MINUTES OF 18th EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) MEETING HELD DURING 23RD TO 25TH JANUARY 2017

VENUE: Brahmputra Hall, Vayu Wing, First Floor, Ministry of Environment, Forests and Climate Change, Indira ParyavaranBhawanAliganj, Jorbagh Road, New Delhi -110003.

23rd January, 2016 (Day 1)

18.1 Opening Remarks of the Chairman

18.2. Confirmation of the Minutes of the 17th Meetings of the EAC (Industry-2) held on 26th to 29th December, 2016 at New Delhi.

EAC has confirmed the Minutes of the 17th Meetings of the EAC (Industry-2) held on 26th to 29th December, 2016 at New Delhi.

18.2.1 Correction in the Minutes of previous EAC meeting:

(i). Expansion of existing pesticide unit (3525 MT/Y to 9325 MT/Y) at Gat no. 367, Village Rasegaon, Tehsil Dindori, District Nashik, Maharashtra by M/s Spectrum Ether Ltd.–corrigendum in EC.

The Member Secretary informed the EAC that the PP (M/s Spectrum Ether Ltd.) has obtained EC vide letter J-11011/84/2012-IA II(I) dated 28th March, 2016 for Expansion of pesticide manufacturing unit (3525 MTPA to 9325 MT/Y) at Gat no. 367, Village Rasegaon, Tehsil Dindori, District Nashik, Maharashtra.

ii. Based on the request of PP, Ministry vide letter dated 30th December, 2016 has issued amendment to the EC for Expansion of pesticide manufacturing unit (3525 MTPA to 9325 MT/Y) at Gat no. 367, Village Rasegaon, Tehsil Dindori, District Nashik, Maharashtra.

iii. Now, PP has requested for correction in the Minutes/EC letter. The PP and the accredited consultant M/s. En-vision Enviro Engineers Pvt. Ltd., Surat has made a detailed presentation on the corrections in the proposal and submitted the request as per the details below:

Sr. No.	Our submission (In EIA as well as presented)	Information as given in MoM	Amendment/Corrections in the conditions required
I	Total cost of expansion project = Rs. 40 Cr. (This also includes capital cost Rs. 7 Cr. for Env. Management.) Recurring cost on Env. Management = Rs. 0.58 Cr./Month Refer EIA P-121,Section 10.2.5.	Total cost of expansion project = Rs. 40 Cr. (This also includes Capital Cost Rs. 7 Cr. For Environment Management.) Recurring cost on Env. Management = Rs. 0.58 Cr./Annum	The Recurring Cost amount to be mentioned as Rs. 0.58 Cr./ Month.
II	Total production	In MoM dated 21-07-	Represented vide our letter

	quantity w.r.t. the fuel consumption = 10,000 MTPY. Refer EIA P-27, Table: 2.3, Section 2.4	2016, the total production quantity mentioned as 1,000 MTPY.	dated 6-7-2016, & 25-08-2016 for correcting the production figures as 10,000 MTPY.
III	For treating the effluent,in EIA, we have proposed "Tertiary Treatment System", after primary & secondary treatment, as "the effluent goes to polyelectrolyte system/ activated bio sludge aerator system/ primary sand & carbon filters/polishing MEE/secondary sand & carbon filters with additional polyelectrolyte system. The final stream of treated water proposed to use for recycling for cooling/process purpose/decantamination purpose/floor washing etc".	In EC dated 28-3-2016, at P-2, Point No. 3.0 at 9th line, the word "by Tertiary Treatment (i.e. Reverse Osmosis)" incorporated. Under SPECIFIC CONDITION, Point XII, we have detailed our Tertiary system .	Our treatment system comprises of "*"Effluent shall be segregated in High COD / TDS and low COD / TDS effluent streams. High COD / TDS effluent stream shall be passed through steam stripper, followed by evaporation in MEE. Low COD / BOD effluent stream and condensate of MEE will be further treated in tertiary activated sludge aerators in ETP. Treated effluent shall be reused / recycled for process purpose and cooling water make-up, after passing thru polishing MEE and sand & carbon filter.* Hence, the statement regarding Reverse Osmosis as Tertiary Treatment System requested to delete.
III	For treating the effluent,in EIA, we have proposed "Tertiary Treatment System", after primary & secondary treatment, as "the effluent goes to polyelectrolyte system/ activated bio sludge aerator system/ primary sand & carbon filters/polishing MEE/secondary sand & carbon filters	In EC dated 28-3-2016, at P-2, Point No. 3.0 at 9th line, the word "by Tertiary Treatment (i.e. Reverse Osmosis)" incorporated. Under SPECIFIC CONDITION, Point XII, we have detailed our Tertiary system .	Our treatment system comprises of "*"Effluent shall be segregated in High COD / TDS and low COD / TDS effluent streams. High COD / TDS effluent stream shall be passed through steam stripper, followed by evaporation in MEE. Low COD / BOD effluent stream and condensate of MEE will be further treated in tertiary activated sludge aerators in ETP. Treated effluent shall be reused / recycled for process purpose and cooling water make-up, after passing thru polishing MEE and sand &*

