0 (4,4'-DIMETHOXY TRITYL)-2'-0-(2- METHOXYETHYL) N <sup>4</sup> –BENZOYL-5- METHYL- CYTIDINE	0.0300	0.9700	1.0000

			60	2' – FLUORO CYTIDINE 5'-O- {4,4'-DIMETHOXY TRITYL}N <sup>4</sup> - ACETYL- 2'FLUORO CYTIDINE-3'-[C2- CYANOETHYL)- (N,N-DI ISOPROPYL)]- PHOSPHORAMIDI TE	0.0020	-0.0020	0.0000
			61	2' – FU AMIDITE 5'-O-(4,4'- DIMETHOXY TRITYL)-2'- FLUORO URIDINE-3'-[(2- CYANOETHYL)- (N,N-DI ISOPROPYL)]- PHOSPHORAMIDI TE	0.0020	0.0000	0.0020
			62	5'-DMT-2'- OTBDMS-RNA PHOSPHORAMID E AND DERIVATIVES	0.0042	0.3958	0.4000
			63	5'-DMT-C-ETHYL N-PROTECTED NUCLEOSIDES AND PHOSPHORAMIDI TES	0.0100	0.0204	0.0304
			64	5'-DMT-C-ETHYL N-PROTECTED NUCLEOSIDE AND PHOSPHORAMIDI TE	0.0100	-0.0100	0.0000
			65	NAP SUGAR	0.0500	0.9500	1.0000
			66	ENA - PROTECTED NUCLEOSIDE & PHOSPHORAMIDI TE	0.0100	-0.0090	0.0010
			67	TAC PROTECTED NECLEEOSIDE & PHOSPHORAMIDI	0.0100	0.0400	0.0500

			TE			
		68	5'-DMT-2'-MOE PROTECTED NUCLEOSIDE & PHOSPHORAMIDI TE	0.0200	0.3800	0.4000
		69	5'-DMT-2'-O- METHYL PROTECTED NUCLEOSIDE & PHOSPHORAMIDI TIES	0.0100	0.1900	0.2000
		70	ALLOFURANOSE SUGAR	0.0100	0.0000	0.0100
		71	5'-ODMT- DEOXYNUCLEOSI DES, PHOSPHORAMIDI TES AND SUCCINATE SALTS	0.0000	0.2000	0.2000
		72	DMT-LNA- NUCLEOSIDES & PHOSPHORAMIDI TES	0.0000	0.1000	0.1000
		73	GALNAC ACYCLIC SUCCINATE	0.0000	0.0028	0.0028
		74	UNA Phosphoramidites & Derivatives	0.0000	0.0400	0.0400
		75	Morpholino Phosphoramidites & Derivatives	0.0000	0.1000	0.1000
		76	Chiral Phosphoramidites & Derivatives	0.0000	0.1000	0.1000
		77	5'-ODMT-2' OMe NiBu-Guanosine O6 CE	0.0000	0.0840	0.0840
		78	Bis TAc dG	0.0000	0.0500	0.0500
		79	5'-ODMT-NiBu- deoxycytidine	0.0000	0.0500	0.0500
		80	5'-Biotin Phosphoramidite	0.0000	0.0010	0.0010
		81	5-Iodo dC	0.0000	0.0008	0.0008
		82	2'-Fluoro-GiBu-3'- CEPA	0.0000	0.0008	0.0008

		83	5'-ODMT-N6-Bz-2'-Fluoro Adenosine-3'-OCEPA	0.0000	0.0008	0.0008
		84	5'ODMT-NiBu-dG (O6 CE)	0.0000	0.0500	0.0500
	<b>Friedal craft</b>	85	4,4'--DIMETHOXYTRITYL CHLORIDE (DMT-CL)	0.1500	0.8500	1.0000
		86	4-HEXYL RESORCINOL	0.4160	1.5840	2.0000
		87	TINUVIN -400	27.8648	72.1352	100.0000
		88	ANETHOL	0.0000	30.0000	30.0000
		89	Substituted Triazine Derivative	50.0000	75.0000	125.0000
		<b>Condensation</b>	90	Ethyl 2-Methyl-4-Pentenoate (EMPE)	0.0833	-0.0750
	91		Ethyl-4-Pentenoate	0.0833	-0.0750	0.0083
	92		4-Pentenoic Acid	0.8333	1.1667	2.0000
	93		Methyl Tiglate	0.0166	0.0000	0.0166
	94		Ethyl-2-Methyl 3-4-Pentadienoate (EMPD)	0.5000	-0.4990	0.0010
	95		p-Nitro Phenyl Phosphate – Disodium Salt Hexahydrate	0.0833	0.1167	0.2000
	96		SODIUM BETA GLYCERO PHOSPHATE	1.6600	-0.6600	1.0000
	97		DL -LACTIDE	0.0000	0.0083	0.0083
	98		Diethyl L-(+) tartrate	0.0000	0.1660	0.1660
	99		E-TETRACETATE	0.0500	0.1500	0.2000
	100		P-AnisylPropanal	0.0000	4.0000	4.0000
	101		ETHYLENEDIAMINETETRAACETIC ACID METAL CHELATE SALTS	0.0000	0.0030	0.0030
	102		SODIUM SELENITE PENTAHYDRATE	0.0000	0.0030	0.0030

			103	R&D Products (Intermediate chemicals)	0.0000	0.4000	0.4000
			104	Peonile	0.0000	19.0000	19.0000
			105	N,N- Dimethylbenzami de (DMBA)	0.0000	1.0000	1.0000
			106	4- (methylamino)pen tan-2-ol dibenzoate (AB)	0.0000	1.0000	1.0000
			107	4- Hydroxycoumarin	0.0000	1.0000	1.0000
			108	Trans aconiticAcid	0.0000	0.0083	0.0083
			109	Phenothiazine	0.0000	5.0000	5.0000
		<b>Grignard</b>	110	3-3 Dimethyl Cyclohexanone (DMCH)	0.0833	0.9167	1.0000
			111	Beta-Methyl Acid (BMA)	2.0000	-2.0000	0.0000
			112	7-BROMO 1HEPTENE	0.2200	3.7800	4.0000
		<b>Aminolysis</b>	113	2-6 Diamino-9-(b- D-Ribo) Purine (DAP)	0.0500	-0.0450	0.0050
			114	2,2'-Azobis(2- methylpropionami dine)dihydrochlori de	0.0000	0.0100	0.0100
		<b>purification</b>	115	4-Hydroxy isoleucine	3.3330	-3.2330	0.1000
			116	ACRYLAMIDE PURIFIED	0.0000	0.4000	0.4000
		<b>Cynation</b>	117	1-CYANO CYCLOBUTANE- 1,2- DICARBOXYLIC ACID DIMETHYL EASTER / TRANSDIACID	0.2000	0.2000	0.4000
			118	3,5-Bis(2- Cyanoprop-2- yl)benzyl bromide Anastrozole intermediate	0.0000	0.0083	0.0083

	119	3,5-Bis(2-Cyanoprop-2-yl)Toluene Anastrozole intermediate	0.0000	0.0083	0.0083
<b>TOTAL</b>			<b>100.5765</b>	<b>410.1796</b>	<b>510.76</b>

#### List of Proposed By-Products

Sr. No.	By-Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Hydrochloric Acid 30%	43.00	664.50	707.50
2	Sulphuric Acid 66%	85.00	165.00	250.00
3	Mixed Solvents	133.50	665.00	798.50
4	Aqueous Aluminium Chloride	303.00	1297.00	1600.00
<b>TOTAL</b>		<b>564.50</b>	<b>2791.50</b>	<b>3356.00</b>

Power required –

Existing	Proposed	Total after expansion
2.5 MW	2.5 MW	5.0 MW

Emergency power –

Existing	Proposed	Total after expansion
1000 KVA X 2 no 500KVA X 1 no 125KVA X 1 no	1000 KVA X 3 no	1000 KVA X 5 no 500KVA X 1 no 125KVA X 1 no

Water required –

Existing	Proposed	Total after expansion
573 CMD	627 CMD	1200 CMD

Capital cost (In Cr.) –

Existing	Proposed	Total after expansion



79.41

250

329.41

**The committee after delebration on the proposal observed that** Patalganga river is flowing adjacent to the boundary and the google image reflects that plant boundary seems to be encroaching the main stream of the river, PP also informed that water will be taken form Patalganga River only. After the detailed deliberation, the committee suggested for revising the Plant Lay out by incorporating:

1. Creation of buffer zone, with tree plantation, of at least 10 meter wide between plant boundary and adjacent bank of the river. List of tree species to be planted in buffer zone shall be prepared as per CPCB guidelines and after consultation with forest department.
2. Proper river conservation plan in view of proximity of the plant to the river, with commitment regarding no disturbance in natural flowing of the river.
3. Provision for Zero Liquid Discharge system.

The EAC decided to defer the proposal till the desired information is submitted.

17.4.5

**Set up the Haldia Coastal Installation at HAL-733, Patikhali, Durgachak, Haldia - 721602, West Bengal by M/s BPCL Haldia [IA/WB/IND2/60570/2016, , J- 11011/355/2016-IA.II(I)]**

The project proponent made a presentation before the EAC and informed that:

1. M/s Bharat Petroleum Corporation Limited (BPCL) has proposed to expand its Haldia Coastal Installation near Patikhali Village, Haldia, West Bengal. Total existing capacity of the Haldia Coastal Installation is 94360 KL. Proposed project envisages expansion of capacity by 1108 KL through installation of two aboveground storage tanks. After expansion the storage capacity will increase to 95468 KL.
2. Haldia is a Critically Polluted Area (CPA) and is classified under Schedule 6(b) & Category 'A' according to EIA Notification 2006 & subsequent amendments. Hence, the current proposal has been submitted to MoEFCC for issuance of Environmental Clearance for the expansion of storage capacity (95468 KL) through addition of two aboveground storage tanks for Biodiesel (1 X 858 KL) and Ethanol (1 X 250 KL).
3. **Land Area:** 44 acres of land is available with Haldia coastal installation.
4. **Connectivity:** The project site is well connected by road and rail network. The project site is located at 1.5 km away from Durgachak Town Railway station on North and 7 km away from Haldia Township on East Northeast. The Coastal Installation terminal is well connected to NH41 in 5 km (W).
5. **Raw Material:** The POL Products are received through rail tank wagons.
6. **Process Description:** Products are received through rail tank wagons, Ship tankers and are unloaded in their designated tanks through TWD

	<p>Pumps for storage in Aboveground &amp; Underground Tanks</p> <ol style="list-style-type: none"> <li>7. <b>Project Cost:</b> The total project cost for the proposed expansion is around ` <b>624 Lakhs.</b></li> <li>8. <b>Water requirement</b> for the depot will be around 4.25 KLD which will be sourced through HDA. Sewage will be disposed through septic tanks &amp; soaks pits. Wastewater generated from tank farm is primarily treated oily water with suspended solids. After flow through OWS, the water is routed to Storm Water Drain.</li> <li>9. The total <b>Manpower</b> in the existing depot is 50 persons and there will not be any additional man power requirement for the proposed expansion.</li> <li>10. <b>Electrical Requirement:</b> 11 KV will be required for this POL Depot and the same shall be supplied by WBSEB. In case of power failure, 1250,350,250 KV Diesel Generation (DG) sets for feeding the main Depot operations and another 125 KV DG set for taking care of Depot lighting requirements.</li> <li>11. As per the corporate policy, 2% of the project cost will be used for CSR for various activities.</li> <li>12. Storm water drains were developed to collect run-off water from paved areas. Recharge pits are at the site to harvest run-off water.</li> <li>13. Tank bottom sludge generated while cleaning of oil storage tanks. The cleaning of oil storage tanks are done once in five years as per practice of Oil Industry.</li> <li>14. Firefighting Measures will be provided as per OISD Norms. Onsite and Offsite disaster management plan will be prepared.</li> <li>15. The Depot will be storage of POL products and distribution only, there will not be any major impacts on air, water, flora-fauna and nearby population, however the operation of the depot will give rise to better POL penetration in various districts of west Bengal and bring down the demand supply gap. Adequate green belt will be developed on 33% of total plot area within the depot to mitigate the pollution arising due to movement of vehicles.</li> </ol> <p>The committee recommended the project for grant of generic TOR as available on the website with following additional TOR:</p> <ol style="list-style-type: none"> <li>i. A separate chapter on status of compliance of Environmental clearance conditions granted by the State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF a certified report by concerned RO, MoEFCC on status of compliance of conditions of EC for the existing unit to be provided in EIA/EMP report.</li> <li>ii. CRZ clearance to be obtained from respective authorities.</li> <li>iii. Public hearing is exempted under para 7 (ii) of the EIA Notification, 2006.</li> </ol>
17.4.6	<p><b>Manufacturing of Bulk drugs intermediates at Plot no. B/1085, Lamdapura road, Vill: Manjusar, Tal: Savli, Dist: Vadodara- 391 770 by M/s. J.R. Corporation [IA/GJ/IND2/58786/2016, J- 11011/356/2016-IA.II(I)]</b></p> <p>The project proponent made a presentation before the EAC and informed</p>

following:-

1. The project involves M/s. J.R. Corporation is engaged in manufacturing of Bulk drugs and intermediates at Plot no. B/1085, Lamdapura road, Vill: Manjusar, Tal: Savli, Dist: Vadodara- 391 770, Gujarat.
2. The unit is having valid Consolidated Consent & Authorization (CC&A) from Gujarat Pollution Control Board vide CC&A order no.: AWH-69376 with validity upto 10/02/2020 for manufacturing of Bulk drugs and intermediates.
3. The unit have now proposed to go for expansion by increasing existing production capacity and proposed new production capacity of Synthetic API's. Total existing production capacity is 2.6 MT/Month and 8 MT/Month By-product. After expansion, total production capacity will be 254.6 MT/Month and by-product capacity will be 8 MT/Month. The unit has proposed expansion of existing unit.
4. The product table is mentioned below.

Sr. No.	Name of Products	Existing Quantity in MT/Month	Proposed Quantity in MT/Month	Total Quantity in MT/Month
<b>EXISTING</b>				
1	Cellulose Acetate Phthalate-I pluse p grade	1.5	0	1.5
2	Hydroxy propyl methyl cellulose phthalate USP grade(HPMCP)	1.1	0	1.1
3	Crude sodium Acetate(by production)	8	0	8
<b>PROPSOED</b>				
1.	Glimipride	0.0	2	2
2.	Carvedilol		0.5	0.5
3.	Alendronate sodium		2	2
4.	Mirtazepin		0.5	0.5
5.	Topiramate		1	1
6.	Losartan Potassium		1	1
7.	Lacidipine		0.5	0.5
8.	Granisetron		0.5	0.5
9.	Ondensetron		0.5	0.5
10.	Naltrexone		0.5	0.5
11.	Buprenorphine HCl		0.5	0.5
12.	Metoprolol Succinate		3	3

	<b>13.</b>	Colesevelan HCl		0.3	0.3
	<b>14.</b>	Montelukast sodium		0.5	0.5
	<b>15.</b>	Desloratidine		0.6	0.6
	<b>16.</b>	Levocetirizinedihydrochloride		0.5	0.5
	<b>17.</b>	Duloxetine HCl		0.5	0.5
	<b>18.</b>	Paroxetine HCl		0.4	0.4
	<b>19.</b>	Diclofenac sodium		100	100
	<b>20.</b>	Zonisamide		0.6	0.6
	<b>21.</b>	Lacosamide		0.4	0.4
	<b>22.</b>	Oxcarbazepine		0.6	0.6
	<b>23.</b>	Aripiprazole		0.3	0.3
	<b>24.</b>	Paliperidone		0.3	0.3
	<b>25.</b>	Quetiapine		1	1
	<b>26.</b>	Risperidone		0.5	0.5
	<b>27.</b>	Balasalazine disodium		1.5	1.5
	<b>28.</b>	Valacyclovir HCl		1	1
	<b>29.</b>	Cinacalcet HCl		0.5	0.5
	<b>30.</b>	Deferasirox		1	1
	<b>31.</b>	Epinephrine		1	1
	<b>32.</b>	Zolpidem tartrate		0.2	0.2
	<b>33.</b>	Fesoterodine fumarate		1	1
	<b>34.</b>	Pramipraxole Dihydrochloride		1	1
	<b>35.</b>	Rabeprazole sodium		0.7	0.7
	<b>36.</b>	Rosuvastatin calcium		1	1
	<b>37.</b>	Sitagliptin phosphate		1	1
	<b>38.</b>	Sumatriptan Succinate		1	1
	<b>39.</b>	Tamsulosin HCl		0.3	0.3
	<b>40.</b>	DextromethopphanHbr		2	2
	<b>41.</b>	Captopril		1	1
	<b>42.</b>	Pioglitazone HCl		0.5	0.5
	<b>43.</b>	Fexofenadine HCl		3	3
	<b>44.</b>	Entaxapone		1	1
	<b>45.</b>	AmoldipineBesylate		2	2
	<b>46.</b>	Atovaquone		1	1
	<b>47.</b>	Clinidipine		1	1
	<b>48.</b>	Desvenlafaxine		1	1
	<b>49.</b>	Devalproex sodium		1	1
	<b>50.</b>	Donepezil HCl		0.3	0.3

<b>51.</b>	Dronedarone HCl		0.3	0.3
<b>52.</b>	Iopamidol& its derivatives		20	20
<b>53.</b>	Nebivolol		1	1
<b>54.</b>	Palonosetron HCl		2	2
<b>55.</b>	Pantoprazole sodium		1	1
<b>56.</b>	Saxagliptin Monohydrate		1	1
<b>57.</b>	Tapentadol HCl		1	1
<b>58.</b>	Venlafaxine HCl & derivative		1	1
<b>59.</b>	Zoledronic Acid		1.5	1.5
<b>60.</b>	Bethanechol chloride		1	1
<b>61.</b>	Nadifloxacin		0.5	0.5
<b>62.</b>	Paliperidonepalmitate		0.5	0.5
<b>63.</b>	Pidotimod		2	2
<b>64.</b>	Apixaben		1	1
<b>65.</b>	Dofetilide		0.5	0.5
<b>66.</b>	Ivacaftor		1	1
<b>67.</b>	Oxybutynin chloride		2	2
<b>68.</b>	Pregabalin		3	3
<b>69.</b>	Agomelantine		0.5	0.5
<b>70.</b>	Aceclofenac		50	50
<b>71.</b>	Atenolol		0.5	0.5
<b>72.</b>	Valproic acid		3	3
<b>73.</b>	Sodium valproate		5	5
<b>74.</b>	Iavomilnacopran		1	1
<b>75.</b>	Milnacipran		0.7	0.7
<b>76.</b>	Diatrizoic acid		5	5
<b>77.</b>	TBEE		1	1
<b>78.</b>	R&D products		1	1
	<b>Total</b>	<b>0.00</b>	<b>252</b>	<b>254.6</b>

5. The expected cost of project is Rs. 20 Crore. The total plot area of the unit is 9765 sq.m. The green belt area will be 1000 sq.m.
6. After proposed expansion total Raw materials requires will be 11898.43 MT/Month.
7. There is flue gas emission from existing boiler stack having capacity of 0.8 T/Hr. The unit will be proposed another two Boiler- 2 TPH, one Thermopack- 2 lacs kcal/hr and one D.G.set There will be process emission from Sulphonation reactor, Chlorination and Bromine reactor.
8. The existing connected load is 60 HP. Aditional load will be 100 HP. It will be met through Madhya Gujarat Vij Company Ltd. In existing, Unit

	<p>is using 1.5 T/day wood as fuel for boiler. After Proposed expansion, unit will be using bio-coal (4 MT/day) as a fuel for two boilers (1 TPH Each), furnace oil (200 Litres/day) thermo pack (2 Lakh K.cal/Hr.) and diesel (100 Litres/day) for two DG sets of 50 KVA.</p> <ol style="list-style-type: none"> <li>9. The unit will use 40.00 KL/Day water. 35.00 KL/Day of water will be used for the Industrial purpose and 5.00 KL/Day will be used for Domestic purpose.</li> <li>10. The total waste water generation will be 19.00 KL/Day. The industrial waste water generation will be 15.00 KL/Day and domestic waste water generation will be 4.00 KL/Day.</li> <li>11. The hazardous waste generation from proposed expansion will be Residue &amp; waste- 188 T/Month, Spent Catalyst-12.29 T/Month, Spent Solvent-35 T/month, Spent solid- 394 T/month, Discarded Containers- 600 Nos./year and ETP sludge-2-3 t/month.</li> </ol> <p>The committee after detailed deliberations recommended the proposal for grant of following additional TOR alongwith Standard TOR as available on the Ministry website:</p> <ol style="list-style-type: none"> <li>1. 10 m. wide Green Belt of perennial trees (Neem, Sesam, Teak wood) around plant periphery, ETP and STP.</li> <li>2. Zero Liquid Discharge to be adopted.</li> </ol>
17.4.7	<p><b>“Manufacturing of Synthetic Resins and Allied Chemicals Products” at A-11/2B-1, SIPCOT Industrial Area, Thervoykandigai Village, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu-601202 by M/s Hindustan Resins &amp; Terpenes. [A/TN/IND2/60836/2016, J- 11011/357/2016-IA.II(I)]</b></p> <p>The project proponent made a presentation before the EAC and informed following:-</p> <ol style="list-style-type: none"> <li>1. The project involves Manufacturing of Synthetic Resins and Allied Chemicals Products” at A-11/2B-1, SIPCOT Industrial Area, Thervoykandigai Village, Gummidipoondi Taluk, Thiruvallur District, TamilNadu-601202 by M/s Hindustan Resins &amp; Terpenes.</li> <li>2. The project category is ‘A’ due to interstate boundary 3.8 Km, WNW, from TN to AP.</li> <li>3. The project plot is of size 5 Acres (20,234.30 Sq.mt) located at A-11/2B-1, SIPCOT Industrial Area.. The site coordinates are as below: <ol style="list-style-type: none"> <li>a. 13° 22.028'N; 79° 59.377'E.</li> <li>b. 13° 22.024'N; 79° 59.261'E.</li> <li>c. 13° 22.075'N; 79° 59.261'E.</li> <li>d. 13° 22.080'N; 79° 59.377'E.</li> </ol> </li> <li>4. Proposed Capacity is Total: 64,800 MTA out of which 48000 MTA (16 nos)- Synthetic Organic Chemicals. and 16800 MTA (2 nos) – Paints be produced.</li> <li>5. Water requirement: <ol style="list-style-type: none"> <li>i. Construction Phase: Quantity: 50 KLD</li> </ol> </li> </ol>

- ii. Operation Phase: Quantity: Total 75 KLD.
- iii. Fresh water 63.4 KLD

Water supply agreement for 200 KLD will be made with SIPCOT Authorities.

6. Total 11.25kg/day organic and 13.75 kg/day inorganic municipal solid waste to be generated which will be collected in drums/bags and sold to authorized dealer.
7. Total 2.4 KLD sewage and 11KLD industrial liquied waste to be generated which will be treated in 1 no. STP Capacity of 3 KLD, 1 no. ETP Capacity: 12 KLD, 1 no. Electrical Evaporator: 80% Efficiency and RO-1 Capacity: 9 KLD, RO-2 Capacity: 2 KLD.
8. The various hazardous wastes generated from the process includes: 1. Waste oil/used oil. 2. ETP Sludge & Evaporation Salt. 3. Used Filter Cloth. 4. Empty containers/Bags. 5. Cotton soaked waste. These wastes will be stored in an isolated area above concrete platform under roof shed. These waste will be segregated & stored and will be disposed off by giving it to the TNPCB authorized dealers/recycler/TSDF within a stipulated period of time (90 days). The high calorific value waste like used filter cloth etc. will be sent to TSDF Gummudipoondi. Hazardous waste materials will be properly disposed as per the Hazardous and other Wastes (Management, Handling and trans boundary Movement) Rules 2016; Agreement will be made with TSDF approved dealers for safe disposal of hazardous wastes. PCB authorization for Hazardous waste disposal will be obtained.
9. No forest land is involved in the project.
10. No court case is pending against the project.
11. Project cost – INR 9.5 Crores. Propose site civil construction shall be started in 2017 and shall be completed by 10 months.
12. CSR plan - Promotion of education and possible infrastructure development in nearby villages will be undertaken possibly.
13. Products and capacities –

S. No	Products Name	Total Proposed Capacity (MTA)
	<b>Synthetic Organic Chemicals</b>	48,000
1	Alkyd Resin	
2	Rosin Estergums	
3	Phenolic Resins	
4	Rosin Modified Maleic	
5	Polyester Resins	
6	Amino Resin	
7	Polyamide Resin	
8	Ketonic Resin	
9	Acrylic Resins & Emulsions	
10	CNSL & Cardanol Resins	
11	Synthetic Resins & Varnishes	
12	Gum Rosin	

13	Terpene Chemicals	
14	Thinners	
15	Industrial Solvents	
16	Epoxy Esters	
	<b>Paint Products</b>	
17	Solvent Base Paint	4,800
18	Water Base Paint	12,000
	<b>Total</b>	<b>64,800</b>

The committee deliberated on the proposal and observed that the proposed project is being located in SIPCOT, an Industrial estate. The Committee after detailed deliberations recommended the proposal for grant of standard TOR without Public Hearing. The EAC also recommended that:

- i. PP need to submit land allotment letter from SIPCOT.
- ii. PP need to submit Toposheet.
- iii. Revised Lay out plan to be submitted making provision for 10 m wide Green Belt of perennial indigenous tree species (Neem, Sesam, Teak wood etc.) around plant periphery.
- iv. Zero Liquid Discharge to be adopted.
- v. No ground water will be used.

17.4.8

**Expansion of existing Plant capacity (Sugar – 4750 TCD to 7500 TCD and Co-gen power – 15 MW to 34 MW) and addition of distillery (60 KLPD), generation of 3 MW Power from incineration boiler) BY M/S E.I.D. - Parry (India) Limited (Bagalkot) Karnataka [IA/KA/IND2/60858 /2016, J-11011/358/2016-IA.II(I)]**

1. The project proponent informed following:-
2. The project involves Existing Plant capacity Sugar – 4750 TCD Co-gen power – 15 MW BY M/S E.I.D. - Parry (India) Limited (Bagalkot) Karnataka. Cost of the existing project was below Rs. 100 crores. Hence, no environmental clearance was obtained for existing unit as per 1994 EIA Notification.
3. Total area already in possession is 177.2 acres. Sy. No. of the land are 29, 32/1, 32/2, 33/1/B and 33/1A, 36, 27/2, 27/3, 28/1, 28/2. 29/1, 30/6, 30/3, 30/4b, 30/4a, 30/4c, 30/5a, 30/5b, 33/2a, 35/2, 36/1b, 36/2, 48/1a, 48/1b/1. 39/1, 36/3, 62/1a, 3/3 + 4/1, 30/1+2, 39/2b, 43/1+2/c, 43/1, 135/1.
4. Project cost Rs: 351 Crores
5. Water requirement for existing plant is 406 KLD. Water requirement for the proposed expansion 1504 KLD. Total water requirement 1910 KLD d. Source of water is Krishna river.
6. Effluent generation from the existing plant is 596 KLD b; whereas effluent generation from the expansion plant is expected to be 1083 KLD. Hence, total effluent generation would be 1679 KLD. Sugar Plant Effluent generated from the existing Sugar plant is being treated in specially



designed ETP and treated effluent is being utilized for greenbelt development after ensuring quality of treated effluent with standards stipulated for onland for irrigation by CPCB / KSPCB. Power Plant Effluent from the existing power plant is being treated in Sugar Plant ETP and treated effluent is being utilized for greenbelt development in the plant premises after ensuring quality of treated effluent with standards stipulated for onland for irrigation by CPCB / KSPCB

7. Effluent treatment (proposed expansion): Sugar Plant Effluent generated from the Sugar plant will be treated in specially designed ETP and treated effluent will be utilized for greenbelt development after ensuring quality of treated effluent with standards stipulated for onland for irrigation by CPCB / KSPCB. Power Plant Effluent from the power plant will be treated in Sugar Plant ETP and treated effluent will be utilized for greenbelt development in the plant premises after ensuring quality of treated effluent with standards stipulated for onland for irrigation by CPCB / KSPCB Distillery Plant.
8. Spent wash generated from the Process will be concentrated in Multiple Effective Evaporators up to 55% solids and will be incinerated in the Boiler mixing with other fuels like coal or biomass
9. Steam requirement (existing) Steam requirement existing sugar plant is being met from existing 85 TPH Cogeneration power plant Boiler.
10. Steam requirement (expansion) Steam required sugar plant will be met from proposed 110 TPH Cogeneration power plant Boiler. Steam required for the Distillery plant and Multiple Effective Boilers will be met from the 25 TPH Incineration Boiler.
11. Emissions from Project will be Particulate matter, SO<sub>2</sub> and NO<sub>x</sub> ESP will be provided to 110 TPH Boiler to bring down the particulate matter to below 50 mg/Nm<sup>3</sup> . The exhaust gases from the boiler will be discharged into the atmosphere through a stack of 67 m height for effective dispersion of gases into the atmosphere.
12. Ambient Noise levels are within the standards prescribed by MOE&F Notification and its amendments and after proposed expansion also similar practice will be followed.
13. Solid waste generation (expansion): Press mud generated from the Sugar plant will be given to farmers as organic manure Bagasse generated from the Plant will be utilized as fuel for power generation in Co-gen Power plant boiler Power Plant Ash generated form the power plant will be given to farmers as organic manure when bagasse / biomass is used as fuel and will be disposed off to brick manufacturers when coal is used as fuel.
14. Products and capacities –

Unit	Capacity		
	Existing (No EC obtained)	Expansion	Total

	<b>from MoEF)</b>		
Sugar	4750 TCD	2750 TCD	<b>7500 TCD</b>
Co-gen Power plant	15 MW	19 MW	<b>34 MW</b>
Distillery	--	60 KLPD	<b>60 KLPD</b>
Power from incineration boiler	--	3 MW	<b>3 MW</b>

The committee deliberated on the proposal and recommended for grant of following additional TOR along with Standard TOR as available on the Ministry website for preparation of EIA/EMP report:

- i. A separate chapter on status of compliance of Environmental clearance conditions granted by the State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF a certified report by concerned RO, MoEFCC on status of compliance of conditions of EC for the existing unit to be provided in EIA/EMP report.
- ii. Proposed effluent treatment system for molasses distillery (spent wash, spent lees, condensate and utilities) as well as domestic sewage and scheme for achieving zero effluent discharge (ZLD).
- iii. Proposed action to restrict fresh water consumption within 10 KL/KL of alcohol production.
- iv. Details about capacity of spent wash holding tank, material used, design consideration. No. of peizometers to be proposed around spent wash holding tank and composting yard.
- v. No ground water shall be withdrawn.
- vi. Lay out plan to be submitted making provision for 10 m wide Green Belt of perennial indigenous tree species (Neem, Seesam, Teak wood etc.) around plant periphery.

17.4.9

**Expansion of capacity of existing Distillery (from 60 KLPD to 75 KLPD) at Sy.Nos.529 p, 530, 531p, 532p, 536p, 557p, 560p & 564p of Peddavaram Village, Nandigama Mandal, Krishna District, Andhra Pradesh by M/s Crux Biotech India Private Limited. [IA/AP/IND2/60879/2016, J-11011/359/2016-IA.II(I)]- Teme of Reference**

The project proponent made a presentation before the EAC and informed following:-

1. The project involves distillery (capacity enhancement from 60 KLPD to 75 KLPD at Sy.Nos.529 p, 530, 531p, 532p, 536p, 557p, 560p & 564p of Peddavaram Village, Nandigama Mandal, Krishna District, Andhra

Pradesh by M/s Crux Biotech India Private Limited:

<b>Plant</b>	<b>Product/ By Product</b>	<b>Existing</b>	<b>Expansion</b>	<b>After Expansion</b>
Distillery (with Grains)	Rectified Spirit/ENA/ Ethanol	60 KLPD	15 KLPD	75 KLPD
Power	Electricity	2.5 MW	---	2.5 MW

2. Since the proposal is for Enhancement of distillery plant production capacity from 60 KLPD to 75 KLPD with process modifications without installing additional machinery, no additional cost for the expansion project is envisaged.
3. Existing plant is have 28.98 Acres, expansion will be taken up in the existing plant premises only.
4. Water requirement proposed for 60 KLPD distillery at the time of Environmental clearance in 2012 is 642 KLD. However, No increase in water requirement due to capacity enhancement and it remains 642 KLD only for 75 KLPD capacity.
5. Water requirement for the distillery plant is being sourcing from Ground water & Krishna River at a distance of 1.3 Kms. from the plant. Permission has been obtained for drawl of 250 cum/day of ground water from Ground Water Department, Gov. A.P. and same is shown in subsequent slides. I & CAD , GOAP has accorded permission to draw 800 KLD of water from Krishna River.
6. No additional Power & fuel will be required for expansion project.
7. Bag filters is already provided to the existing boiler to bring down the particulate matter to below 50 mg/Nm<sup>3</sup>.
8. No additional waste water generation from the expansion project.
9. Used oil is being disposed to SPCB authorized recyclers and same will be followed.
10. Nearest river is Krishna River at 1.3 Kms and nearest village is Peddavaram Village at 1.6 Kms.
11. No air emission will generate from expansion proposal as existing Boiler is sufficient for expansion also.
12. No additional effluent generation from the proposed expansion project.
13. CSR plan - CSR plan will be furnished in the Final EIA report.

The committee delebrated on the proposal and recommended for grant of following additional TOR along with Standard TOR as available on the Ministry website for prepration of EIA/EMP report:

- i. A separate chapter on status of compliance of Environmental Clearance conditions granted by the State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF a certified report by concerned RO, MoEFCC on status of compliance of conditions of EC for the existing unit to be provided in EIA/EMP report.
- ii. Study report on emissions and their impact on nearby forest area to be submitted with EIA/EMP report.