	with additional polyelectrolyte system. The final stream of treated water proposed to use for recycling for cooling/process purpose/decantamination purpose/floor washing etc".		*carbon filter.* Hence, the statement regarding Reverse Osmosis as Tertiary Treatment System requested to delete.
IV	Our Environmental Consultant for project proposal is M/s. En-vision Enviro Engineers Pvt. Ltd., Surat, Gujarat., who is accredited consultant for the project sector.	In EC dated 28-3-2016 as P-3, at Point No. 6.0, the EIA consultant name mentioned as Ultra-tech Pune.	We request to correct the name of Environmental Consultant as M/s. En-vision Enviro Engineers Pvt. Ltd., Surat, Gujarat.
V	In EIA, at P-46, Table 2.13 indicates the details regarding Hazardous Waste Category & Quantity w.r.t. the existing & proposed production.	EC as well as MoM is silent on this issue.	Requested to incorporate the details regarding Hazardous Waste, its Category and Quantity w.r.t existing and proposed production. The same is shown in the table.

iv. Based on the submission, PP has requested for a corrigendum to the EC as below:

(a). The Recurring cost on Environment Management is Rs. 0.58 Cr./ Month.
(b). The total fuel consumption is 10,000 MTPY.
(c). In EC dated 28-3-2016, at P-2, Point No. 3.0 at 9th line, "Tertiary Treatment (i.e. Reverse Osmosis)" shall be read as "Tertiary Treatment" which is detailed under Specific Condition, Point XII i.e. "Effluent shall be segregated in High COD / TDS and low COD / TDS effluent streams. High COD / TDS effluent stream shall be passed through steam stripper, followed by evaporation in MEE. Low COD / BOD effluent stream and condensate of MEE will be further treated in tertiary activated sludge aerators in ETP. Treated effluent shall be reused / recycled for process purpose and cooling water make-up, after passing thru polishing MEE and sand & carbon filter.
(d). The accredited environmental consultant of the project is M/s. En-vision Enviro Engineers Pvt. Ltd., Surat.
(e). Details regarding Hazardous Waste, its Category and Quantity w.r.t existing and proposed production.

EAC observed that the PP have not requested for these corrections when they came for amendment in the 11th EAC meeting held during 20-21st July, 2016. EAC observed that the

details of Hazardous Waste with category and Quantity are not necessary in the EC letter, as the same is available in the EIA/EMP report.

EAC after detailed deliberation accepted the aforesaid corrections and recommended to issue corrigendum to the EC, subject to submission of an affidavit confirming that the PP has provided the same information in the Form I/TOR Proposal/ EIA-EMP Report with respect to point no . (c) to (e) of the corrections sought.

(ii). The Member Secretary informed the EAC that the Ministry has received a representation from the SNJ Sugars and Products Limited (Formerly Known as Sagar Sugars & Allied Products Limited) making request to the Ministry that they had applied (online on dated 29th July 2015) for amendment in the existing environmental clearance issued to M/s Sagar Sugar and Allied Products Limited vide letter No.J-11011/99/2002-IA II (I) dated 19th November 2003 for Proposed 70 KLPD distillery unit by M/s Sagar Sugar and Allied Products Limited at village Nelavoy district Chittor, Andhra Pradesh. The amendments requested are as follows:

A. Amend the name change as M/s SNJ Sugars and Products Limited in place of M/s Sagar Sugars & Allied Products Limited.

B. Incorporate ''Grain'' and "Malt" also as one of the raw material ingredient for the 70 KLPD Distillery already provided with molasses, sweet Sorghum and Sugar Beet as juice as raw materials.

The above proposal was considered in the 14th EAC (Industry-2) meeting held during 26th to 27th October, 2016 and the Committee agreed to favourably consider the above amendment; however the Minutes of the said EAC meeting posted on the website covered only the request for name change.

The EAC critically examined the request made by the PP and after deliberations unanimously accepted the corrections and recommended to incorporate the ''Grain'' and "Malt" also as raw materials ingredient for the existing distillery with condition that spent wash generation shall not increase 3kl/kl of alcohol produced.

18.3. Consideration of Proposals: (Environmental Clearance)

18.3.1	**Proposed expansion of Active Pharma Ingredients (APIs) and Intermediates Manufacturing at Sy. No.533,535, 536 and 537, IDA Bonthapally, JinnaramManda, Sangareddy District, Telangana by M/s Granuels India Limited. API, Unit-I-** [IA/TG/IND2/60706/2016, SEIAA/TS/OL/MDK-04/2016-1803]-**Environmental Clearance** The PP not attended the EAC meeting. The EAC decided to defer the proposal.
18.3.2	**Expansion of Grain based Distillery plant capacity from 125 KLPD to 150 KLPD by M/s SENTINI BIOPRODUCTS PRIVATE LTD UNIT II-** [IA/AP/IND2/58016/2016, J-11011/110/2016 IA II (I)]**- Environmental Clearance**

The project proponent and the accredited consultant M/s Pioneer Enviro Laboratories & Consultants Pvt. Ltd., Hyderabad made a detailed presentation on the proposal and informed that:

i. The PP obtained Environmental clearance for 125 KLPD Grain based distillery and 4 MW power plant in Sy. Nos. 63, 101-103 & 224-229 of Gandepally Village, Kanchikacherla Mandal, Krishna District, Andhra Pradesh from MOEF&CC, New Delhi vide letter No. F.No.J.11011/308/2006-IA II (I) dated 05/01/2007, in 102.94 acres (41.66 Ha.).

ii. PP now proposed to enhance the Distillery plant capacity from 125 KPLD to 150 KLPD with certain modifications in existing infrastructure. There is no additional land involved in the proposed expansion project.

iii. All non molasses based distilleries (≥60 KLD) are listed at Sl.No. 5(g) (ii) of Schedule of EIA Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

i. The Terms of References (TORs) was awarded in the 8th Meeting of the Expert Appraisal Committee (Industry) held during 26-27th May, 2016 for preparation of EIA-EMP report. Ministry has issued the TOR vide letter dated 15th July, 2016. Ministry has issued an amendment to the TOR vide letter dated 20th October, 2016 exempting public hearing for the project for preparation of EIA-EMP report.

iv. The Proposed expansion will be taken up in the existing plant area of 102.94 acres (41.66 Ha.). No additional land is envisaged for the proposed expansion project.

v. The expansion project cost will be Rs. 3.15 crores.

vi. There are no Reserve Forests/Protected Forests within 10 Km. radius of the plant site. Rivers Muniyeru (1.75 Kms) and Wira (1.5 Kms) are flowing within 10 km distance of the project site. Nagarjuna sagar left bank canal is located 0.9 Kms from the project site.

vii. Following is the existing and proposed production capacity:

S. No.	Unit	PRODUCT/ BY PRODUCT	EXISTING CAPACITY	PROPOSED EXPANSION CAPACITY	AFTER EXPANSION CAPACITY
1.	Distillery(with Grains)	Rectified Spirit/ENA/Ethanol	125 KLPD	25 KLPD	150 KLPD
2.	Power	Electricity	4 MW	---	4 MW
3.	$C0_2$ recovery plant	$C0_2$(By product)	93 TPD	19 TPD	112 TPD

viii. There will be no additional power requirement for proposed expansion project.