	<p>iii. Public Consultation would be exempted under para 7 (ii) of the EIA Notification, 2006, as the EC granted in 2012 and PH already done at that time.</p> <p>vii. Lay out plan to be submitted making provision for 10 m wide Green Belt of perennial indigenous tree species (2000 nos. trees of Neem, Sesam, Teak wood etc.) around plant periphery.</p>
<p><b>17.4.10</b></p>	<p><b>Capacity augmentation of speciality chemicals from 11,000 TPA to 22,000 TPA within the existing plant at KONNAGAR, DISTRICT HOOGLY, WEST BENGAL by M/s Nalco Water India Limited [IA/WB/IND2/60903/2016, J-11011/360/2016-IA.II(I)]- Terms of Reference</b></p> <p>The project proponent made a presentation before the EAC and informed following:-</p> <ol style="list-style-type: none"> <li>1. The land allocation for the existing plant is 27.40 acres. No additional land requirement as the proposed capacity augmentation will be within the plant premises. The cost of the project will be about Rs. 10 crores.</li> <li>2. The plant is located between the geographically co-ordinates: Latitude - 22° 42'53" N and Longitude - 88° 20'37" E.</li> <li>3. Proposed augmentation is based on the existing technology. Production is done by batch process. Most of the products are blended product of different raw materials based on standard business formulation and some are reaction based polymer product. Liquid raw materials are either pumped or sucked under vacuum into the reactor or into a measure vessel for subsequent charging into the reactor. Solid raw materials are charged through charge hole of the reactor. Reaction temperature is maintained by heating with steam or cooling with chilled water by passing them through jacket or coil of the reactor whenever required. Reactor is vented through scrubber. In some products, reactor is hooked up to a vent condenser. After processing is over, batch is sampled to control laboratory for analysis and adjustments are done if required to meet the product specification. When approved, product is filled in MS drums or Plastic Barrels or HDPE Totes or Jars for shipments to customers.</li> <li>4. Water requirement 65 m<sup>3</sup> /day will be met from ground water resources with prior approval of the CGWA.</li> <li>5. The plant is located 1.5 km, N from Konnagar/Rishra Railway Station and 12 km, SE from Kolkatta Airport.</li> <li>6. Nearest water body is Hooghly River located at a distance 1.3 km in East direction.</li> <li>7. Municipal waste (domestic and or commercial wastes) - About 100 kgs per month (canteen waste)</li> <li>8. Waste oil [30 Litre /annum] from DG set. The nature of solid wastes is ETP Sludge, Physical Sludge from Lamella Clarifier and some Polymeric sludge during vessel rinsing prior to decontamination. All solid wastes are disposed off through external authorized agency of WBPCB -M/s West Bengal Waste Management Limited, Haldia, Purba Medinipore, West Bengal.</li> <li>9. Solid waste from process (polymeric) will be about 1000 kg/months where</li> </ol>

	<p>is will be disposed to Ramky, Haldia and sludge from ETP will be about 300 kg/month (dry powder) where it is kept in sludge bed and disposed to Ramky. Liquid waste will be discharged after necessary treatment in our existing Effluent Treatment Plant maintaining discharge norms of WBPCB.</p> <p>10.The expected noise levels will be in the range of 75-85 dB(A).</p> <p>11.We have Environment Management Plan for handling spillages of any chemicals by appropriate measures like spill containment kit, dyke walls, sluice gates etc</p> <p>12.Industrial waste water will be discharged after necessary treatment in our existing Effluent Treatment Plant maintaining discharge norms of WBPCB.The treated water will be partly recycled for the captive use. The sewage wastewater will be treated and used for greenbelt development.</p> <p>13.No forests exist in 10 km radial distance from project boundary.</p> <p>14.Power will be required for proposed project is sourced from the state grid.</p> <p>15. The proposed project site falls in zone-III as per IS 1893 (Part-I): 2002, indicating that the site is seismically stable zone.</p> <p>The EAC noted the submission made by the PP and observed that existing plant was established in 1989 i.e., prior to EIA Notification, 2006. PP sought permission for collecting the data from December 2016 to February 2017, the committee agreed to and after detailed delebration recommended the project for grant of following additional TOR along with Standard TOR as available on the Ministry website for prepration of EIA/EMP report:</p> <ol style="list-style-type: none"> <li>i. CGWA permission for withdwal of ground water to be submitted at the time of appraisal of EC.</li> <li>ii. Lay out plan to be prepared making provision for 10 m wide Green Belt of perennial indigenous tree species (2000 nos. trees of Neem, Seasam, Teak wood etc.) around plant periphery.</li> <li>iii. Public Consultation to be done as per provisions of the EIA Notification, 2006.</li> <li>iv. Zero Liquid Discharge System to be installed.</li> </ol>
17.4.11	<p><b>Enhancement of production capacity of Carbon Di Sulphide (CS<sub>2</sub>) from 50,000 MTPA to 75,000 MTPA and steam export capacity from 45,000 MTPA to 65,000 MTPA at Plot No: Z-7/1 &amp; Z-8/Part, SEZ-1, GIDC Dahej, Taluka – Vagra, Dist: Bharuch, Gujarat by M/s Indobaijin Chemicals Pvt. Ltd. [IA/GJ/IND2/60907/2016, J- 11011/361/2016-IA.II(I)]</b></p> <p>The project proponent made a presentation before the EAC and informed following:-</p> <ol style="list-style-type: none"> <li>1. The project involves enhancement of production capacity of Carbon Di Sulphide (CS<sub>2</sub>) from 50,000 MTPA to 75,000 MTPA and steam export capacity from 45,000 MTPA to 65,000 MTPA at Plot No: Z-7/1 &amp; Z-8/Part, SEZ-1, GIDC Dahej, Taluka – Vagra, Dist: Bharuch, Gujarat by M/s Indobaijin Chemicals Pvt Ltd.</li> <li>2. The Project is having a existing EC F. No. J – 11011/301/2011-IA II (I) dated 24<sup>th</sup>December, 2012.</li> </ol>

3. Cost of Project - Existing cost: Rs. 178 Crores, Expansion cost: ` 15 Crores
4. Source of Water : GIDC water supply
5. Existing Water Consumption for Domestic Activities is 50 KLD and for Industrial Activities: 700 KLD. No additional water will be required for domestic as well as industrial purpose as current water consumption is around 450 KLD only, hence no additional water will be required for the proposed expansion.
6. No industrial wastewater is discharged from the existing unit. After the proposed expansion same shall be achieved. Existing sewage is treated in STP and treated water is reused in gardening purpose. After the proposed expansion same practice shall be continue.
7. No industrial wastewater is discharged from the existing unit hence the unit is a zero liquid discharged unit. After the proposed expansion same shall be achieved.
8. Power Source: Torrent Energy Ltd, Total Connected load -5110 KW, Original Contract Demand -1920 KW, Existing Contract Demand, which is used - 1520 KW. Proposed additional Contract Demand – 30 KW
9. No change in existing contract demand due to proposed expansion as only additional 30 KW of additional connected load is required for proposed expansion, which is already available with unit. Hence no additional electricity will be required for proposed expansion.
10. Public Hearing is not applicable as per section 7 (i), (iii) stage (3), para (i) (b) of EIA notification, 2006.
11. CSR Plan - Need base survey shall be undertaken and based on that CSR plan shall be incorporated in EIA report.
12. The existing and after expansion the product scannerio is as below:

<b>No.</b>	<b>Product</b>	<b>Existing Quantity</b>	<b>Proposed Quantity</b>	<b>Total Quantity</b>
1	Carbon Di-sulphide	50,000 MTPA	25,000 MTPA	<b>75,000 MTPA</b>
2	Steam Export	45,000 MTPA	20,000 MTPA	<b>65,000 MTPA</b>

The EAC noted the submission made by the PP and observed that existing plant was established in 1989 i.e., prior to EIA Notification, 2006. PP sought permission for collecting the data from December 2016 to February 2017, the committee agreed to and after detailed delebration recommended the project for

	<p>grant of following additional TOR along with Standard TOR as available on the Ministry website for preparation of EIA/EMP report:</p> <ol style="list-style-type: none"> <li>i. CGWA permission for withdrawal of ground water to be submitted at the time of appraisal of EC.</li> <li>ii. Lay out plan to be prepared making provision for 10 m wide Green Belt of perennial indigenous tree species (2000 nos. trees of Neem, Sesam, Teak wood etc.) around plant periphery.</li> <li>iii. Public Hearing is not applicable as per section 7 (i), (iii) stage (3), para (i) (b) of EIA notification, 2006, as the project is located in notified industrial estate.</li> <li>iv. Zero Liquid Discharge System to be installed.</li> </ol>
17.4.12	<p><b>Manufacture Melamine Formaldehyde Resin, Phenol Formaldehyde Resin and Urea Formaldehyde Resin as well as Laminated Sheets at Survey No.: 179/P2, Village: Ratavirda, Taluka: Wankaner, District: Morbi, Gujarat by M/s Vansh Laminate LLP. [IA/GJ/IND2/60963/2016, J- 11011/362/2016-IA.II(I)]</b></p> <p>The PP made a presentation before the EAC and informed that:</p> <ol style="list-style-type: none"> <li>1. M/s. Vansh Laminate LLP is a partnership firm proposing to set up a medium scale Resin and Laminated Sheet Manufacturing unit at Survey No.: 179/P2, Village: Ratavirda, Taluka: Wankaner, District: Morbi, Gujarat. Proposed products will be used for captive consumption as well as for sale purpose.</li> <li>2. The proposed final product Laminated Sheets does not attract Environmental Clearance (EC) from Ministry of Environment, Forest &amp; Climate Change (MoEFCC), New Delhi. However, the proposed products like Melamine Formaldehyde Resin, Phenol Formaldehyde Resin and Urea Formaldehyde Resin falls under Category 5(f) as stated in Environment Impact Assessment Notification Published on 14th September, 2006. Further, the location of the proposed project is outside the notified industrial estate. Hence, the project proponent has to obtain the EC from the Ministry of Environment, Forest &amp; Climate Change, New Delhi. M/s. T. R. Associates has been appointed to carry out EIA/EMP studies for obtaining Environmental Clearance.</li> <li>3. The total land area of company is 11,534 m<sup>2</sup> out of which 3,563 m<sup>2</sup> (31 % of total land) area will be used for greenbelt development. The estimated cost of the proposed project is 5.3 PFR of Vansh Laminate of 16 Crores. Total budget allocation towards Environmental Management Facilities will be approx. Rs. 50 Lakhs. Total 75 persons will be employed including skilled persons, unskilled persons and office staff.</li> <li>4. Nearest River/Water body Macchu River - 5.8 km in SW direction, Paneli Lake - 4 km in NNW direction.</li> <li>5. Nearest Village Ratavirda is at 0.7 km distance in ENE direction.</li> <li>6. Energy/power requirement will be 375 kVA which will be procured through Paschim Gujarat Vij Company Limited.</li> </ol>

7. The total water requirement will be 85 kl/day which will be fulfilled by own Borewell.
8. National Parks / Sanctuary None within 10 km radius.
9. Domestic wastewater 4 kl/day will be disposed off through Septic Tank/ Soak Pit System.
10. Industrial wastewater will be generated from process, boiler, cooling tower blow- down, washing & RO-1. Wastewater (washing and process) will be collected collection cum neutralization tank. Then wastewater will be given Chemical Oxidation treatment. After completion of chemical treatment, wastewater will be taken to Nutch Filter/Filter Press for chemical sludge separation. Chemically treated process and washing water will be mixed with RO-1 rejects, cooling tower blow down, boiler blow down in holding tank. After that it will be passed through RO-2. Reject of RO-2 will be taken to an Evaporator followed by condenser. RO - 2 permeate along with condensate from evaporator will be reused in RO - 1. ETP sludge along with evaporation residue from evaporator will be will be disposed of at TSDF site. Thus, unit will maintain Zero Effluent Discharge.
11. ETP waste + evaporation residue, discarded bags/barrels, used oil & edge cutting waste are the main solid hazardous waste that will be generated from the proposed unit. ETP sludge will be collected, stored into solid waste storage area and disposed to authorized TSDF site. Discarded bags and containers will be sold to approve vendor. Edge cutting waste will be disposed off to common incineration facility.
12. The total estimated cost of the proposed project is approx. Rs. 5.3 Crores.
13. CSR Plan - The company planned to carry out SCR activities in the area of education and related support activities for down trodden children, greenbelt development, employment for nearby villagers and village level funding support activities.
14. No court case is pending in any court against the project.
15. Floods are not likely to occur as water body are away. It my be noted that seismic forces will be considered for the construction of proposed structures/buildings as the project site falls under the Sismic Zone - III.
16. List of products required to be manufactured are given below:

<b>S. No.</b>	<b>Name of Product(s)</b>	<b>Proposed Production Capacity</b>
1	Melamine Formaldehyde Resin	300 MT/Month
2	Phenol Formaldehyde Resin	300 MT/Month
3	Urea Formaldehyde Resin	300 MT/Month
4	Laminated Sheets	1,50,000 Sheets/Month



	<p>The EAC noted the submission made by the PP and after detailed deliberation recommended the project for grant of following additional TOR along with Standard TOR as available on the Ministry website for preparation of EIA/EMP report:</p> <ol style="list-style-type: none"> <li>i. Public Consultation to be done as per provisions of the EIA Notification, 2006.</li> <li>ii. Zero Liquid Discharge system to be adopted.</li> <li>iii. Permission of CGWB for withdrawal of borewell water to be submitted with the final EIA/EMP report.</li> </ol>
17.4.13	<p><b>Manufacturing of Bulk Drug &amp; Intermediate and proposed for expansion in product capacity at Gut No.204, Nasik - Mumbai Highway, Vadivarhe, Taluka- Igatpuri. Dist- Nashik, Maharashtra by M/s Vadivarhe Speciality Chemicals Ltd.[ IA/MH/IND2/60969/2016, J- 11011/364/2016-IA.II(I)]</b></p> <p>The EAC noted that the proposal is already under consideration of the Ministry and listed at Agenda item no. 17.8.6 of the 17<sup>th</sup> EAC meeting. The PP has submitted a duplicate proposal which should be avoided. The EAC recommended to the Ministry to delist the proposal from the pending list of the Ministry.</p>
17.4.14	<p><b>Proposed modernization project of Synthetic Organic chemicals and allied products at Plot No.: 1-7 &amp; 26-31, Dhatav MIDC, Roha, Raigad.-402116, Maharashtra by M/s DEEPAK NITRITE LIMITED [IA/MH/IND2/61037/2016, J- 11011/363/2016-IA.II(I)]</b></p> <p>The project proponent informed following:-</p> <ol style="list-style-type: none"> <li>1. The project involves Proposed modernization project of Synthetic Organic chemicals and allied products at Plot No.: 1-7 &amp; 26-31, Dhatav MIDC, Roha, Raigad.-402116, Maharashtra by M/s DEEPAK NITRITE LIMITED.</li> <li>2. The proposed project falls under classification 5(f) of schedules listed in EIA notification SO1533 dated 14/09/2006. Its appraisal category is B-1. Due to absence of SEIAA it has come at Centre level.</li> <li>3. Land requirement - 26624.00 sq. m plot in MIDC. No additional land required. Green Belt Area IS 2581 sq. m.</li> <li>4. Total water requirement for existing plant is 524 CMD. After expansion water requirement will reduce up to 519 CMD.</li> <li>5. Effluent Quantity (Trade + Domestic) IS 243 CMD + 31 CMD = 274 CMD . 243 CMD effluents are presently treated in ETP of capacity 400 CMD. It consists of primary, secondary and tertiary treatment. Treated water will be discharged to CETP Mahad for final disposal into sea. 31 CMD treatment in Sewage treatment plan having capacity 35 CMD. Treated domestic waste will be recycle and reuse for cooling tower and gardening.</li> <li>6. Fuel requirement: Boiler: 8 TPH X 1 no : 32.83 TPD (Type Fuel: Indonesian Coal) and 6 TPH X 1 no : 20.53 TPD (Type Fuel: Indonesian Coal and 9 TPD(Type Fuel: Farnese)</li> </ol>

7. For dispersion of emission for Boiler and Thermopac Stack Height 34 m stack for boiler and common stack for boiler (6TPH) and thermo Pac 24.5m will be provided. For Dispersion of emission from DG Sets, Stack Height : 4.5m above enclosure will be provided.
8. Effluent is treated in existing ETP for Primary and Secondary treatment and treated effluent discharged to CETP.
9. Amount of sewage generation (CMD) is 31 CMD and for its treatment STP of capacity of 35 CMD has been proposed to be installed.
10. Stack height of 34 m is provided to boiler of 8 TPH ( coal) capacity and 24.5m common stack for 6 TPH boiler (FO) and Thermopac of 6 lac Kcal. Cyclone with Dust Collector has also been provided to Boiler along with stack.
11. Acoustic enclosure provided for high noise generating areas.
12. Total power requirement for existing unit is 2100 KW. For the proposed expansion no additional power is required.
13. Total project cost is 38.68 Cr.
14. Size/Magnitude of Proposed By-Production Capacity is given in the table below:-

<b>Sr. NO.</b>	<b>Name of Existing Product</b>	<b>Existing Capacity MT/M</b>	<b>Name of Proposed Product Mix</b>	<b>Proposed Capacity MT/M</b>
1.	Para Cumidine(PC) or 2 Ethyl Hexy Nitrite	200	Para Cumidine(PC) or 3 Amino Benzotri Flouride (3ABTF)	200
2.	Ortho Anisidine(OA) OR Tri Methyl Hydro Quinine(TM HQ)	75	Ortho Anisidine(OA) OR Tri Methyl Hydro Quinine(TM HQ)	50
3.	2,4 Xylidine and 2,6 Xylidine or nitrobenzene or 2,3 Xylidine and 3,4 Xylidine	250	2,4 Xylidine and 2,6 Xylidine or 2,3 Xylidine and 3,4 Xylidine or 2,5 Xylidine and 2,3 xyleneol 2,4 and 2,5 Xyleneol	250
4.	Meta Cholro Aniline Diphenyl Amine Derivatives	50	Diphenyl Amine Derivatives	50
5.	Crystal Diethyl Meta Amino Phenol(Cryst. DEMAP) or Dibutyl Para Phenylene Di amine (DBPPDA )	55 50	Crystal Diethyl Meta Amino Phenol(Cryst. DEMAP) or Dibutyl Para Phenylene Di amine (DBPPDA or 3 NAP (3 Nitro Aceto Phenone)/ or 3AAP(3Amino Aceto Phenone) or 3 HAP (3 Hydroxy Aceto	40

				Phenone)	
6.	TFMAP(3-(trifloromethyl)acetophenon MePPDA Sulphate (2 Methyl P-phenylene Diamine Sulphate) or 1,3 CHD(1,3 Cyclohexane dione) or 4-NAX (Benenamine,N-(1-ethyloropy)-3-4-dimethyl)	55 50 22 10		TFMAP(3-(trifloromethyl)acetophenon	80
7.	Pilot Plant Products 1,3 CHD(1,3 Cyclohexane dione) and SMIA(syn Methoximino(2 furanyl)acetic acid	5		2 MePPDA Sulphate (2 Methyl P-phenylene Diamine Sulphate) or 1,3 CHD(1,3 Cyclohexane dione)	60
8.	--	--		Pilot Plant Products ( synthetic Organic Chemicals)	10
	<b>Total</b>	<b>822</b>			<b>740</b>

The EAC noted the submission made by the PP and after detailed delebration recommended the project for grant of following additional TOR along with Standard TOR as available on the Ministry website for prepration of EIA/EMP report:

- i. Public Consultation to be done as per provisions of the EIA Notification, 2006.
- ii. Zero Liquid Discharge system to be adopted.
- iii. Permission of CGWB for withdrawl of borewell water to be submitted with the final EIA/EMP report.

**27<sup>th</sup> December 2016 (Day 2)**

## 17.5 Environmental Clearance

### 17.5.1 Proposed Bulk Drug & Intermediates Manufacturing Unit At SY.No:29, Tupakulagudem (V), Tallapudi (M), Westgodavari (DIST.) Andhra Pradesh by M/s Vensub Laboratories PVT. LTD. [IA/AP/IND2/60127/2014, J-11011/401 /2014 IA II (I)]

The project proponent and their consultant (M/s Team labs and consultants) gave a detailed presentation on the salient features of the project and informed that:

- i. The Draft Terms of References (TORs) awarded in the 38<sup>th</sup> Meeting of the Reconstituted Expert Appraisal Committee (Industry) held during 20-21<sup>st</sup> April 2015 for preparation of EIA-EMP report.
- (i) All Synthetic organic chemicals industry projects (Bulk drugs and intermediates excluding drug formulations), located outside the notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- ii. Ministry has issued Environmental Clearance vide letter no. J-11011/897/2008-IA-II(I) dated 14<sup>th</sup> October, 2009 to M/s Vensub Laboratories Pvt. Ltd., for Bulk drug manufacturing unit.
- iii. M/s Vensub Laboratories Pvt. Ltd. has Proposed Bulk drug & intermediates manufacturing unit at Sy.no:29, Tupakulagudem (v), Tallapudi (m), Westgodavari (dist.) Andhra Pradesh. It is reported that no areas protected under international conventions, national or local legislation for their ecological landscape, cultural or other related value are located within 10 km distance of project site. The major forest in the study area is Karakapadu Reserve forest is at a distance of 9.2 km in Northwest direction to the plant site.
- iv. Plot area is 11.8 acres of which greenbelt will be developed in 6.5 acres. Cost of project is Rs. 6 Crores. Following are the list of existing and proposed products:

S. No	Product Name	CAS Number	Therapeutic category / Application	Quantity In Kgs/Month	Quantity In Kgs/Day
1	5-(Difluoromethoxy )-2-mercapto -1H-benzimidazole(BZL)	-	Drug Intermediate	5200.00	173.33
2	Niacin	59-67-6	Anti hyper lipidimic	26000.00	866.67
3	N-Methyl-4-piperldone(NMP)	1445-73-4	Drug Intermediate	11490.00	383.00
4	Paracetamol-API	103-90-2		14040.00	468.00
5	Sodium methoxide (SMO)	124-41-4	Antineoplastic	8320.00	277.33
<b>Total (Worst combination of any two products on</b>				<b>40040.00</b>	<b>1334.67</b>

**campaign basis only)**

**LIST OF BY- PRODUCTS AND QUANTITIES**

<b>S. No</b>	<b>Name of the Product</b>	<b>Name of the By-Product</b>	<b>Quantity in MT/Month</b>	<b>Quantity in Kgs/Day</b>
1	5-(Difluoromethoxy)-2-mercapto -1H-benzimidazole	Disodium sulfide	2.16	72.00
2	Niacin	Ammonium sulphate	28.02	934.00
		Sodium nitrate	18.03	601.00
3	Paracetamol	Acetic acid	6.00	200.00
<b>Total</b>			<b>54.21</b>	<b>1807.00</b>

- v. Additionally, PP informed the Committee that ambient air quality monitoring was carried out at 8 locations during March, 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (51.02–68.32 µg/m<sup>3</sup>), PM<sub>2.5</sub> (18.49–34.87 µg/m<sup>3</sup>), SO<sub>2</sub> (7.14 – 14.05 ug/m<sup>3</sup>) and NO<sub>x</sub> (17.59 – 23.41 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.76 µg/m<sup>3</sup>, 1.70 µg/m<sup>3</sup> and 2.28 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- vi. The total power requirement will be 300 KVA and will be met from APSPDCL. One cooling tower of 1000TR will be used. DG set of 250 KVA will be used with adequate stack height.
- vii. Coal fired boiler of 6 TPH capacity and Thermopack boiler of 2,00,000 kcal/hr. will be used. Cyclone separator followed by Bag filter with stack height of 32 m will be used as air pollution control device. Committee suggested to use briquette in place of coal. PP agreed to it.
- viii. Total water requirement is 62 m<sup>3</sup>/day out of which, Fresh water requirement will be 52.28 m<sup>3</sup>/day, which will be met from ground water. Against which 19.35 m<sup>3</sup>/day waste water will be generated.
- ix. Effluents will be segregated as HTDS and LTDS stream . High TDS stream will be sent to MEE and condensate will be sent to ETP. The LTDS effluents will be treated in ETP-RO. RO rejects will be sent to MEE and MEE concentrate will be sent to ATFD.
- x. The Organic waste and Spent carbon will be sent to cement Industries. MEE salts and ETP sludge will be sent to TSDF. Ash from the boilers will be sent to Brick Manufacturers.
- xi. Public hearing was exempted under Para 7 (ii) of EIA Notification, 2006.

The committee decided to defer the project for want of following information:

1. Layout is not acceptable. PP need to submit revised layout plan in which green belt should be 10 m wide around plant periphery.

	<ol style="list-style-type: none"> <li>2. Point wise response and commitments w.r.t. issues raised in earlier public hearing.</li> <li>3. Health study of nearby villagers and photographs with current status report of near by forest area.</li> <li>4. List of plants to be planted at green belt area.</li> <li>5. List of existing industries around plant site.</li> <li>6. Coliforms and fecal coliform test in ground and surface water.</li> </ol>
17.5.2	<p><b>Setting up of Proposed 100 KLD (Grain Based) Distillery at Village –Goandpur Jaichand, Nichla &amp; Singa, Tehsil: Haroli, Distt. Una, Himachal Pradesh by M/s Rock &amp; Storm Distilleries (P) Limited. [IA/HP/IND2/31171/2015, J-11011/234/2015-IA II (I)]</b></p> <p>The project proponent and their consultant (M/s Vardan EnviroNET) gave a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>i. The Daft Terms of References (TORs) awarded in the 6<sup>th</sup> Meeting of the Expert Appraisal Committee (Industry -2) held during 29<sup>th</sup> March-02<sup>nd</sup> April, 2016 respectively for preparation of EIA-EMP report.</li> <li>ii. All Grain based distillery(&gt;60 KLPD) are listed at SN 5(g) (ii) under category ‘A’ and appraised at central level.</li> <li>iii. M/s Rock &amp; Storm Distilleries (P) Limited. has proposed for Setting up of Proposed 100 KLD (Grain Based) Distillery at Village –Goandpur Jaichand, Nichla &amp; Singa, Tehsil: Haroli, Distt. Una, Himachal Pradesh.</li> <li>iv. Plot area for distillery plant will be 14 Acres, of which 33 % area will be developed as green belt. Total cost of project is Rs. 101.0 Crores.</li> <li>v. Total cost earmarked for Environmental protection measures will be Rs. 7.6 crore and recurring cost /annum will be Rs. 90 lakh respectively.</li> <li>vi. It is reported that there is no National Parks/ Wild Life Sanctuaries/ Biosphere Reserves/RF within 10 km radius area of project site.</li> </ol> <p>During presentation Committee noted that PP has uploaded the Draft EIA /EMP report on the website, which is not acceptable. Committee also noted that PP has submitted the baseline data from October-December 2015 before recommendation of TOR.</p> <p>The committee decided to defer the project for want of following information:</p> <ol style="list-style-type: none"> <li>i. One month baseline data additionally for January 2017.</li> <li>ii. Submit Final EIA and EMP report.</li> <li>iii. Permission from CGWA to be submitted.</li> <li>iv. Environmental Sensitivity of 10 km radius to be submitted.</li> </ol>
17.5.3	<p><b>Proposed Expansion &amp; Modernization of Existing Molasses Based Distillery</b></p>

**(30 to 60 KLPD) along with installation of 2.1 MW Co-Generation Power Plant by M/s DWARIKESH SUGAR INDUSTRIES LIMITED at Dwarikesh Nagar, Village Bundki, Tehsil-Nagina, District-Bijnor, Uttar Pradesh-reg. Environmental Clearance [IA/UP/IND2/ 30867/2015, J-11011/256/2015-IA II (I)**

The Project Proponent and the accredited Consultant M/s J M EnviroNet Pvt. Ltd., gave a detailed presentation on the salient features of the project and informed that:

- (i) The proposal is for Expansion & Modernization of Existing Molasses Based Distillery (30 to 60 KLPD) along with installation of 2.1 MW Co-Generation Power Plant by M/s Dwarikesh Sugar Industries Limited at Dwarikesh Nagar, Village Bundki, Tehsil-Nagina, District-Bijnor, Uttar Pradesh.
- (ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 3<sup>rd</sup> EAC meeting held during 18-19<sup>th</sup> January, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter dated 5<sup>th</sup> March, 2016.
- (iii) All molasses based distilleries are listed at Sl.No. 5(g) (i) of Schedule of EIA Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- (iv) The PP has obtained environmental clearance (EC) for the existing distillery unit (30 KLPD) vide MoEF letter no. J- 11011/35/2004 - IA II (I) dated 24<sup>th</sup> June, 2004. Regional Office of MoEF&CC at Bhopal vide letter no. IV/ENV/UP/Ind-74/190/2006 dated 12.04.2016 has submitted the certified copy of statement of compliance to the environmental conditions prescribed in the existing EC.
- (v) Existing land area is 9.9 Hectares and the proposed expansion & modernization will be done within the plant premises. No additional land will be required for the proposed expansion. Almost 33% i.e. 3.26 hectares (8 acres) of the total plant area has already been developed as greenbelt/plantation and the same will be maintained. The total Cost of the project for the expansion is Rs. 50 Crores. Capital cost for Environmental Protection Measures will be Rs. 5.0 crores and Recurring Cost will be Rs. 0.5 Crores / annum. The raw materials for the production will be Molasses (282 MT/day) which will be obtained through own adjacent sugar mill through pipelines & nearby own Sugar mill by tankers.
- (vi) It is reported that no national parks, wildlife sanctuaries, Reserve Forest (RF)/ Protected Forests (PF), Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Padhoi River is flowing at a distance of 5 km from the project site. Gangan River is flowing at a distance of 3 km in West direction, Pelkhala River is flowing

at a distance of 2 km in North direction and Khoh River is flowing at a distance of 7 km in East direction from the project site.

- (vii) The number of working days will be 270 days/annum.
- (viii) Ambient air quality monitoring was carried out at 8 locations during October to December, 2015 and submitted baseline data indicates that ranges of concentrations of PM10 (59.30 µg/m<sup>3</sup> to 88.2 µg/m<sup>3</sup>), PM2.5 (28.3 µg/m<sup>3</sup> to 42.2 µg/m<sup>3</sup>), SO<sub>2</sub> (6.1 µg/m<sup>3</sup> to 10.5 µg/m<sup>3</sup>) and NO<sub>2</sub> (14.1 µg/m<sup>3</sup> to 21.5 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.24 µg/m<sup>3</sup>, 0.59 µg/m<sup>3</sup> and 3.71 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- (ix) Fresh water requirement will be increased from 252 m<sup>3</sup>/day to 526m<sup>3</sup>/day. Which will be sourced from the ground water. PP has submitted the copy of Renewal of NOC for ground water withdrawal issued from CGWA. Committee suggest restricting the fresh water requirement for the distillery unit with 8 Kl/Kl. PP agree with that. As per this fresh water requirement will be 480 m<sup>3</sup>/day.
- (x) Spent wash will be first treated in Bio-Digester (Bio-Methanation) and after that will be concentrated in Multi-effect evaporator and concentrate will be used for bio composting.
- (xi) This is Zero Liquid Discharge unit. No wastewater will be discharged from the site to surrounding area.
- (xii) Power requirement will be increased from 0.5 MW to 1.2 MW, which will be sourced from proposed co-gen plant. ESP will be installed with the proposed boiler of 25 TPH with ESP with adequate stack height.CO<sub>2</sub> generated during the fermentation process will be scrubbed, purified & collected for sale as by-product.
- (xiii) Ash from the Boiler will be used in bio-composting & also given to nearby brick manufacturers. Yeast sludge and Digesters sludge will be finally disposed as Mixing with Press Mud.
- (xiv) CSR plan is prepared for expenditure of 5% of project cost.
- (xv) Public Hearing for the proposed project has been conducted by the Uttar Pradesh Pollution Control Board 20.07.2016.
- (xvi) The following products will be generated by the company:

#	Product	Production			Working days
		Existing	Proposed	Total	
1	Co-gen power	0	2.1 MW	2.1 MW	270
2	Distillery (Ethyl Alcohol)	30	30	60 KLPD	



The EAC deliberated upon the issues raised during the public hearing. The concerns were raised regarding odour from the industry and Fly ash management etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report. The EAC also deliberated on the certified compliance report submitted by the RO, MoEFCC, Lucknow and found satisfactory. The Committee after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions:

- (i) ESP with adequate stack height for dispersion and for proposed boiler. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- (ii) Distillery unit shall be based on molasses based only and no grain based distillery unit shall be operated.
- (iii) Fresh Water need daily for distillery unit shall not exceed 480 m<sup>3</sup> /day and prior permission should be obtained from the CGWA/SGWA.
- (iv) Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.
- (v) Spent wash shall be stored in impervious RCC lagoons with proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. The storage of spent wash shall not exceed 5 days capacity.
- (vi) As proposed, no effluent from distillery shall be discharged outside the plant premises and Zero discharge shall be adopted. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- (vii) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (viii) Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area and compost yard shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and this Ministry. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and total dissolved solids

shall be monitored. Sampling and trend analysis monitoring must be made on monthly basis and report submitted to the Ministry's Regional Office at Bhopal and SPCB.

- (ix) As proposed, green belt over 33 % of the total project area should be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- (x) All the commitments made during the Public Hearing / Public Consultation meeting held on 20.07.2016 should be satisfactorily implemented and adequate budget provision should be made accordingly.
- (xi) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.
- (xii) A regular environment manager having post graduate qualification in environmental sciences/ environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.

17.5.4 **Setting up of NPK (12 lakh MT) Fertilizer Plant at At Sy No. Bit-II, Village Survepalli, Near to Krishnapatnam port, Venkatachalam Mandal, Nellore District, Andhra Pradesh State by M/s KRIBHCO-reg. Environmental Clearance [IA/AP/IND2/31451/2015,J-11011/262/ 2015-IA II (I)**

The Project Proponent and the accredited Consultant M/s Asian Consulting Engineers Private Limited., gave a detailed presentation on the salient features of the project and informed that:

- (i) The proposal is for Setting up of NPK (12 lakh MT) Fertilizer Plant at At Sy No. Bit-II, Village Survepalli, Near to Krishnapatnam port, Venkatachalam Mandal, Nellore District, Andhra Pradesh State by M/s KRIBHCO.
- (ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 2<sup>nd</sup> EAC meeting held during 16-17<sup>th</sup> December, 2015 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter dated 27<sup>th</sup> January, 2016.
- (iii) All Chemicals Fertilizer Industry are listed at S.N. 5(a) under category 'A' and appraised by Expert Appraisal Committee (I).
- (iv) Total plot area will be 286 acres, out of which green belt will be developed

in 33 % area. The total Cost of the project will be Rs 1517 Crore.

(v) It is reported that no National Parks, Wildlife Sanctuaries, Reserve Forests (RF)/ Protected Forests (PF), Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the proposed site. It is reports that Sarvepalli inland water reservoir lies within 2km from the project.

(vi) Project includes following facilities at plant site & port storage:

- Chemical Fertilizer Plant at Nellore
- Port Storage for Ammonia & Phosphoric acid at Krishnapatnam Port of KPCL
- Pipe lines for transportation of these raw materials from (i) unloading Jetty to Port Storage (03-05 km) and (ii) from Port storage to site (16 km).

(vii) Proposed storage facilities for the project:-

<p>Raw Material <b>Storage at Plant Site</b></p>	<ul style="list-style-type: none"> <li>• Ammonia storage tank (1 x 10000 MT).</li> <li>• Sulphuric acid storage tank (1 x 10000 MT).</li> <li>• Phosphoric storage tank (1 x 10000 MT).</li> <li>• MOP storage area of total capacity 36000 MT</li> </ul>
<p>Raw Material <b>Storage at Krishnapatnam Port</b></p>	<ul style="list-style-type: none"> <li>• Ammonia : 2x15000 MT</li> <li>• Phosphoric acid : 4x10000 MT</li> </ul>

(viii) Ambient air quality monitoring was carried out at 8 locations during February 2016 to April 2016 and submitted baseline data indicates that ranges of concentrations of PM10 (38.9 µg/m<sup>3</sup> to 201 µg/m<sup>3</sup>), PM2.5 (20.3 µg/m<sup>3</sup> to 137 µg/m<sup>3</sup>), SO<sub>2</sub> (5.3 µg/m<sup>3</sup> to 36.8 µg/m<sup>3</sup>) and NO<sub>2</sub> (4.2 µg/m<sup>3</sup> to 49.6 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 6.57 µg/m<sup>3</sup>, 0.40 µg/m<sup>3</sup> and 0.89 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS) except PM<sub>10</sub> and PM<sub>2.5</sub>.

(ix) Power requirement of 9.5 MW shall be met through Andhra Pradesh TRANSCO (APTRANSCO).

(x) The phosphoric acid, Ammonia and MOP will be sourced from the foreign market through the Krishnapatnam (KPCL) port. While Sulphuric acid will be taken from domestic market.

- (xi) Fugitive emission shall be controlled by low emission valves, pump sets and scrubbing system.
- (xii) The total raw water requirement will be 1,200 m<sup>3</sup>/day, which will be sourced from *Survepalli Reservoir*.
- (xiii) Industrial effluents will be treated in ETP and domestic effluents will be treated in STP. This is Zero Liquid Discharge unit. No wastewater will be discharged from the site to surrounding area.
- (xiv) CSR plan is prepared for expenditure of 2.5% of project cost.
- (xv) Public Hearing for the proposed project has been conducted by the Uttar Pradesh Pollution Control Board 27<sup>th</sup> September 2016.

The EAC deliberated upon the issues raised during the public hearing. The concerns were raised regarding availability of fertilizers to nearby villagers, Employment, skill development program and development & infrastructure improvement program etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

The Committee after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions:

- (i) Fugitive emission shall be controlled by low emission valves, pump sets and scrubbing system.
- (ii) The total raw water requirement shall not exceed 1,200 m<sup>3</sup>/day and prior permission from concerned authority shall be obtained.
- (iii) Industrial effluents shall be treated in ETP and domestic effluents shall be treated in STP.
- (iv) No wastewater will be discharged from the site to surrounding area.
- (v) Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.
- (vi) As proposed, green belt over 33 % of the total project area should be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- (vii) All the commitments made during the Public Hearing / Public Consultation meeting held on 27<sup>th</sup> September 2016 should be satisfactorily implemented and adequate budget provision should be made accordingly.

(viii) At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner. Medical and drinking water facility shall be provided to nearby villagers.

(ix) A regular environment manager having post graduate qualification in environmental sciences/ environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.

(x) Rain water harvesting system shall be installed.

(xi) Irrigated water quality shall be improved.

17.5.5 **Expansion of Specialty Chemicals Manufacturing Unit at Plot No.E-7 & E-8, MIDC Chincholi, Taluka Mohol, District Solapur, Maharashtra by M/s Balaji Amines Ltd.-reg EC {J-11011/195/2015-IAI (I)}**

Project was considered in 12<sup>th</sup> EAC meeting held during 23-24<sup>th</sup> August, 2016, Wherein committee deferred the proposal for the following :-

- i. Commitment to be provided for use of natural gas fired boiler in place of coal fired boiler.
- ii. Point wise Action taken report on non- compliance points w.r.t. existing EC alongwith documents.
- iii. To conduct indoor monitoring w.r.t. amines for one month
- iv. Option to be explored for use of common incinerator facility for management of distillate residue in place of isolated incineration.

Now PP has submitted the following additional information:-

1. In response of point no. 1, PP informed that it is appeared in the minutes is nothing but a discrepancy which has occurred inadvertently. This is because no discussions on natural gas as fuel took place during the presentation neither there is any such facility nearby the Chincholi MIDC of Solapur. It is a fact that the discussions took place on bagasse as a fuel and not on natural gas as stated in the minutes. It seems the term bagasse has been misprinted as natural gas.

During presentation the Committee noted that if it is wrongly mentioned in the minutes of 12<sup>th</sup> EAC meeting then PP had to inform the Ministry immediately but

PP did not inform the ministry regarding this correction. The committee observed that as natural gas and bagasse is not available as per requirement, imported coal (Sulphur content less than 0.15 %) shall be used as a fuel in boiler with Cyclone separator followed by bagfilter to control particulate emission.

2. In response of point no. 2 i.e action taken report w.r.t. non compliance points raised by RO, MoEF&CC. PP has submitted the action taken report on non compliance points which are as follows:

- STP is provided on site.
- Augmentation of existing green belt has been done on site. Thereunder, 1250 trees covering an area of 26,564 Sq. M have been planted after RO visit. Accordingly, the plantation area accounts for 33% of total plot.
- The latest six monthly compliance report was submitted to Regional Officer; MoEFCC, Nagpur on 27.01.2016. From now onwards, the six monthly compliance report shall be submitted regularly to RO, MoEFCC; Nagpur.
- Stack monitoring reports along with six monthly reports shall be submitted to RO MoEFCC regularly.
- The frequency of AAQ monitoring shall be increased from quarterly to monthly.
- Roof top water harvesting plan is under implementation.

3. PP has conducted the indoor monitoring w.r.t. amines for one month.

4. PP has already been installed 'Incineration cum Waste Heat Recovery Plant (IWHRP)' which shall be solely used for Captive use.

During presentation the committee noted that there is no green belt inside the plant premises. Secondly, the PP has submitted the self certified action taken report on non compliance points raised by RO, MoEF&CC; however, it should be certified by the RO, MoEFCC concerned.

After detailed deliberation the committee recommended to the Ministry to take up the matter with the RO, MoEF&CC concerned in order to get latest certified compliance report.

The EAC decided to defer the proposal.

17.5.6 **Expansion & Debottlenecking of Petrochemical Complex, Nagothane Manufacturing Division (NMD) at MIDC, Tehsil Roha, District Raigarh,**

**Maharashtra by M/s Reliance Industries Limited reg EC {{J-11011/175/2015-IA-II(I)}}**

Project was considered in 14<sup>th</sup> EAC meeting held during 26-27 October 2016  
Wherein committee deferred the proposal for the following :

- I. As water requirement if on higher side, therefore, revised water balance with measures of recycle and reuse to submitted.
- II. As committed photograph of green belt to be submitted.
- III. Action plant to be drawn at the rate of 2.5% of project cost under ESR activities.

PP has submitted the additional information:-

- PP has submitted the revised water balance. As per this existing fresh water requirement is 36000 m<sup>3</sup>/day, which will be sufficient for the proposed project. No additional fresh water will be required.
- PP has submitted the photographs of greenbelt.
- PP has submitted the action plan for ESR activities.

The Committee after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions:

- i) Compliance to all the environmental conditions stipulated in the environmental clearance letter no. SEAC-2013/CR-TC-1 date 5<sup>th</sup> September, 2014 shall be satisfactorily implemented and compliance reports submitted to the Ministry's Regional Office.
- ii) All pollution control and monitoring equipments shall be installed, tested and interlocked with the process. SPCB shall grant 'Consent to Operate' after ensuring that all the mentioned pollution control equipments, construction of storm water drain, rain water harvesting structure, Greenbelt, uploading of compliance report on the website etc have been implemented.
- iii) The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- iv) Ambient air quality data shall be collected as per NAAQS standards notified by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> September, 2009. The levels of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC and CO shall be monitored in the ambient air and emissions from the stacks and displayed at a convenient location near the main gate of the company

and at important public places. The company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and the Maharashtra Pollution Control Board (MPCB).

- v) Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits stipulated by the MPCB.
- vi) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- vii) Total fresh water requirement from MIDC shall not exceed 36,000 m<sup>3</sup>/day and prior permission shall be obtained from the Competent Authority. No ground water shall be used without permission.
- viii) The effluent generated shall be treated in the existing ETP with 10,000 m<sup>3</sup>/d capacity. The treated effluent shall be recycled into the system, reused in the green belt and excess will be discharged to Dharamtar Creek.
- ix) Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.
- x) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- xi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps.
- xii) As proposed, ETP sludge disposed at TSDF, Spent catalyst sent to registered recyclers/ reprocessors/ TSDF. Organic waste and Spent solvent distillation residue will be sent to registered recyclers/ reprocessors/ TSDF.
- xiii) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from MPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire fighting facilities in case of emergency.
- xiv) The Company shall strictly comply with the rules and guidelines under



	<p>Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All Transportation of Hazardous Chemicals shall be <i>as per</i> the Motor Vehicle Act (MVA), 1989.</p> <p>xv) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.</p> <p>xvi) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</p> <p>xvii) At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.</p> <p>xviii) As proposed, green belt over 298 ha shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.</p> <p>xix) Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.</p> <p>xx) A regular environment manager having post graduate qualification in environmental sciences/ environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.</p>
17.5.7	<p><b>Manufacturing of resins (1000MTPM) at plot no. 65/A, Ankhola Patia, Kadi Road, Taluka Kadi, District Mehsana, Gujarat by M/s Cedar Decor Pvt. Ltd. reg EC. { J- 11011/203/2015-IA-II (I)}</b></p> <p>Project was considered in 13<sup>th</sup> EAC meeting held during 26-27 September, 2016, Wherein committee deferred the proposal for the following :-</p> <p>(i) Revised water balance with recycle and reuse to reduce fresh water requirement by adopting 3 Rs method to be submitted. Recheck the boiler</p>

water requirement.