ix. The total water requirement after recycling as per the existing environmental clearance is 1955 KLD. No additional water is required for the proposed expansion project and the total water requirement for 150 KLPD capacity will be reduced to 1500 KLD. Water requirement for the existing 125 KLPD plant is being sourced from Muniyeru river which is at a distance of 1.7 Kms. from the plant. Water drawl permission has been

obtained from the I & CAD, Govt. of Andhra Pradesh which is valid up to 13/02/2018. The PP informed that as per report of the Central Ground water Board, Ministry of Water Resources, Government of India, Kanchika Mandal, Andhra Pradesh, where the project site is falling, is declared as 'Safe Zone'. The PP submitted a copy of the report of Central Ground water Board, Ministry of Water Resources, Government of India. The PP also submitted the permission obtained from Ground Water Department, Government of Andhra Pradesh for with drawl of 11, 00, 000 lts/day of ground water from the recommended (7) Borewells and existing groundwater structure vide Memo No. 5283/HGII (1)/2006 dated 21.11.2016.

x. A stack height of 63 Meter have been provided for existing 40 TPH boiler as per CPCB norms for effective dispersion of pollutants into the atmosphere. High efficiency Bag filters have been provided for bringing down PM emission to < 100 mg/Nm^3. The same 40 TPH Boiler is adequate for expansion project, as there will not be any further increase in steam requirement due to reduction in specific steam consumption.

xi. There will be no additional thin slop generation with 150 KLPD production and infact the thin slop generation with 150 KLPD will be 1050 KLD, due to better recycling practices proposed to be adopted.

xii. In the existing 125 KLPD plant, Spent wash (6 % w/w solids) is initially being treated in a decanter and the supernatant is concentrated in the Multilple Effect Evaporators (MEE) up to 30-35% solids (w/w). This concentrated spent wash is sent to the drier along with wet cake generated from Decanter and the output is a dry powder with 90% solids and is known as DDGS.

xiii. This DDGS will be used as cattle feed. Thus zero spent wash discharge will be implemented for spent wash treatment to comply with CPCB stipulation.

xiv. The proposed capacity enhancement will be achieved by making suitable modifications in infrastructure. Spent wash generation will be reducing. Hence existing ETP is adequate to treat the spent wash & non process waste water from 150 KLPD plant. Ash generation remains 60.9 TPD only as the same Boiler is adequate for 150 KLPD capacity also. The same silo is adequate for ash storage. DDGS generation will be 125 TPD from 150 KLPD plant, which will be used as cattle/poultry feed.

xv. The PP has informed the EAC that the ambient air quality (AAQ) monitoring was carried out at 8 locations during October- November, 2016. The baseline data indicates that the ranges of concentrations as:- PM_{10} (33.6 to 63.4 $\mu g/m^3$), $PM_{2.5}$ (19.3 to 38.2 $\mu g/m^3$), SO_2 (9.0 to 23.5 $\mu g/m^3$), CO (450 to 1080 $\mu g/m^3$) and NOx (11.0 to 27.7 $\mu g/m^3$). The concentrations are within the National Ambient Air Quality Standards (NAAQS).

xvi. PP has submitted the copy of the certified compliance report no. 1372 dated 01.07.2016 from the Regional Office, Chennai for the conditions in the existing EC.

EAC deliberated on the proposal. It is observed that the AAQ are within National Ambient Air Quality Standards. EAC found the certified compliance report to be satisfactory. EAC suggested PP to reduce the water requirement to 1250 m^3/day and the proposed project shall not make any additional effluent discharge.