- (ii) Enterprise Social Commitment (ESC) (@ 5% of project cost) based on local needs to be drawn alongwith action plan with financial and physical breakup/details.
- (iii) Rain water harvesting to be done.

Now PP has submitted the additional information:-

- i. PP has submitted the revised water balance. As per this existing Total water requirement will be 299 m<sup>3</sup>/day, out of which fresh water requirement will be 259 m<sup>3</sup>/day. PP informed that existing boilers are adequate for the proposed expansion. So no additional water will be required in boiler. PP also informed that domestic wastewater, boiler blow down, cooling blow down and RO reject will be treated in STP. Process effluent will be separately treated then will be evaporated in evaporation system.
- ii. PP has submitted the year wise plan (5 years) for ESR activities at the rate of 5 %.
- iii. PP has submitted the detailed plan for rain water harvesting. As per the plan from the available area i.e. 12542 m<sup>2</sup>, about 5828.16 m<sup>3</sup> rain water will be harvested.

After detailed deliberations, the Committee, on the basis of the additional information provided and presentation made recommended the project for environmental clearance and stipulated following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

- i) Regular monitoring of Volatile Organic Compounds (VOCs) should be carried out.
- ii) Multi-cyclone separator along with stack of adequate height should be installed to waste wood/biomass/lignite and coal fired boiler to control particulate emissions.
- iii) Fugitive emissions in the work zone environment, product, raw materials storage area etc. should be regularly monitored.
- iv) Scrubber shall be provided to Phenol Formaldehyde and melamine formaldehyde impregnators to control process emissions. Methanol should be recovered from the process area.
- v) Total fresh water requirement from ground water source should not exceed 259 m<sup>3</sup>/day and prior permission should be obtained from the

	<p>CGWA/SGWA.</p> <p>vi) Domestic wastewater, boiler blow down, cooling blow down and RO reject shall be treated in STP. Process effluent shall be separately treated then will be evaporated in evaporation system.</p> <p>vii) The company should obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from GPCB should be obtained for disposal of solid / hazardous waste in the TSDF. Measures should be taken for fire fighting facilities in case of emergency.</p> <p>viii) Green belt over 4200 m<sup>2</sup> (33 %) area should be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.</p> <p>ix) Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.</p> <p>x) All the commitments made to the public during the Public Hearing/Public Consultation meeting held on 31<sup>st</sup> May 2016 should be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhopal.</p> <p>xi) At least 5 % of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhopal. As committed, implementation of such program should be ensured for Ankhol and Indrad village in a time bound manner.</p>
17.5.8	<p><b>Proposed expansion of production capacity &amp; introducing new products (Para Formaldehyde &amp; purification of silver) in the existing premise Plot No. 1398, Village Moti Bhoyan, Tehsil Kalol, District Gandhinagar Gujarat by M/s Balaji Formalin Pvt. Ltd. reg EC {(J-11011/67/2015-IAII(I)}</b></p> <p>Project was considered in 14<sup>th</sup> EAC meeting held during 26-27<sup>th</sup> October 2016, Wherein committee deferred the proposal for the following :-</p>

- (i) Action taken report on non-compliance points reported by the respective RO of MEF&CC.
- (ii) Year wise detailed plan on Enterprise Social Commitment (ESC) based on local needs to be drawn to tune of 5 % of project cost with financial and physical breakup/details.
- (iii) Revise water balance chart to be submitted. Water requirement need to be reworked.
- (iv) A copy of application seeking NBWL clearance w.r.t. Thol Bird Sanctuary to be provided.

Now PP has submitted the following additional information:-

- i. PP has submitted the action taken report on non compliance points raised by RO, MoEF&CC. Committee noted that non complied point are mainly administrative point hence action taken report submitted by PP is acceptable.
- ii. PP has submitted the year wise plan (5 years) for ESR activities at the rate of 5 %.
- iii. PP informed that w.r.t. rework on water requirement we have rechecked for any possibility to reduce the water and found no gap anywhere in our water balance. We request to consider the same water balance as per our EIA report.
- iv. PP has submitted the copy of ESZ notification published dated 09.02.2015 and informed that the Thol Wild Life Sanctuary in the State of Gujarat has been declared as Ecosensitive Zone, up to 2.244 kilometers from the boundary of the Thol Wild Life Sanctuary. Our project site is 3.8 km away from the boundary of Thol Wild Life Sanctuary. Hence no need to apply/get the NBWL clearance.

After detailed deliberations, the Committee, on the basis of the additional information provided and presentation made recommended the project for environmental clearance and stipulated following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

- i. Regular monitoring of Volatile Organic Compounds (VOCs) should be carried out.
- ii. Tail gas treatment incinerator shall be used and will be connected to 18 m stack height.
- iii. Fugitive emissions in the work zone environment, product, raw materials storage area etc. should be regularly monitored.

- iv. Scrubber shall be provided to control process emissions.
- v. Total fresh water requirement from Narmada water supply source should not exceed 535 m<sup>3</sup>/day and prior permission should be obtained from the concerned authority.
- vi. Wastewater generated from silver refining and cooling bleed off will be directly sent to force effect evaporator and then sent to mechanical evaporator. Condensate from evaporator will be reused in process hence there will be no discharge of industrial effluent outside the premises. plant is based on ZLD scheme. Domestic wastewater will be sent to soak pit followed by evaporator.
- vii. The company should obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from GPCB should be obtained for disposal of solid / hazardous waste in the TSDF. Measures should be taken for fire fighting facilities in case of emergency.
- viii. Green belt over 1500 m<sup>2</sup> (35%) area should be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- ix. Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
- x. All the commitments made to the public during the Public Hearing/Public Consultation meeting held on 9<sup>th</sup> May 2016 should be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhopal.
- xi. At least 5 % of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhopal. As committed, implementation of such program should be ensured for nearby villages in a time bound manner.

**17.5.9 Installation of Gasoline Hydrotreatment Unit (GTU) and associated facilities**

**to produce 100% BS-VI MS in existing Mumbai Refinery at village Anik, Mahul, Tehsil Kurla, Mumbai, Maharashtra by M/s BPCL Mumbai Refinery – reg EC. {{ J- 11011/98/2016- IA II(I)}( IA/MH/IND2/51174/2016)}**

Project was considered in 15<sup>th</sup> EAC meeting held during 10<sup>th</sup> November, 2016., Wherein committee deferred the proposal for the following :-

1. Revised water balance chart w.r.t. existing and proposed water requirement with special emphasis on water recycling and reuse.
2. Fresh water requirement shall be based on quantity of treated effluent sent by M/s RCF for consumption in Refinery. Realistic figure of fresh water should be worked out with MoU signed between M/s RCF and M/s BPCL.
3. Five year plan at the rate of 2% of project cost under CSR activities.

Now PP has submitted the revised water balance chart and as per the revised water balance the water consumption has been reduced from 16500 m<sup>3</sup>/day to 15950 m<sup>3</sup>/day.

PP informed that the Comprehensive Memorandum of Understanding (MOU) was signed between M/s. RCF and BPCL for “supply of treated water from proposed Sewage Treatment Plant (STP) at RCF Trombay to BPCL” on 24<sup>th</sup> October, 2014. The salient features of this MOU are as under:

- i. RCF shall undertake to set up a new independent Sewage Treatment Plant (STP) at RCF Trombay factory for treating sewage for generating water suitable for use in industry (treated water).
- ii. The construction, commissioning, operation of the STP and procurement of sewage from Municipal Corporation of Greater Mumbai shall be the responsibility of RCF.
- iii. RCF shall commit to supply 6 MLD of treated water from the said STP to BPCL through the pipeline on daily basis for the period of 15 years commencing from the date of commissioning of the plant.
- iv. BPCL has agreed to pay interest free deposit to the extent of 40% of the estimated capital cost of Rs. 197.78 crores.
- v. PP also informed that based on recent discussions with RCF, the proposed schedule for supply of water will start from 31/12/2018 and year wise reduction in water consumption are as follows:

<b>Year</b>	<b>Water consumption (m<sup>3</sup>/day)</b>	<b>Reduction in water consumption (m<sup>3</sup>/day)</b>
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2017/18	15950	0
2018/19	15050	900
2019/20	11150	3900
2020/21	9950	1200
Total reduction	-	6000

PP has submitted the Five year plan at the rate of 2% of project cost under ESC activities.

After detailed deliberations, the Committee, on the basis of the additional information provided and presentation made recommended the project for environmental clearance and stipulated following specific conditions along with other environmental conditions while considering for accord of environmental clearance: \_

- i. M/s BPCL shall comply with new standards/norms for Oil Refinery Industry notified under the Environment (Protection) Rules, 1986 vide G.S.R. 186(E) dated 18<sup>th</sup> March, 2008.
- ii. Compliance to all the environmental conditions stipulated in the environmental clearance letter no. J J-11011/582/2011-IA II(I) dated 07.06.2013, letter no. J-11011/140/2012-IA II(I) dated 12.06.2013, letter no. J-11011/270/2013-IA II(I) dated 08.08.2014 and letter no. J-11011/21/2013-IA II(I) dated 13.08.2015 shall be satisfactorily implemented and compliance reports submitted to the Ministry's Regional Office.
- iii. Continuous on-line stack monitoring for SO<sub>2</sub>, NO<sub>x</sub> and CO of all the stacks shall be carried out. Low NO<sub>x</sub> burners shall be installed.
- iv. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Besides, acoustic enclosure /silencer shall be installed wherever noise levels exceed the limit.
- v. Fresh water requirement from MCGM shall not exceed 15950 m<sup>3</sup>/day after expansion and prior permission shall be obtained from the competent authority. About 300 m<sup>3</sup>/hr of cooling water blowdown will be discharged into sea.
- vi. Comprehensive water audit to be conducted on annual basis and report to

	<p>the concerned Regional Office of MEF&amp;CC. Outcome from the report to be implemented for conservation scheme.</p> <p>vii. Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB, Regional Office of MoEF&amp;CC and in the Company's website.</p> <p>viii. The Company should strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000. Hazardous waste should be disposed of as per Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and amended time to time.</p> <p>ix. Acoustic enclosure /silencer shall be installed wherever it is possible.</p> <p>x. Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.</p> <p>xii. Green belt over 33% area should be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.</p> <p>xi. The company should make the arrangement for protection of possible fire and explosion hazards during construction and operation phase. To prevent fire and explosion at oil and gas facility, potential ignition sources shall be kept to a minimum and adequate separation distance between potential ignition sources and flammable materials shall be in place.</p> <p>xii. All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.</p> <p>xiii. At least 2 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.</p>
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## 17.6 **Terms of Reference (TOR)**



17.6.1 **Manufacturing of Synthetic Organic Dyes at Plot No 1 & 13, Sikandar Market Opp. Chandola Talav Petrol Pump, Danilimbda, Ahemadabd by M/S. F I DYE CHEM .[ IA/GJ/IND2/59635/2016, J-11011/326/2016-IA.II(I)]**

The project proponent gave a detailed presentation on the salient features of the project and informed that:

- (ii) M/s F I DYE CHEM has proposed for Manufacturing of Synthetic Organic Dyes at Plot No 1 & 13, Sikandar Market Opp. Chandola Talav Petrol Pump, Danilimbda, Ahemadabd .
- (iii) All Synthetic organic chemicals industry projects (Bulk drugs and intermediates excluding drug formulations), located outside the notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- (iv) Total plot area is 1202 m<sup>2</sup> out of which 410 m<sup>2</sup> area will be developed as green belt. Project Cost for the proposed project is 65 Lakh.
- (v) It is reported that no National park, Wild life sanctuary, protected area/eco-sensitive areas are located within 10 km of the Unit. Sabarmati River is flowing at a distance of 1.3 km from the project site.

The proposed products and quantities for expansion are as below:-

<b>S. No.</b>	<b>Product Name</b>	<b>Total quantity (Mt/month)</b>
1	Reactive Blue P3R (Crude)	20
2	Reactive MX7R (Crude)	5
3	Reactive Black B (Crude)	10
4	Reactive Blue 49 (Crude)	10
5	Reactive Green HE4BD (Crude)	10
	Total	55

- (vi) Total water requirement is 42 m<sup>3</sup>/day which will be sourced from Borewell but committee suggest to use only municipal water supply. PP agreed with that.Waste generated will be 18 KLD which will be treated in ETP plant and will be passed though RO.
- (vii) Total power requirement will be 100 HP which will be sourced from Torrent power Ltd. DG set of capacity 62.5 KVa will be used as stand by. One Agro waste fired boiler of 1 TPH capacity will be used and Multi Cyclone separator with 12 m stack height will be used to control particulate pollution.

After detailed deliberations, the Committee prescribed the following Specific and Additional TOR in addition to Generic TOR provided at Annexure (Refer Ministry's web site) for preparation of EIA-EMP report:

**A. Standard TOR**

1. Details on solvents to be used, measures for solvent recovery and for emissions control.
2. Details of process emissions from the proposed unit and its arrangement to control.
3. Ambient air quality data should include VOC, other process-specific pollutants\* like NH<sub>3</sub>\*, chlorine\*, HCl\*, HBr\*, H<sub>2</sub>S\*, HF\*, etc., (\* - as applicable)
4. Work zone monitoring arrangements for hazardous chemicals.
5. Detailed effluent treatment scheme including segregation of effluent streams for units adopting 'Zero' liquid discharge.
6. Action plan for odour control to be submitted.
7. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they co-process organic solid/hazardous waste generated.
8. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
9. Action plan for utilization of MEE/dryers salts.
10. Material Safety Data Sheet for all the Chemicals are being used/will be used.
11. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
12. Details of incinerator if to be installed.
13. Risk assessment for storage and handling of hazardous chemicals/solvents. Action plan for handling & safety system to be incorporated.
14. Arrangements for ensuring health and safety of workers engaged in handling of toxic materials.

**B. Additional TOR**

- i. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in

EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

**ii.** Revised layout plan in which 2.5 m wide Green belt around the periphery to be developed.

**17.6.2 Proposed to set up a 200,000 KLPA capacity Plant for Paint Manufacturing Facilities at Toranagallu & Musenayakana Halli Villages, Dist. Ballari, Karnataka by M/s JSW PAINTS PRIVATE LIMITED [IA/KA/IND2/60157 /2016,J-11011/313 /2016- IA II(I)]- Terms of Reference**

The project proponent gave a detailed presentation on the salient features of the project and informed that:

- (i) M/s JSW PAINTS PRIVATE LIMITED has proposed to set up a 200,000 KLPA capacity Plant for Paint Manufacturing Facilities at Toranagallu & Musenayakana Halli Villages, Dist. Ballari, Karnataka .
- (ii) All Integrated paint industry are listed at Sl.No. 5(h) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B' and are appraised at SEIAA but due to applicability of general condition i.e. Notified Eco-sensitive areas thus appraised at Central level.
- (iii) As per the Form-1, Daroji Kere lake pond is situated at a distance of about 5.7 kms. Kanigana Halla is flowing at a distance about 100 m from the proposed site and Daroji bear sanctuary is situated at a distance of 9.5 kms from proposed plant site.
- (i) The total area of the plot is 67 Acres (subleased from M/s JSW steel ltd.) out of which 33% will be developed as green belt . The total Project cost is Rs.600 Crores. Man power requirement during construction phase will be 1000and operation phase will be 600.
- (ii) Power requirement is 5.5 MW which will be sourced from the existing network of JSW steel limited.
- (iii) Water requiurement will be 530 KLD which will be sourced from JSW steel limited.
- (iv) Effluent generation will be 12 KLD will be treated min ETP and reused.
- (v) Hazardous waste will be disposed through TSDF/incineration.
- (vi) The proposed products and quantities for expansion are as below:

Water based decorative paints – 200,000 KLPA (100,000 KLPA each in two phases) including water based emulsion co-polymer – 40,000 TSRPA in phase 2

S. No.	Product Name	Total quantity: 200,000 KLPA	
		Phase I	Phase II
1	Water based decorative	100,000 KLPA	100,000 KLPA

During presentation committee noted that PP did not mentioned the availability reserved forest in the Form-1.

**A. Standard TOR**

1. Details on solvents to be used, measures for solvent recovery and for emissions control.
2. Details of process emissions from the proposed unit and its arrangement to control.
3. Ambient air quality data should include VOC, other process-specific pollutants\* like NH<sub>3</sub>\*, chlorine\*, HCl\*, HBr\*, H<sub>2</sub>S\*, HF\*, etc., (\* - as applicable)
4. Work zone monitoring arrangements for hazardous chemicals.
5. Detailed effluent treatment scheme including segregation of effluent streams for units adopting 'Zero' liquid discharge.
6. Action plan for odour control to be submitted.
7. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they co-process organic solid/hazardous waste generated.
8. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
9. Action plan for utilization of MEE/dryers salts.
10. Material Safety Data Sheet for all the Chemicals are being used/will be used.
11. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
12. Details of incinerator if to be installed.
13. Risk assessment for storage and handling of hazardous chemicals/solvents. Action plan for handling & safety system to be incorporated.
14. Arrangements for ensuring health and safety of workers engaged in handling of toxic materials.

**B. Additional TOR**

- i. Public hearing to be conducted and issues raised and commitments made

	<p>by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.</p> <ul style="list-style-type: none"> <li><b>ii.</b> ZLD to be followed.</li> <li><b>iii.</b> List of Inorganic chemicals and VOC monitoring plan to be submitted.</li> </ul> <p>It was recommended that 'TOR along with Public Hearing prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.</p>
17.6.3	<p><b>Proposal for proposed to manufacture the product Polyurethane Foam at Block No.: 166/b, Plot No. 126 - 140, 152,153, Om Textile Park, Vibhag-3, Umbhel Road, Parab, Tal. Kamrej, Dist.: Surat, State: Gujarat M/s. Prayag Foams Pvt. Ltd [ IA/GJ/IND2/60020/2016, J- 11011/348/2016-IA.II(I)]- Terms of Reference</b></p> <p>The project proponent gave a detailed presentation on the salient features of the project and informed that:</p> <ul style="list-style-type: none"> <li>(i) M/s Prayag Foams Pvt. Ltd has proposed to manufacture the product Polyurethane Foam at Block No.: 166/b, Plot No. 126 - 140, 152,153, Om Textile Park, Vibhag-3, Umbhel Road, Parab, Tal. Kamrej, Dist.: Surat, State: Gujarat .</li> <li>(ii) All Synthetic organic chemicals industry projects (Bulk drugs and intermediates excluding drug formulations), located outside the notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>(iii) Total area of project site is 2629.62 m<sup>2</sup>. The proposed green belt area is 1754.62 m<sup>2</sup>. Capital cost of project is Rs.195 Crores. It is reported that there is no any National Park, Eco Sensitive area, Reserved forest and Wild life sanctuary is situated around 10 k radius of the project. Proposed project will provide employment to 35 persons.</li> <li>(iv) Power requirement of the proposed project will be 50 KVA which will be sourced from Daxin Gujarat Vij Company Ltd . DG Set of 250 KVA capacity will be used as stand by.</li> </ul>

- (v) Exhaust vent will be attached to Foaming Machine with Carbon Column.
- (vi) Fresh water requirement will be 26.23 m<sup>3</sup>/day, which will be sourced from ground water. Against which 10 m<sup>3</sup>/day waste water will be generated. No waste water will be generated from the process. Domestic waste water will be sent to septic tank followed by soak pit.
- (vii) No effluent will be discharged outside the plant premises.
- (viii) Used oil will be sold to Registered Re-refiners. Carbon waste will be sent to TSDF site.
- (ix) The proposed product will be manufactured:

Sr. No.	Name of Product	Capacity (MT/Month)
1.	Polyurethane Foam	360

The committee after detailed deliberations recommended the proposal for grant of following additional TOR alongwith Standard TOR as available on the Ministry website for preparation of EIA-EMP report:

- i. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- ii. Elaborate on handling of Toluene Di isocyanate, Silicon/Stannous Octoate and Methylene chloride will be the part of EIA study.
- iii. Details on solvents to be used, measures for solvent recovery and for emissions control.
- iv. Details of process emissions from the proposed unit and its arrangement to control.
- v. Ambient air quality data should include VOC, other process-specific pollutants\* like NH<sub>3</sub>\*, chlorine\*, HCl\*, HBr\*, H<sub>2</sub>S\*, HF\*, etc., (\* - as applicable)
- vi. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they co-process organic solid/hazardous waste generated.
- vii. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
- viii. Action plan for utilization of MEE/dryers salts.

It was recommended that TOR along with Public Hearing prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of

	<p>EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.</p>
17.6.4	<p><b>Proposal for 30 KLPD molasses based distillery (Ethanol) by M/s Devnandan Ethanol and Allied Products LLP. at RS. NO. 52/52, 52/44 part 1, 52/51 part 1, Moje Ranipura (Samalaya), Ta: Savli, Dist: Vadodara, Gujarat. [IA/GJ/IND2/60233/2016, J-11011/312/2016- IA II(I)]- Terms of Reference</b></p> <p>The project proponent gave a detailed presentation on the salient features of the project and informed that :</p> <ul style="list-style-type: none"> <li>(i) M/s Devnandan Ethanol and Allied Products LLP has proposed for molasses based distillery (Ethanol). at RS. NO. 52/52, 52/44 part 1, 52/51 part 1, Moje Ranipura (Samalaya), Ta: Savli, Dist: Vadodara, Gujarat.</li> <li>(ii) All molasses based distilleries are listed at Sl.No. 5(g) (i) of Schedule of EIA Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>(iii) The capital Cost of the Project is Rs. 39.60 Crore, out of which cost earmarked for Environment management plan will be Rs. 3.41 Crore. Operating days of Distillery will be 300 days.</li> <li>(iv) Total area of the unit is 13.6 Acre (Land is in Possession) in which greenbelt area is 5 Acre (37% of total plot area). It is reported that no National park, reserved/ protected forest, wildlife sanctuary and Eco sensitive area lies in 10 km radius of the project site. Nardiyu River is flowing at a distance of 0.98 km in North direction and Karod river is flowing at a distance of 8.27 km in North direction from the project site. PP did not mention information regarding Naradu river in form 1.</li> <li>(i) Fresh water requirement will be 291 KLD after recycling. Spent wash will be concentrated in integrated evaporator and will be used as a fuel in spent wash fired boiler. Minor effluent will be sent to condensate polishing unit and reused as a cooling tower make-up or gardening. Domestic wastewater will be sent to Septic tank followed by soak pit system. The unit will be operated on Zero Liquid Discharge principle.</li> <li>(ii) Total power required for proposed project will be 1.42 MWh and would be generated through the in-house boiler and T.G. set. Coal and spent wash will be used as a fuel in the 12 TPH boiler at the rate of 22 TPD and 85 TPD respectively. ESP with adequate stack height will be provided to control particulate pollution. Process emission i.e. CO<sub>2</sub> will be scrubbed by water.</li> </ul>

The committee felt that PP is not having sufficient water supply to run the plant. The committee suggested to produce permission for fresh water supply from the concerned department and revise the fresh water requirement at the rate of 8 kl/kl.

The committee deferred the proposal.

**17.6.5 Expansion of Existing Synthetic Organic Chemical Plant at Khata No. 45, Mouza-Khapri, PO-Kalambi, Tehsil- Kalmeshwar, District Nagpur, Maharashtra by M/s. Ran Chemicals Pvt. Ltd.[ IA/MH/IND2/59922/2016, J-11011/340/2016-IA.II(I)]**

The project proponent gave a detailed presentation on the salient features of the project and informed that:

- (i) M/s Ran Chemicals Pvt. Ltd has proposed for Expansion of Existing Synthetic Organic Chemical Plant at Khata No. 45, Mouza-Khapri, PO-Kalambi, Tehsil- Kalmeshwar, District Nagpur, Maharashtra.
- (ii) All Synthetic organic chemicals industry projects (Bulk drugs and intermediates excluding drug formulations), located outside the notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC). Project was established prior EIA Notification, 2006.
- (iii) Plot area is 27600 m<sup>2</sup>, Net Plot area: 7229 m<sup>2</sup> ,Area for green Belt Development: 2386.00 sq. m Total power requirement is 1000 KW which will be sourced from MSEDCL. Two nos. of DG sets of 500 & 320 KVA capacities shall be installed as backup support in case of power failure. 1 TPH Coal fired boiler will be used and Mechanical dust collector with 30.50 m stack height will be provided to control particulate emission.
- (iv) Existing water requirement is 99.5 KLD and proposed water requirement is 177 KLD which will be soured from borewell.
- (v) Total manpower requirement is 172.
- (vi) It is reported that no national park, wildlife sanctuary, Biosphere reserve lies within 10 Km radius of project site. Venu dam is 3.52 Km away from project site.

The proposed products and quantities for expansion are as below:

Sr. No.	Product	Existing (MT/d)	Proposed (MT/d)	Total (MT/d)
1	Polyester based resin & other polyester	28	36	64



2	Finishing agent And preparations used in textile	1.4	14.6	16
3	Spent Methanol and Glycol	1.2	0.8	2
Total	<b>30.6</b>	<b>51.4</b>	<b>82</b>	

The committee after detailed deliberations recommended the proposal for grant of following additional TOR alongwith Standard TOR as available on the Ministry website for preparation of EIA-EMP report:

- i. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- ii. 10 m wide greenbelt around the periphery to be developed.
- iii. Details on solvents to be used, measures for solvent recovery and for emissions control.
- iv. Details of incinerator if to be installed.
- v. Details on solvents to be used, measures for solvent recovery and for emissions control.
- vi. Details of process emissions from the proposed unit and its arrangement to control.
- vii. Risk assessment for storage and handling of hazardous chemicals/solvents. Action plan for handling & safety system to be incorporated.

It was recommended that TOR along with Public Hearing prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

**17.6.6 Installation of LPG bullets at Karup, Assam by M/s INDIAN OIL COOPERATION LIMITED [IA/AS/IND2/60898/2016, J- 11011/365/2016-IA.II(I)]**

The project proponent gave a detailed presentation on the salient features of the project and informed that:

- i. M/s. INDIAN OIL COOPERATION LIMITED. has proposed for Installation of

LPG bullets at Karup, Assam.

- ii. All the projects related to Isolated storage & handling of hazardous chemicals are listed in para 6(b) of schedule of EIA Notification, 2006 covered under category 'B' but due to general conditions applicability it is listed in category 'A' and appraised at central level.
- iii. The design capacity of existing mounded bullet is 400 MT each. two new mounded bullets of design capacity of 350 MT each are to be installed .
- iv. The cost of two no. of mounded bullets is Rs 24.83 crores. No additional manpower is required .
- v. The capacity of mounded bullet had been worked out considering the following future plans of guwahati refinery:-
  1. Popst INDMAX revamp @ 150 % capacity, LPG Production at guwahati refinery is 170-180 MT/ day.
  2. With installation of CRU @ 90 TMTPA capacity , LPG production is expected to increase by 5 MT/day.
  3. With 100% import crude processing, LPG production is expected to increase by 13-15 MT/day.
  4. Cumulative LPG production with above basis is 198-200 MT/day.
- vi. Products and capacities - It is to be noted that this project has been conceived to comply to the 9th External Safety Audit (ESA) point no 44 recommending the replacement of existing Horton Sphere (HS) with Mounded Bullets (MB).
- vii. The committee recommended the project TOR without PH. PH exempted under para 7 (ii) of EIA Notification. Addition of new facility.

The committee after detailed deliberations recommended the proposal for grant of following additional TOR alongwith Standard TOR as available on the Ministry website for preparation of EIA-EMP report:

- i. PH exempted under para 7 (ii) of EIA Notification, 2006.
- ii. 10 m wide greenbelt around the periphery of plant to be developed.
- iii. Details on list of hazardous chemicals to be stored alongwith storage quantities at the facility, their category ( as per MSIHC Rules ), MSDS.
- iv. Mode of receiving hazardous chemicals in isolated storages and mode of their dispatch.
- v. Layout plan of the storage tanks and other associated facilities.
- vi. Details on types and specifications of the storage facilities including tanks,

pumps, piping, valves, flanges, pumps, monitoring equipments, systems for emissions control safety controls including relief systems.

It was recommended that 'TOR without Public Hearing prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.

17.6.7 **Installation of BS VI projects of Guwahati Refinery , Assam by M/s INDIAN OIL COOPERATION LIMITED [IA/AS/IND2/61067/2016, J- 11011/366/2016-IA.II(I)]**

The project proponent gave a detailed presentation on the salient features of the project and informed that:

- i. M/s. INDIAN OIL COOPERATION LIMITED. has proposed for Installation of BS VI projects of Guwahati Refinery , Assam.
- ii. All Petroleum refining industry are listed at S.N. 4(a) under category 'A' as per EIA Notification 2006 and appraised by Expert Appraisal Committee (I).
- iii. Ministry has issued EC vide letter no. J-11011/215/2007-1A-H(I) dated 7<sup>th</sup> February, 2008.
- iv. Estimated cost for Guwahati refinery is Rs 513 Crores. Proposed project will be carried out within existing refinery premises. No additional land will be required.
- v. Water and fuel requirement shall be met from existing facilities.
- vi. Proposed capacity of units under BS-VI Projects are provided below,
  1. HGU Revamp from 10 KTA to 12 KTA
  2. HDT Revamp from 600 KTA to 800 KTA
  3. ISOM Revamp from 45 KTA to 54 KTA (EC No.MOEF LETTER NO.)
  4. INDAdeptG Revamp – 35 KTA / No capacity expansion (Additional reactors are added to meet BS-VI quality specifications)(EC no. J-11011/71/2012-1A II (I) dated 22<sup>nd</sup> January, 2015)
  5. New indeSelectG Unit – 80 KTA
- vii. Spent catalyst will be sold to authorized vendors.

The committee after detailed deliberations recommended the proposal for grant of following additional TOR alongwith Standard TOR as available on the Ministry

website:

1. Public hearing exempted as para 7(ii) of EIA, Notification 2006.
2. A separate chapter on status of compliance of Environmental Conditions granted by Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA-EMP report.
3. Details of effluent treatment plant, inlet and treated water quality with specific efficiency of each treatment unit in reduction in respect of all concerned/regulated environmental parameters. Also, include treatment details such as primary (physico- chemical), secondary (biological) and tertiary (activated carbon filters) treatment systems.
4. Complete process flow diagram describing each unit, its capacity along-with material and energy balance.
5. Details of intermediate product, their storages and final products to be manufactured.
6. Sulphur balance giving input from crude, refinery fuel ( if used) and any other outside fuel and output in various products and emissions.
7. Storm water management plan.

It was recommended that TOR with exemption of public hearing is prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.

17.6.8 **Modernization with change in product mix of existing unit at MIDC Talaja, Raigarh, Maharashtra by M/s DEEPAK NITRITE LIMITED. [IA/MH/IND2/61070/2016, J- 11011/367/2016-IA.II(I)]**

The project proponent gave a detailed presentation on the salient features of the project and informed that:

- i. M/s. Deepak Nitrite Limited has proposed for Modernization with change in product mix of existing unit at MIDC Talaja, Raigarh, Maharashtra .
- ii. All Synthetic organic chemicals industry projects (Bulk drugs and intermediates excluding drug formulations), located inside the notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B' but as SEIAA is not available in Maharashtra thus are appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. It is reported that no national park, wildlife sanctuary and Biosphere

reserve lies within 10 Km radius of project site.

- iv. The existing plot area is 26624 m<sup>2</sup>. No additional land will be required.
- v. The capital cost of the project is Rs. 38.68 crore. Total fresh water requirement for project is 319 KLD which will be sourced from MIDC Tajola. The exiting water requirement is 135 KLD. Total water requirement after expansion will be 1009 KLD. Water requirement will be made available through Bore well.
- vi. Total effluent generated will be 77 KLD, out of which process effluent will be 75 KLD and domestic effluent will be 2 KLD. Effluent from process will be treated in ETP of capacity 90 KLD for primary, secondary and tertiary treatment. Treated water will be discharged into CETP Tajola.
- vii. 2 No. Of Existing Boilers of capacity 4 TPH and 5 TPH along with Thermic fluid heater of capacity 2 lac Kcal/hr will be used. DG Set of capacity 750 KVA will be used.as stand by.

**Existing Production details:**

Sr. No.	Name of the products	Quantity (MT/Month)
1.	<b>Aromatic Amines Like:</b> Toulidines (Ortho/ Meta/ Para) Xylidines, O-anisidine, Cumidines (Ortho / Para) Phynelene, Di-amine (Ortho/ Para) Chloro Aniline Meta (Ortho / Para) Dimethyl Amino Benzoic Acid, Dimethyl Cyclohexanone	1500

**Proposed Production details:**

Sr. No.	Name of the products	Quantity (MT/Month)
1.	Toulidines (Ortho / Meta / Para)	150
2.	Xylidines(2,3/2,4/2,5/2,6/3,5)OR Xylidiene Derivatives as Xylenols(2,3/2,4/2,5/2,6)	295
3.	Cumidines (Ortho / Para)	270
4.	PhyneleneDi-amine (Ortho / Para)	50
5.	Dimethyl Cyclohexanone(DMCH)	425
6.	3 Amino BenzoTrifluoride (3-ABTF)	150
7.	Benzhydrol OR	100
8.	Cyclohexenylethylamine (CHEA) OR	
9.	Homoveratrylamine (HVA) OR	
10.	4-(2-Methoxyethyl) Phenol.(4 MEP)	

<b>Total</b>		<b>1440</b>
<b>List of Proposed By-Products</b>		
Sr. No.	Name of the By-products	Quantity (MT/Month)
1.	2 Aminobenzotrifluoroirde(2ABTF)	24
2.	4 Aminobenzotrifluoroirde(4ABTF)	36
<b>Total</b>		<b>60</b>
<p>The committee after detailed delebrations recommended the proposal for grant of following additional TOR alongwith Standard TOR as available on the Ministry website:</p> <ol style="list-style-type: none"> <li>i. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.</li> <li>ii. Copy of CTE to be submitted.</li> <li>iii. 10 m wide greenbelt around the periphery to be developed.</li> <li>iv. Detailed effluent treatment scheme including ssegregation of effluent streams for units adopting 'Zero' liquid discharge.</li> <li>v. Details on solvents to be used, measures for solvent recovery and for emissions control.</li> </ol> <p>It was recommended that 'TOR along with Public Hearing prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.</p>		

**28<sup>th</sup> December 206 (day 3)**

**17.7 Environmental Clerance (EC)**

17.7.1	<p><b>Proposed expansion for Sugar plant from 2500 TCD to 7000 TCD, Distillery from 30 KLPD TO 60 KLPD and Co-generation from 22 MW to 34 MW at Mohanrao Kadam Nagar, At Post Wangi, Taluka-Kadegaon, Dist. Sangli Maharashtra by M/s Sonhira Sahakari Sakhar Karkhana Ltd. [IA/MH/IND2/59239/2015, J-11011/101/2015-IA II (I)] - Environmental</b></p>
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## Clearance

The Project Proponent and the accredited Consultant M/s SD Engineering services pvt. ltd., gave a detailed presentation on the salient features of the project and informed that:

- i. The proposal is for expansion for Sugar plant from 2500 TCD to 7000 TCD, Distillery from 30 KLPD TO 60 KLPD and Co-generation from 22 MW to 34 MW at Mohanrao Kadam Nagar, At Post Wangi, Taluka-Kadegaon, Dist. Sangli Maharashtra by M/s Sonhira Sahakari Sakhar Karkhana Ltd.
- ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 40th Reconstituted EAC meeting held during 18-19th May, 2015 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter dated 13<sup>th</sup> July, 2015.
- iii. All molasses based distilleries are listed at Sl.No. 5(g) (i) of Schedule of EIA Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iv. The PP has obtained environmental clearance (EC) from MoEF&C for the existing distillery unit (30 KLPD) vide letter no. J- 11011/87/2003 - IA II (I) dated 1<sup>st</sup> April, 2004 and SEIAA has issued EC vide letter no. SEAC2010/CR 542/TC-2 dated 14.09.2011. Regional Office of MoEF&CC at Nagpur vide letter no. EC-40/RON/2016-NGP dated 02.08.2016 has submitted the certified copy of statement of compliance to the environmental conditions prescribed in the existing EC.
- v. Existing land area is 109.306 ha and the proposed expansion will be done within the plant premises. No additional land will be required for the proposed expansion. Almost 33% i.e. 36 hectares of the total plant area has already been developed as greenbelt/plantation and the same will be maintained. The total Cost of the project for the expansion is Rs. 214.44 Crores. Capital cost for Environmental Protection Measures will be Rs. 18.0 crores.
- vi. It is reported that no national parks, wildlife sanctuaries, Reserve Forest (RF)/ Protected Forests (PF), Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance.
- vii. Ambient air quality monitoring was carried out at 9 locations during October to December, 2016 and submitted baseline data indicates that ranges of concentrations of PM10 (24.9 µg/m<sup>3</sup> to 38.4 µg/m<sup>3</sup>), PM2.5 (8.8µg/m<sup>3</sup> to 18.7 µg/m<sup>3</sup>), SO<sub>2</sub> (7.1 µg/m<sup>3</sup> to 8.7 µg/m<sup>3</sup>) and NO<sub>2</sub> (8.9µg/m<sup>3</sup> to 11.1 µg/m<sup>3</sup>) respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- viii. Power requirement will be 6950 kw/hr for sugar, 413 kw/hr for co-gen unit &1380 kw/hr for Distillery the same will be met through own generation.
- ix. Existing unit has 2 bagasse fired boilers of 115 and 10 TPH capacity. Under proposed expansion, 01 bagasse fired boiler of 80 TPH with 80 m stack height and 01 Bio-gas fired boiler of 10 TPH capacity with 52 m stack height will be installed. ESP will be provided to control particulate emission. Two DG sets of 500 KVA each will be used.
- x. Fresh water requirement will be increased from 1635 m<sup>3</sup>/day to 2275 m<sup>3</sup>/day, which will be sourced from the Chinchani Dam.

- xi. Spent wash will be first treated in Bio-Digester (Bio-Methanation) and after that will be concentrated in evaporator and concentrate will be used for bio composting.
- xii. Ash from the Boiler will be used in bio-composting & also given to nearby brick manufacturers. Yeast sludge and Digesters sludge will be finally disposed as Mixing with Press Mud and converted to bio compost which will be made available to nearby farmers.
- xiii. CSR plan is prepared for expenditure of 5% of project cost.
- xiv. Public Hearing for the proposed project has been conducted by the Uttar Pradesh Pollution Control Board 23.06.2016.
- xv. The following products will be generated by the company:

#	Product	Production			Working days
		Existing	Proposed	Total	
1	Sugar	2500 TCD	4500TCD	7000 TCD	190
2	Co-gen	22 MW	12 MW	34 MW	190
3	Distillery	30 KLPD	30 KLPD	60 KLPD	270

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding Air pollution, benefits of proposed products, compost management, wastewater, water requirement and skill development programme etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

The EAC also deliberated on the certified compliance report submitted by the RO, MoEFCC, Nagpur and found that there are mainly one not complied point i.e. distillery is operating more than 270 days. PP informed that they will strictly follow the condition. Committee found Certified Compliance report satisfactory. The Committee after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions:

- i. ESP with adequate stack height for dispersion and for proposed boiler. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- ii. Fresh Water requirement shall not exceed 2275m<sup>3</sup> /day from the Chinchani Dam and prior permission should be obtained from the concerned authority.
- iii. Spent wash shall be treated in Bio-Digester (Bio-Methanation) and after that will be concentrated in evaporator and concentrate will be used for bio composting.
- iv. Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the



	<p>Company's website.</p> <ul style="list-style-type: none"> <li>v. Spent wash shall be stored in impervious RCC lagoons with proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. The storage of spent wash shall not exceed 5 days capacity.</li> <li>vi. Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.</li> <li>vii. Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area and compost yard shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and this Ministry. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and total dissolved solids shall be monitored. Sampling and trend analysis monitoring must be made on monthly basis and report submitted to the Ministry's Regional Office at Bhopal and SPCB.</li> <li>viii. As proposed, green belt over 33 % of the total project area should be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.</li> <li>ix. All the commitments made during the Public Hearing / Public Consultation meeting held on 23.06.2016 should be satisfactorily implemented and adequate budget provision should be made accordingly.</li> <li>x. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.</li> <li>xi. A regular environment manager having post graduate qualification in environmental sciences/ environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.</li> </ul>
17.7.2	<p><b>Expansion of existing Plant (33 MT/Month to 50 MT/ Month) at Plot No. B-14/2, MIDC Chincholi, Taluka Mohol, District Solapur, Maharashtra by M/s Sri Krishna Pharmaceuticals Limited- reg. [IA/MH/IND2/31586/2015, J-11011/267/2015-IA II (I)]- Environmental Clearance</b></p> <p>The project proponent and their consultant (M/s Equinox Environments (India) Pvt. Ltd.) gave a detailed presentation on the salient features of the project and informed that:-</p>

- i. The Draft Terms of References (TORs) awarded in the 3<sup>rd</sup> Meeting of the Reconstituted Expert Appraisal Committee (Industry) held during 18<sup>th</sup>-19<sup>th</sup> January, 2016 for preparation of EIA-EMP report.
- ii. All Synthetic organic chemicals industry projects (Bulk drugs and intermediates excluding drug formulations), located inside the notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B' but due to applicability of General condition i.e. Great Indian Bustard (GIB) Sanctuary is located within 5 km and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. Ministry has issued Environmental Clearance vide letter no. J-11011/916/2007-IA-II(I) dated 07.02.2008 to M/s Sri Krishna Drugs Limited., for Bulk drug manufacturing unit. Regional Office of MoEF&CC at Nagpur vide letter no. F.No:5-24/201S(ENV) Vol III dated 11.05.2016 has submitted the certified copy of statement of compliance to the environmental conditions prescribed in the existing EC.
- iv. M/s Sri Krishna Pharmaceuticals Limited has Proposed Expansion of existing Plant (33 MT/Month to 50 MT/ Month) at Plot No. B-14/2, MIDC Chincholi, Taluka Mohol, District Solapur, Maharashtra. It is reported that no National Park, Reserved forest or Protected forest are located within 10 km distance of project site. The Great Indian Bustard (GIB) Sanctuary is situated within 5 km from the proposed project site. Rive Sina is flowing at a distance of 4.8 km. PP has informed that they have already applied vide dated 01.10.2016 to NBWL for Wildlife clearance. Total Plot area is 31,895.52 m<sup>2</sup> of which greenbelt will be developed in 11,992.80 m<sup>2</sup> area. Total cost of project is Rs. 37.5 Crores. Of which cost earmarked for Environmental protection measures will be Rs. 695 lacs. Following are the list of existing and proposed products:

Sr. No	Name of Product	Quantity (MT/ M)	
		Existing	Expansion
1.	Folic Acid	-	40
2.	Domperidone	-	10
3.	4-Amino -6 Chlorobenzene1,3Disulfonamide (CADS)	18	-
4.	Lasamide	15	-
<b>Total</b>		<b>33</b>	<b>50</b>

- v. Additionally, PP informed the Committee that ambient air quality monitoring was carried out at 6 locations during March 2016 to May 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (38.8–71.5 µg/m<sup>3</sup>), PM<sub>2.5</sub> (9.4–21.5 µg/m<sup>3</sup>), SO<sub>2</sub> (9.2 – 27.7 ug/m<sup>3</sup>) and NO<sub>x</sub> (2.1–33.5 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.40 µg/m<sup>3</sup>, 0.10 µg/m<sup>3</sup> and 7 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, PM<sub>2.5</sub> and SO<sub>2</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

- vi. Power requirement will be increased from 500 KVA to 1500 KVA and will be met from MSEB/Grid. D. G Set of capacity 750 KVA would be provided with High Speed Diesel to the tune of 500 Ltrs /Hr having stack of 5.5 M ARL. DG set would be operated only during power failures.
- vii. Existing unit has imported coal fired boiler of 3 TPH capacity with Multicyclone Dust Collector followed by stack of 30 m. Additionally a 15 TPH imported coal fired boiler will be installed with Cyclone separator followed by Bag filter and 30 m stack height. After commissioning of proposed 15 TPH boiler the existing 3TPH boiler shall be operated only as standby. Process emissions will be scrubbed by adequate scrubber.
- viii. Fresh water requirement will be increased from 178.5 m3/day to 376 m3/day. Which will be met from MIDC Supply. Against which wastewater generation will be increased from 30 m3/day to 371.95 m3/day. Wastewater will be segregated in two streams Stream-I and Stream-II. Stream-I effluent will be treated in proposed ETP followed by MEE and ATFD. The condensate from MEE would be forwarded to Stream -II for further treatment. Stream - II will be treated in ETP followed by RO. The RO reject will be sent to MEE in Stream-I treatment thereby achieving Zero Liquid Discharge (ZLD).
- ix. Coal ash will be sold to the registered brick manufacturers but committee suggest to sent the coal ash to the Cement plant. Spent Acid will be sold to Authorized agency. Spent Carbon, Sludge from ETP and Solids from MEE will be sold to to CHWTSDF.
- x. Public hearing was exempted under Para 7 (ii) of EIA Notification, 2006.

The EAC also deliberated on the certified compliance report submitted by the RO, MoEFCC, Nagpur and found that there are mainly 03 specific conditions are partially complied and 06 General conditions are found not complied. PP informed that now they have complied with the partially complied specific conditions and not complied general conditions and PP also confirmed that they will strictly follow the condition in future.

The Committee accepted the clarification and Certified Compliance report found satisfactory. In view of the eco sensitivity of the area (GIB Century-1.6 KM), No future expansion would be considered. The Committee after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions:

- (i) NBWL permission shall be obtained, if applicable.
- (ii) Cyclone separator followed by Bag filter and 30 m stack height shall be provided to 15 TPH imported coal fired.
- (iii) Process emissions shall be scrubbed by adequate scrubber. The scrubbing media shall be sent to effluent treatment plant (ETP) for treatment. Efficiency of scrubber shall be monitored regularly and maintained properly. No VOC emissions shall be emitted from the plant.
- (iv) Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits imposed by SPCB. Odour management plan shall be

implemented.

- (v) Special precaution shall be adopted for handling of proposed two drugs which are Thionyl Chloride and MIBK..
- (vi) Total fresh water requirement from MIDC supply shall not exceed 376 m<sup>3</sup>/day and prior permission shall be obtained from the concerned authority.
- (vii) Wastewater will be segregated in two streams Stream-I and Stream-II. Stream-I effluent will be treated in proposed ETP followed by MEE and ATFD. The condensate from MEE would be forwarded to Stream -II for further treatment. Stream - II will be treated in ETP followed by RO. The RO reject will be sent to MEE in Stream-I treatment thereby achieving Zero Liquid Discharge (ZLD).
- (viii) No effluent will be discharged outside the plant premises.
- (ix) As proposed, Coal ash will be sent to cement plant. Spent Acid will be sold to Authorized agency. Spent Carbon, Sludge from ETP and Solids from MEE will be sold to CHWTSDF.
- (x) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from SPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire-fighting facilities in case of emergency.
- (xi) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xii) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESR). Plan for ESR activity shall be prepared and submitted to the Ministry's Regional Office.
- (xiii) As proposed, green belt of 11,992.80 m<sup>2</sup> shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation.
- (xiv) A regular environment manager having post graduate qualification in environmental sciences/ environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.
- (xv) All other statutory clearances such as the approvals under Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

17.7. **Setting up of Synthetic Organic Chemicals API (capacity-16 MTPM) at**

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**Survey No. 281/1, Village: Amarnagar, Taluka: Morbi, District: Morbi, Gujarat by M/s ROLENCE PHARMA AND CHEMICAL LLP [IA/GJ/IND2/51071/2016, J-11011/97/2016- IA II(I)- Environmental Clearance**

The project proponent and their consultant (M/s T. R. Associates) gave a detailed presentation on the salient features of the project and informed that:-

- i. The Draft Terms of References (TORs) awarded in the 8<sup>th</sup> Meeting of the Expert Appraisal Committee (Industry-2) held during 26<sup>th</sup>-27<sup>th</sup> May, 2016 for preparation of EIA-EMP report.
- ii. All Synthetic organic chemicals industry projects (Bulk drugs and intermediates excluding drug formulations), located outside the notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and appraised at Central Level by Expert Appraisal Committee (EAC).
- ii. M/s Rolence Pharma and Chemical LLP has Proposed Setting up of Synthetic Organic Chemicals API (capacity-16 MTPM) at Survey No. 281/1, Village: Amarnagar, Taluka: Morbi, District: Morbi, Gujarat.
- v. It is reported that no National Park, Wildlife sanctuary, reserved forest or protected forest are located within 10 km distance of project site. Machhu River (Seasonal River) is flowing at a distance of 3.96 km in WSW direction and Godhadhri River is flowing at a distance of 3.23 km from the project site.
- v. The total land area of company is 8095 m<sup>2</sup>, out of which 2680.10 m<sup>2</sup> land will be used for greenbelt area development. The estimated cost of the project is Rs. 5.005 Crore. Total budget allocation towards Environmental Management Facilities will be Rs. 68.5 lacs and recurring cost will be Rs. 41.2 Lacs. Total 30 persons will be employed including skilled labours, unskilled labours and office staff. Following products will be manufactured:

S. No.	Name of Proposed Products	Quantity (MT/Month)
1	Pentoxyfylline	10
2	Pregabalin	2
3	Topiramate	2
4	Carvidilol	2
	<b>Total</b>	<b>16</b>

- vi. Additionally, PP informed the Committee that ambient air quality monitoring was carried out at 8 locations during March 2016 to May 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (66.20–82.30 µg/m<sup>3</sup>), PM<sub>2.5</sub> (22.07–33.30 µg/m<sup>3</sup>), SO<sub>2</sub> (6.11 – 23.33 µg/m<sup>3</sup>) and NO<sub>x</sub> (7.20–24.69 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.0 µg/m<sup>3</sup>, 0.50 µg/m<sup>3</sup> and 1.0 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>2</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- xii. Power requirement will be 60 KVA, which will be met from PGVCL. Steam Boiler (1 TPH), Incinerator (300 lit/hr), D. G. Set (60 KVA) & process gas

emission from reactor. Coal/Briquettes will be used as a fuel & the requirement shall be 2.6 MT/Day. Proper stack height (30 M) will be provided for proper atmosphere dispersion. Dust collector followed by Bag Filter will be provided to Steam boiler. HCl Scrubber will be provided as an APCM after incinerator. Committee suggest to use only Briquettes in place of coal. PP agree with it.

- xiii. Fresh water requirement will be 21 m<sup>3</sup>/day, which will be sourced from own borewell/ surface water. Committee suggest to use only surface water. Wastewater will be segregated in two streams Stream-I and Stream-II. Stream-I effluent will be treated in proposed ETP followed by Incineration. Stream – II will be treated in separate ETP then treated water will be sent to Evaporator followed by condenser. Domestic wastewater will be sent to septic tank followed by soak pit. Project will be based on Zero Liquid Discharge. No Effluent will be discharged outside the plant boundary.
- xiv. ETP waste & evaporation residue and spent catalyst will be disposed off at approved TSDF site; used oil will be reused within premises as a lubricant or sold to registered recycler; process residue & waste and spent carbon will be disposed to approved incineration facility; discarded plastic bags will be sold to authorized vendor.
- xv. Public Hearing for the proposed project has been conducted by the Gujarat Pollution Control Board 09.11.2016.

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding benefits of the proposed project and wastewater management etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

The Committee after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions:

- (i) Dust collector followed by Bag Filter and 30 m stack height shall be provided to Briquettes fired Steam Boiler of 1 TPH capacity.
- (ii) HCl Scrubber shall be provided as an APCM after incinerator.
- (iii) Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits imposed by SPCB. Odour management plan shall be implemented.
- (iv) Total fresh water requirement from Narmada Pipeline shall not exceed 21 m<sup>3</sup>/day and prior permission shall be obtained from the concerned authority.
- (v) Wastewater will be segregated in two streams Stream-I and Stream-II. Stream-I effluent will be treated in proposed ETP followed by Incineration. Stream – II will be treated in separate ETP then treated water will be sent to

Evaporator followed by condenser. Domestic wastewater will be sent to septic tank followed by soak pit. Project will be based on Zero Liquid Discharge. No Effluent will be discharged outside the plant boundary.

- (vi) No effluent will be discharged outside the plant premises.
- (vii) As proposed, ETP waste & evaporation residue and spent catalyst will be disposed off at approved TSDF site; used oil will be reused within premises as a lubricant or sold to registered recycler; process residue & waste and spent carbon will be disposed to approved incineration facility; discarded plastic bags will be sold to authorized vendor.
- (viii) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from SPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire-fighting facilities in case of emergency.
- (ix) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (x) All the commitments made during the Public Hearing / Public Consultation meeting held on 09.11.2016 should be satisfactorily implemented and adequate budget provision should be made accordingly.
- (xi) At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.

17.7.4 **Pesticides industry and pesticide specific intermediates M/s Agrico Organics Limited Plot No. D-2, CH/12/C, GIDC, Dahej-II Industrial Estate, Tehsil: Vagra, District: Bharuch (Gujarat) [IA/GJ/IND2/27071/2015, J-11011/74/2015-IAII(I)]- Environmental Clearance**

The project proponent and their consultant (M/s San Envirotech Pvt. Ltd.) gave a detailed presentation on the salient features of the project and informed that:

- i. The Draft Terms of References (TORs) awarded in the 38<sup>th</sup> Meeting of the Expert Appraisal Committee (Industry-2) held during 20-21 April 2015 for preparation of EIA-EMP report.
- ii. All Pesticides based industry are listed at S.N. 5(b) under category 'A' and appraised by Expert Appraisal Committee (I).
- iii. M/s Agrico Organics Limited has Proposed Setting up of Pesticides industry and pesticide specific intermediates at Plot No. D-2, CH/12/C, GIDC,

Dahej-II Industrial Estate, Tehsil: Vagra, District: Bharuch (Gujarat).

- iv. It is reported that no National Park, Wildlife sanctuary, reserved forest or protected forest are located within 10 km distance of project site.
- v. The total land area of company is 46560.13 m<sup>2</sup>, out of which 15365 m<sup>2</sup> land will be used for greenbelt area development. The estimated cost of the project is Rs. 70 crores. Total budget allocation towards Environmental Management Facilities will be Rs. 08 crores and recurring cost will be Rs. 3.0 crores per annum. Proposed project will provide employment to 150 persons. Following products will be manufactured:

<b>Sr. No.</b>	<b>Name of Products</b>	<b>Quantity (MT/Month)</b>
<b>A</b>	<b>Herbicides</b>	
1.	Imazethapyr Technical	15
2.	Pendimethalin Technical	10
3.	Sulfosulfuron	10
4.	Atrazine Technical	50
5.	Metribuzine Technical	20
6.	Glyphosate Technical	150
7.	Clodinafop- propargyl Technical	20
8.	Pretilachlor Technical	50
9.	Metsulfuron Methyl	05
10.	Paraquat Dichloride	20
11.	2,4-d Sodium Salt	300
12.	Indoxacarb Technical	15
<b>B</b>	<b>Fungicides</b>	
13.	Tricyclazole Technical	50
14.	Hexaconazole Technical	50
15.	Difenoconazole Technical	50
16.	Propicoazole Technical	50
17.	Myclobutanil Technical	15
18.	Thiophenate Methyl	50
19.	Tebuconazole Technical	50
<b>C</b>	<b>Intermediate Chemicals</b>	
20.	Mono Chloro Acetic Acid	100
21.	IDA	100
22.	PMIDA	500
23.	CMAC	200
24.	MPBD	100
25.	CCMP	100
26.	Triazoles	50
<b>D</b>	<b>Insecticides</b>	
27.	Thiamethoxam Technical	100
28.	Buprofezin Technical	50
29.	Temephos Technical	50



30.	Diafenthiuron Technical	50
31.	Imidacloprid Technical	100
32.	Fipronil Technical	100
33.	Permethrin Technical	20
34.	Chloropyriphos Technical	100
35.	Cartap Hydrochloride Technical	150
36.	Metalyxyl Technical	50
37.	Allethrin Technical	15
38.	Alpha Cypermethrin Technical	50
39.	Cypermethrin Technical	30
40.	D-Transallethrin	10
41.	Lambda Cyhalothrin Technical	50
42.	Novaluron	50
43.	Bifenthrin	50
<b>E</b>	<b>Fermentation Technology</b>	
44.	Abamectin	50
45.	Emamectin Benzoate	50
46.	AzoxyStrobin	50
<b>Total</b>		<b>3305</b>

- vi. Additionally, PP informed the Committee that ambient air quality monitoring was carried out at 8 locations during March 2015 to May 2015 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (46.9– 78.3 µg/m<sup>3</sup>), PM<sub>2.5</sub> (21.6 – 42.2 µg/m<sup>3</sup>), SO<sub>2</sub> (11.9–23.3 ug/m<sup>3</sup>) and NO<sub>x</sub> (11.0– 27.1 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.721 µg/m<sup>3</sup>, 0.540 µg/m<sup>3</sup>, 0.313 µg/m<sup>3</sup>, 0.212 µg/m<sup>3</sup> & 0.0034 µg/m<sup>3</sup> with respect to SPM, SO<sub>2</sub>, NO<sub>x</sub>, HCl & Cl<sub>2</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- vii. Power requirement will be tune around 1500 kVA and fulfilled from Dakshin Gujarat Vij Company Limited (DGVCL). Unit will install 1000 kVA of standby D.G. set to meet emergency power requirement and used only during failure of power supply.
- viii. Two Coal fired boiler (4TPH) with 30 m stack height and one Thermic Fluid Heater of 6 lac Kcal/hr capacity with 21 m stack height will be installed. One Incinerator of 2 TPH capacity will be used with Alkali Scrubber and 30 m stack height. Water Scrubber followed by alkali scrubber will be used to control process emission.
- ix. Total water requirement will be 742 m<sup>3</sup>/day, out of which Fresh water requirement will be 228 m<sup>3</sup>/day. Which will be met from GIDC water supply. Against which 535 m<sup>3</sup>/day waste water will be generated. Wastewater will be evaporated through MEE after primary & tertiary treatment in ETP. Condensate will be reused. Effluent from washing, scrubber, utilities (boiler blow down & cooling bleed off) will be treated in ETP and then passed through RO. RO permeate will be recycled and reject of RO will be sent to MEE. Thus, there will be no disposal of effluent

outside the premises and unit will achieve zero discharge of effluent. Domestic wastewater will be sent to septic tank followed by soak pit.

- x. ETP sludge, MEE salt & Incineration ash will be disposed by land filling at approved TSDF site. Process residue & Off specific products will be incinerated in our own incinerator. Spent catalyst will be sent for regeneration to suppliers. Discarded containers/liners will be used for packing of ETP sludge in case of excess it will be sold to authorized recycler. Used Oil will be sent to registered recyclers. Entire quantity of the hazardous waste will be stored in the isolated hazardous waste storage area within premises having leachate collection system and roof cover.
- xi. Public Hearing for the proposed project has been conducted by the Gujarat Pollution Control Board 06.10.2016.

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding Employment from the proposed project and management of Hazardous waste management etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

The Committee after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions:

- (i) Two Coal fired boiler (4TPH) with 30 m stack height and one Thermic Fluid Heater of 6 lac Kcal/hr capacity with 21 m stack height will be installed. One Incinerator of 2 TPH capacity shall be used with Alkali Scrubber and 30 m stack height.
- (ii) Water Scrubber followed by alkali scrubber shall be used to control process emission.
- (iii) Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits imposed by SPCB. Odour management plan shall be implemented.
- (iv) Total fresh water requirement from GIDC water supply shall not exceed 228 m<sup>3</sup>/day and prior permission shall be obtained from the concerned authority.
- (v) Wastewater will be evaporated through MEE after primary & tertiary treatment in ETP. Condensate will be reused. Effluent from washing, scrubber, utilities (boiler blow down & cooling bleed off) will be treated in ETP and then passed through RO. RO permeate will be recycled and reject of RO will be sent to MEE. Thus, there will be no disposal of effluent outside the premises and unit will achieve zero discharge of effluent. Domestic wastewater will be sent to septic tank followed by soak pit.
- (vi) No effluent will be discharged outside the plant premises.

- (vii) As proposed ETP sludge, MEE salt & Incineration ash shall be disposed by land filling at approved TSDF site. Process residue & Off specific products shall be incinerated in our own incinerator. Spent catalyst shall be sent for regeneration to suppliers. Discarded containers/liners shall be used for packing of ETP sludge in case of excess it shall be sold to authorized recycler. Used Oil shall be sent to registered recyclers. Entire quantity of the hazardous waste will be stored in the isolated hazardous waste storage area within premises having leachate collection system and roof cover.
- (viii) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from SPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire-fighting facilities in case of emergency.
- (ix) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (x) All the commitments made during the Public Hearing / Public Consultation meeting held on 06.10.2016 should be satisfactorily implemented and adequate budget provision should be made accordingly.
- (xi) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.

**17.7.5 Manufacturing Unit of Proposed Melamine Formaldehyde Moulding Powder at Survey No: 183, Navagam, Kathawada Village, Kheda Taluka & District, Gujarat by M/s PRISTINE MELAMINE LLP- reg- Environmental Clearance [IA/GJ/IND2/51581/2016, J-11011/104/2016- IA II(I)]**

The project proponent and their consultant (M/s Rightsource Industrial Solutions Pvt. Ltd.) gave a detailed presentation on the salient features of the project and informed that:

- i. The Draft Terms of References (TORs) awarded in the 8<sup>th</sup> Meeting of the Expert Appraisal Committee (Industry-2) held during 26-27<sup>th</sup> May, 2016 for preparation of EIA-EMP report.
- ii. All Synthetic organic chemicals industry projects (Bulk drugs and intermediates excluding drug formulations), located outside the notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. M/s Pristine Melamine LLP has Proposed Setting up of Melamine Formaldehyde Moulding Powder manufacturing unit at Survey No: 183,

- Navagam, Kathawada Village, Kheda Taluka & District, Gujarat.
- iv. It is reported that no national parks and Wildlife Sanctuaries lies within 10 km distance while a Open Mixed jungle near Nayka is situated at a distance of 6.1 km from the project site. Sabarmati River is flowing at 4.0 km (W) and Khari River is flowing at 4.0 km (S) from project site.
- v. The total land area of company is 9510 m<sup>2</sup>, out of which 3140.0 m<sup>2</sup> land will be used for greenbelt area development. The estimated cost of the project is Rs.6.73 Crores. Total budget allocation towards Environmental Management Facilities will be Rs. Rs. 20.5 Lacs and recurring cost will be 8.0 Lacs per annum. Proposed project will provide employment to 50 persons. Following products will be manufactured:

S. No	Name of the Product	Quantity in MT/Month	Quantity in MT /Day
1	Melamine Formaldehyde Moulding Powder	500.00	16.67
<b>Total</b>		<b>500.00</b>	<b>16.67</b>

- vi. Additionally, PP informed the Committee that ambient air quality monitoring was carried out at 8 locations during 15<sup>th</sup> March 2016 – 15<sup>th</sup> June 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (55.0 – 63.77µg/m<sup>3</sup>), PM<sub>2.5</sub> (22.46 – 27.87 µg/m<sup>3</sup>), SO<sub>2</sub> (12.51 – 16.65ug/m<sup>3</sup>) and NO<sub>x</sub> (21.82 – 26.20 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.11 µg/m<sup>3</sup>, 0.25 µg/m<sup>3</sup> and 0.31 µg/m<sup>3</sup> with respect to SPM, SO<sub>2</sub> and NO<sub>x</sub> respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- vii. Power requirement will be tune around 350 KVA and fulfilled from Uttar Gujarat Vij Company Ltd. Unit will install 125 KVA of standby D.G. set to meet emergency power requirement and used only during failure of power supply.
- viii. Coal fired boiler of 2 TPH capacity with 30 m stack height. Cyclone separator followed by Bag filter will be used to control particulate pollution. No Process emissions are liberated from manufacturing process of proposed product.
- ix. Total fresh water requirement will be 22.50 m<sup>3</sup>/day, which will be met through Ground water. Against which 3.40 m<sup>3</sup>/day waste water will be generated. Wastewater will be treated in ETP followed by forced evaporation. Condensate will be reused.
- xii. FE Salts will be sent to TSDF. Coal Ash from Boiler will be sold to registered Brick Manufacturers. Used oils will be sold to SPCB Authorized Agencies for Reprocessing/ Recycling. PP Bags will be Sent to Authorized Parties for Reprocessing/ Recycling. Used Lead Acid Batteries will be Sent back to suppliers for buyback of New Batteries.
- xiii. Public Hearing for the proposed project has been conducted by the Gujarat Pollution Control Board 28.10.2016.

During presentation the committee noted that PP has used baseline data from 15<sup>th</sup> March 2016 – 15<sup>th</sup> June 2016, while proposal was considered and recommended for TOR during 8<sup>th</sup> EAC meeting held during 26-27<sup>th</sup> May, 2016. After due diligence committee has accepted the Base line data/ AAQ data. The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding ONGC well i.e. nearby this proposed unit, CSR Fund and its planning, CSR funds must be utilized for the nearby villages and Employment and etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

The Committee after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions:

- (i) Coal fired boiler of 2 TPH capacity with 30 m stack height. Cyclone separator followed by Bag filter will be used to control particulate pollution. No Process emissions are liberated from manufacturing process of proposed product.
- (ii) Total fresh water requirement after expansion project from ground water shall not exceed 22.50 m<sup>3</sup>/day and prior permission should be obtained from the CGWA/SGWA.
- (iii) Wastewater will be treated in ETP followed by forced evaporation. Condensate will be reused.
- (iv) No effluent will be discharged outside the plant premises.
- (v) As proposed, FE Salts will be sent to TSDF. Coal Ash from Boiler will be sold to registered Brick Manufacturers. Used oils will be sold to SPCB Authorized Agencies for Reprocessing/ Recycling. PP Bags will be Sent to Authorized Parties for Reprocessing/ Recycling. Used Lead Acid Batteries will be Sent back to suppliers for buyback of New Batteries.
- (vi) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from SPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire-fighting facilities in case of emergency.
- (vii) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (viii) All the commitments made during the Public Hearing / Public Consultation meeting held on 28.10.2016 should be satisfactorily implemented and adequate budget provision should be made for Navagam and Khatawada villages accordingly.
- (ix) At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly for Navagam and Khatawada villages in a time bound manner.

**17.7.6 Proposed Expansion & Modernization of Molasses based Distillery Capacity from 10 KLPD to 100 KLPD along with 3 MW Co-generation Power Plant at Saharanpur, Uttar Pradesh by M/s Co-Operative Company Limited- [ IA/UP/IND2/27612/2015, J-11011/153/2015-IA-II(I)-Environmental Clearance**

The Project Proponent and the accredited Consultant M/s J M EnviroNet Pvt. Ltd., gave a detailed presentation on the salient features of the project and informed that:

- i. The proposal is for Expansion & Modernization of Molasses based Distillery Capacity from 10 KLPD to 100 KLPD along with 3 MW Co-generation Power Plant at Saharanpur, Uttar Pradesh by M/s Co-Operative Company Limited.
- ii. The project proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) in its 42<sup>nd</sup> REAC meeting held during 16-17<sup>th</sup> June, 2015 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter dated 29<sup>th</sup> July, 2015.
- iii. All molasses based distilleries are listed at Sl.No. 5(g) (i) of Schedule of EIA Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iv. Existing unit has no Environmental Clearance as Project was started before 1994. In response of additional TOR i.e. Compliance of Environmental conditions granted by State/ Centre to be provided, UPPCB vide letter no. 639/C/SRE/T-13/16 dated 28.09.2016 has informed that As per office record, Co-operative Co. Ltd. (Distillery Unit) having capacity 3600 KL per annum. The production in Distillation Plant was closed since Jan-2012. The consent Air/water was granted by the Board upto June- 2015. The industry has proposed for expansion of the industry and admitted that industry will comply the direction of Central Pollution Control Board under section 5 of EPA 1986 before the Start of production after obtaining Environment clearance. The Bottling Unit of the industry was still running and granted consent Air/Water upto 31.12.2015 and that time the industry complied the consent conditions. Existing land area is 3.98 ha (9.84 acres) and the proposed expansion & modernization will be done within the plant premises. No additional land will be required for the proposed expansion. Almost 33% i.e. 1.31 ha (3.24 acres) of the total plant area has already been developed as greenbelt/plantation and the same will be maintained. The total Cost of the project for the expansion is Rs. 120.50 Crores. Capital cost for Environmental Protection Measures will be Rs. 35.0 crores and Recurring Cost will be Rs. 3.5 Crores / annum. The raw materials for the production will be Molasses (410 TPD) which will be obtained from nearby sugar mills through tankers. Proposed project will provide employment to 85 persons.
- v. It is reported that no national parks, wildlife sanctuaries, Reserve Forest (RF)/ Protected Forests (PF), Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Hindan River (Seasonal) is flowing Adjacent to plant site in North direction and Kali Nadi is flowing at a distance of 6.0 km in East direction from the project site.
- vi. The number of working days will be 330 days/annum.

- vii. Ambient air quality monitoring was carried out at 8 locations during October to December, 2015 and submitted baseline data indicates that ranges of concentrations of PM10 (58.7 µg/m<sup>3</sup> to 88.4 µg/m<sup>3</sup>), PM2.5 (28.2 µg/m<sup>3</sup> to 44.2 µg/m<sup>3</sup>), SO<sub>2</sub> (5.8 µg/m<sup>3</sup> to 10.2 µg/m<sup>3</sup>) and NO<sub>2</sub> (13.1 µg/m<sup>3</sup> to 22.5 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.86 µg/m<sup>3</sup>, 1.16 µg/m<sup>3</sup> and 1.39 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- viii. Total fresh water requirement (existing and proposed) after proposed expansion project will be 687 m<sup>3</sup>/day which will be sourced from Surface as well as Ground water but committee suggest to use only surface water in place of ground water. PP agree with it.
- ix. Spent wash will be concentrated in MEE from initial 12% solid to 55% solid and transferred for complete incineration in a special boiler designed for spent wash. Hence the complete spent wash will be concentrated & incinerated & no spent wash will be discharged. Process condensate will be treated in CPU and treated water from it will be recycled back to the process and remaining will be used for greenbelt development. Domestic wastewater will be sent to Septic Tank. Online flow meters will be installed for regular monitoring of inlet and outlet flow rates of the effluent.
- x. The total power requirement of the plant will be 2.4 MW which will be sourced from proposed 3 MW Co-Generation Power Plant.
- xi. The total steam requirement will be met from 25 TPH boiler. Concentrated spent wash will be used as boiler fuel. Cyclone Separator followed by Bag Filter with stack height of 60 m will be installed with the proposed boiler. CO<sub>2</sub> generated during the fermentation process will be scrubbed, purified & collected for sale as by-product. DG set of 750 KVA will be installed with adequate stack height. Continuous online monitoring system for stack emissions will be installed by the company.
- xii. Fly ash generated from the boiler will be given to brick manufacturers. Concentrated spent wash generated during the process, will be burnt in the incinerator boiler and then used as fuel. Used oil & grease generated from plant machinery/Gear boxes as hazardous waste will be sold out to the CPCB authorized recycler.
- xiii. CSR plan is prepared for expenditure of 5% of project cost.
- xiv. Public Hearing for the proposed project has been conducted by the Uttar Pradesh Pollution Control Board 14.05.2016.
- xv. The following products will be generated by the company:

S. No.	Product	Production			Working days
		Existing	Proposed	Total	
1	Co-gen power Plant	0	3 MW	3 MW	330
2	Molasses based Distillery	10 KLPD	90 KLPD	100 KLPD	

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding management and disposal of solid waste, Mitigation measures to control particulate matter, employment, benefits of the

project and conservation measure for ground water etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

Existing unit has no Environmental Clearance as Project was started before 1994. The PP has submitted a copy of the UPPCB letter no. 639/C/SRE/T-13/16 dated 28.09.2016 wherein it has been informed that as per office record, Co-operative Co. Ltd. (Distillery Unit) having capacity 3600 KL per annum. The production in Distillation Plant was closed since Jan-2012. The consent Air/water was granted by the Board upto June- 2015. The industry has proposed for expansion of the industry and admitted that industry will comply the direction of Central Pollution Control Board under section 5 of EPA 1986 before the Start of production after obtaining Environment clearance.

The Committee after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions:

- (i) The total steam requirement will be met from 25 TPH boiler. Concentrated spent wash will be used as boiler fuel. Cyclone Separator followed by Bag Filter with stack height of 60 m will be installed with the proposed boiler. CO<sub>2</sub> generated during the fermentation process will be scrubbed, purified & collected for sale as by-product. DG set of 750 KVA will be installed with adequate stack height.
- (ii) Distillery unit shall be based on molasses based only and no grain based distillery unit shall be operated.
- (iii) Fresh Water need daily for proposed unit shall not exceed 687 m<sup>3</sup>/day from surface water and prior permission should be obtained from the concerned authority. No ground water shall be used.
- (iv) Spent wash will be concentrated in MEE from initial 12% solid to 55% solid and transferred for complete incineration in a special boiler designed for spent wash. Hence the complete spent wash will be concentrated & incinerated & no spent wash will be discharged. Process condensate will be treated in CPU and treated water from it will be recycled back to the process and remaining will be used for greenbelt development. Domestic wastewater will be sent to Septic Tank.
- (v) Spent wash shall be stored in impervious RCC lagoons with proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. The storage of spent wash shall not exceed 5 days capacity.
- (vi) Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.
- (vii) As proposed, Fly ash generated from the boiler will be given to brick manufacturers. Concentrated spent wash generated during the process, will be burnt in the incinerator boiler and then used as fuel. Used oil & grease generated from plant machinery/Gear boxes as hazardous waste will be sold out to the CPCB authorized recycler.
- (viii) Adequate numbers of ground water quality monitoring stations by



	<p>providing piezometers around the project area and compost yard shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and this Ministry. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and total dissolved solids shall be monitored. Sampling and trend analysis monitoring must be made on monthly basis and report submitted to the Ministry's Regional Office and SPCB.</p> <p>(ix) As proposed, green belt over 33 % i.e. 1.31 ha (3.24 acres) of the total project area should be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.</p> <p>(x) All the commitments made during the Public Hearing / Public Consultation meeting held on 14.05.2016 should be satisfactorily implemented and adequate budget provision should be made accordingly.</p> <p>(xi) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.</p> <p>(xii) A regular environment manager having post graduate qualification in environmental sciences/ environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.</p>
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### **Reconsideration of EC**

<p><b>17.7.7</b></p>	<p><b>Proposal of Drilling of 2 wells and Setting up of EPS in Sanand Miroli Block CB-ONN-2002/03, in Ahmedabad, Mehsana &amp; Gandhinagar Districts of Gujarat by M/s Gujarat Petroleum Corporation {J-11011/183/2014-IA II(I) ; [IA/GJ/IND2/52432/2014}; J-11011/183/2014-IA-II(I)- Reconsideration of EC</b></p> <p>The Member Secretary informed the EAC that proposal was earlier considered on 26<sup>th</sup> to 27<sup>th</sup> May 2016. During presentation on that time it was noted that in the certified compliance report dated 31.3.2014 of MoEF&amp;CC Regional Office at Bhopal, it has been reported that oil was being collected from two wells and necessary facilities were maintained. Therefore, the Committee was of the view that this is a violation case and project shall be considered as per prevailing procedures to treat such violation case.</p> <p>Accordingly the Ministry issued a show cause notice to GSC on dated 17<sup>th</sup> Oct 2016 and reply of the show cause notice were submitted by GSPC on dated 27<sup>th</sup> Oct 2016. The PP informed that oil came out during exploration because of pressure, so that was collected and dispatched. The violation issue has now been resolved in the Ministry. After approval of the competent authority it has been decided that the EAC may consider the proposal.</p>
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In view of the above decision of the Ministry the Committee decided to consider the proposal.

After detailed deliberations, the Committee based on the documents furnished and presentation made recommended the project for environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

- i. Ambient air quality shall be monitored near the closest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, methane & Non-methane HC etc.
- ii. Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.
- iii. Approach road shall be made pucca to minimize generation of suspended dust.
- iv. The company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosure shall be provided to DG sets and proper stack height shall be provided as per CPCB guidelines.
- v. Total water requirement shall not exceed 45 m<sup>3</sup>/day from tanker supply and prior permission shall be obtained from the concerned agency.
- vi. The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- vii. Drilling wastewater including drill cuttings wash water shall be collected in disposal pit lined with HDPE lining evaporated or treated and shall comply with the notified standards for on-shore disposal. The membership of common TSDF shall be obtained for the disposal of drill cuttings and hazardous waste. Otherwise, secured land fill shall be created at the site as per the design approved by the CPCB and obtain authorization from the SPCB. Copy of authorization or membership of TSDF shall be submitted to Ministry's Regional Office.
- viii. Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/ soak pit.
- ix. Oil spillage prevention scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- x. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30<sup>th</sup> August, 2005.
- xi. The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- xii. Emergency Response Plan (ERP) shall be based on the guidelines prepared

	<p>by OISD, DGMS and Govt. of India.</p> <p>xiii. Abandoned well inventory and remediation plan shall be submitted within six months from the date of issue of letter.</p> <p>xiv. Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.</p> <p>xv. Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office.</p> <p>xvi. Under Enterprise Social Commitment (ESC), sufficient budgetary provision shall be made for health improvement, education, water and electricity supply etc. in and around the project.</p> <p>xvii. All personnel including those of contractors shall be trained and made fully aware of the hazards, risks and controls in place.</p> <p>xviii. Company shall have own Environment Management Cell having qualified persons with proper background.</p> <p>xix. Company shall prepare operating manual in respect of all activities. It shall cover all safety &amp; environment related issues and system. Measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office.</p>
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**17.7.8 Expansion of drugs intermediates and speciality chemicals unit (30MTPM to 54 MTPM) at Plot nos. 22/C/1&2, GIDC Estate Phase I, GIDC, Vapi, District & Tehsil Valsad, Gujarat by M/s Aarti Industries Ltd. (Custom Synthesis Division) reg. EC {J-11011/368/2012-IA-II(I), IA/GJ/IND2/32249/2012}-Reconsideration of EC**

The PP made a presentation before the EAC and informed that the proposal was considered by EAC ( Industry-2) in its meeting held during 16<sup>th</sup> EAC meeting has been held during 8-9 December 2016 wherein the committee suggested the PP to submit documentary evidence establishing that the construction, reported as a violation, was done as per EC no. J-11011/710/2008-IA.II (I) dated 7<sup>th</sup> November, 2008 and it is not the part of the present proposal for expansion under consideration of the ministry.