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

A. Specific Conditions:

i) Bag filter shall be provided to the bagasse/slope fired boiler to control particulate emissions within permissible limit. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

ii) PP shall reduce the water requirement from 1500 m^3/day to 1250 m^3/day. Total fresh water requirement after expansion project from ground water shall not exceed 1250 m^3/day and prior permission should be obtained from the concerned authority.

iii) Spent wash generation from molasses based distillery shall not exceed 8 Kl/Kl of alcohol. The spent wash from molasses based distillery shall be treated in MEE followed by incineration boiler. Effluent from spentlees, utilities effluent and evaporator Condensate shall be treated in Condensate Polishing Unit (Secondary ETP followed by RO) and recycled/reused in process. No effluent shall be discharged outside the premises and 'Zero' discharge shall be maintained.

iv) As proposed, existing effluent treatment plant of the existing distillery shall be scrapped and switched over to the new proposed scheme i.e. evaporation followed by incineration after installation. The expansion project shall not make any additional effluent discharge.

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) Continuous online (24 x7) monitoring to be installed for flow measurement and measurement of pollutants within the treatment unit. Data to be uploaded on company's website and provided to the respective RO of MEF&CC, CPCB and SPCB.

ix) 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 Lucknow and SPCB.

x) Bagasse storage shall be done in such a way that it does not get air borne or fly around due to wind.

xi) Boiler ash from distillery as well as sugar plant 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 along with the storm water. Direct exposure of workers to fly ash & dust shall be avoided.

	Proper ash management for its end use to drawn and consent to be obtained accordingly. xii) 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. xiii) 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. xiv) 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. xv) As proposed, green belt shall be developed within plant premises with at least 10 meter wide green belt of perennial trees 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. xvi) An Environment Cell will be set up with One environmental Manager having post graduate qualification in environmental sciences/ Environmental engineering. xvii) 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 Lucknow. Implementation of such program shall be ensured accordingly in a time bound manner within 5 years. Besides, water supply, toilet facility and solar lighting, one rain water harvesting pond, etc shall be created in nearby villages as committed.
18.3.3	**Setting up of synthetic organic resins namely Phenol Formaldehyde Resin, Urea Formaldehyde Resin, Melamine Formaldehyde Resin and Laminated Sheets at Survey no. 125 Paiki 1, Village Bahadurgadh, Sokhada Road, Taluka & District Morbi, Gujarat by M/s Abhay Laminate LLP.–** [IA/GJ/IND2/51363/2016, J-11011/99/2016- IA II(I)]- **Environmental Clearance** The project proponent and the accredited consultant M/s T.R. Associates, Ahmedabad made a detailed presentation on the proposal and informed that: i. The proposal is for setting up of synthetic organic resins namely Phenol Formaldehyde Resin, Urea Formaldehyde Resin, Melamine Formaldehyde Resin and Laminated Sheets at Survey no. 125 Paiki 1, Village Bahadurgadh, Sokhada Road, Taluka & District Morbi, Gujarat by M/s Abhay Laminate LLP. ii. All Synthetic Organic Chemicals Industry located outside the notified industrial area/estate are listed at S.N. 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 Terms of References (TORs) was awarded in the 8th Meeting of the Expert Appraisal Committee (Industry) held during 26-27th May, 2016 for preparation of EIA-EMP report. Ministry has issued the TOR vide letter dated 15th July, 2016.

iv. PP has informed that the village name is Bahadurgadh not Sokhada. PP has requested for TOR amendment vide letter dated 12th November, 2016 regarding correction in village name.

v. The total land area of the PP is 11, 837 m^2 out of which 3,908 m^2 land will be used for greenbelt area development. The unit proposes to develop green belt area of 3,900m^2.

vi. The estimated cost of the Resin project is 1.10 Crore.

vii. Total budget allocation towards Environmental Management Facilities will be Rs. 34 lacs and recurring cost will be 31.9 Lacs.

viii. Total 60 persons will be employed including skilled labours, unskilled labours and office staff.

ix. No protected areas are located within 10 km radius of the project site. Rivers Machchhu (4.62 Km) and Godadhari (4.88 Km) are flowing within 10 km distance of the project site.

x. The PP proposed to manufacture following products:

Name of Products	**Quantity (MT/Month)**
Phenol Formaldehyde Resin	400
Melamine Formaldehyde Resin	150
Urea Formaldehyde Resin	300
Laminated Sheets	1,50,000 Nos./Month

xi. Total fresh water requirement for the proposed project will be 49.7 KLD which will be fulfilled by own borewell/canal water. Water requirement for domestic activities is 7 KLD, for utilities & washing activities is 30.7 KLD and for greenbelt development is 7 KLD.