Now PP has submitted the evidence i.e copy of bills and work order dated 07.10.2012 in support of his claim that the construction which is reported as violation, was done before the submission of application for expansion application under the environment clearance granted to PP in 2008.

The committee critically examined the papers submitted by the PP and was of the view that construction, which has been reported by the RO, MoEF&CC as violation was done in terms of environmental clearance granted by the Ministry on 7<sup>th</sup> November, 2008. The EAC thereafter unanimously recommended that the present proposal can be considered for further expansion as per provisions of the EIA Notification, 2006.

The project proponent and their consultant (M/s. Jyoti Om Chemical

Research Centre Pvt.Ltd.) gave a detailed presentation on the salient features of the project and informed that:

- (i) Draft Terms of References (TORs) awarded in the 6th Meeting of the Reconstituted Expert Appraisal Committee (Industry -2) held during 5th-7th march 2013 for preparation of EIA-EMP report.
- (ii) All Synthetic Organic Chemicals Industry located inside the notified industrial area/estate are listed at S.N. 5(f) under category 'B' but due to general conditions applicability, it is considered in category 'A' and appraised by Expert Appraisal Committee (I).
- (iii) M/s Aarti Industries Ltd.(Custom Synthesis Division) has proposed for Environmental Clearance of M/s Aarti Industries Ltd.(Custom Synthesis Division. The total land area is 26,196 m<sup>2</sup>, proposed expansion will be carried out within the land area .Total project cost is 51.3374 crore out of which capital cost and recurring cost per annum earmarked towards environment protection measures are Rs 2.85 Crore and Rs 0.34 crore respectively.
- (iv) It is reported that there is no national park, Wildlife/ eco sensitive located within 10 km radius from the project site. Daman ganga river is flowing at a distance of 1.5 Km from project site Following products will be manufactured:

<b>S.No</b>	<b>List of product involving unit process like hydrogenation, nitration, condensation, halogenations and esterification</b>	<b>Production quantity in MT/Month as per existing CCA no. AWH. 46537</b>	<b>Proposed Production quantity in MT/Mont</b>	<b>Total quantity in MT/Month</b>
1.	ZN V,C <sub>15</sub> H <sub>19</sub> NO <sub>2</sub> .HCl	10.0	0	10.0
2.	CS-V(11-chloroDibenzo[b,f][1,4]thiazepine	20.0	0	20.0
3.	TV-VII((3S) -3-Amino-2,3,4,5-Tetrahydro-2-oxo-1H-1 Benzazepine-1-acetic acid,Tert butyl ester)			
4.	TV-INT (Ethyl ,2-(4-Nitrobenzene Sulphonyl)			
5.	PAN-IV (11,16,17,21-Tetra hydroxy-pregna-1,4 dine-3,20-dione)			
6.	MES-II (2-S-Thiuronium ethane sulphonate)			
7.	IB-V (8-Isopropyl -8-azabicyclo [3.2.1]octane-			

	3-y1-2-formyl phenyl acetate)			
8.	Fly X ((2S,3as,7as)-1-[2-[1-(Ethoxycarbonyl)-(S)-Propyl] Octahydroindole-2-Carboxylic acid			
9.	QN-II (1,2,3,4-Tetrahydro isoquinoline -2-Benzyl CARboxylate PTSA salt)			
10	FL-II HCL (1-[2-Amino-1 (4-Methoxyphenyl) Ethyl] Cyclohexanol Hydrochloride			
11	BA-II (5-methyl-N-[4-(trifluoromethyl phenyl)]isoxazole-4-carboxamide			
12	DX I 2-Cyclo hexyl Ethyl amine	0	30	30
13	DX VI Dextro Methopan HBr	0	10	10
14	SAF III Diflunisal 4-(2,4Difluorophenyl)-Phenol	0	4	4
15	Maxy VI	0	10	10
16	Caffiene	0	100	100
	<b>Total</b>	<b>30</b>	<b>154</b>	<b>184</b>

#### Byproducts

1	Phosphorous Oxychloride (BP)	17.275	-17.275	0
2	30% HCL(BP)	22.96	-	22.96
3	Potassium Bromide and/or	8.9	-	8.9
4	Acetic acid and/or	3.4	-	3.4
5	Sodium Bromide and/or	11.42	-	11.42
6	MCBA	11.6	-	11.6
	HCl(30%)	-	48	48
	Phosphoric acid	-	11.03	11.03

#### Co product

1	Maleic Acid	-	21	21
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*Note: Custom synthesis products involving hydrogenation, condensation, nitration and chlorination products (54 MT/Month). Purification capacity will be 100 MT/Month for Caffiene.*

(v) Additionally, PP informed the Committee that ambient air quality monitoring was carried out at 8 locations during March, 2013 –May 2013

and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (42 µg/m<sup>3</sup> – 98 µg/m<sup>3</sup>), PM<sub>2.5</sub> (8 µg/m<sup>3</sup>– 36 µg/m<sup>3</sup>), SO<sub>2</sub> (14 µg/m<sup>3</sup>–45 µg/m<sup>3</sup>) and NO<sub>x</sub> (14 µg/m<sup>3</sup>–30 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.45 µg/m<sup>3</sup>, 6.03 µg/m<sup>3</sup> and 2.16 µg/m<sup>3</sup> with respect to PM , SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

- (vi) Power requirement will be increased from 1250 KVA to 2250 KVA which will be sourced from DGVCL. Two (02) nos of natural gas fired boilers of capacity 1500 Kg/hr and 4000 Kg/hr attached with stack of height 19m will be used .Two (02) nos of existing DG Sets of capacity 320 KVA and 625 KVA attached with stack of height 11 m will be used as stand by.
- (vii) Two stage alkali scrubber will be used as pollution control measure for process emission such as HCL, So<sub>2</sub> and No<sub>x</sub>.
- (viii) After proposed expansion water requirement will increased from 277 m<sup>3</sup>/day to 530.5 m<sup>3</sup>/day out of which fresh water requirement will increased from 234.5 m<sup>3</sup>/day to 387 m<sup>3</sup>/day. Fresh water will be met by GIDC water supply scheme. There will be no extraction of ground water, so that no direct impact is found on ground water availability.
- (ix) Total waste water generation will increased from 57 m<sup>3</sup>/day to 150.5 m<sup>3</sup>/day. Effluent generated will be treated in ETP followed by RO and MEE.
- (x) ETP sludge and ash from incinerator will be sent to approved landfill site. Distillation residue, aqueous effluent, spent catalyst, off specification products and spent carbon will be sent to approved common incinerator facility. Used oil will be sell to register re processor. Discarded containers/bag will be sell to authorized recycler.
- (xi) Public hearing was exempted as the unit is located in the notified industrial area.

The EAC also deliberated on the certified compliance report submitted by the RO, MoEFCC, Bhopal and found that there are mainly 14 conditions are not complied. PP informed that now they have complied all conditions and they will strictly follow the conditions in future also. After detailed deliberations, the Committee recommended the project for environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

- (i) Action taken report on the non-complied points duly certified by the RO, MoEF&CC to be submitted.
- (ii) Regular monitoring of Volatile Organic Compounds (VOCs) should be carried out.
- (iii) Two stage alkali scrubber shall be used as pollution control measure for process emission such as HCL, So<sub>2</sub> and No<sub>x</sub>.
- (iv) Fugitive emissions in the work zone environment, product, raw materials storage area etc. should be regularly monitored.
- (v) Total fresh water requirement from GIDC water supply should not exceed 387 m<sup>3</sup>/day and prior permission should be obtained from the concerned

	<p>authority.</p> <ul style="list-style-type: none"> <li>(vi) Effluent generated will be treated in ETP followed by RO and MEE.</li> <li>(vii) No effluent will be discharged outside the plant premises and zero discharge will be followed.</li> <li>(viii) As proposed, ETP sludge and ash from incinerator will be sent to approved landfill site. Distillation residue, aqueous effluent, spent catalyst, off specification products and spent carbon will be sent to approved common incinerator facility. Used oil will be sell to register re processor. Discarded containers/bag will be sell to authorized recycler.</li> <li>(ix) The company should obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from GPCB should be obtained for disposal of solid / hazardous waste in the TSDF. Measures should be taken for fire fighting facilities in case of emergency.</li> <li>(x) Green belt over 33 % area should be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.</li> <li>(xi) Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.</li> <li>(xii) At least 5 % of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office. As committed, implementation of such program should be ensured for nearby village in a time bound manner.</li> </ul>
17.7.9	<p><b>Addition of 3 KLPD (10 %) Cellulosic non food biomass (Agri waste) based modular Demo Pilot Plant” for R&amp;D purpose within premises of existing 30 KLPD Molasses Distillery at Patethan Post- Rahu, TahsilDaund, District Pune, Maharashtra by Shreenath Mhaskoba Sakhar Karkhana Ltd. [IA/MH/IND2/59639/2016, J- 11011/189/2016- IA II(I)]- Environmental Clearance</b></p> <p>The project proponent and their consultant (M/s ABC Techno Labs India Pvt. Ltd.) gave a detailed presentation on the salient features of the project and informed that:</p> <ul style="list-style-type: none"> <li>i. The Draft Terms of References (TORs) awarded in the 12<sup>th</sup> Meeting of the Reconstituted Expert Appraisal Committee (Industry) held during 23<sup>rd</sup> -24<sup>th</sup> August, 2016 for preparation of EIA-EMP report.</li> <li>ii. All molasses based distillery are listed at S.No. 5(g) (i) under category ‘A’ and appraised at central level.</li> <li>iii. Ministry had issued Environmental Clearance vide letter No. J-11011/19/2012-IA II(I) dated 15-12-2014.</li> <li>iv. M/s Shreenath Mhaskoba Sakhar Karkhana Ltd., has Proposed Addition of 3 KLPD (10 %) Cellulosic non food biomass (Agri waste) based modular</li> </ul>

Demo Pilot Plant” for R&D purpose within premises of existing 30 KLPD Molasses Distillery at Patethan Post- Rahu, TahsilDaund, District Pune, Maharashtra.

- v. Existing plot area is 80937 m<sup>2</sup>, additional 8094 m<sup>2</sup> land will be required for the proposed expansion, out of which Green belt will be developed in 28,360 m<sup>2</sup> (35%) area. The existing land from SMSKL premises will be used for setting up of the new plant. Total cost of the project is Rs 30.60 crore. Total Capital cost and recurring cost/annum for Environment pollution control measures are Rs 6.36 crores and 0.912 crores respectively.
- vi. It is reported that there is no national park, wildlife sanctuary, Reserved forest/protected forest lies within 10 Km radius of project site. Bhima river and Mula Mutha river are flowing at a distance of 3 Km and 6.5 Km away from project site. Following are the list of existing and proposed products:

S. No.	Product	Production		
		Existing	Proposed	Total
1	Sugar Plant	3500 TCD	0 TCD	3500 TCD
	Molasses based Distillery	30 KLPD	3 KLPD	33 KLPD
2	Co-gen power Plant	10 MW	0 MW	10 W

- vii. Power requirement for the proposed project will be 450 KWH, which will be sourced from existing 10 MW cogeneration power plant of SMSKL. 1 DG set of capacity 380 KVA will be used as stand by and attached to stack of height 3.5 m. Steam requirement will be 24TPD which will be met from existing boiler of 70 TPH capacity. No additional boiler will be required for the proposed expansion.
- viii. Fresh water requirement for the proposed project will be 56 m<sup>3</sup>/day. will be met from the existing sanctioned (300 m<sup>3</sup>/day) water source from Bhima River. Approx 8 m<sup>3</sup>/day effluent will be generated from new plant. Spent wash generated from proposed unit will be treated in new ETP in which it will be passed through Solid- Liquid separation followed by biomethanation unit and RO. RO reject will be sent to existing compost yard, whereas sludge produce from existing distillery will be used as fertilizer after composting. No effluent is discharged outside plant premises. Plant is based on Zero liquid discharge scheme.
- ix. Additionally, PP informed the Committee that ambient air quality monitoring was carried out at 8 locations during 1<sup>st</sup> October, 2016 – 31<sup>st</sup> October 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (45.1 µg/m<sup>3</sup> – 85.4 µg/m<sup>3</sup>), PM<sub>2.5</sub> (30.3 µg/m<sup>3</sup>– 61.8 µg/m<sup>3</sup>), SO<sub>2</sub> (18.0 ug/m<sup>3</sup>–35 ug/m<sup>3</sup>), NO<sub>x</sub> (28 µg/m<sup>3</sup>–38.3 µg/m<sup>3</sup>) and CO(1.2 mg/m<sup>3</sup>- 3.9 mg/m<sup>3</sup>) respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- x. Public hearing was exempted as per para 7 (ii) of EIA, Notification, 2006.
- xi. PP has submitted the compliance report w.r.t. Environmental conditions stipulated in Existing EC i.e. J-11011/19/2012-IA II (I) dated 15<sup>th</sup> December, 2014 vide letter dated 10.08.2016 to RO, MoEF&CC (WCZ),



Nagpur.

The EAC noted that PP has not submitted the Certified Compliance report yet and has already requested to issue CCR vide letter dated 10.08.2016 to RO, MoEF&CC. Committee also noted that the proposed activity is for R&D purposes to produce Ethanol for meeting the long term requirement of the country for blending in the fuel and as PP informed that they will strictly follow the condition of existing EC. Committee found Compliance report satisfactory.

After detailed deliberations, the Committee found the final EIA/EMP report adequate and suggested to stipulate following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

- (i) No additional boiler shall be used for the proposed expansion.
- (ii) Total fresh water requirement shall not exceed 300 m<sup>3</sup>/day from Bhima River and prior permission shall be obtained from the concerned agency.
- (iii) Spent wash generated from proposed unit will be treated in new ETP in which it will be passed through Solid- Liquid separation followed by biomethanation unit and RO. RO reject will be sent to existing compost yard, whereas sludge produce from existing distillery will be used as fertilizer after composting.
- (iv) As proposed, no effluent from distillery shall be discharged outside the plant premises and Zero discharge shall be adopted. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- (v) Spent wash shall be stored in SS tank. The storage of spent wash shall not exceed 5 days capacity.
- (vi) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (vii) Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre shall be strengthened and the regular medical test records of each employee shall be maintained separately.
- (viii) Dedicated parking facility for loading and unloading of materials shall be provided in the factory premises. Unit shall develop and implement good traffic management system for their incoming and outgoing vehicles to avoid congestion on the public road.
- (ix) Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.
- (x) As proposed, green belt over 28,360 m<sup>2</sup> (35%) of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- (xi) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs particularly

	<p>nearby village and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.</p> <p>(xii) A regular environment manager having post graduate qualification in environmental sciences/ environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.</p>
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## 17.8 Term of Reference (TOR)

17.8.1	<p><b>Proposed Expansion of Existing Synthetic Organic Chemical Plant of SUGAR AND DISTILLERY of M/s. SHREE GANESH KHAND UDYOG SAHKARI MANDLI LTD. Shri Harisinhji Mahida Bhavan, At &amp; Po: Vataria, TaL: Valia, Dist: Bharuch, Gujarat-393001 IA/GJ/IND2/58126/2016, J-11011/334/2016-IA.II(I)]</b></p> <p>The project proponent gave a detailed presentation on the salient features of the project and informed that:</p> <p>(i) M/s Shree Ganesh Khand Udyog Sahkari Mandli Ltd., has proposed for Expansion of Distillery at Shri Harisinhji Mahida Bhavan, At &amp; Po: Vataria, TaL: Valia, Dist: Bharuch, Gujarat-393001.</p> <p>(ii) All molasses based distillery are listed at S.No. 5(g) (i) under category 'A' and appraised at central level.</p> <p>(iii) Ministry has issued EC vide letter no. J-11011/ 131/2004-IA II (I) dated 27<sup>th</sup> December, 2004.</p> <p>(iv) Total Plot Area is 4,86,264 m<sup>2</sup> out of which 1,45,879 m<sup>2</sup> is Green Belt Area.</p> <p>(v) Total project cost for the proposed project is Rs 2.97 Crore.</p> <p>(vi) It is reported that no National park, Wildlife sanctuary, Reseerved forest/protected forest lies within 10 Km radius of project site. Amravati river is flowing at a distance of 3.7 Km away from project site.</p> <p>(vii) The proposed products and quantities for expansion are as below: -</p>																					
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">NAME OF PRODUCTS</th> <th style="width: 30%;">EXISTING* (MT/Month)</th> <th style="width: 35%;">TOTAL AFTER EXPANSION (MT/Month)</th> </tr> </thead> <tbody> <tr> <td colspan="3"><b>Products</b></td> </tr> <tr> <td>V.P. Sugar</td> <td>14,500</td> <td>14,500</td> </tr> <tr> <td>Rectified Spirit</td> <td>33 KLPD</td> <td>66 KLPD</td> </tr> <tr> <td>Absolute Alcohol</td> <td>30 KLPD</td> <td>60 KLPD</td> </tr> <tr> <td colspan="3"><b>By-Products</b></td> </tr> <tr> <td>Molasses</td> <td>6,000</td> <td>7,500</td> </tr> </tbody> </table>	NAME OF PRODUCTS	EXISTING* (MT/Month)	TOTAL AFTER EXPANSION (MT/Month)	<b>Products</b>			V.P. Sugar	14,500	14,500	Rectified Spirit	33 KLPD	66 KLPD	Absolute Alcohol	30 KLPD	60 KLPD	<b>By-Products</b>			Molasses	6,000	7,500
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Rectified Spirit	33 KLPD	66 KLPD																				
Absolute Alcohol	30 KLPD	60 KLPD																				
<b>By-Products</b>																						
Molasses	6,000	7,500																				

Bagasse	45,000	45,000
Filter Cake	4,500	4,500

- (viii) Total power requirement is 75 KW which will be sourced from DGVCL.
- (ix) Existing unit has bagasse fired boiler of 40 MT/Day capacity, additionally bagasse fired boiler of 15 MT/Day and Briquette fired boiler of 0.5 MT/Day will be installed. Multi Cyclone Separator with Scrubber (Wet) will be used to control particulate emission.
- (x) Fresh water requirement will be increased from 1820 m<sup>3</sup>/day to 2010, which will be met through borewell. Committee suggest restricting the fresh water demand upto 1820 m<sup>3</sup>/day.
- (xi) The wastewater generation will be 890 KL/Day after proposed expansion. The effluent from sugar factory is sent to ETP consists of primary, secondary & tertiary treatment facility to treat the effluent and treated effluent is reused as per requirement of factory for cooling, washing, irrigation purposes, etc. Entire qty. of wastewater from distillery is utilized in bio-composting and the same shall be followed after proposed expansion.

After detailed deliberations, the Committee prescribed the following Specific and Additional TOR in addition to Generic TOR provided at Annexure-I ( refer Ministry's website) for preparation of EIA-EMP report:

#### **A. Specific TOR**

1. List of existing distillery units in the study area along with their capacity and sourcing of raw material.
2. Number of working days of the distillery unit.
3. Details of raw materials such as molasses and their source with availability.
4. Details of the use of steam from the boiler.
5. Surface and Ground water quality around proposed spent wash storage lagoon, and compost yard.
6. Commitment for spent wash generation within 6-8 KL/KL of alcohol produced.
7. Proposed effluent treatment system for molasses distillery (spent wash, spent lees, condensate and utilities) as well as domestic sewage and scheme for achieving zero effluent discharge (ZLD).
8. Proposed action to restrict fresh water consumption within 10 KL/KL of alcohol production.
9. Details about capacity of spent wash holding tank, material used, design consideration. No. of peizometers to be proposed around spent wash holding tank and composting yard.
10. Action plan to control ground water pollution.
11. Details of solid waste management including management of boiler ash, yeast, etc. Details of incinerated spent wash ash generation and its disposal.

12. Details of bio-composting yard.
13. Action plan to control odour pollution.
14. Arrangements for installation of continuous online monitoring system (24x7 monitoring device).

**B. Additional TOR**

- i. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- ii. Green belt 10m wide around the periphery.
- iii. Commitment w.r.t. No additional fresh water requirement to be submitted.
- iv. A separate chapter on status of compliance of Environmental Conditions granted by Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA-EMP report.

It was recommended that 'TORs' along with Public Hearing prescribed by the Reconstituted Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

**17.8.2 Proposed LPG Bottling Plant at Korba, Chhattisgarh by M/s Indian Oil Corporation Ltd. [IA/CG/IND2/59931/2016, J- 11011/341/2016-IA.II(I)]- Term of Reference**

The project proponent gave a detailed presentation on the salient features of the project and informed that:

- i. M/s. INDIAN OIL COPERATION LIMITED. has proposed for Installation of LPG Bottling plant at Korba Chhattisgarh.
- ii. All the projects related to Isolated storage & handling of hazardous chemicals are listed in para 6(b) of schedule of EIA Notification, 2006 covered under category 'B' but due to general conditions applicability i.e. Critically polluted area, it is listed in category 'A' and appraised at central level.
- iii. It is reported that no National park, Wildlife sanctuary, Reseerved forest/protected forest lies within 10 Km radius of project site. Hasdeo river is flowing at a distance of 2.5 Km and SE, Darri water reservoir is situated at a distance of 6.0 km (SE) and Chhuri water reservoir is situated at a distance of 5.5 Km away from project site.
- iv. Existing plant area is 57.24 Acres. Proposed project will be carried out within existing plant premises. The Bottling Plant is estimated to cost Rs

120.72 crores. The total manpower requirement will be 63 persons.

v. The product and capacities are as follows:-

**Products and capacities**

Type of Vessel	Nos	Capacity	Total Capacity
Mounded Bullets	3	600 MT	1800

vi. Total Water Requirement is approx 5m<sup>3</sup> /day via pipeline from reservoirs within the IGC Maneri. Power required for the existing operations is 400 KW sourced from Chhattisgarh State Electricity Board. Two DG sets of 750 and 250 KVA capacity will be used.

vii. No industrial solid waste will be generated during the bottling process. Damaged cylinders will be segregated & stored on site prior to disposal as scrap metal. Hazardous waste generated from D.G set operation will be disposed to MPPCB Authorized Recyclers

After detailed deliberations, the Committee prescribed the following Specific and Additional TOR in addition to Generic TOR provided at Annexure-I ( refer Ministry's website) for preparation of EIA-EMP report:

**A. Specific TOR:**

1. Details on list of hazardous chemicals to be stored alongwith storage quantities at the facility, their category ( as per MSIHC Rules ), MSDS.
2. Mode of receiving hazardous chemicals in isolated storages and mode of their dispatch.
3. Layout plan of the storage tanks and other associated facilities.
4. Details on types and specifications of the storage facilities including tanks, pumps, piping, valves, flanges, pumps, monitoring equipments, systems for emissions control safety controls including relief systems.
5. Arrangements to control loss/leakage of chemicals and management system in case of leakage.
6. Risk Assessment & Disaster Management Plan
  - a. Identification of hazards
  - b. Consequence Analysis
  - c. Details of domino effect of the storage tanks and respective preventive measures including distance between storage units in an isolated storage facility.
  - d. Onsite and offsite emergency preparedness plan.

**B. Additional TOR**

1. Public hearing is exempted under para 7(ii) of EIA Notification, 2006.
2. The baseline data collection has to be collected from Dec to February.

3. Risk assessment plan to be submitted.
4. Green belt 10m wide around the periphery.

It was recommended that 'TORs' without Public Hearing prescribed by the Reconstituted Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.

**17.8.3 Capacity Expansion of NCU,MEG,HDPE , PP Units & Setting up of Catalyst Manufacturing Unit at Panipat Naphtha Cracker by M/s INDIAN OIL CORPORATION LIMITED. PANIPAT REFINERY & PETROCHEMICAL COMPLEX [IA/HR/IND2/60197/2016, J-11011 /106/2012-IA.II(I)]**

The project proponent gave a detailed presentation on the salient features of the project and informed that:

- i. M/s Indian Oil Corporation Limited, has proposed for Capacity Expansion of NCU,MEG,HDPE , PP Units & Setting up of Catalyst Manufacturing Unit at Panipat Naphtha Cracker, Panipat, Haryana.
- ii. All the Petro-chemical complexes (industries based on processing of petroleum fractions & natural gas and/or reforming to aromatics) are listed at S.N. 5(c) under Category 'A' and appraised at the Central level.
- iii. Total Existing plot area is 306 Ha, out of which green belt area is 55 Ha. The estimated project cost is Rs 1500 Crores.
- iv. It is reported that there is no national park ,wildlife sanctuary, reserved/proected forest, water bodies lies within 10 Km radius of project site.
- v. The petrochemical plant consists of the following existing plants & related □□□□ utilities which are in operation.
  - a. Naphtha Cracker Unit (NCU)
  - b. Butadiene Extraction Unit ( BEU)
  - c. C4 Hydrogenation Unit
  - d. Pyrolysis Gasoline Hydrogenation Unit ( PGHU)
  - e. Benzene Extraction Unit ( BZEU)
  - f. High Density Polyethylene ( HDPE) Unit
  - g. Swing (LLDPE/HDPE) Unit
  - h. Ethylene Glycol (EG) Plant
  - i. Polypropylene (PP) Unit
  - j. Utilities including Captive Power Plant
- vi. The proposed products and quantities for expansion are as below:-

S.No	Plant	Existing(KTA)	Proposed(KTA)
1.	NCU	800	947
2.	MEG	300	425
3.	HDPE	300	351
4.	PP	600	780

- vii. Power requirement for the proposed project will be 7.6 MW will be met from existing captive power plant.
- viii. Existing fresh water requirement is 43200 KLD, additional Fresh water requirement is 4443 KLD will be met from Munak regulator on western Yamuna canal. Effluent generated will be treated in ETP.

After detailed deliberations, the Committee prescribed the following Specific and Additional TOR in addition to Generic TOR provided at Annexure-I ( refer Ministry's web site) for preparation of EIA-EMP report:-

**A. Specific TOR:**

1. Details on requirement of raw material (naphtha/gas feedstock), its source of supply and storage at the plant.
2. Complete process flow diagram for all products with material balance.
3. Brief description of equipments for various process ( cracker, separation, polymerization etc)
4. Details of proposed source-specific pollution control schemes and equipments to meet the national standards.
5. Details on VOC emission control system from vents, stacks, fugitive emissions and flare management, etc.
6. Details on proposed LDAR protocol.
7. Ambient air quality should include hydrocarbon ( methane and non methane ), VOC and VCM (if applicable).
8. Action plan to meet the standard prescribed under EPA for petrochemical complex.
9. Risk Assessment & Disaster Management Plan
  - a. Identification of hazards
  - b. Consequence Analysis
  - c. Measures for mitigation of risk.

**B. Additional TOR**

1. Public hearing is exempted under para 7(ii) of EIA Notification, 2006, as Public hearing was conducted in August, 2015.
2. Baseline data to be collected from December, 2016 to February, 2017.
3. Green belt 10m wide around the periphery.
4. A separate chapter on status of compliance of Environmental Conditions granted by Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA-EMP report.

It was recommended that 'TORs' without Public Hearing prescribed by the Reconstituted Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.

17.8.4 **Manufacturing of Shoes soling with Direct PU Injection Technology by M/s Liberty Shoes Ltd.-TOR reg. [IA/UK/IND2/60420/2016, J-11011/335/2016-IA.II(I)]**

The project proponent gave a detailed presentation on the salient features of the project and informed that:

- (i) M/s Liberty shoes ltd. has proposed for Manufacturing of Shoes soling with Direct PU Injection Technology at village Raipur, Tehsil Bhagwanpur, District Haridwar Uttrakhand.
- (ii) Proposed project is manufacturing polyurethane which is a synthetic organic chemical All Synthetic organic chemicals industry projects (Bulk drugs and intermediates excluding drug formulations), located inside the notified industrial area/estate are listed at S.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification 2006 comes under Category 'B', since SEIAA of Uttrakhand is dissolved, projects comes under category 'A' and appraised at Central Level by Expert Appraisal Committee (EAC).
- (iii) It is reported that there is no national park, Wildlife Sanctuary, Reserved forest /protected forest lies within 10 Km radius of project site. Solani river is flowing at a distance of 2 Km from project site.
- (iv) Total plant area is 27000 m<sup>2</sup>, out of which 16445 m<sup>2</sup> area (60%) has already been developed as green belt.
- (v) Total cost of existing and modernisation project is Rs 28.9647 crores out of which cost of EMP is Rs 25 Lakh. Total manpower requirement for the project is 350.
- (vi) The power required for the proposed project will be 425 KVA, which will be sourced from State Electricity Board & D.G Set (for emergency).
- (vii) Total water requirement is 50 m<sup>3</sup>/day, which will be sourced from existing Tubewell (ground water).
- (viii) Waste from Polyol and isocyanide will be sent to authorised recyclers.

After detailed deliberations, the Committee prescribed the following Specific and Additional TOR in addition to Generic TOR provided at Annexure-I (refer Ministry's web site) for preparation of EIA-EMP report:

**A. Specific TOR:**

15. Details on solvents to be used, measures for solvent recovery and for emissions control.
16. Details of process emissions from the proposed unit and its arrangement to control.
17. Ambient air quality data should include VOC, other process-specific pollutants\* like NH<sub>3</sub>\*, chlorine\*, HCl\*, HBr\*, H<sub>2</sub>S\*, HF\*, etc., (\* - as applicable)
18. Work zone monitoring arrangements for hazardous chemicals.
19. Detailed effluent treatment scheme including segregation of effluent streams for units adopting 'Zero' liquid discharge.



20. Action plan for odour control to be submitted.
21. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they co-process organic solid/hazardous waste generated.
22. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
23. Action plan for utilization of MEE/dryers salts.
24. Material Safety Data Sheet for all the Chemicals are being used/will be used.
25. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
26. Details of incinerator if to be installed.
27. Risk assessment for storage and handling of hazardous chemicals/solvents. Action plan for handling & safety system to be incorporated.
28. Arrangements for ensuring health and safety of workers engaged in handling of toxic materials.

**B. Additional TOR**

- i. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

It was recommended that 'TORs' along with Public Hearing prescribed by the Reconstituted Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

17.8.5 **Expansion in manufacturing capacity of Synthetic Organic Chemicals by M/s DBS CHEMICALS at Plot no. 285, 286/4, 287, at Sanghvi, Shirwal - 412801 Off Pune - Bangalore Highway (NH4), Dist: Satara, Maharashtra [IA/MH/IND2/59417/2016, J- 11011/336/2016-IA.II(I)]**

The project proponent gave a detailed presentation on the salient features of the project and informed that:

- (i) M/s DBS CHEMICALS has proposed for Expansion in manufacturing capacity of Synthetic Organic Chemicals at Plot no. 285, 286/4, 287, at Sanghvi, Shirwal - 412801 Off Pune - Bangalore Highway (NH4), Dist: Satara, Maharashtra.

- (ii) All Synthetic organic chemicals industry projects (Bulk drugs and intermediates excluding drug formulations), located outside the notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- (iii) DBS Chemicals is engaged in the manufacture of Dyes Intermediates and has been in operation since 1992 which was prior to EIA notification 1994 & 2006. The project did not attract environmental clearance at that time, however consent to operate was taken from MPCB and the same was renewed time to time. PP has obtained Consent to Establish from MPCB dated 29.06.2016 for production of 72 MT/M of PAAB, 120 MT/M of OAAT & 5 MT/M of yellow dye which is valid till 29.06.2021.
- (iv) The proposed expansion will be carried out in existing premises of industry having total area of 8830 m<sup>2</sup>.
- (v) It is reported that no national park, wildlife sanctuary, Biosphere reserve lies within 10 Km radius of project site. Nira river is flowing at a distance of 3.5 Km from the project site.
- (vi) The proposed products and quantities for expansion are as below:-

S.No	Product Name	Existing capacity (MTPM)	Proposed capacity (MTPM)
1	Para Amino Azo Benzene (PAAB)	8	80
2	Ortho Amino Azo Toluene (OAAT)	-	120
3	Yellow Dye (Methylene yellow-N)	-	5

- (vii) 1 wood fired boiler of capacity 1TPH is provided with wet scrubber followed by stack of height 30 m will be used. DG set of capacity 125 KVA will also be used.
- (viii) Total water requirement for the existing project is 6 KLD and for the proposed expansion is 24 m<sup>3</sup>/day, out of which fresh water requirement of 3.8 m<sup>3</sup>/day will be sourced from Grampanchayat & Well water (Existing).
- (ix) Existing and proposed ETP capacity is 11KLD and 25 KLD respectively. Domestic waste water, Process effluent & waste from Floor washing will be sent to ETP followed by evaporator.
- (x) Chemical sludge from ETP will be sent to CHWTSDF site. Used oil, Process waste residue & spent solvent will be sent to authorised recyclers.
- (xi) During presentation the PP requested to exempt the Public hearing and

submit the document w.r.t. Notified Industrial estate but committee review the document and found that document is not acceptable.

After detailed deliberations, the Committee prescribed the following Specific and Additional TOR in addition to Generic TOR provided at Annexure-I ( refer Ministry's web site) for preparation of EIA-EMP report:

**A. Specific TOR:**

1. Details on solvents to be used, measures for solvent recovery and for emissions control.
2. Details of process emissions from the proposed unit and its arrangement to control.
3. Ambient air quality data should include VOC, other process-specific pollutants\* like NH<sub>3</sub>\*, chlorine\*, HCl\*, HBr\*, H<sub>2</sub>S\*, HF\*, *etc.*, (\* - as applicable)
4. Work zone monitoring arrangements for hazardous chemicals.
5. Detailed effluent treatment scheme including segregation of effluent streams for units adopting 'Zero' liquid discharge.
6. Action plan for odour control to be submitted.
7. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they co-process organic solid/hazardous waste generated.
8. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
9. Action plan for utilization of MEE/dryers salts.
10. Material Safety Data Sheet for all the Chemicals are being used/will be used.
11. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
12. Details of incinerator if to be installed.
13. Risk assessment for storage and handling of hazardous chemicals/solvents. Action plan for handling & safety system to be incorporated.
14. Arrangements for ensuring health and safety of workers engaged in handling of toxic materials.

**B. Additional TOR**

- i. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- ii. Zero Liquid Discharge plan to be submitted.
- iii. Revised layout plan to be submitted in which green belt of 10m width

- around the periphery.  
iv. No ground water will be used.

It was recommended that 'TORs' along with Public Hearing prescribed by the Reconstituted Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

17.8.6 **Expansion of Manufacturing of Bulk Drug & Intermediate (from 12.85 MTM to 34.868 MTPM) at Gut No. 204, Nashik - Mumbai highway, A/p - Vadivarhe, Taluka Igatpuri, District Nashik, Maharashtra by M/s Vadivarhe Speciality Chemicals Ltd. {J-11011/123/2016- IA II(I) IA/MH/IND2/52374/2016}**

The project proponent gave a detailed presentation on the salient features of the project and informed that:

- (i) M/s Vadivarhe Speciality Chemicals Ltd has proposed for Expansion of Manufacturing of Bulk Drug & Intermediate (from 12.85 MTM to 34.868 MTPM) at Gut No. 204, Nashik - Mumbai highway, A/p - Vadivarhe, Taluka Igatpuri, District Nashik, Maharashtra.
- (ii) All Synthetic organic chemicals industry projects (Bulk drugs and intermediates excluding drug formulations), located outside the notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- (iii) Total area of the project is 12500 m<sup>2</sup>.
- (iv) Total project cost is Rs 22 crore.
- (v) Total water requirement after the proposed expansion will be 54.41 m<sup>3</sup>/day which will be met from tankers/borewell.
- (vi) Total effluent generation after expansion will be 24.71 KLD which after treatment in ETP will be recycled.
- (vii) Total power requirement of 350 KV will be met from MSEB. DG Set of capacity 250 KVA will be used as stand by.
- (viii) 1 Existing diesel fired boiler of capacity 850 Kg/hr followed by stack of height 20 m will be used.
- (ix) Distillation residue, waste residue, Spent solvent, ETP sludge will be sent to TSDF site.

After detailed deliberations, the Committee prescribed the following Specific and Additional TOR in addition to Generic TOR provided at Annexure-I (refer Ministry's web site) for preparation of EIA-EMP report:

**A. Specific TOR:**

1. Details on solvents to be used, measures for solvent recovery and for

emissions control.

2. Details of process emissions from the proposed unit and its arrangement to control.
3. Ambient air quality data should include VOC, other process-specific pollutants\* like NH<sub>3</sub>\*, chlorine\*, HCl\*, HBr\*, H<sub>2</sub>S\*, HF\*, etc., (\* - as applicable)
4. Work zone monitoring arrangements for hazardous chemicals.
5. Detailed effluent treatment scheme including segregation of effluent streams for units adopting 'Zero' liquid discharge.
6. Action plan for odour control to be submitted.
7. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they co-process organic solid/hazardous waste generated.
8. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
9. Action plan for utilization of MEE/dryers salts.
10. Material Safety Data Sheet for all the Chemicals are being used/will be used.
11. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
12. Details of incinerator if to be installed.
13. Risk assessment for storage and handling of hazardous chemicals/solvents. Action plan for handling & safety system to be incorporated.
14. Arrangements for ensuring health and safety of workers engaged in handling of toxic materials.

**B. Additional TOR**

- i. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- ii. Green belt 10m wide around the periphery.
- iii. ZLD plan to be submitted.

It was recommended that 'TORs' along with Public Hearing prescribed by the Reconstituted Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

17.8.7

**PROPOSED DISTILLERY UNIT by M/s. Agasti Sahakari Sakhar Karkhana Ltd., A/p Agastinagar, Tal. Akole, Dist. Ahmednagar,422 601Maharashtra. [IA/MH/IND2/59752 /2016, J- 11011/329/2016-IA.II(I)]**

The project proponent gave a detailed presentation on the salient features of the project and informed that:

- (i) M/s Agasti Sahakari Sakhar Karkhana Ltd has proposed for Distillery unit at Agastinagar Tal Akolre Dist Ahmednagar 422 601 Maharashtra Expansion of DISTILLERY at Shri Harisinhji Mahida Bhavan, At & Po: Vataria, TaL: Valia, Dist: Bharuch, Gujarat-393001.
- (ii) All molasses based distillery are listed at S.No. 5(g) (i) under category 'A' and appraised at central level.
- (iii) The proposed products and quantities for expansion are as below: -

S.No	Products	Existing	Proposed
1	Distillery	-	30 KLPD
2	Sugar	2500 TCD	-

- (iv) Total existing site area is 52.21 Ha out of which ,6 Ha area will be used for distillery project. 2 Ha area will be used for the developement of green belt.
- (v) Total cost for the project is Rs 49.88 crores.
- (vi) It is reported that no National Park, Wildlife sanctuary,reserved forest/protected forest lies within 10 Km radius of project site. Pravara river is flowing at a distance of 4 km away from project site
- (vii) Power requirement is 1000 KW/day which will be met from govt. Electricity board and own generation. 1existing DG set of capacity 320 KVA and 1 additional DG Set of capacity 75 KVA will be used as stand by..
- (viii) 2 No. of existing boilers having capacity 32 TPH in sugar unit and 1 additional boiler of capacity 10 TPH will be used.
- (ix) Water requirement is 400 KLD which will be met from Pravara river.
- (x) Spent wash will be sent to anaerobic digester followed by MEE followed by composting.
- (xi) Lubricating oil drum and spent oil will be sent to Authorized recycler.

After detailed deliberations, the Committee prescribed the following Specific and Additional TOR in addition to Generic TOR provided at Annexure-I ( refer Ministry's website) for preparation of EIA-EMP report:

**A. Specific TOR**

1. List of existing distillery units in the study area along with their capacity and sourcing of raw material.
2. Number of working days of the distillery unit.
3. Details of raw materials such as molasses and their source with availability.
4. Details of the use of steam from the boiler.
5. Surface and Ground water quality around proposed spent wash storage

	<p>lagoon, and compost yard.</p> <ol style="list-style-type: none"> <li>6. Commitment for spent wash generation within 6-8 KL/KL of alcohol produced.</li> <li>7. Proposed effluent treatment system for molasses distillery (spent wash, spent lees, condensate and utilities) as well as domestic sewage and scheme for achieving zero effluent discharge (ZLD).</li> <li>8. Proposed action to restrict fresh water consumption within 10 KL/KL of alcohol production.</li> <li>9. Details about capacity of spent wash holding tank, material used, design consideration. No. of peizometers to be proposed around spent wash holding tank and composting yard.</li> <li>10. Action plan to control ground water pollution.</li> <li>11. Details of solid waste management including management of boiler ash, yeast, etc. Details of incinerated spent wash ash generation and its disposal.</li> <li>12. Details of bio-composting yard.</li> <li>13. Action plan to control odour pollution.</li> <li>14. Arrangements for installation of continuous online monitoring system (24x7 monitoring device).</li> </ol> <p><b>B. Additional TOR</b></p> <ol style="list-style-type: none"> <li>i. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.</li> <li>ii. Green belt 10m wide around the periphery</li> </ol> <p>It was recommended that 'TORs' along with Public Hearing prescribed by the Reconstituted Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.</p>
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## 17.9 Any other

17.9.1	<p><b>Drilling of 19 wells of exploratory/appraisal/development nature and setting up of production facilities at CB-ONN-2000/1 in Ahmedabad Block by M/s Gujarat State Petroleum Corporation Ltd.- [ IA/GJ/IND2/53032/2014, J-11011/ 96/2014-IA II (I)] - TOR Amendment</b></p> <p>This is repeated proposal. Proposal was already considered in 12<sup>th</sup> EAC meeting held during 23-24<sup>th</sup> August, 2016.</p>
17.9.2	<p><b>Expansion of Pesticide Manufacturing unit of M/s Ambay Lab. Ltd. At village Sotanala, Tehsil Behror, District Alwar, Rajasthan-</b></p>

**[IA/RJ/IND2/31273/2013, J-11011/296/2013] - TOR Amendment**

- i. Ministry had issued TOR to M/s Ambay Lab. Ltd., vide letter No.J-11011/296/2013-IA II (I) dated 11<sup>th</sup> December, 2014 for Expansion of Pesticide Manufacturing unit at village Sotanala, Tehsil Behror, District Alwar, Rajasthan.
- ii. Now PP gave a presentation before the EAC and requested due to market requirement they want add following new products which are as follows:

Sr. No.	Name of Product (Existing)	Quantity (TAP)		
		Existing	Proposed	Total
1	2,4-D Sodium Salt	1040	2960	4000
2	2,4-D Acid	845	1155	2000
3	2,4-D Ethyl Ester	600	200	800
4	2,4-D Amine Salt	600	2400	3000
Sr. No.	Name of Product (New)	Quantity (MTPA)		
		Existing	Proposed	Total
1	ClodinofofPropargyl Chloride	0	50	50
2	Hexaconzole	0	250	250
3	Atrazine	0	300	300
4	Buprofezin	0	100	100
5	Lambda Cyhalothrin	0	50	50
6	Cypermethrin	0	250	250
7	Alphamethrin	0	50	50
8	Deltamethrin	0	50	50
9	Cypermethrin Acid Chloride (CMAC)	0	1000	1000
10	Meta phenoxy Benzaldehyde (MPB)	0	720	720
11	Fipronil	0	200	200
12	Glyphosate	0	200	200

TOR Approved



13	TOR AMENDMENT	Glufosinate Ammonium	0	50	50
14		Metribuzin	0	50	50
15		Pendimethalin	0	150	150
16		Mancozeb	0	3600	3600
17		Azoxystrobin	0	50	50
18		Ziram	0	100	100
19		Thiram	0	100	100
20		Propineb	0	50	50
21		Ethion	0	50	50
22		Ethepon	0	50	50
23		Propargite	0	50	50
24		Imazethapyr	0	100	100
25		Propiconazole	0	100	100
26		Tebuconazole	0	100	100
27		Bispyribac Sodium	0	50	50
28		Metalaxyl	0	50	50
29		Carbendazim	0	50	50
30		Diafenaconazole	0	50	50
31		Quizalofop Ethyl	0	47	47
32		Acephate	0	98	98
33		R & D	0	5	5
<b>Total</b>			3085	14885	1797 0

The committee noted that the proposal was granted TOR in 11<sup>th</sup> December, 2014 vide F. No. J-11011/296/2013-IA.II (I). Now, the PP wants to add new product list. After detailed deliberations the committee noted that this will change the scope of the project; hence requires reassessment of environmental impacts of newly added chemicals in a comprehensive manner. The The PP need to conduct the fresh EIA with respect to new product list.

The committee recommended the aforesaid inclusion of new products. The specific and additional already recommended to the project would remain same.

17.9.3 **Proposed Distillery project (90 KLPD), Co-gen 35MW, Sugar 8000 TCD ha. at Sonavade -Bambavade, Tal - Shahuwadi, Dist. Kolhapur, Maharashtra by M/s athani Sugars Ltd. - [IA/MH/IND2/27170/2015, J-11011/85/2015-IA-II(I)]-TOR Amendment**

The PP did not attend the meeting. The EAC decided to defer the proposal.

17.9.4 **Proposed 200 KLPD Grain Based Distillery along with 5.0 MW Co-Generation Power Plant in West Bengal by M/s Ankoor Distilleries Private Ltd.-[IA/WB/IND2/50883/2016, J-11011/93/2016-IA-II(I)] - TOR Amendment**

- i. Ministry had issued TOR to M/s Ankoor Distilleries Private Ltd., vide letter No. J-11011/93/2016-IA II (I) dated 15<sup>th</sup> July, 2016 for Proposed 200 KLPD Grain Based Distillery along with 5.0 MW Co-Generation Power Plant in West Bengal.
- ii. Now PP gave a presentation before the EAC and requested due to difficulties in land procurement, registration formalities, the District Revenue Department suggested to shift the plot area by approx 1.5 km in West direction from the earlier site. The alternative land has been acquired and registration process is completed. PP has also submitted the new village name for new site i.e. Jorsha.
- iii. The slight change in proposed site is as follows:

S. No.	Particular	As per ToR Letter dated 15 <sup>th</sup> July, 2016	Proposed Amendment	Remark
1.	Village	Ghusra	Jorsha	--
2.	Plot/survey/Khasra	49, 79, 99, 100, 105 to 132, 134, 170 to 188, 488 to 491, 493 to 495, 501, 510, 512 to 530, 576 to 617, 637, 638, 2243	Teghori Mouja- 16, 18, 19, 21, 23, 25/ 1213, 28, 29/1225, 30, 32, 33,34, 35, 36, 37, 41, 42, 43, 46, 47, 48, 50, 51, 54, 56, 59, 61, 63, 65, 66, 71, 73, 73/1226, 75, 78, 80, 82/1272, 83,84, 88, 89, 93, 94, 97, 99, 100, 101, 107 & Joshu Mouja - 1, 913, 914, 915	--
3.	Coordinates			
	Latitude	23° 33' 52.33" N	23° 13' 58.42" N to 23° 34' 09.96" N	
	Longitude	87° 03' 37.29" E	87° 02' 14.15" E to 87° 02' 33.17" E	
4.	Area	7.28 hectares (18.0 acres)	7.28 hectares (18.0 acres)	<b>No change</b>
5.	Capacity	200 KLPD Distillery	200 KLPD Distillery & 5.0	<b>No</b>

			& 5.0 MW Co- Generation Power Plant	MW Co- Generation Power Plant	<b>Change</b>
<p>After detailed deliberations the committee recommended the aforesaid amendment in existing TOR. All the specific and additional TOR will remain same.</p>					

**29<sup>th</sup> Decemeber 2016 (Day 4)**

**17.10 Environmental Clearance**

**17.10.1 Project Proposal on 30 Development Wells, Group Collection Station and pipeline laying from Bhuratoli to Palatana in Tripura by M/s Oil and Natural Gas Corporation Ltd. [IA/TR/IND2/29940/2012, J-11011/234/2012-IAII(I) – Environmental Clearance.**

The PP made a presentation before the EAC and informed that the proposal was earlier recommended for grant of environmental clearance by the EAC (industry-2) in its 3<sup>rd</sup> meeting held during 18<sup>th</sup> -19<sup>th</sup> January 2016. The PP informed the EAC M/s ONGC had proposed to develop 30 wells across six gas fields – Boramura, Konaban, Agartala Extension Dome II, Manikynagar, Sundalbari and Gojalia in Tripura. A GCS and a pipeline (54.15 Km) connecting the GCS to ONGC Tripura Power Company, Palatana is to be constructed. Cost of drilling project is Rs. 639 Crore. Cost of GCS and pipeline laying is Rs. 119 crore. Proposed project is located in five districts of Tripura i.e. West Tripura District, Sepahijala District, Khowai District, south Tripura District and Gomati District. Depth of wells vary from 2500 – 3000 m. It was reported that a stretch of 3.9 Km of pipeline passes through forest. It was also reported that PCCF, Tripura Forest Dept. has issued clearance letter alongwith the map wherein proposed ONGC's location are far away from the ESZ. However, ESZ has not yet been notified. 9 wells + 50.1 km pipeline is not falling under forest land involving as well as no ESZ area. 10 wells are falling ESZ of WLS. One well fall under reserve forest. 10 wells are falling under reserve forest + unclassified Govt. forest land. 3.5 km pipeline passing through reserve forest.

The Member Secretary informed the EAC that the proposal is still pending due to non submission of stage-1 forest clearance involved in some well locations of the proposed project.

The PP thereafter requested the EAC to consider the proposal may be considered for grant of environmental clearance for following 9 wells (located in the non forest area) and GCS along with the pipeline out of 30 development wells.

<b>S. No.</b>	<b>Locations</b>	<b>Well</b>	<b>Latitude</b>	<b>Longitude</b>

<b>1</b>	Konaban	ROD I	23°42'0.62"	91°10'08.71"
<b>2</b>		RODM	23°42'39.29"	91°10' 45.05"
<b>3</b>		TRKN-16	23°41'42.00"	91°10'15.00"
<b>4</b>		TRKN-17	23°41'41.00"	91°10'49.60"
<b>5</b>		TRKN-18	23°42'12.00"	91°10'30.00"
<b>6</b>		TRKN-20	23°41'41.00"	91°10' 49.60"
<b>7</b>		TRKN-21	23°44'25.43"	91°10'17.75"
<b>8</b>	Manikyanagar	RODK	23°39'07.92"	91°11'36.69"
<b>9</b>	Sonamura	TRSN-1	23°31'05.44"	91°16'23.09"

After detailed deliberations, the Committee recommended that in view of importance of the proposal from country's oil production point of view the Ministry may consider the proposal for grant of environmental clearance for 9 wells (in the non forest area) and GCS along with the pipeline.

The EAC also recommended that specific conditions and other environmental conditions (other than those which are specific to the locations falling in forest areas) recommended in the 3<sup>rd</sup> EAC meeting held during 18<sup>th</sup> -19<sup>th</sup> January 2016 would remain same.

**17.10.2** Development drilling of one location BMDE at Baramurafield, Tripura by M/s ONGC J -11011/313/2012-IA II (I)- E

The Member Secretary informed the EAC that the proposal has been recommended for grant of environmental clearance in 16<sup>th</sup> EAC meeting held during 8<sup>th</sup> 9<sup>th</sup> December, 2016. The EAC decided not to consider the proposal.

**17.10.3** **Exploratory Drilling of 22 Wells (Onshore) in Ramanathapuram PML, Ramanathapuram District, Tamilnadu by M/s ONGC- Environmental Clearance [J-11011/207/2013-IA-II(I)]**

This Proposal was earlier considered in the 14<sup>th</sup> EAC meeting held during 26<sup>th</sup> - 27<sup>th</sup> October 2016. The Committee in the said meeting noted that the 4 wells are close to the coast line and the ONGC informed that these well fall outside the CRZ zone. However, relevant documents were not given by the PP. Therefore, after detailed deliberations, the Committee deferred the proposal for want of clarification/certification from Anna University w.r.t. of 4 wells not falling under CRZ zone.

The Member Secretary informed the EAC that the PP has submitted the

authenticated map of CRZ from the Anna University. The committee examined the MAP and noted that the 4 wells which are close to the coastline are outside the CRZ zone.

After detailed deliberations the EAC recommended the proposal for grant of Environmental Clearance subject to following specific conditions and other general conditions.

- i) Recommendations of Standing Committee of NBWL shall be obtained.
- ii) Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, CH<sub>4</sub>, HC, Non-methane HC etc.
- iii) Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.
- iv) Approach road shall be made pucca to minimize generation of suspended dust.
- v) The company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosure shall be provided to DG sets and proper stack height shall be provided as per CPCB guidelines.
- vi) Total water requirement shall not exceed 28 m<sup>3</sup>/day/well and prior permission should be obtained from the Competent Authority.
- vii) The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- viii) Drilling wastewater including drill cuttings wash water shall be collected in disposal pit lined with HDPE lining evaporated or treated and shall comply with the notified standards for on-shore disposal. The membership of common TSDF shall be obtained for the disposal of drill cuttings and hazardous waste. Otherwise, secured land fill shall be created at the site as per the design approved by the CPCB and obtain authorization from the SPCB. Copy of authorization or membership of TSDF shall be submitted to Ministry's Regional Office.
- ix) No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies.
- x) Produced water shall be treated in ETP. Treated produced water shall be disposed off as per CPCB/MoEF guidelines.

- xi) Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/ soak pit.
- xii) Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- xiii) The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30<sup>th</sup> August, 2005.
- xiv) The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- xv) The company shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self containing breathing apparatus.
- xvi) The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and its Regional Office at Bhopal.
- xvii) Blow Out Preventor (BOP) system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.
- xviii) Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.
- xix) The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.
- xx) All the commitments made to the public during public hearing/public consultation meeting held on 13<sup>th</sup> February, 2015 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.

	<p>xxi) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing Issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.</p> <p>xxii) Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.</p> <p>xxiii) Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office.</p> <p>xxiv) Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.</p> <p>xxv) An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to the Ministry's Regional Office.</p> <p>xxvi) Company shall have own Environment Management Cell having qualified persons with proper background.</p> <p>xxvii) Company shall prepare operating manual in respect of all activities. It shall cover all safety &amp; environment related issues and system. Measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.</p> <p>xxviii) On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.</p>
17.10.4	<p><b>Manufacturing of Crop Chemical Production at Plot No: C1-76/523, 77/524, 78/525, 65/551, 66/550, 100 Shed Area, GIDC Notified Industrial Area, Vapi, Dist: Valsad, Gujarat by M/s Netmatrix Crop Care Limited - Environment Clearance [IA/GJ/IND2/35671/2015, J-11011/11/2016-IA II (I)].</b></p> <p>The project proponent and the accredited consultant M/s Eco Chem Sales &amp; Services, Surat gave a detailed presentation on the salient features of the project and informed that:</p> <p>i. Draft Terms of References (TORs) was awarded in the 4<sup>th</sup> EAC(Industry) meeting held during 11<sup>th</sup> – 12<sup>th</sup> February, 2016 for preparation of EIA-EMP report. The TOR letter was issued vide Ministry's letter dated 31<sup>st</sup> March, 2016.</p>

- ii. All Pesticides industry and pesticide specific intermediates (excluding formulations) units producing technical grade pesticides are listed at Sl.No. 5(b) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. Public hearing was exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate.
- iv. The existing unit was established in the year 1984 in the name of Ankoor Agro Chem Limited. In the year 2005 M/s Ankoor Agro Chem Limited has obtained EC from MoEF, New Delhi for the expansion of Chlorpyrifos with capacity of 83.34 TPM vide No. J-11011/145/2003-IA.II (I) dated 23.6.2005. In the year 2009 M/s Netmatrix limited has purchased M/s Ankoor Agro Chemicals limited with entire plots and machineries and continued production of Chlorpyrifos with capacity of 93.34 TPM and also purchased adjoining Plot No. C1-76.66. In the year of 2014, name of the company has been changed from M/s Netmatrix Limited to M/s Netmatrix Crop Care Limited.
- v. The project involves manufacturing of crop chemical production at Plot No: C1-76/523, 77/524, 78/525, 65/551, 66/550, 100 Shed Area, GIDC Notified Industrial Area, Vapi, Dist: Valsad, Gujarat by M/s Netmatrix Crop Care Limited. The following products will be manufactured :

Sr. No.	Product	Capacity(MTPM)	
		Existing	Total after expansion
1	Chlorpyrifos Or PritlaChlor (2-Chloro-N-(2,6-Di ethyl phenyl)-N-(2-Propoxy Ethyl) Acetamide Or TBEE-Trichlopyr Butoxy Ethyl Ester	93.3 Or 0 Or 0	450
2	DDVP (2,2 Di Chloro Vinyl Di Chloro Methyl phosphate)	0	390
	<b>Total</b>	<b>93.3</b>	<b>840</b>

- vi. Proposed project will utilize the existing land. No additional land shall be procured by the industry for proposed expansion. The total water requirement after the proposed expansion is 145.21 KLD (Domestic- 8KLD, Industrial- 137.21 KLD). The Electricity requirement of 1000 KVA will be sourced from DGVCL.
- vii. The details of fuel for existing and proposed project is as below:

Sr. No	Description	Type of Fuel	Quantity		
			Existing	Proposed	Total



1.	Boiler- 3TPH	Imported coal	290 kgs/hr	460 kgs/hr	750 kgs/hr
2.	Boiler- 2.8TPH	Natural Gas	-	400 SCM/hr	400 SCM/hr
3.	Thermic Fluid Heater (20 lacs kcal)	Imported Coal	-	100 kgs/hr	100 kgs/hr
4.	D.G Set (500 KVA)	HSD	90 lits/hr	-	90 lits/hr
5.	D.G Set (500 KVA)	HSD	-	90 lits/hr	90 lits/hr
6.	Incinerator (600 kgs/hr)	LDO/FO	-	200 kgs/hr	200 kgs/hr
7.	Hot air generator (29 lacs kcal)	Imported coal	-	628 kgs/hr	628 kgs/hr

**viii.** PP informed the Committee that ambient air quality monitoring was carried out at 8 locations during March – May 2016. The baseline data indicates the ranges of concentrations as:- PM<sub>10</sub> (74.9 – 98.4 µg/m<sup>3</sup>), PM<sub>2.5</sub> (30.8 – 52.5µg/m<sup>3</sup>), SO<sub>2</sub> (19.7 – 34.1 µg/m<sup>3</sup>) and NO<sub>x</sub> (24.5 – 37.0 µg/m<sup>3</sup>) respectively. The concentrations are within the NAAQS.

**ix.** The company is located in notified industrial area and contributed their contribution for the social welfare of surrounding villages through Vapi industries association. The company has their CSR policy that aims on Social welfare program based on local need.

**x.** The PP has also informed that an application has been submitted for name change.

After detailed deliberations, the committee has deferred the proposal for want of compliance report of the conditions of the existing EC certified by the Regional Office of Ministry. The EAC also recommended to the Ministry to consider the request of PP for name change.

17.10.5

**Proposed expansion of a molasses based Distillery Unit (60 KLPD to 100 KLPD) at post Kisanveer Nagar, Tehsil Wai, Dist: Satara Maharashtra by M/s Kisan Veer Satara Sahakari Sakhar Karkhana Ltd-[IA/MH/IND2/35354/2013, J -11011/211/2010-IA -II]- Environmental Clearance**

The project proponent has presented the salient features of the project and informed the following:-

- i. MoEF vide letter no. J-11011/211/2010-IA -II dated 29<sup>th</sup> June 2010 has issued TOR for the above mentioned project. The EAC (Industry) in its 10<sup>th</sup> meeting held on 31<sup>st</sup> July, 2013 has extended the validity of the TOR for one more year for preparation of EIA-EMP report.
- ii. The PP further informed that an application for extension of validity of TOR was made online on 21<sup>st</sup> December, 2015.
- iii. Rectified Spirit/Extra Neutral Alcohol, Spirit and Ethanol will be produced in the proposed unit.

- iv. EC for existing molasses based 60 KLPD Distillery unit was obtained vide EC Letter No. J-11011/496/2008 – IA II (I) dated 08.12.2008.
- v. The PP has proposed to expand existing 60 KLPD Unit to 100 KLPD Unit. Proposed expansion will be carried out in existing sugar mill premises of 432 Acre.
- vi. The capital cost for proposed expansion is ` 17 Crore
- vii. The proposed expansion will be carried out in existing premises of sugar industry having total area of 432 acres. The phase II will be adjacent to Phase I. Out of 432 acres, 10 acres earmarked for proposed expansion. The total water requirement for the proposed expansion (40 KLPD unit) is 720 m<sup>3</sup>/day and will be met from Krishna River, Farm Pond and left canal of Dhom Dam. The total water requirement for 100 KLPD distillery unit is 1685 m<sup>3</sup>/day. The basic raw material for the distillery will be Molasses. The Molasses for proposed expansion will be sourced from our sugar factory and nearby sugar factories. The Bagasse (40 TPD) and Biogas (1800 TPD) required for proposed expansion will be sourced from existing sugar Plant and Biomethanation Plant.
- viii. The manufacturing process involves three steps process namely molasses preparation, fermentation and distillation. The main gaseous emission from plant is emission from boiler only (PM, SO<sub>2</sub> and NO<sub>x</sub>) The CO<sub>2</sub> from fermentation will be scrubbed in water. The spent wash generation for the proposed expansion unit is 320 KLD. The spent wash generation for 100 KLD distillery unit is 800 KLD. The spent wash generation is 8 KL/KL of alcohol production. The yeast/fermented sludge; sludge from Biomethanation plant will be reused in compost making process. Boiler ash will be sold to Brick Manufacturing Unit.
- ix. The spent wash from proposed molasses based distillery will be treated in biomethanation process and evaporated in MEE and concentrated spent wash will be mixed with press mud generated from sugar unit for manufacturing organic manure to achieve 'Zero' discharge. Evaporator Condensate shall be treated and recycled/reused in process. No effluent shall be discharged outside the premises and 'Zero' discharge shall be maintained.
- x. All fire- fighting facilities as per OISD 117 norms will be provided in proposed expansion area.
- xi. During public hearing concerns were raised regarding water Pollution control measures, air Pollution Control measures. The KSSSKL has provided the multi cyclone to arrest the fly ash for distillery boiler stack. The spent wash from molasses based distillery shall be treated in biomethanation process and evaporated in MEE and concentrated spent wash will be mixed with press mud generated from sugar unit for manufacturing organic manure to achieve 'Zero' discharge.
- xii. Budgetary Provision made for Community Welfare is 1.35 Cr. CSR activity proposed are development of Village school and maintenance, Construction of Medical Centre, Training and development locals, Development of village roads, Provision of potable water for the nearby villages, Conducting cultural activities etc. 25 Lacs/annum shall be allocated for the recurring expenses of CSR.

The EAC noted that the EIA study has been carried out as per the TOR prescribed by EAC in its 10<sup>th</sup> meeting held on 31st July, 2013. The EAC after detailed deliberation and after examining the validity of TOR suggested the PP to submit the following:

1. The EAC was of the view that being an expansion project the Certified compliance report is the essential document to establish that all the conditions of the existing EC grant to the project vide letter no. J-11011/496/2008-IA.II (I) dated 08.12.2008. The EAC suggested the PP to submit the same at the earliest for further consideration of the proposal.
2. Name of Registered Brick Manufacturing Unit to be provided giving commitments for full use of fly ash to be provided by the proposed unit.
3. Layout plan of the plant be revised marking the Green belt of 10m wide around the periphery of the plant. Selection of trees will be done as per CPCB norms and after consultation with forest department.
4. Spent was will be treated through bio-methanation route followed by evaporation and composting.

The EAC has decided to defer the proposal till the receipt of desired information.

17.10.6

**Expansion of Synthetic Organic Chemicals Manufacturing Unit at Village Dothigudem, Mandal Pochampally, District Nalgonda, Andhra Pradesh by M/s SVR Laboratories Pvt. Ltd- Environmental Clearance [IA/TG/IND2/50585/2012, J-11011/7/2013-IA II (I)]**

The project proponent and the accredited consultant M/s TEAM Labs and Consultants, Hyderabad made a detailed presentation on the salient features of the project and informed the following:-

- i. Draft Terms of Reference (TOR) have been discussed and finalized during the 6<sup>th</sup> Expert Appraisal Committee (Industry) meeting held during 5<sup>th</sup>-7<sup>th</sup> March, 2013 for preparation of EIA/EMP report. The TOR was issued vide Ministry's letter dated 29<sup>th</sup> April, 2013. The validity of the TOR has been extended further period of one year vide Ministry's letter dated 24<sup>th</sup> June, 2016.
- ii. All Synthetic organic chemicals industry projects, located outside the notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. The project involves expansion of Synthetic Organic Chemicals Manufacturing Unit at Village Dothigudem, Mandal Pochampally, District Nalgonda, Andhra Pradesh by M/s SVR Laboratories Pvt. Ltd.
- iv. The existing products capacity is as follows

S.No	Name of the Product	Capacity	
		Kg/day	TPM
1	4 hydroxy carbonole (Stage -1	16.67	0.5

	intermediate of Carvidilol)		
2	2(2,4 Difluorophenyl)-1-(1H-1,2,4)- Trrizole-1-YL)-2,3 epoxy-propane methane) sulfonate(State 2 intermediate of Fluconazole)	16.67	0.5
Total		33.34	1.0

v. The proposed product capacity is as below:

S.No	Name of the Product	CAS No.	Capacity	
			Kg/Day	TPM
I. Bulk drugs				
1	Acyclovir	59277-89-3	130	3.9
2	Atorvastatin Calcium	134523-03-8	150	4.5
3	Capecitabine	154361-50-9	50	1.5
4	CBZ-L-Valine	158257-41-1	100	3
5	Cevimeline Hydrochloride	107220-28-0	70	2.1
6	Clofarabine	123318-82-1	40	1.2
7	Eprsartan Mesylate	144143-96-4	50	1.5
8	Felbamate	106817-52-1	160	4.8
9	Gemcitabine Hydrochloride	122111-03-9	100	3
10	Levofloxacin	100986-85-4	60	1.8
11	Lopinavir	192725-17-0	125	3.75
12	Losartan Potassium	124750-99-8	300	9
13	Methyl 1,2,4-tri-O-catyl-3-O- benzyl-L-idopyranuronate (SDP)		40	1.2
14	Methyl 2,3-di-O-benzyl-4-O- chloro acetyl- b-D- glucopyranuronate (MKM)		50	1.5
15	Methyl 6- O-acetyl-3-O-benzyl- 2-(benzyl oxyarbonyl) amino - 2- deoxy-a - D-glucopyranoside (MVR)		180	5.4
16	Moxifloxacin Hydrochloride	186826-86-8	70	2.1
17	Pantoprazole Sodium	164579-32-2	333.33	10
18	Pregabalin	148553-50-8	300	9
19	Ritonavir	155213-67-5	100	3
20	Rizatriptan Benzoate	145202-66-0	70	2.1
21	Rosuvastatin Clacium	147098-20-2	100	3
22	Saxagliptin monohydrate	709031-78-7	70	2.1
23	Tenofovir Disoproxil	201341-05-1	100	3
24	Valacyclovir Hydrochloride	124832-27-5	180	5.4
25	Valsartan	137862-53-4	130	3.9
26	Zileuton	111406-87-2	100	3
27	1,6-anhydro-2-azido-2-deoxy- b-D-		50	1.5

	glucopyranuronate (DHA)			
28	3-O-acetyl-1,6-anhydro-2-azido-2-deoxy-D-glucopyranuronate (DRV)		60	1.8
Total- I: Worst Case 8 Products on Campaign basis.			1733.33	52
II. Intermediates				
1	( )-3-(Carbamoylmethyl)-5-methyl hexanoic acid		100	3
2	2- chloromethyl-3,4-dimethoxy pyridine Hydrochloride(Pantoprazole Chloro compound)	72830-09-2	333.33	10
Total – II			433.33	13
Grand Total (I + II)			2166.66	65

vi. The details of By-Products after the proposed expansion is as below:

S.No	Name of the Product	Stage	Name of the By-Product	Capacity	
				Kg/day	TPM
1	Acyclovir	II	Potassium Chloride	128.2	3.8
		IV	Sodium Acetate	75.8	2.3
2	Atorvastatin Calcium	I	Sodium Acetate	38.7	1.2
3	Capecitabine	III	Triethylamine HCl	21.7	0.7
4	Clofarabine	I	Triethylamine HCl	47.4	1.4
5	Gemcitabine Hydrochloride	II	Triethylamine HBr	107.5	3.2
		III	Pyridine HCl	115.2	3.5
		V	Triethylamine HCl	53.6	1.6
6	Losartan Potassium	III	Triethylamine	69.7	2.1
7	Methyl 1,2,4-tri-O-cetyl-3-O-benzyl-L-idopyranuronate (SDP)	IV	Trityl Alcohol	28.9	0.9
8	Methyl 2,3-di-O-benzyl-4-O-chloro acetyl- b-D-glucopyranuronate (MKM)	V	Trityl Alcohol	34.5	1.0
9	Methyl 6- O-acetyl-3-O-benzyl-2-(benzyl oxyarbonyl)amino - 2-deoxy-a - D-glucopyranoside (MVR)	III	Triethylamine HCl	107.8	3.2
10	Pregabalin	I	R-(+)-	120.2	3.6

			phenylethylamine		
11	Tenofovir Disoproxil	VI	Triethylamine HCl	53	1.6
12	Valsartan	II	Triethylamine HCl	58.5	1.8
		III	Triethylamine HCl	47.8	1.4
13	1,6-anhydro-2-azido-2-deoxy-b-D-glucopyranuronate (DHA)	I	Triethylamine HCl	264.4	7.9
14	3-O-acetyl-1,6-anhydro-2-azido-2-deoxy-D-glucopyranuronate (DRV)	I	Triethylamine HCl	77.6	2.3
15	2- chloromethyl-3,4-dimethoxy pyridine Hydrochloride (Pantoprazole Chloro compound)	I	Potassium Sulphate	150.1	4.5

vii. SVR Laboratories Pvt. Ltd., was established in 2004 under the name of Painoori Chemical Industries vide letter no. NLG-127/PCB/ZO/RCP/CFE/2004-076 dt. 25.10.2004 and accordingly obtained amendment to CFE under the name of SVR Laboratories Pvt. Ltd., vide letter no. NLG-127/PCB/ZO/RCP/2005-98 dt. 16.05.2005 and involved in manufacturing of API intermediates. The API Intermediate manufacturing does not require environmental clearance vide EIA notification S.O. 60 (E) 1994. The unit obtained Consent for operation vide letter no. TSPCB/RCP/NLG/HO/CFO/2016-559 dated 28.05.2016 valid till 31.03.2017.

viii. The PP proposed to expand manufacturing capacity in an area of 6 acres by acquiring addition land of 4 acres in addition to existing 2 acres. Land allocated for green belt is 2 acres.

ix. The total water requirement after expansion is in the order of 130 KLD consisting of 75.1KLD fresh water and 55KLD of recycled water.

x. The total power requirement will be met from TSPDCL and back up DG sets of capacity 2 x 1000 KVA proposed in addition to existing 1 x 250 KVA.

xi. Coal will be used as fuel for proposed 1 x 5 TPH and 1 x 4 TPH boilers and existing 1 x 1 TPH coal fired boiler. The required steam for process and ZLD system shall be drawn from proposed 5 TPH boiler while existing 1 TPH and proposed 4 TPH and boilers shall be kept as standby. It is proposed to provide a thermic fluid heater with a capacity of 4 lakh k.cal, as part of expansion. Consumption of coal is 25 TPD.

- xii. The total fresh water requirement after expansion is 130.1 KLD consisting of 75.1 KLD fresh water and 55 KLD of recycled water. The required water is drawn from bore-wells within the site. The effluents generated are from process, utilities, scrubbers and domestic usage. These effluents are segregated as low TDS and high TDS effluents. The quantity of effluents is 56 KLD. These effluents are sent to effluent treatment system based on Zero liquid discharge principle. The treated effluents are reused for cooling tower and boiler make up. Thus fresh water requirement is reduced by 55 KLD.
- xiii. The zero liquid discharge system consists of treating high COD/TDS stream in a stripper followed by multiple effect evaporator (MEE), and agitated thin film dryer (ATFD). The condensate from stripper is sent to cement plants for co-incineration, while the condensate from MEE and ATFD is mixed with low TDS/COD effluents to be treated in biological system. The salts from ATFD are sent to TSDF for disposal. The treated wastewater is subjected to tertiary treatment in an Industrial reverse osmosis (RO) plant. The permeate from the RO is reused for cooling tower and boiler make up, while the reject is sent to MEE.
- xiv. The Capital cost of the project is Rs 9 crores for proposed expansion.
- xi. PP informed the Committee that ambient air quality monitoring was carried out at 8 locations during March to June, 2014. The baseline data indicates the ranges of concentrations as:- PM<sub>10</sub> (38-49µg/m<sup>3</sup>), PM<sub>2.5</sub> (14-18 µg/m<sup>3</sup>), SO<sub>2</sub> (9-12 µg/m<sup>3</sup>) and NO<sub>x</sub> (11-14µg/m<sup>3</sup>) respectively. The concentrations are within the NAAQS.
- xii. Public hearing for the proposed expansion was conducted on 27.08.2016 at the project site. The major issue raised is provision of employment to locals, and participation in local development activities apart from implementation of effective pollution control measures.
- xiii. The budget allocated for funding corporate social responsibility (CSR) activity is ` 40 lakhs or 5% of the capital cost to be spent during the first 5 years of the project implementation.

The EAC has deliberated on the proposal and noted that

- (i) PP has not provided adequate green belt for the proposed plant. PP need to submit a revised layout plan with 10 metre width green belt development in the peripheral from the boundary of the project
- (ii) EAC desired that PP may plant 10,000 plants in the nearby village.
- (iii) Fresh water requirement will be 50 m/day
- (iv) Cyclone separator followed by bag filter will be provided to boiler and thermic floor heater.
- (v) PP need to submit the letter of commitment for full utilization of Fly ash to be produced by the proposed project by the Registered Brick Manufacturing Unit.

EAC has decided to defer the proposal till the submission of above information/documents.

17.10.7

**Proposed Expansion in Existing Production Capacity and Addition of New Products at Plot No: 5, 6, 29, 30, 33, 34, 35, 37, 38, 80, 81, 84, 85 & 91, Survey No: 274,275 & 276, At & Post: Atul – 396 020, Dist: Valsad, Gujarat by M/s Atul Limited. [ IA/GJ/IND2/57601/2015, J -11011/108/2015-IA – II] -Environmental Clearance**

The project proponent and the accredited consultants M/s Eco Chem Sales & Services, Surat and M/s Kadam Environmental Consultants, Vadodara made a detailed presentation on the salient features of the project and informed the following:-

- i. Draft Terms of Reference (TOR) have been discussed and finalized during the 40<sup>th</sup> Expert Appraisal Committee (Industry) meeting held during 18-19<sup>th</sup> May, 2015 for preparation of EIA/EMP report. The TOR was issued vide Ministry's letter dated 3<sup>rd</sup> July, 2015.
- ii. All Synthetic organic chemicals industry projects, located outside the notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. The PP has earlier obtained Environmental Clearance (EC) from the Ministry for the unit vide letter no. F. No. J-11011/85/2009-IA.II(I) dated 13.05.2009.
- iv. The project involves Expansion of existing chemical manufacturing complex in Production Capacity and Addition of New Products at Plot No: 5, 6, 29, 30, 33, 34, 35, 37, 38, 80, 81, 84, 85 & 91, Survey No: 274,275 & 276, At & Post: Atul – 396 020, Dist: Valsad, Gujarat by M/s ATUL LIMITED.
- v. The list of existing & proposed products are as below:

Sr. No.	Product	Capacity (TPM)		
		Existing	Proposed	Total
1.	Dyes	1,300.80	583.33	1,884.13
2.	Chloro – Alkali Industry	3,400.00	4,100.00	7,500.00
3.	Pesticide Technical	2,644.07	261.64	2,905.71
4.	Bulk Drugs & Pharmaceuticals	350.60	0.00	350.60
5.	Resin	2,990.90	441.67	3,432.57
6.	Other Chemicals	20,551.60	651.00	21,202.60
7.	Flavors & Fragrances	0.00	733.32	733.32
<b>Total</b>		<b>31,237.96</b>	<b>6,770.95</b>	<b>38,008.91</b>



Sr.No	Product	Capacity (TPM)		
		Existing	Proposed	Total
1.	Dyes	1,300.80	583.33	1,884.13
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5.	Resin	2,990.90	441.67	3,432.57
6.	Other Chemicals	20,551.60	651.00	21,202.60
7.	Flavors & Fragrances	0.00	733.32	733.32
<b>Total</b>		31,237.96	6,770.95	38,008.91

- vi. The proposed expansion shall be developed within existing premises. New equipment and utilities required for proposed expansion will be set up in the existing process plant area. Hence, no additional spare land will be required for proposed expansion.
- vii. The additional water requirement for proposed expansion will be fulfilled by existing source i.e. Par River during the construction as well as operation phase (Existing: 22,569 KL/day, Proposed: 5,788.70KL/day, Total: 28,357.70 KL/day). Ground water is not being extracted for the existing operation nor it will be extracted for proposed expansion. The unit has already obtained permission from irrigation department, which accommodates additional water requirement for proposed expansion.
- viii. The Power requirement of 56 MW will be met from Co-Gen. CPP. D. G. Set - 3100 KVA & 1500 KVA will be used in case of any emergency and/or power failure only. 10.00 MVA DGVCL grid power as standby for initial startup of power plant. It is proposed to use following fuels (i) Indian Coal and/or Imported Coal and/or Lignite - 36,925 MT/Month; (ii) Diesel oil: 340 lit/hr for 3100 KVA & 300 lit/hr for 1500 KVA; (iii) Natural Gas: 1,98,000 m<sup>3</sup>/month; (iv) Furnace Oil: 1,100 KL/Month.
- ix. Existing power and fuel are sufficient for the proposed expansion project and hence no additional power and fuel shall be required for the proposed expansion project.
- x. The project cost for the proposed expansion is Rs. 265.00 Crores.
- xiv. PP informed the Committee that ambient air quality monitoring was carried out at 8 locations during October- December, 2015. The

	<p>baseline data indicates the ranges of concentrations as:- PM<sub>10</sub> (70.2 – 101.0 µg/m<sup>3</sup>), PM<sub>2.5</sub> (30.2 – 47.4 µg/m<sup>3</sup>), SO<sub>2</sub> (16.3 to 25.3 µg/m<sup>3</sup>) and NO<sub>x</sub> (20.2 - 31.4 µg/m<sup>3</sup>) respectively. The concentrations are within the NAAQS.</p> <p><b>xv.</b> The Public Hearing (PH) for the proposed expansion was conducted on 21/06/2016 by Gujarat Pollution Control Board (GPCB).</p> <p>xvi. Under the CSR plan, the proponent is committed to fostering sustainable socio-economic upliftment in the lives of the under privileged through relevant interventions mainly through six programs namely: education, empowerment, health, relief, conservation and infrastructure.</p> <p>xvii. For the past year 2014-2015, the proponent had allocated a budget of Rs. 3.94 crores for CSR activities and spent the same for education, empowerment, health, relief, conservation and infrastructure activities.</p> <p>The EAC noted that site visit was done by the Regional Office, Chandigarh on dated 09.05.2016. The site visit report forwarded by the regional office, Chandigarh vide letter 3-7/90/RO (NZ)/1021 dated 29.09.2016 shows that there are 21 being complied points and 16 points are not complied. The committee was of the view that the compliance report provide by the regional office, Chandigarh was not satisfactory. The EAC suggested the PP to submit the latest certified compliance report of the Regional office, Chandigarh. The committee also recommended to the ministry to take up the matter with RO, Chandigarh in this regard.</p> <p>EAC has decided to defer the proposal till the submission of above information/documents.</p>
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### 17.11 Terms of Reference (TOR)

17.11.1	<p><b>Proposal for manufacturing of Formaldehyde (37%), Phenol Formaldehyde Resin, Melamine Formaldehyde Resin &amp; Urea Formaldehyde Resin as well as Laminated Sheets at Survey No.: 1458, Village: Panshina, Taluka: Limbdi, District: Surendranagar, Gujarat M/s N N Polymers [IA/GJ/IND2 /60441/2016, J-11011/337/2016-IA.II(I)]- Terms of Reference (TOR).</b></p> <p>The project proponent gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. The PP has informed the following:-</p> <p>i. The proposal is for manufacturing of Formaldehyde (37%), Phenol Formaldehyde Resin, Melamine Formaldehyde Resin &amp; Urea Formaldehyde Resin as well as Laminated Sheets at Survey No.: 1458, Village: Panshina, Taluka: Limbdi, District: Surendranagar, Gujarat</p>
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M/s. NN Polymers.