xii. Total power requirement for the proposed project will be about 300 KVA which will be procured from Paschim Gujarat Vij Company Ltd. (PGVCL). In addition to this, unit will install one D. G. Set of 250 KVA as stand-by to the main source and the same will be utilized only in case of non-availability of power from PGVCL. Fuel will be required for Boiler (4 TPH), Thermic Fluid Heater (15 Lac Kcal/h) and D. G. Set (300 KVA). Briquettes/Coal will be used in Boiler as well in Thermic Fluid Heater and High Speed Diesel (HSD) will be utilized for D. G. Set. Fuel will be purchased from the nearby trader. Cyclone separator followed by Bag filter with adequate stack height will be provided for thermic fluid heater.

xiii. Total 6 KLD sewage (domestic wastewater) will be disposed off through septic tank / soak pit system. 1.2 KLD effluent will be generated from the manufacturing of Phenol Formaldehyde resins. However, there will not be any

requirement of water in manufacturing activities. 0.2 KLD wastewater generated from floor washing. 1 KLD and 3 KLD wastewater will be generated from boiler and cooling tower respectively as blow down. 12 KLD reject water will be generated from RO-1 plant which will be taken to RO-2 for further treatment out of which 9.6 KLD permeate will be used in boiler while 2.4 KLD of rejects will go to effluent treatment plant. Process and washing wastewater will be collected and treated by chemical oxidation treatment. After completion of chemical treatment, wastewater will be taken to Nutch Filter for chemical sludge separation. Dried sludge will be stored in bags and ultimately disposed of at TSDF site. Chemically treated water will be collected in holding tank where utility wastewater and RO-2 reject will be mixed. Whole quantity of treated water will be evaporated in Steam / Thermic fluid based evaporation system followed by condenser. Condensate water from condenser will be reused in process. Thus, unit will reuse water in Industrial process and bottom sludge from evaporator will be handled with ETP sludge.

xiv. The main source of hazardous waste generation from manufacturing process will be edge cutting waste from sheets containing resin to be generated during cutting of laminated sheets. The other hazardous wastes shall be discarded bags, used oil and ETP sludge and evaporation residue. Unit will provide storage area for hazardous wastes having roof, pucca flooring with leachate collection system. Leachate, if any will be collected and treated in effluent treatment plant. Unit will take membership of TSDF site as well as common incineration facility after commencement of proposed project.

xv. Public hearing has been conducted by Gujarat Pollution Control Board on 18th November, 2016.

xvi. The PP has informed the EAC that the ambient air quality (AAQ) monitoring was carried out at 8 locations during March - May, 2016. The baseline data indicates that the ranges of concentrations as:- PM_{10} (61.30-82.20 $\mu g/m^3$), $PM_{2.5}$ (22.07-33.00 $\mu g/m^3$), SO_2 (6.10-25.00 $\mu g/m^3$) and NO_2 (6.10-24.70 $\mu g/m^3$). AAQ modeling study for point source emissions indicates that the maximum incremental ground level concentrations (GLCs) after the proposed project are within the National Ambient Air Quality Standards (NAAQS).

EAC deliberated on the proposal. EAC noted that the village name is Bahadurgadh and recommended to correct the village name accordingly. The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding local employment, type of waste generated from industry, tree plantation, etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report. EAC has noted that the AAQ concentrations are within the National Ambient Air Quality Standards. EAC suggested PP to use surface water and no ground water shall be used. Briquests shall be used as fuel and coal shall not be used. PP is directed to ensure ZLD and to make facilities for air quality monitoring in monthly basis. PP shall install detectors for process emission detection. EAC suggested PP to plant 1000 perennial trees/year till five years in the nearby village with tree guard. PP shall also ensure the survival of the plants and survival status report to be submitted in six monthly compliance report.