- ii. All Synthetic organic chemicals industry projects, located outside the notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. The proposed unit will be set-up on 17,705 m<sup>2</sup> of an open land area.
- iv. The estimated cost of the proposed project is 11 Crores. Total budget allocation towards Environmental Management Facilities will be Rs. 75 Lakhs. Total 90 persons will be employed including skilled persons, unskilled persons and office staff.
- v. It is reported that no protected area/eco-sensitive area are located within 10 km area of the project site.
- vi. Bhogavo river is approx. 2.2 km away in SW direction from project site. Narmada canal is 1.2 km away in South direction from project site.
- vii. Total consumption of water during the plant operation will be 285 kl/day.
- viii. Power requirement of 600 KVA will be met from Paschim Gujarat Vij Corporation Ltd.
- ix. The PP proposed to manufacture the following products:

<b>Sr. No.</b>	<b>Name of Product(s)</b>	<b>Proposed Production Capacity</b>
<b>1</b>	Melamine Formaldehyde Resin	300 MT/Month
<b>2</b>	Phenol Formaldehyde Resin	300 MT/Month
<b>3</b>	Urea Formaldehyde Resin	300 MT/Month
<b>4</b>	Laminated Sheets	1,50,000 Nos./Month

- x. The company planned to carry out CSR activities in the area of education and related support activities for down trodden children, greenbelt development, employment for nearby villagers and village level funding support activities.

The Committee examined the project details and observed that in the PFR the PP has proposed to produce formaldehyde (3000 MT/Month) also; however, During the presentation, the PP informed the EAC that the proposed unit will manufacture only Resin not formaldehyde. It was informed that the PP will import the formaldehyde. The Committee suggested the PP to submit revised Form-1 updating the PFR.

After detailed deliberations, the Committee prescribed the following Specific and Additional TOR in addition to Generic TOR provided at Annexure (Refer Ministry's web site) along with public hearing for preparation of EIA-EMP report:

#### **A. Specific TOR**

1. Details on solvents to be used, measures for solvent recovery and for emissions control.
2. Details of process emissions from the proposed unit and its arrangement to control.
3. Ambient air quality data should include VOC, other process-specific pollutants\* like NH<sub>3</sub>\*, chlorine\*, HCl\*, HBr\*, H<sub>2</sub>S\*, HF\*, etc., (\* - as applicable)
4. Work zone monitoring arrangements for hazardous chemicals.
5. Detailed effluent treatment scheme including segregation of effluent streams for units adopting 'Zero' liquid discharge.
6. Action plan for odour control to be submitted.
7. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they co-process organic solid/hazardous waste generated.
8. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
9. Action plan for utilization of MEE/dryers salts.
10. Material Safety Data Sheet for all the Chemicals are being used/will be used.
11. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
12. Details of incinerator if to be installed.
13. Risk assessment for storage and handling of hazardous chemicals/solvents. Action plan for handling & safety system to be incorporated.
14. Arrangements for ensuring health and safety of workers engaged in handling of toxic materials.

#### **B. Additional TOR**

- i. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- ii. Zero Liquid Discharge system to be adopted.
- iii. Revised layout in which Green belt to be developed for 10 m width around the periphery of the boundary with Neem, Sesam, Teak Trees.
- iv. Briquets shall be used as a fuel source.
- v. Source of water shall be clearly mentioned and approval from concerned authority shall be obtained prior to submission for EC. Possibility for reduction of fresh water use to be explored and proper justification for existing water requirement to be

mentioned in the EIA/EMP report.

It was recommended that TOR along with Public Hearing prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

17.11.2

**Additional cogeneration unit Gas Turbine-IV at ONGC, Uran Plant, Uran, Raigad, Maharashtra by M/s ONGC Ltd. [IA/MH/IND2/60511/2016, J-11011/338/2016-IA.II(I)]- Terms of Reference (TOR).**

The project proponent gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. The PP has informed the following:-

- i. The project involves additional cogeneration unit Gas Turbine-IV at ONGC, Uran Plant, Uran, Raigad, Maharashtra by M/s ONGC Ltd.
- ii. All Offshore and onshore oil and gas exploration, development & production projects are listed at S.N. 1(b) under category 'A' and appraised at Central level by Expert Appraisal Committee.
- iii. It is reported that no forest area/protected area/eco-sensitive area are located within 10 km area of the project site.
- iv. The proposed project is located within existing complex, which is located in the industrial belt of Uran.
- v. The estimated cost for the proposed project is Rs 213.50 Cr.
- vi. At present the total fresh water requirement of existing Uran Complex is 17 MLD which is met through MIDC supply. Additional fresh water is not required.
- vii. The PP has proposed to install the following facilities in the unit
  - a) 1 no Gas Turbine Generator of 15- 20 MW capacity
  - b) 1 no Heat Recovery Steam Generator of 60 TPH capacity
  - c) De aerator & Boiler Feed Water system
  - d) Gas conditioning skid
  - e) A new building (G+2) for electrical panels, switch gears, etc.,
  - f) 22kV GIS at Co-gen substation
  - g) 22KV GIS at HBB substation
- viii. The above facilities proposed to be set up within the existing complex by creating space by dismantling old unserviceable existing facilities such

as Thermax Boiler and IAEC boiler shed. No additional land is proposed to be acquired. Above facilities shall be accommodated within the existing complex.

- ix. New facilities are coming up with in the existing complex.
- x. Ministry has earlier given EC for existing units (No. J-11011/635/2008-IA.II (I) dated 29.4.2009).
- xi. To reduce the emissions to environment to zero, Flare gas recovery unit 150000 m<sup>3</sup>/day and Tank vapor recovery unit 15,000 m<sup>3</sup>/day are installed. Flare gas recovery unit is registered for CDM with UNFCCC.
- xii. The effluent from our Effluent Treatment Plant are monitored regularly by MPCB by collecting samples and tested at their laboratories. Online monitoring systems are installed and is connected to CPCB/MPCB servers as per directives of CPCB.
- xiii. Ambient Air Quality is monitored at different locations regularly via Real Time Monitoring Stations (RTMs). The analysis of the air is within stipulated limits of National Ambient Air Quality Monitoring Standards (NAAQMS). Online monitoring system for Stack Monitoring Stations (SMSs) are installed and is connected to CPCB/MPCB servers as per directives of CPCB. ONGC Uran is life member of M/s MWML, Taloja, a TSDF facility for disposal of hazardous wastes.
- xiv. Plantation and green belt is maintained and upgraded regularly with in the unit and the surroundings.
- xv. All the above measures shall be integrated for new facilities as the facilities are coming up with in the complex. Lot of employment was generated for locals due to existing facilities and Uran area is flourished due to ONGC. There is no social resentment among the locals.
- xvi. MOEFCC has waived off public hearing and EIA while issuing Environmental clearance for setting of Additional process facilities such as LPG3, CFU3, GSU 3 and CHU4 facilities during the year 2009.
- xvii. All the new facilities shall be accommodated within the existing complex. No additional land shall be acquired for this purpose. The location of all proposed units has been reflected in the plot plan.
- xviii. Ambient air quality is well within permissible limits. Compliance Reports are being sent to ministry regularly.
- xix. There will not be any significant change in emission levels in surrounding areas.
- xx. Flora and fauna shall not be disturbed in the surrounding areas. However for one of the proposed facility i.e desalination project at Uran, EIA is carried out recently by M/s MECON.
- xxi. EMP is prepared by M/s MECON for one of the proposed facility i.e Desalination project at Uran. Same shall be incorporated with the existing environmental management plan of the Uran complex.

- xxii. Existing ETP can cater to proposed new facilities in terms of quantity & quality.
- xxiii. Proposed Desalination Plant (10MLD capacity) will reduce the consumption of fresh water being supplied by MIDC.
- xxiv. Risk assessment is carried out for the proposed facilities by our inhouse premier R&D institute IEOT and no risks are identified. Copy attached
- xxv. Disposal of solid waste is done through MoEF/MPCB approved agency.
- xxvi. Sarpanch and representatives of local panchayat visited site, after detailed discussions, issued a no objection certificate.
- xxvii. Western Central Zone, MOEFCC, Nagpur visited Uran plant on 19.05.2016 for site inspection and issued report on compliances earlier environment clearances. Action taken report against observations submitted to MOEFCC

Earlier EC issued vide No. J-11011/635/2008-IA.II (I) dated 29.4.2009 for setting up of additional process of facilities and debutanisation project at existing ONGC Uran Complex by M/s ONGC Ltd. exempting the public hearing under para 7 (ii) of the EIA Notification, 2006.

The committee noted that the proposed facilities "Additional cogeneration unit Gas Turbine-IV at ONGC, Uran Plant, Uran, Raigad by M/s ONGC Ltd." is also being located in the existing plant premise.

After detailed deliberations, the Committee prescribed the following Specific TOR in addition to Generic TOR provided at Annexure (Refer Ministry's web site) exempting the public hearing under para 7 (ii) of the EIA Notification, 2006, for preparation of EIA-EMP report:

**A. Specific TOR**

1. Executive summary of the project.
2. No. of exploratory wells for which environmental clearance is accorded and No. of new wells proposed during expansion. Status and No. of the wells which are completed and closed.
3. Project Description and Project Benefits;
4. Cost of project and period of completion.
5. Employment to be generated.
6. Distance from coast line.
7. Details of sensitive areas such as coral reef, marine water park, sanctuary

and any other eco-sensitive area.

8. Recommendation of SCZMA/CRZ clearance as per CRZ Notification dated 6<sup>th</sup> January, 2011 ( if applicable).
9. Details on support infrastructure and vessel in the study area.
10. Climatology and meteorology including wind speed, wave and currents, rainfall etc.
11. Details on establishment of baseline on the air quality of the areas immediately affected by the exploratory drilling and also particularly with reference to hydrogen sulphide, sulphur dioxide, NOx and background levels of hydrocarbons and VOCs.
12. Details on estimation and computation of air emissions (such as nitrogen oxides\*, sulphur oxides\*, carbon monoxide\*, hydrocarbons\*, VOCs\*, etc.) resulting from flaring, DG sets, combustion, etc. during all project phases
13. Base line data collection for surface water for one season leaving the monsoon season within 1 km for each exploratory wells, particularly in respect of oil content in the water sample and sediments sample.
14. Fisheries study w.r.t. benthos and marine organic material and coastal fisheries.
15. Source of fresh water. Detailed water balance, waste water generation and discharge.
16. Noise abatement measures and measures to minimize disturbance due to light and visual intrusions in case of project site closed to the coast.
17. Procedure for handling oily water discharges from deck washing, drainage systems, bilges etc.
18. Procedure for preventing spills and spill contingency plans.
19. Procedure for treatment and disposal of produced water.
20. Procedure for sewage treatment and disposal and also for kitchen waste disposal.
21. Details on solid waste management for drill cuttings, drilling mud and oil sludge, produced sand, radioactive materials, other hazardous materials, etc. including its handling and disposal options during all project phases.
22. Storage of chemicals on site.
23. Commitment for the use of water based mud (WBM) and synthetic oil based



	<p>mud in special case.</p> <p>24. Details of blowout preventer Installation.</p> <p>25. Risk assessment and mitigation measures including whether any independent reviews of well design, construction and proper cementing and casing practices will be followed.</p> <p>26. Handling of spent oils and oil from well test operations.</p> <p>27. H<sub>2</sub>S emissions control plans, if required.</p> <p>28. Details of all environment and safety related documentation within the company in the form of guidelines, manuals, monitoring programmes including Occupational Health Surveillance Programme etc.</p> <p>29. Restoration plans and measures to be taken for decommissioning of the rig and restoration of on-shore support facilities on land.</p> <p>30. Documentary proof for membership of common disposal facilities, if required.</p> <p>31. Any litigation pending against the project or any directions/order passed by any Court of Law against the project. If so, details thereof.</p> <p>32. Total capital and recurring cost for environmental pollution control measures.</p> <p>It was recommended that 'TOR prescribed by the Expert Appraisal Committee (Industry)' should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under para 7 (ii) of the EIA Notification, 2006, for preparation of EIA-EMP.</p>
17.11.3	<p><b>Development Drilling in the Aliabet Oil Field of Ankleshwar Asset, Gujarat by M/s ONGC Ltd. [IA/GJ/IND2/60507/2016, J- 11011/339/2016-IA.II(I)]- Terms of Reference (TOR).</b></p> <p>The project proponent gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. The PP has informed the following:-</p> <ol style="list-style-type: none"> <li>i. PP has proposed for Development Drilling of seven wells in Aliabet field, District Surat, Gujarat. Area of the block is 243 Km<sup>2</sup>.</li> <li>ii. All the projects related to Offshore and onshore oil and gas exploration, development &amp; production are listed at S.N. 1(b) under category 'A' and</li> </ol>

- appraised at Central level by Expert Appraisal Committee.
- iii. It is reported that no forest area/protected area/eco-sensitive area are located within 10 km area of the project site.
  - iv. Proposed depth of drilling is 2100 to 2300m
  - v. The total cost of the project is Rs. 156.40 crore.
  - vi. Out of seven wells proposed in the application, coordinates for four wells as mentioned below are provided by the PP.

LOCATION	LATITUDE	LONGITUDE
ALIABET-A	21° 34' 40" N	72 ° 39 ' 01"E
ALIABET-C	21° 35' 27" N	72 ° 38 ' 40"E
ALIABET-D	21° 35' 17" N	72 ° 39 ' 22"E
ALIABET-F	21° 36' 18" N	72 ° 39 ' 03"E

- vii. During presentation the committee noted that PP has submitted Coordinates of 4 development wells only. PP has informed that the Coordinates of the remaining three wells will be firmed up later and informed duly.
- viii. The PP informed that location of 3 wells have not been firmed up. The PP further informed that all the 7 wells are located in the block Aliabet (co-ordinates) district – Surat, Gujrat.
- ix. The position of wells is within 10km of radius of Aliabet C with latitude of 21°35' 27"N and longitude 72°38' 40"E. The PP has obtained mining lease for the development block Aliabet wherein all the 7 wells are located. The mining lease order to be submitted by the PP.
- x. The PP informed that the project location is around 50km far from the sea coast. So, CRZ notification, 2011 is not applicable to the proposal.
- xi. The power requirement for these development wells will be met through the operation of DG set. Fuel requirement will be 6-8 KLD of diesel during drilling Phase.
- xii. Fresh water requirement will be 15-20 m<sup>3</sup>/d which will be sourced from tube well/Tankers. The quantity of drill cuttings generated will be around 120m<sup>3</sup>. The quantity of waste water produced will be about 3-5 m<sup>3</sup>/ day. Water will be sourced from contractors through tanker or tube well after validating their permission from concerned authorities.
- xiii. It is reported that the temporarily storage of drilling waste will be in an HDPE lined pit and will be subsequently treated to ensure conformance with CPCB designated Best Use Standards and Oil Drilling & Gas Extraction Industry Standards and guidelines provided by the MoEFCC under the Hazardous Wastes (Management, Handling &Trans boundary Movement) Rules, 2008.
- xiv. Drill cuttings generated will be collected and separated using a solid control system and temporarily stored on-site in HDPE lined pits.

Drilling and wash wastewater generated will also be stored at an onsite HDPE lined pit. The water will be adequately treated in ETP.

After detailed deliberations, the Committee prescribed the following Specific TOR in addition to Generic TOR provided at Annexure (Refer Ministry's web site) for preparation of EIA-EMP report.

**A. Specific TOR**

1. Executive summary of the project.
2. No. of exploratory wells for which environmental clearance is accorded and No. of new wells proposed during expansion. Status and No. of the wells which are completed and closed.
3. Project Description and Project Benefits;
4. Cost of project and period of completion.
5. Employment to be generated.
6. Distance from coast line.
7. Details of sensitive areas such as coral reef, marine water park, sanctuary and any other eco-sensitive area.
8. Recommendation of SCZMA/CRZ clearance as per CRZ Notification dated 6<sup>th</sup> January, 2011 ( if applicable).
9. Details on support infrastructure and vessel in the study area.
10. Climatology and meteorology including wind speed, wave and currents, rainfall etc.
11. Details on establishment of baseline on the air quality of the areas immediately affected by the exploratory drilling and also particularly with reference to hydrogen sulphide, sulphur dioxide, NOx and background levels of hydrocarbons and VOCs.
12. Details on estimation and computation of air emissions (such as nitrogen oxides\*, sulphur oxides\*, carbon monoxide\*, hydrocarbons\*, VOCs\*, etc.) resulting from flaring, DG sets, combustion, etc. during all project phases
13. Base line data collection for surface water for one season leaving the monsoon season within 1 km for each exploratory wells, particularly in respect of oil content in the water sample and sediments sample.
14. Fisheries study w.r.t. benthos and marine organic material and coastal fisheries.

15. Source of fresh water. Detailed water balance, waste water generation and discharge.
16. Noise abatement measures and measures to minimize disturbance due to light and visual intrusions in case of project site closed to the coast.
17. Procedure for handling oily water discharges from deck washing, drainage systems, bilges etc.
18. Procedure for preventing spills and spill contingency plans.
19. Procedure for treatment and disposal of produced water.
20. Procedure for sewage treatment and disposal and also for kitchen waste disposal.
21. Details on solid waste management for drill cuttings, drilling mud and oil sludge, produced sand, radioactive materials, other hazardous materials, etc. including its handling and disposal options during all project phases.
22. Storage of chemicals on site.
23. Commitment for the use of water based mud (WBM) and synthetic oil based mud in special case.
24. Details of blowout preventer Installation.
25. Risk assessment and mitigation measures including whether any independent reviews of well design, construction and proper cementing and casing practices will be followed.
26. Handling of spent oils and oil from well test operations.
27. H<sub>2</sub>S emissions control plans, if required.
28. Details of all environment and safety related documentation within the company in the form of guidelines, manuals, monitoring programmes including Occupational Health Surveillance Programme etc.
29. Restoration plans and measures to be taken for decommissioning of the rig and restoration of on-shore support facilities on land.
30. Documentary proof for membership of common disposal facilities, if required.
31. Any litigation pending against the project or any directions/order passed by any Court of Law against the project. If so, details thereof.

	<p>32. Total capital and recurring cost for environmental pollution control measures.</p> <p>It was recommended that 'TOR prescribed by the Expert Appraisal Committee (Industry)' should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Considering the fact that the project location is around 50 km far from the sea coast, after due diligence the committee has exempted Public hearing under para 7 (ii) of the EIA Notification, 2006, for preparation of EIA-EMP.</p>
17.11.4	<p><b>Development Drilling of 406 wells in Mehsana Asset, Mehsana, Gujarat by M/s ONGC Ltd [IA/GJ/IND2/60533/2016; J- 11011/352/2016-IA.II(I)].- Terms of Reference (TOR).</b></p> <p>The project proponent gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. The PP has informed the following:-</p> <ol style="list-style-type: none"> <li>i. PP has proposed for Development Drilling of 406 wells in Mehsana Asset, Mehsana, Gujarat.</li> <li>ii. All the projects related to Offshore and onshore oil and gas exploration, development &amp; production are listed at S.N. 1(b) under category 'A' and appraised at Central level by Expert Appraisal Committee.</li> <li>iii. Cost of the proposed project will be Rs. 2402.83 crores.</li> <li>iv. The proposed project will be covering an mining lease area of 1114.006 sq. km wherein 406 wells are proposed to be drilled for development. The Proposed average depth of drilling is 1600 m.</li> <li>v. It is reported that no forest/ protected area/eco-sensitive area lies within 10 km distance of the project site.</li> <li>vi. The power requirement for these development wells will be met through the operation of DG set. Fuel requirement will be 85 KL per well of diesel during drilling phase.</li> <li>vii. Fresh water requirement will be 25-30 m<sup>3</sup>/day/well which will be sourced from tube-well/Tankers. The quantity of drill cuttings generated will be around 128 m<sup>3</sup>/well. The quantity of waste water produced will be about 14-15 m<sup>3</sup>/ day/well. Water will be sourced from contractors through tanker or tube well after validating their permission from concerned authorities. A total of 580 m<sup>3</sup> of drilling Waste per well will be generated and will be based on target depth of well.</li> <li>viii. It is reported that the temporarily storage of drilling waste will be in an HDPE lined pit and will be subsequently treated to ensure conformance with CPCB designated Best Use Standards and Oil Drilling &amp; Gas Extraction Industry Standards and guidelines provided by the MoEFCC under the Hazardous Wastes (Management, Handling &amp;Trans</li> </ol>

boundary Movement) Rules, 2008. The major solid waste generated during peak drilling period will be 128 m<sup>3</sup> of drill Cuttings, 14-15 m<sup>3</sup> per day of waste water would also be generated.

- ix. Drill cuttings generated will be collected and separated using a solid control system and temporarily stored on-site in HDPE lined pits. Drilling and wash wastewater generated will also be stored at an onsite HDPE lined pit. The water will be adequately treated through mobile ETPs.
- x. Earlier EC was issued by Ministry vide no. J-11011/503/2011-IA.II(I) dated 26<sup>th</sup> November, 2014.
- xi. During presentation the committee noted that PP has submitted coordinates of 45 blocks falling in four districts i.e. Ahmedabad, Gandhinagar, Patan and Mehsana only.
- xii. EAC has noted that it is an expansion project and no CRZ, ESZ, Eco-sensitive area issues are involved with the project.

After detailed deliberations, the Committee prescribed the following Specific TOR in addition to Generic TOR provided at Annexure (Refer Ministry's web site) for Preparation of EIA-EMP report. The committee after detailed deliberation and due diligence exempted the public hearing under the provisions made under para 7 (ii) of the EIA notification, 2006.

**A. Specific TOR**

1. Executive summary of the project.
2. No. of exploratory wells for which environmental clearance is accorded and No. of new wells proposed during expansion. Status and No. of the wells which are completed and closed.
3. Project Description and Project Benefits;
4. Cost of project and period of completion.
5. Employment to be generated.
6. Distance from coast line.
7. Details of sensitive areas such as coral reef, marine water park, sanctuary and any other eco-sensitive area.
8. Recommendation of SCZMA/CRZ clearance as per CRZ Notification dated 6<sup>th</sup> January, 2011 ( if applicable).
9. Details on support infrastructure and vessel in the study area.
10. Climatology and meteorology including wind speed, wave and currents, rainfall etc.
11. Details on establishment of baseline on the air quality of the areas

immediately affected by the exploratory drilling and also particularly with reference to hydrogen sulphide, sulphur dioxide, NOx and background levels of hydrocarbons and VOCs.

12. Details on estimation and computation of air emissions (such as nitrogen oxides\*, sulphur oxides\*, carbon monoxide\*, hydrocarbons\*, VOCs\*, *etc.*) resulting from flaring, DG sets, combustion, *etc.* During all project phases
13. Base line data collection for surface water for one season leaving the monsoon season within 1 km for each exploratory wells, particularly in respect of oil content in the water sample and sediments sample.
14. Fisheries study w.r.t. benthos and marine organic material and coastal fisheries.
15. Source of fresh water. Detailed water balance, waste water generation and discharge.
16. Noise abatement measures and measures to minimize disturbance due to light and visual intrusions in case of project site closed to the coast.
17. Procedure for handling oily water discharges from deck washing, drainage systems, bilges *etc.*
18. Procedure for preventing spills and spill contingency plans.
19. Procedure for treatment and disposal of produced water.
20. Procedure for sewage treatment and disposal and also for kitchen waste disposal.
21. Details on solid waste management for drill cuttings, drilling mud and oil sludge, produced sand, radioactive materials, other hazardous materials, *etc.* including its handling and disposal options during all project phases.
22. Storage of chemicals on site.
23. Commitment for the use of water based mud (WBM) and synthetic oil based mud in special case.
24. Details of blowout preventer Installation.
25. Risk assessment and mitigation measures including whether any independent reviews of well design, construction and proper cementing and casing practices will be followed.
26. Handling of spent oils and oil from well test operations.
27. H<sub>2</sub>S emissions control plans, if required.

28. Details of all environment and safety related documentation within the company in the form of guidelines, manuals, monitoring programmes including Occupational Health Surveillance Programme etc.
29. Restoration plans and measures to be taken for decommissioning of the rig and restoration of on-shore support facilities on land.
30. Documentary proof for membership of common disposal facilities, if required.
31. Any litigation pending against the project or any directions/order passed by any Court of Law against the project. If so, details thereof.
32. Total capital and recurring cost for environmental pollution control measures.

It was recommended that 'TOR prescribed by the Expert Appraisal Committee (Industry)' should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The committee has exempted Public hearing under para 7 (ii) of the EIA Notification, 2006, for preparation of EIA-EMP.

**17.11.5 Proposed Synthetic organic chemical industry at Plot No. 21/2 Dhatav MIDC, Tal. Roha, Dist. Raigad by M/s Ambernath Organics Pvt. Ltd. [IA/MH/IND2/60342/2016, J- 11011/353/2016-IA.II(I)]**

The project proponent gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. The PP has informed the following:

- i. PP has proposed to produce synthetic organic chemicals at Plot No. 21/2 Dhatav MIDC, Tal. Roha, Dist. Raigad.
- ii. The PP has presented the project before SEAC-1 in its 122<sup>nd</sup> meeting held on 24<sup>th</sup>- 26<sup>th</sup> February, 2016. The committee noted that the said project location is in Dhatav appearing in list of ESA village in draft notification of MoEF dated 4<sup>th</sup> September, 2015. Considering the same, the SEAC HAS decided to keep the proposal in abeyance till the draft notification is finalized. In view of this PP has submitted application under Category A at the Central level.
- iii. All synthetic organic chemicals industry located in a notified industrial area/estate are listed at S.N. 5(f) under category 'B'. However, considering the general condition that location within 5 km area of the Eco-sensitive areas, the project is considered as category 'A' and appraised at Central



- level by Expert Appraisal Committee.
- iv. It is reported that the project is located in Notified Industrial Area and land is developed by MIDC.
  - v. PP in the Form I has informed that no forest/protected area/eco-sensitive area are located within 10 km distance of the project site. However, the State SEAC has noted that the said project location is in Dhatav appearing in list of ESA village in draft notification of MoEF dated 4<sup>th</sup> September,2015 and has kept the proposal is abeyance..
  - vi. The total Water requirement is 391.26 CMD. The source of water is MIDC.
  - vii. Required electricity of 520 KW will be supplied by MSEDCL.
  - viii. 7.1 KL/D Furnace oil or 17.7 MT/D of coal will be used for steam boiler. two separate bag filter and stack of 30 m height will be provided to mitigate particulate emissions.
  - ix. The PP proposed to produce the following products at Plot No. 21/2 Dhatav MIDC, Tal. Roha, Dist. Raigad.

<b>Name of the Product</b>	<b>Quantity MT/A</b>
Isatoic Anhydride	3005
Anthranilic Acid	400
Methyl Anthranilate	2000
Dimethyl Anthranilate	200
Buthyl Anthranilate	100
Anthranilamide	80
Dibromoester	40
<b>Total</b>	<b>5825</b>

- x. The By Products during the proposed production are:

<b>Name of the By-Product</b>	<b>Quantity MT/A</b>
Recovered Methanol	673.56
Recovered n- Butanol	36.6
<b>Total</b>	<b>710.16</b>

- xi. EAC has noted that the public hearing is exempted as the industry is established in notified industrial estate as per EIA notification 2006.
- xii. It is reported that PP will spend 2.5% of the total project cost for the social activities (CSR) to contribute in sustainable development of the region.

After detailed deliberations, the Committee prescribed the following Specific and

Additional TOR in addition to Generic TOR provided at Annexure (Refer Ministry's web site) for Preparation of EIA-EMP report. As the industry is located in the notified industrial area/estate, Public hearing is exempted under the provisions as per para 7 III. Stage (3) (b) of the EIA notification, 2006.

#### **A. Specific TOR**

1. Details on solvents to be used, measures for solvent recovery and for emissions control.
2. Details of process emissions from the proposed unit and its arrangement to control.
3. Ambient air quality data should include VOC, other process-specific pollutants\* like NH<sub>3</sub>\*, chlorine\*, HCl\*, HBr\*, H<sub>2</sub>S\*, HF\*, *etc.*, (\* - as applicable)
4. Work zone monitoring arrangements for hazardous chemicals.
5. Detailed effluent treatment scheme including segregation of effluent streams for units adopting 'Zero' liquid discharge.
6. Action plan for odour control to be submitted.
7. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they co-process organic solid/hazardous waste generated.
8. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
9. Action plan for utilization of MEE/dryers salts.
10. Material Safety Data Sheet for all the Chemicals are being used/will be used.
11. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
12. Details of incinerator if to be installed.
13. Risk assessment for storage and handling of hazardous chemicals/solvents. Action plan for handling & safety system to be incorporated.
14. Arrangements for ensuring health and safety of workers engaged in handling of toxic materials.

#### **B. Additional TOR**

- i. PP shall develop Green Belt with 10 metre width in the peripheral of the boundary of the project site.
- ii. PP shall ensure Zero Liquid Discharge.
- iii. Coal shall not be used as a fuel source.
- iv. PP shall submit a revised Layout Plan.

	<p>It was recommended that 'TOR prescribed by the Expert Appraisal Committee (Industry)' should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. As the industry is located in the notified industrial area/estate, Public hearing is exempted under the provisions as per para 7 III. Stage (3) (b) of the EIA notification, 2006.</p>
17.11.6	<p><b>Installation of LPG bullets at ONGC, Uran Plant, Uran, Raigarh, Maharashtra by M/s ONGC Ltd. [IA/MH/IND2/60517/2016, J- 11011/354/2016-IA.II(I)]</b></p> <p>The project proponent gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. The PP has informed the following:</p> <ol style="list-style-type: none"> <li>i. The project involves Installation of LPG bullets at ONGC, Uran Plant, Uran, Raigarh, Maharashtra by M/s ONGC Ltd.</li> <li>ii. The plant is designed to process, store and dispatch the Natural gas received from offshore platforms, basins &amp; oil /gas fields.</li> <li>iii. The present LPG storage and dispatch facilities in the Uran plant have 4 nos. of LPG tanks with 4500 m<sup>3</sup>/hr combined capacity available at Uran Plant along with 3 nos. of LPG transfer pumps. The LPG is transported through pipeline to BPCL.</li> <li>iv. To upgrade their storage facilities, M/s ONGC is intended to install 03 nos. of LPG mounded bullets with LPG loading pumps by dismantling of old LAN tanks, for receiving, storage and dispatch of LPG at above mentioned complex. There are dismantling jobs envisaged for existing LAN tank system.</li> <li>xiii. All the projects related to Petro-chemical complexes (industries based on processing of petroleum fractions &amp; natural gas and/or reforming to aromatics) are listed at S.N. 5(c) under category 'A' and appraised at Central level by Expert Appraisal Committee.</li> <li>v. The total cost of the proposed project is Rs 84.27 Crores.</li> <li>vi. It is reported that no forest area/protected area/biosphere reserves/eco-sensitive area are located within 10 km area of the project site.</li> <li>vii. It is informed that the proposed project shall be located within the existing ONGC complex. The project will be developed in an area of 4500 ha.</li> <li>viii. The water requirement of plant shall be met through MIDC water only.</li> <li>ix. It is reported that the coastline is 1 km from the site and CRZ notification, 2011 is not applicable to the project.</li> <li>x. Proposed facility/project is for LPG storage and reported that no consumption of fuel or electricity is needed.</li> <li>xi. No effluent is expected from this proposed facility. The facility in the present project is transit storage for LPG being dispatched to BPCL. However, existing available facility shall be utilized for treatment of liquid effluents. ONGC Uran is a life member of MWML Taloja for disposal of Solid wastes. Solid wastes Shall be handled and disposed</li> </ol>

- through MWML as per applicable regulations.
- xii. The PP has received EC for the existing unit vide letter no. J-11011/635/2008-iA.II (I) dated 29<sup>th</sup> April, 2009.
  - xiii. Public hearing was exempted under para 7 (ii) of the EIA Notification, 2006.
  - xiv. The EAC has noted the proposed facility "Installation of LPG bullets at ONGC, Uran Plant, Uran, Raigarh, Maharashtra by M/s ONGC Ltd." is also being located in the existing plant premise. After due diligence, committee decided to exempt the public hearing under para 7 (ii) of the EIA Notification.

The Committee examined the project details and observed that the project activity falls under item no. 6 (b) of the Schedule to the EIA Notification, 2006; however in the Form -1 submitted by the PP it is mentioned as 1(b). The EAC suggested the PP to submit the revised Form -1 correcting these details. The Project is a Category 'B' project; however due to absence of SEIAA/SEAC in Maharashtra it is being considered at central level in the Ministry.

After detailed deliberations, the Committee prescribed the following Specific TOR in addition to Generic TOR provided at Annexure (Refer Ministry's web site) for Preparation of EIA-EMP report, exempting the public hearing under para 7 (ii) of the EIA Notification, 2006.

#### **A. Specific TOR**

1. Details on requirement of raw material (naphtha/gas feedstock), its source of supply and storage at the plant.
2. Complete process flow diagram for all products with material balance.
3. Brief description of equipments for various process ( cracker, separation, polymerization etc)
4. Details of proposed source-specific pollution control schemes and equipments to meet the national standards.
5. Details on VOC emission control system from vents, stacks, fugitive emissions and flare management, *etc.*
6. Details on proposed LDAR protocol.
7. Ambient air quality should include hydrocarbon (methane and non methane ), VOC and VCM (if applicable).
8. Action plan to meet the standard prescribed under EPA for petrochemical complex.
9. Risk Assessment & Disaster Management Plan
  - Identification of hazards
  - Consequence Analysis
  - Measures for mitigation of risk.

It was recommended that TOR prescribed by the Expert Appraisal Committee

(Industry)' should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under para 7 (ii) of the EIA notification, 2006.

**17.11.7 Development of drilling of 406 wells, at Mehsana Asset by M/s ONGC Ltd. [IA/GJ/IND2/60533/2016, J-11011/352/2016-IA-II(I)]**

The proposal is of repetition of agenda item no. 17.11.4. The EAC decided to not to consider the proposal.

**17.11.8 Drilling of Four Exploratory Wells (GKBW, GKBX , NGAC and NGAD) in Sivasagar District, Assam by M/s Oil and Natural Gas Ltd. [A/AS/IND2/59982/2016, J- 11011/352/2016-IA.II(I)]**

The project proponent gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. The PP has informed the following:

- i. The project involves Drilling of Four Exploratory Wells (GKBW, GKBX , NGAC and NGAD) in Sivasagar District, Assam by M/s Oil and Natural Gas Ltd.
- ii. All the projects related to Offshore and onshore oil and gas exploration, development & production are listed at S.N. 1(b) under category 'A' and appraised at Central level by Expert Appraisal Committee.
- iii. It is informed that the PP, proposed for Drilling of Four (4) exploratory wells falling in: i) SE Geleki Extension PML ii) Geleki PML, iii) Mekeypore-Santak-Nazira PML and iv) Mekeypore-Santak-Nazira PML of part of Sivasagar District, Assam.
- iv. The proposed drilling depth of each well will be between 2200-4600 m.
- v. Total cost of the project is Rs. 180 crores.
- vi. Proposed project has employment potential of 50-65 personnel.
- vii. It is reported that no national parks/Wildlife Sanctuary/ Reserve/ protected forest lies within the radius of 10 kms from the project site.
- viii. PP has informed that the coordinates of the locations are as follows:

Sl No	Well Name	PML / PEL Area	Co-ordinates
1	<b>GKBW</b>	SE Geleki PML	Lat: 26° 45' 39.68"N Long: 94° 40' 52.26"E
2	<b>GKBX</b>	Geleki PML	Lat: 26° 48' 19.795"N Long: 94° 41' 34.267"E
3	<b>NGAC</b>	Mekeypore, Santak, Nazira PML	Lat: 26° 50' 1.43"N Long: 94° 43' 29.44"E
4	<b>NGAD</b>	Mekeypore ,Santak, Nazira PML	Lat: 26° 50' 40.51"N Long:94° 42' 55.68"E

- ix. The power requirement for this exploratory well will be met through the operation of DG sets. Fuel requirement will be 5-6 KLD of diesel during drilling Phase and it will be supplied onsite by through mobile tankers.
- x. The daily water consumption will be 25 m<sup>3</sup>/d, which will be supplied through road tanker from nearby source. Water based Mud will be used as drilling fluid.
- xi. It was informed that detailed geological and geophysical studies, mostly 2D-seismic mapping have been carried out to finalize these locations, keeping in mind the results of previously drilled wells.
- xii. It is reported that the temporarily storage of drilling waste will be in an HDPE lined pit and will be subsequently treated to ensure conformance with CPCB designated Best Use Standards and Oil Drilling & Gas Extraction Industry Standards and guidelines provided by the MoEF and CC under the Hazardous Wastes (Management, Handling & Trans boundary Movement) Rules, 2008.
- xiii. The PP informed that the present project site is falling in shivsagar taluka of Shivsagar district of Assam. The PP has already conducted public hearing on 4<sup>th</sup> October, 2016 for the exploratory drilling of 4 wells name GKBW, GKBX, NGAC, NGAD falls in shivsagar taluka of shivsagar district in assam. The proposed sites are falling within 5km of the exploratory wells (GKBW, GKBX, NGAC, NGAD) where public hearing has already been conducted.
- xiv. The committee has considered the facts that the proposed site is in proximity of the site where public hearing has already been conducted. After due diligence, the EAC has recommended the project for grant of TOR exempting the public hearing under para 7 (ii) of the EIA Notification, 2006.

After detailed deliberations, the Committee prescribed the following Specific and Additional TOR in addition to Generic TOR provided at Annexure (Refer Ministry's web site) for preparation of EIA-EMP report:

**A. Specific TOR**

1. Executive summary of the project.
2. No. of exploratory wells for which environmental clearance is accorded and No. of new wells proposed during expansion. Status and No. of the wells which are completed and closed.
3. Project Description and Project Benefits;
4. Cost of project and period of completion.
5. Employment to be generated.
6. Distance from coast line.

7. Details of sensitive areas such as coral reef, marine water park, sanctuary and any other eco-sensitive area.
8. Recommendation of SCZMA/CRZ clearance as per CRZ Notification dated 6<sup>th</sup> January, 2011 ( if applicable).
9. Details on support infrastructure and vessel in the study area.
10. Climatology and meteorology including wind speed, wave and currents, rainfall etc.
11. Details on establishment of baseline on the air quality of the areas immediately affected by the exploratory drilling and also particularly with reference to hydrogen sulphide, sulphur dioxide, NO<sub>x</sub> and background levels of hydrocarbons and VOCs.
12. Details on estimation and computation of air emissions (such as nitrogen oxides\*, sulphur oxides\*, carbon monoxide\*, hydrocarbons\*, VOCs\*, etc.) resulting from flaring, DG sets, combustion, etc. during all project phases
13. Base line data collection for surface water for one season leaving the monsoon season within 1 km for each exploratory wells, particularly in respect of oil content in the water sample and sediments sample.
14. Fisheries study w.r.t. benthos and marine organic material and coastal fisheries.
15. Source of fresh water. Detailed water balance, waste water generation and discharge.
16. Noise abatement measures and measures to minimize disturbance due to light and visual intrusions in case of project site closed to the coast.
17. Procedure for handling oily water discharges from deck washing, drainage systems, bilges etc.
18. Procedure for preventing spills and spill contingency plans.
19. Procedure for treatment and disposal of produced water.
20. Procedure for sewage treatment and disposal and also for kitchen waste disposal.
21. Details on solid waste management for drill cuttings, drilling mud and oil sludge, produced sand, radioactive materials, other hazardous materials, etc. including its handling and disposal options during all project phases.
22. Storage of chemicals on site.

23. Commitment for the use of water based mud (WBM) and synthetic oil based mud in special case.
24. Details of blowout preventer Installation.
25. Risk assessment and mitigation measures including whether any independent reviews of well design, construction and proper cementing and casing practices will be followed.
26. Handling of spent oils and oil from well test operations.
27. H<sub>2</sub>S emissions control plans, if required.
28. Details of all environment and safety related documentation within the company in the form of guidelines, manuals, monitoring programmes including Occupational Health Surveillance Programme etc.
29. Restoration plans and measures to be taken for decommissioning of the rig and restoration of on-shore support facilities on land.
30. Documentary proof for membership of common disposal facilities, if required.
31. Any litigation pending against the project or any directions/order passed by any Court of Law against the project. If so, details thereof.
32. Total capital and recurring cost for environmental pollution control measures.

**B. Additional TOR**

- i. Certified compliance report of the conditions in the existing EC, from the concerned Regional Office of Ministry shall be submitted.
- ii. Coordinate of wells to be provided in EIA-EMP report.

It was recommended that 'TOR prescribed by the Expert Appraisal Committee (Industry)' should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under para 7 (ii) of the EIA notification, 2006.

**17.12 Any other**

17.12.1	<b>Greenfield project of Chlorinated and Hydrogenated Derivatives for Agro Intermediates Plant in Gujrat by M/s Radha Madhav Processors Pvt. Ltd.</b>
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**[IA/GJ/IND2/59261/2015, J-11011/274/2014-IA-II(I)] - TOR Amendment**

The project proponent gave a detailed presentation on the project and informed that:

- i. Draft Terms of References (TORs) was awarded in the 26<sup>th</sup> EAC(Industry) meeting held during 29<sup>th</sup>- 30<sup>th</sup> October, 2014 for preparation of EIA-EMP report. The TOR letter was issued vide Ministry's letter dated 06<sup>th</sup> January, 2015. The PP has requested for amendment in Term of Reference granted vide Ministry's letter dated 06<sup>th</sup> January 2015 in term of following changes:
  - Increasing the size of plant area from 30,000 m<sup>2</sup> to 60,000 m<sup>2</sup>.
  - Addition of missing products in existing ToR letter
- ii. PP has informed that they have acquired a new plot D-2/CH/5 which is adjacent to the existing Plot D-2/CH/6 of same size (30, 000m<sup>2</sup>), now admeasuring the total size of both the plots to be 60,000 m<sup>2</sup> in the GIDC Industrial Estate, Dahej II. PP proposed to develop the proposed facility on both of these plots.
- iii. The PP has also informed that the following products are missing in the TOR letter granted and requested amendment in TOR including the following missing products:

Plant code	Common Name	Products	Capacity (MTPM)
Plant H	Hydrogenation compounds	2 Chloro, 5-Methyl, 1,4 Phenylene Diamine	500
		2, Chloro 1,4 Phenylene Diamine	
		2,5 Dichloro 1,4 Phenylene Diamine	
		2,4,5 Trichloro Aniline	
		6-Methyl 5-Amino Benzimidazolone	
		5-Amino Benzimidazolone	
		3-Amino 4-Chloro Benzoic acid	
		3-Amino 4-Chloro Benzotrifluoride	
		3-Amino Benzotrifluoride	
		3,5 Dichloro Aniline	
		2,5 Dichloro Aniline	
		2,3 Dichloro Aniline	
		3 Amino 4-Methyl Benzoic Acid	

After detailed deliberations, the Committee has recommended for amendment in TOR as per the request of PP for preparation of EIA-EMP report

17.12.2	<p><b>Expansion of existing Plant (33 MT/Month to 50 MT/ Month) at Plot No. B-14/2, MIDC Chincholi, Taluka Mohol, District Solapur, Maharashtra by M/s Sri Krishna Pharmaceuticals Ltd. [IA/MH/IND2/59377/2015, J-11011/267/2015-IA II (I) - TOR Amendment</b></p> <p>The project proponent gave a detailed presentation on the project and informed that:</p> <ol style="list-style-type: none"> <li>i. Draft Terms of References (TORs) was awarded in the 3<sup>rd</sup> EAC (Industry) meeting held during 18-19<sup>th</sup> January, 2016 for preparation of EIA-EMP report. The TOR letter was issued vide Ministry's letter dated 05<sup>th</sup> March, 2016.</li> <li>ii. The PP has requested for amendment in Term of Reference granted vide Ministry's letter dated 05<sup>th</sup> March, 2016.</li> <li>iii. PP informed that the Plot No. B-14 mentioned in the TOR letter have been bifurcated into two plots namely plot no. B-14/1 and B-14/2. Plot no. B-14/1 is allotted in the name of M/s Sri Krishna Pharmaceuticals Ltd. and Plot no. B-14/2 M/s Sri Krishna Drugs Ltd. PP has produced copy of agreements with MIDC.</li> <li>iv. PP has also informed that the name of company at Plot no. B-14/2 was later changed to M/s Sri Krishna Pharmaceuticals Ltd. PP has produced the copy of name change certificate.</li> <li>v. PP has informed that the existing plant of M/s Sri Krishna Pharmaceuticals Ltd. is established at Plot No. B-14/2.</li> <li>vi. PP has requested to change the plot number in the TOR issued in the name M/s Sri Krishna Pharmaceuticals Ltd. at Plot No. B-14 to Plot No. B-14/2.</li> </ol> <p>After detailed deliberations, the Committee has recommended to the Ministry for amendment in TOR as per the request of PP for preparation of EIA-EMP report.</p>
17.12.3	<p><b>Energy Improvement Project of Ammonia and Urea Plants and 1 million t/y DAP/NPK Project, Poly Carboxyl Ether (PCE) Project of 18,000 t/y in Karnataka by M/s Mangalore Chemicals and Fertilizers Limited - Reg. - TOR Amendment [IA/KA/IND2/55271/2016, J-11011/159/2016-IA-II(I)]</b></p> <p>The project proponent gave a detailed presentation on the project and informed that:</p> <ol style="list-style-type: none"> <li>i. Draft Terms of References (TORs) was awarded in the 11<sup>th</sup> EAC(Industry) meeting held during 20<sup>th</sup>-21<sup>st</sup> July, 2016 for preparation of EIA-EMP report. The TOR letter was issued vide Ministry's letter dated 23<sup>rd</sup> September, 2016.</li> <li>ii. The PP has requested for amendment in Term of Reference granted vide Ministry's letter dated 23<sup>rd</sup> September, 2016.</li> <li>iii. PP informed that TOR was issued for following projects: <ol style="list-style-type: none"> <li>(i). Energy Improvement Project of Ammonia and Urea Plants.</li> <li>(ii). 1 million t/y DAP/NPK Project.</li> </ol> </li> </ol>

	<p>(iii). Poly Carboxyl Ether (PCE) Project of 18,000 t/y.</p> <p>iv. PP has now proposed for the following;</p> <ul style="list-style-type: none"> <li>(i). Installation of LNG truck unloading, storage and regasification facility in the existing fertilizer</li> <li>(ii). Exemption from Public Consultation being in Industrial area.</li> <li>(iii). Correction in TOR letter for Ammonia capacity to be 2,47,500 TPA.</li> </ul> <p>v. During the presentation PP has informed that:</p> <ul style="list-style-type: none"> <li>(a). In addition to project mentioned in the TOR letter, PP also like to install LNG truck unloading, storage and regasification facility in the existing fertilizer complex.</li> <li>(b). It is informed that, in MCF, at present vide GoI directive July 15, 2015 policy, naphtha is used as feed stock for Ammonia plant as GAIL has not provided gas pipeline connectivity from Kochi to Mangalore.</li> <li>(c). Now as per the proposal by Petronet who, is operating LNG terminal at Kochi, MCF intends to meet the part requirement of LNG through road tankers.</li> <li>(d). About 150-200 MT/day of LNG will be transported by road tankers from Kochi to Mangalore, unloaded to a small storage facility (750 KL) at MCF factory and re-gasified for use.</li> <li>(e). It is informed that there will not be any liquid effluent discharge, gaseous emission and solid waste generation from the LNG storage and regasification facility.</li> <li>(f). No additional water requirement and the LNG storage and regasification facility will be installed inside the MCF premises.</li> <li>(g). The Environment Impact Assessment study was carried out during 2011 – 12 for our existing fertilizer complex for conversion of feed stock from naphtha to natural gas in ammonia plant and fuel from furnace oil to natural gas in Boilers and Captive Power Plant.</li> <li>(h). As per the EIA study report all the parameters are within the standards.</li> <li>(i). The MoEF &amp; CC had issued the Environment Clearance to MCF for the NG conversion project vide F. No. J-11011/34/2010-1A II (I) dated 06.02.2013.</li> <li>(j). PP has submitted the Prefeasibility Project Report on Installation of LNG truck unloading, storage and Regasification facility.</li> <li>(k). PP requested to issue the Amendment to the Terms of Reference considering the installation of LNG truck unloading, storage and regasification facility along with the above mentioned Projects viz. 1) Energy improvement project of Ammonia and Urea plants. 2) 1 million t/y DAP/NPK project. 3) Poly Carboxyl Ether (PCE) project of 18,000 t/y.</li> </ul> <p>vi. With respect to exemption from Public Consultation, PP has informed the following;</p> <ul style="list-style-type: none"> <li>(a). The existing fertilizer complex of Mangalore Chemicals &amp; Fertilizers Limited (MCF) is located in the Karnataka Industrial Area Development Board (KIADB) notified Baikampady/</li> </ul>
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	<p>Panambur Industrial Area, Mangalore, Dakshina Kannada District, Karnataka State (Mangalore Industrial Cluster).</p> <p>(b). PP requested for exemption on “Public Consultation’ for the above project as per Clause 7 (i) III stage (3) – Public Consultation – (i) (b) of MoEF &amp; CC notification dated 14<sup>th</sup> September 2006 (as amended till 2009).</p> <p>(c). PP has produced copy of Karnataka Gazette Notification No.C18 FDB 71, dated 29<sup>th</sup> June 1971 &amp; No.C133 FDB 72 dated 3<sup>rd</sup> August 1972 in which it was declared that the land belonging to the survey numbers mentioned are in Industrial Area, and letter from KIADB indicating that the land allotted to MCF is in notified Industrial Area is also enclosed.</p> <p>vii. PP has also informed that in the approved TOR it is mentioned for the Existing Capacity of Ammonia as 2,47,5002 TPA instead of 2,47,500 TPA. PP requested to make the necessary correction for Existing Capacity of Ammonia as 2,47,500 TPA.</p> <p>After detailed deliberations, the Committee has recommended for amendment in TOR for preparation of EIA-EMP report.</p>
17.12.4	<p><b>Manufacturing Plant of Technical Grade Pesticides at Kh No.60//22/2, 69//2, 3,8,9,12/1/1, village kalanwali, tehsil Dabwali, District Sirsa, Haryana by M/s Maheshwari Bio-Chemicals Pvt. Ltd. - Reg. TOR Amendment [Ia/HR/IND2/51333/2015, J-11011/102/2015-IA-II(I)]</b></p> <p>The project proponent gave a detailed presentation on the project and informed that:</p> <p>i. Draft Terms of References (TORs) was awarded in the 40<sup>th</sup> EAC(Industry) meeting held during 18<sup>th</sup>-19<sup>th</sup> May, 2015 for preparation of EIA-EMP report. The TOR letter was issued vide Ministry’s letter dated 13<sup>th</sup> July 2015.</p> <p>ii. The PP has requested for amendment in Term of Reference granted vide Ministry’s letter dated 13<sup>th</sup> July 2015.</p> <p>iii. PP has requested amendment for  (a). Change Village Name from “Kalanwali” to “Makha”.  (b). Point Indicating Requirement of CGWA Permission for Ground Water Abstraction.</p> <p>iv. PP has informed that village name was inadvertently written as Kalanwali in Form I and requested to change to Makha.</p> <p>v. PP has informed that CGWA has sought reference from concerned authority regarding the grant of CGWA permission for groundwater withdrawal for the project. PP has requested ministry consider including the point in the TOR letter.</p> <p>After detailed deliberations, the Committee has recommended for amendment in TOR for preparation of EIA-EMP report.</p>
17.12.5	<p><b>Proposal for M/s Net Matrix Crop Care Limited (Earlier known as</b></p>

	<p><b>Netmatrix limited) in Gujarat State - Reg. - [IA/GJ/IND2/35670/2004, J-11011/145/2003-IA II(I)- EC Amendment- Tranfer of EC</b></p> <p>The PP made a presentation before the EAC and informed that earlier the unit – During presentation the PP informed that the unit started manufacturing of pesticide chemical in the year of 1984 at plot no. C1-76/523, 77/524, 78/525, 65/551, 66/550, 100 shed area, GIDC Notified Industrial Area, Vapi. Thereafter, Environmental Clearance was taken from the Ministry on 23<sup>rd</sup> June, 2005 in favour of M/s. Ankur Agro Chemicals Ltd. At present, the unit is running in the name of Net Matrix Crop Care Ltd.</p> <p>The EAC observed that the request made by the PP is for transfer of Environmental Clearance from M/s. Ankur Agro Chemicals Ltd. to M/s. Net Matrix Crop Care Ltd.,.</p> <p>The EAC recommended that since it is a administrative matter and EAC ha no role to play, the PP may take up the matter with the Ministry in this regard.</p>
17.12.6	<p><b>Bulk Drug manufacturing unit in Telangana State of M/s Aurobindo Pharma Limited, Unit-1-reg. Correction in EC. [IA/TG/IND2/ 54051/2015, J-11011/289/2012-IA II(I)</b></p> <p>The PP made a presentation and informed that:</p> <ol style="list-style-type: none"> <li>i. Aurobindo Pharma Limited, Unit – I is located at Sy. Nos. 379, 385, 386, 388 to 396 &amp; 269, Borapatla (V), Hathnoora (M), Medak District, Telangana</li> <li>ii. This Unit is engaged in manufacturing of Bulk Drugs (APIs) &amp; Bulk Drug Intermediates</li> <li>iii. The unit was accorded Environmental Clearance by MoEF in November, 2011 vide MoEF&amp;CC File No. J-11011/289/2012-IA II(I), dt. 30<sup>th</sup> Nov., 2015.</li> <li>iv. It is noticed that there are certain inadvertent omissions/corrections are to be made in Environmental Clearance in line with Project Proposal placed before Hon'ble Committee</li> <li>v. We made submission to MoEF&amp;CC accordingly requesting for following corrections:</li> </ol> <p><b>Corrections :</b></p> <p><b>1. Our proposal:</b>  We submitted our proposal for expansion of existing bulk drugs and drug intermediates from 96 TPM to 421.2 TPM [66 APIs (Bulk Drugs/ Intermediates)] and establishment of 3.95 MW co-generation (39 TPH coal/husk based Boiler) power plant.</p>

**# Omission noticed:**

In Environmental Clearance accorded, details of co-gen plant are not incorporated.

**# Correction requested:**

Incorporation of 3.95 MW Co-generation (39 TPH coal/husk based boiler) power plant in Environmental Clearance

**2. Our proposal:**

Proposed 39 TPH coal/husk fired boiler with a stack height of 50 m with ESP as control equipment.

**# Omission noticed:**

In Environmental Clearance, boiler proposed is not included and air pollution control equipment is indicated as 'bag filter'.

**# Correction requested:**

Incorporation of following in EC, 39 TPH (coal/husk based boiler).  
Correction of APC as 'ESP'

**3. Our proposal:**

Proposed 3 x 750 kVA and 4 x 1010 kVA DG Sets in addition to the existing 1 x 1000 KVA and 6 x 750 KVA, 1 x 1010 KVA DG sets as backup power.

**# Omission noticed:**

In Environmental Clearance, details of DG sets are not figured.

**# Correction requested:**

Incorporation of DG Sets as per following details: 9 x 750 kVA, 1 x 1000 kVA, 5 x 1010 kVA

**4. Our proposal:**

Total wastewater generation is 611.3 KLD. Domestic wastewater is 70 KLD (Domestic – 60 KLD and Garment Washing – 10 KLD). Accordingly, process and utilities wastewater generation is 541.3 KLD

**# Omission noticed:**

In Environmental Clearance, waste water generation and discharge is mentioned as 522 KLD (condition No. 3 – Description of project and condition no. x of special condition in Schedule A)

**# Correction requested:**

Correction of industrial effluent generation as 541.3 KLD

**5. Our proposal:**

Proposal include comprehensive details of hazardous and miscellaneous wastes streams and quantities

**# Omission noticed:**

In Environmental Clearance, details of hazardous and miscellaneous wastes streams and quantities are not mentioned.

**# Correction requested:**

Incorporation of hazardous and miscellaneous wastes streams and quantities.

The EAC after examining the request of PP recommended to the Ministry to revise the

	Environmental Clearance issued vide letter dated J-11011/289/2012 IA.II (I) dated 30.12.2015 incorporating the details as requested by PP after verification of the EIA/EMP report submitted by the PP.
17.12.7	<p><b>Proposed for Distillery unit of 64 KLPD capacities along with co-generation plant Of M/s MADRAS SUGARS LIMITED - Reg. EC Amendment. [IA/TN/IND/5666/2011, J-11011/566/2010-IA.II(I)]</b></p> <p>The PP did not attend the meeting. The EAC decided to defer the proposal.</p>
17.12.8	<p><b>Expansion of Synthetic Organic Chemical Manufacturing Unit at Sipcot Industrial Area, Phase II, Village Mornapalli, Hosur, Tamil Nadu of M/s V B MEDICARE PRIVATE LIMITED. - Reg. EC Amendment [IA/TN/IND2/57400/2015, J-11011/65/2013-IA II (I)]</b></p> <p>The PP vide email dated 23.12. 2016 informed that they are not in position to attend the meeting. The EAC decided to defer the proposal.</p>
17.12.9	<p><b>Sri Krishna Pharmaceuticals Limited, Unit-III (Formerly Sri Krishna Drugs Limited)- [IA/TG/IND2/39646/1994, J11011/147/2005-IA.II(I)]- EC Amendment- name change</b></p> <p>The project proponent gave a detailed presentation on the project and informed that:</p> <ol style="list-style-type: none"> <li>i. Earlier, environmental clearance was granted in the name of M/s Sri Krishna Drugs Limited vide file no. J-11011/147/2005-IA.II (I), Dated 11.8.2005.</li> <li>ii. M/s Sri Krishna Drugs Limited was amalgamated (taken over by) with M/S Sri Krishna Pharmaceuticals Limited (parent company).</li> <li>iii. PP has requested for change of name from Sri Krishna Drugs Limited to Sri Krishna Pharmaceuticals Limited, Unit-III.</li> </ol> <p>The EAC opined that it is an administrative issue and there are no environmental implications. After detailed deliberation, EAC advised the PP to take up the matter with the Ministry along with the copy of resolution passed by the Board of Directors in this regard.</p>
17.12.10	<p><b>160 KLPD Distillery unit in Uttar Pradesh of M/s Triveni Engineering and Industries Ltd. - Reg. - [IA/UP/IND/31/2006, J-11011/369/2006-IA.II(I)]- Amendment in EC.</b></p> <p>The project proponent gave a detailed presentation on the project and informed that:</p> <ol style="list-style-type: none"> <li>i. PP has obtained Environmental Clearance from the Ministry vide order No. F.No.J.11011/369/2006-IA II (I) dated 25<sup>th</sup> January 2007 for 160 KLPD Distillery plant.</li> </ol>

	<p>ii. It is informed that 31.6 acres of area is allocated for Bio-composting for 270 days of operation.</p> <p>iii. It is reported that as per minutes of meeting chaired by the Chairman-CPCB along the representative of All India Distillery Association (AIDA) and Senior officials of CPCB on 8<sup>th</sup> April 2016, the Chairman CPCB has agreed that “Composting under covered premises shall be mandated only to those distilleries opting for operation throughout the year.”</p> <p>iv. 12.6 acres of land for Bio-composting will be covered in accordance with CPCB stipulation to facilitate spentwash treatment during monsoon season also.</p> <p>v. Pressmud required for bio-composting is being and will be sourced from the two large sugar plants of the group located in the nearby area.</p> <p>vi. Quality of Biocompost will be in accordance with G.O. of Ministry of Agriculture &amp; Farmer Welfare vide S.O. 2776 (E) dated 10<sup>th</sup> October, 2015.</p> <p>Amendment requested:</p> <p>vii. PP has requested for amendment in EC (J-11011/369/2006-IA II(I) dt 25<sup>th</sup> January 2007, Specific Condition: (i) as “ from 270 days in a year to 365 days”. PP has requested permission for operation of the distillery for 365 days in a year with covered Biocomposting area of 12.6 acres.</p> <p>The EAC after detailed deliberation has recommended for amendments in EC subject to no addition/modification in the existing plant production capacity, effluent quantity, water requirement etc. It was also advised to ensure that there should be no water logging in the mud storage area in rainy season to avoid mixing of leachate with water.</p>
17.12.11	<p><b>Automized Fertilizer Plant, Uttar Pradesh of M/s Tata Chemicals Ltd. - Reg. – Amendment in Environment Clearance [IA/UP/IND/6611/2008, J-11011/850/2008-IA.II(I)]</b></p> <p>The project proponent gave a detailed presentation on the project and informed that:</p> <p>i. The PP has received EC No. J-11011/850/2008-IA.II(I) dated 02<sup>nd</sup> February, 2009 for Customized Fertilizer complex by Tata Chemicals Limited, Babrala, Dist. Sambhal, Uttar Pradesh.</p> <p>ii. PP is operating a Customized Fertilizer plant in the Urea Fertilizer Complex at Babrala in Sambhal district of Uttar Pradesh since 2010.</p> <p>iii. It is informed that the customized fertilizer plant at Babrala is one of its kind which is manufacturing crop and soil specific micro nutrient based fertilizer.</p> <p>iv. PP has established a granulation plant.</p> <p>Amendment proposed:</p>



- v. To further enhancing the resource efficiency of the plant, PP proposed to add a lump crushing unit for recycling / reusing the DAP lumps that are segregated from the raw materials.
- vi. It is informed that it will further reduce the waste generation from the plant with higher resource utilization.

The EAC after detailed deliberation has recommended for amendments in EC subject to submission of certified compliance report from the concerned Regional Office regarding compliance of conditions in the existing EC, and submission of undertaking from PP that, there will not be any additional pollution load due to the proposed activity.

17.12.12

**Pesticide Manufacturing Unit at Haryana State of M/s Crystal Crop Protection Pvt Ltd - Reg. - [ IA/HR/IND2/48163/2012, J-11011/120/2011-IA-II(I) -Amendment in Environment Clearance**

The project proponent gave a detailed presentation on the project and informed that:

- i. The PP has obtained EC for the existing unit “Expansion of the existing Pesticide Formulation Plant (90 MTPD) by installing Pesticide Manufacturing Unit (21 MTPD) at Village Nathupur, District Sonapat, Haryana by M/s Crystal Phosphates Limited”vide No. J-11011/120/2011-IA-II(I) dated 23<sup>rd</sup> May, 2012.

Amendment proposed:

- ii. The PP proposed to change the product mix of its existing pesticide manufacturing unit and add 32 more products while its present capacity of 21 TPD shall decrease to 17.75 TPD, to meet with the market requirement for herbicides, insecticides, fungicides and plant growth regulators..
- iii. Table showing Product-wise Revision(s) proposed compared to products in existing Environmental Clearance is given below:

Class	Before Amendment		After Amendment		
	Product	MT PD	Product	MTPD	MTPA
Insecticide	Thiamethoxam/Ac etamiprid/ Imidacloprid	1.0	Thiamethoxam/Acet amiprid/ Imidacloprid/Clothia nidin*	1.0	300
	Cypermethrin	0.0 67	Cypermethrin/Lambda Cyhalothrin /Alphamethrin*/ Bifenthrin*	0.8	240
	Synthetic Pyrethroids i.e. Lambda	2.0			

		Cyhalothrin				
		Acephate Technical	1.5	Acephate Technical	1.0	300
				Diafenthiuron technical *	0.8	240
				Fenpyroximate*/Fipronil*	0.5	150
				Pyriproxifen*/Pyridaben*	0.5	150
			<b>4.5 67</b>		<b>4.6</b>	
<b>Herbicide</b>		Sulfosulfuron	0.0 67	Sulfosulfuron/Pyrazosulfuron*/Chlorimuron*	0.3	75
		Pretilachlor/Butachlor Technical	3.4	Pretilachlor/Butachlor Technical/Propanil*	1.0	300
		Metribuzin	0.1 34	Metribuzin	0.5	150
		Glyphosate Technical	5.0	Glyphosate Technical	0.5	150
		Clodinafop Propargyl	1.5	Propaquizafop*/Quizalofop-Ethyl*/Clodinafop-Propargyl	1.5	450
		2,4-D Ethyl Ester	2.0	2,4-D Ethyl Ester	0.8	240
				Bispyribac-Sodium*	0.5	150
				Imazethapyr*	0.5	150
				Mesotrione*	0.5	150
				Pendimethalin*	1.0	300
				Penoxsulam*	0.6	180
				Oxadiazon*	0.5	150
			<b>12. 101</b>		<b>8.2</b>	
<b>Fungicide</b>		Tricyclazole	0.5	Tricyclazole	1.0	300
		Propiconazole	2.0	Hexaconazole*/Propiconazole/ Cyproconazole*/Difenaconazole*/ Epoconazole*/Myclobutanil*/ Prothiaconazole*/Tetraconazole*/ Tebuconazole*	1.5	450
		Metalaxyl	0.5	Metalaxyl/Boscalid*	0.5	150
		Copper	1.0	Copper Oxychloride	0.0	0

	Oxychloride				
			Dimethomorph*	0.5	150
			Thiaphanate Methyl*/ Mancozeb*	1.5	450
<b>PGR</b>	Ethephone Technical	0.7	Ethephone Technical	0.0	0
		<b>4.700</b>		<b>5.0</b>	
<b>Herbicide Safner</b>			Cloquintocet Mexyl	<b>0.5</b>	<b>150</b>
	<b>Total Before Amendment</b>	<b>21.37</b>	<b>Total After Amendment</b>	<b>17.75</b>	<b>5325</b>

iii. Total product list after proposed revision requiring Environmental Clearance is given below:

<b>S. No.</b>	<b>Products</b>	<b>Class</b>	<b>Quantity (MTPD)</b>	<b>Quantity (MTPM)</b>	<b>Quantity (MTPA)</b>
<b>1</b>	Thiamethoxam	Insecticide	1	28	300
<b>2</b>	Acetamiprid	Insecticide	1	28	300
<b>3</b>	Imidachloprid	Insecticide	1	28	300
<b>4</b>	Clothianidin*	Insecticide	1	28	300
<b>5</b>	Cypermethrin	Insecticide	0.8	22.4	240
<b>6</b>	Lambda Cyhalothrin	Insecticide	0.8	22.4	240
<b>7</b>	Alphamethrin*	Insecticide	0.8	22.4	240
<b>8</b>	Bifenthrin*	Insecticide	0.8	22.4	240
<b>9</b>	Acephate Technical	Insecticide	1	28	300
<b>10</b>	Diafenthiuron*	Insecticide	0.8	22.4	240
<b>11</b>	Fenpyroximate*	Insecticide	0.5	14	150
<b>12</b>	Fipronil*	Insecticide	0.5	14	150
<b>13</b>	Pyriproxifen*	Insecticide	0.5	14	150
<b>14</b>	Pyridaben*	Insecticide	0.5	14	150
<b>15</b>	Sulfosulfuron	Herbicide	0.3	8.4	90
<b>16</b>	Pyrazosulfuron*	Herbicide	0.3	8.4	90
<b>17</b>	Chlorimuron*	Herbicide	0.3	8.4	90

<b>18</b>	Pretilachor	Herbicide	1	28	300
<b>19</b>	Butachlor Technical	Herbicide	1	28	300
<b>20</b>	Propanil*	Herbicide	1	28	300
<b>21</b>	Metribuzin	Herbicide	0.5	14	150
<b>22</b>	Glyphosate Technical	Herbicide	0.5	14	150
<b>23</b>	Propaquizafop*	Herbicide	1.5	42	450
<b>24</b>	Quizalofop ethyl*	Herbicide	1.5	42	450
<b>25</b>	Clodinafop-Propargyl	Herbicide	1.5	42	450
<b>26</b>	2,4 D-Ethyl Ester	Herbicide	0.8	22.4	240
<b>27</b>	Bispyribac Sodium*	Herbicide	0.5	14	150
<b>28</b>	Imazethapyr*	Herbicide	0.5	14	150
<b>29</b>	Mesotrione*	Herbicide	0.5	14	150
<b>30</b>	Pendimethalin*	Herbicide	1	28	300
<b>31</b>	Penoxsulam*	Herbicide	0.6	16.8	180
<b>32</b>	Oxidiazon*	Herbicide	0.5	14	150
<b>33</b>	Tricyclazole	Fungicide	1	28	300
<b>34</b>	Hexaconazole*	Fungicide	1.5	42	450
<b>35</b>	Propiconazole	Fungicide	1.5	42	450
<b>36</b>	Cyproconazole*	Fungicide	1.5	42	450
<b>37</b>	Difenaconazole*	Fungicide	1.5	42	450
<b>38</b>	Epoxiconazole*	Fungicide	1.5	42	450
<b>39</b>	Myclobutanil*	Fungicide	1.5	42	450
<b>40</b>	Prothiaconazole*	Fungicide	1.5	42	450
<b>41</b>	Tetraconazole*	Fungicide	1.5	42	450
<b>42</b>	Tebuconazole*	Fungicide	1.5	42	450
<b>43</b>	Metalaxyl	Fungicide	0.5	14	150
<b>44</b>	Boscalid*	Fungicide	0.5	14	150
<b>45</b>	Dimethomorph*	Fungicide	0.5	45	150
<b>46</b>	Thiaphanate Methyl*	Fungicide	1.5	42	450
<b>47</b>	Mancozeb*	Fungicide	1.5	42	450
<b>48</b>	Cloquintocet Mexyl*	Herbicide Safner	0.5	14	150

\*Newly added products after revision

Total production per annum shall not exceed 5325 MTPA for the unit and the product-

	<p>wise maximum annual production capacity is also given in the table as above.</p> <ul style="list-style-type: none"> <li>iv. It is reported that there is no additional investment for this project and there shall be only change in product mix and no increase in pollution load and thus exemption is sought from the public hearing and EIA process under Clause 7(ii). of the EIA notification 2006.</li> <li>v. It is informed that the project was appraised and as per minutes of meeting (12<sup>th</sup> EAC Industry-2 Meeting held during 23<sup>rd</sup>-24<sup>th</sup> August, 2016) the project was recommended for amendment in Existing EC with direction to apply online for amendment.</li> <li>vi. It is also informed that the total production per annum shall not exceed 5325 MTPA for the unit.</li> </ul> <p>The committee after detailed deliberation and examination of the chemicals proposed for amendment observed that there are similar group of the chemicals already being produced in the existing unit. The PP admitted that there would be no increase in the pollution load (effluent, solid waste, air pollution).</p> <p>The EAC has noted that the proposal is attracting the notification S.O. No. 3518(E) dated 23<sup>rd</sup> November, 2016. After detailed deliberation, the EAC has recommended the proposal subject to submission of no pollution load certificate from SPCB.</p>
17.12.13	<p><b>Establishment of 30 KLPD Molasses based Distillery plant along with 2 MW captive power plant at Chowtkur village, Pulkal Mandal, Medak District, Telangana state by M/s Ganpati Sugar Industries Limited - [IA/TG/IND2/59500/2016, J-11011/61/2015-IA II (I)]- Amendment in EC.</b></p> <p>The project proponent gave a detailed presentation on the project and informed that:</p> <ul style="list-style-type: none"> <li>i. PP has obtained EC vide order No. F. No. J-11011/61/2015 – IA II (I) dated 30<sup>th</sup> June, 2016 for 30 KLPD Distillery plant &amp; 2 MW captive power plant.</li> <li>ii. PP has informed that, a request for permission to operate Distillery for 270 days was placed before EAC during award of existing EC.</li> <li>iii. However, it was not granted considering pressmud requirement for treatment of spentwash with biocomposting</li> <li>iv. PP now informed that the pressmud requirement for treatment of spentwash with biocomposting for the 30 KLPD distillery plant is 7500 Tons/annum_ where as pressmud generation from the 5000 TCD sugar plant of the group company is 30,000 TPA.</li> <li>v. Hence surplus pressmud is available for treatment of spent wash for operating the distillery for 270 days in a year.</li> <li>vi. In view of the same, PP requested issue amendment to Environmental clearance permitting to operate 30 KLPD Distillery plant for 270 days.</li> </ul> <p>After detailed deliberations, the Committee has recommended for amendment</p>

	in EC permitting PP to operate 30 KLPD Distillery plant for 270 days.															
17.12.14	<p><b>15 Exploratory Locations in SA Block Distt. Golaghat, Assam, by M/s ONGC Ltd. - Reg. - Amendment for Terms of References [IA/AS/IND2/27496/2015, J-11011/111/2015-IA-II(I)]</b></p> <p>The PP was present in the meeting. The EAC decided to defer the proposal.</p>															
17.12.15	<p><b>Exploratory Drilling in NELP-VII, block CB-ONN-2005/10 Block in Western Onshore Basin, Gujarat by M/s ONGC- Reg. [IAGJ/IND/5200/2012, J-11011/470/2009-IA-II(I)] -EC Amendment</b></p> <p>The project proponent gave a detailed presentation on the project and informed that:</p> <ol style="list-style-type: none"> <li>PP has obtained EC for the existing project vide letter No.J-11011/470/2009-IA II (I) dated 26<sup>th</sup> February, 2013 for exploratory drilling of 8 wells in NELP VII Block, CB-ONN-2005/10 in District Bharuch in Western Offshore Basin in Vadodara.</li> <li>It is informed that, due to change in G &amp;G interpretation, the coordinates of the location, B -Anor1 having EC clearance has changed.</li> <li>The coordinates of the proposed and the previous locations for which EC already granted is as under:</li> </ol> <table border="1" data-bbox="327 1093 1492 1323"> <thead> <tr> <th>S.No.</th> <th>Name of the well</th> <th>Latitude</th> <th>Longitude</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>B-Anor-1</td> <td>21<sup>0</sup> 56' 44.037"N</td> <td>72<sup>0</sup> 54' 25.875"E</td> <td>EC Granted</td> </tr> <tr> <td>2</td> <td>Anor- A</td> <td>21<sup>0</sup> 56' 33.66"N</td> <td>72<sup>0</sup> 53' 15.18" E</td> <td>EC Clearance sought</td> </tr> </tbody> </table> <p>The committee has deliberated on the proposal and noted that the change in project co-ordinates due to change in location is within 2km of the earlier proposed site. The committee was of the view that the proposed change will not lead to any change in existing environmental conditions.</p> <p>After detailed deliberation, the committee agreed upon the proposal for change in co-ordinates and recommended to the ministry to revise the environment clearance letter accordingly.</p>	S.No.	Name of the well	Latitude	Longitude	Remarks	1	B-Anor-1	21 <sup>0</sup> 56' 44.037"N	72 <sup>0</sup> 54' 25.875"E	EC Granted	2	Anor- A	21 <sup>0</sup> 56' 33.66"N	72 <sup>0</sup> 53' 15.18" E	EC Clearance sought
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17.12.16	<p><b>Modification in the process facilities of Gas and condensate processing at Hazira Plant by M/s ONGC Ltd. [19828/2008, J-11011/677/2008-IA-II(I)]-EC Amendment</b></p> <p>The project proponent gave a detailed presentation on the project and informed that:</p> <ol style="list-style-type: none"> <li>PP has obtained EC for the existing project vide No. J-11011/677/2008-IA-II(I) dated 12<sup>th</sup> November, 2008.</li> </ol>															

- ii. PP has proposed for modifications in process facilities of Gas and Condensate processing at Hazira Plant, Village - Bhatpore, Tehsil Chorasi, District Surat, Gujarat.
- iii. It is informed that, in view of the change in product basket, as brought out by the project proponent, the processing capacity of the plant will be redesignated as follows:

<b>S No</b>	<b>Product</b>	<b>Capacity</b>
1	Natural gas	46.9 MMSCMD + 1 train standby of 5.6 MMSCMD
2	Sulphur	23,100 TPA
3	Total VAP	19,00,000 TPA

- iv. It is informed that, hHydrocarbon Storage Capacity of the Plant will be as follows:

<b>Sl. No.</b>	<b>Product</b>	<b>Total Capacity</b>
1	HSD	11000 M3
2	LSHS	900 M3
3	LPG	22500 M3
4	NAPTHA	1,32,000 M3
5	SKO	20,000 M3
6	ATF	2000 M3
7	Propane	325 M3

After detailed deliberation, the committee agreed upon the proposal for Modification in the process facilities of Gas and condensate processing at Hazira Plant and recommended to amend the EC. PP has been advised to comply with all the conditions in the EC.

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