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

A. Specific Conditions

i. Stack of adequate height shall be provided to oil fired boiler and thermic fluid heater to control particulate emissions.

ii. Scrubber shall be provided to control process emissions viz. HCl and SO_2. The scrubbed water should be sent to ETP for further treatment. Efficiency of scrubber shall be monitored regularly and maintained properly. Scrubbers vent shall be provided with on-line detection and alarm system to indicate higher than permissible value of controlled parameters. At no time, the emission levels shall go beyond the prescribed standards. The system should be interlocked with the pollution control equipments so that in case of any increase in pollutants beyond permissible limits, plant should be automatically stopped.

iii. Chilled brine circulation system should be provided to condensate solvent vapors and reduce solvent losses. It should be ensured that solvent recovery should not be less than 95%.

iv. Fugitive emissions in the work zone environment, product, raw materials storage area etc. should be regularly monitored. The emissions should conform to the limits stipulated by GPCB.

v. Surface water shall be used as water source and no ground water shall be used.

vi. Effluent generation shall not exceed the proposed. Effluent will be treated in the ETP and treated effluent will be disposed after conforming to the standards prescribed for the effluent discharge and obtaining permission from the GPCB. Domestic sewage should be treated in STP.

vii. Treated effluent should be passed through guard pond. Online pH meter, flow meter and TOC analyzer should be installed.

viii. Briquettes shall be used as fuel and coal shall not be used

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 for management of hazardous wastes and prior permission from SPCB should be obtained for disposal of solid / hazardous waste in the TSDF. The concerned company should undertake measures for fire fighting facilities in case of emergency.

x. As proposed, greenbelt should be developed in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Selection of plant species should be as per the CPCB guidelines. 1000 perennial trees shall be planted in the nearby village with tree guard. PP shall also ensure the survival of the plants.

xi. An Environment Cell will be set up with One environmental Manager having post graduate qualification in environmental sciences/ Environmental engineering.

xii. All the recommendations made in the risk assessment report should be satisfactorily implemented.

xiii. Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.

xiv. Zero Liquid Discharge shall be ensured.

xv. The unit shall have 24x7 air quality monitoring system. Necessary facilities for air quality monitoring in monthly basis shall be installed.

xvi. Detectors for process emission detection shall be installed.

18.3.4	**Setting up of 200 KLPD Molasses Based Distillery along with 6.0 MW Cogeneration Power Plant at village Hariawan, Tehsil & District Hardoi, Uttar Pradesh by M/s DCM Shriram Ltd.-** [IA/UP/IND2/48115/2016, J-11011/62/2016-IA II(I)] **-Environmental Clearance** The project proponent and the accredited consultant M/s J. M. Environet Pvt. Ltd.., Gurgaon made a detailed presentation on the proposal and informed that: i. The proposal is for setting up of 200 KLPD Molasses Based Distillery along with 6.0 MW Cogeneration Power Plant at village Hariawan, Tehsil & District Hardoi, Uttar Pradesh by M/s DCM Shriram Ltd. 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). iii. The Terms of References (TORs) was awarded in the 7th Meeting of the Expert Appraisal Committee (Industry) held during 28-29th April, 2016 for preparation of EIA-EMP report. Ministry has issued the TOR vide letter dated 21st June, 2016. iv. The total Plant area is 16.75 ha (41.39 acres). 5.53 ha (13.67 acres) of the total plant area will be developed as greenbelt/plantation. The total cost of the proposed project is Rs 188 crores. Capital cost for Environmental Protection Measures will be Rs. 40Crores and Recurring Cost will be Rs. 4Crores / annum. No forest area/ National Park/ Sanctuary exists within 10km radius of the study area. Sai River (Seasonal River-800 m), Bhainsta River (1km-Seasonal River) BaruanJhil (Seasonal Lake-2km) and Lucknow Branch Canal (6.0 km) are located within 10 km distance of the project site. 145 persons will be employed in the proposed plant. The number of working days of the unit will be 330 days/annum. The PP proposed unit consist the following : v. The water requirement for the proposed project will be 1792KLPD which will be sourced from ground water & rainwater. vi. The total power requirement for proposed project will be 5.4 MW which will be sourced from proposed 6.0 MW Co-Generation Power Plant & 2x 1500 KVA of D.G. set (for back up). vii. The fuel used for the boiler will be Concentrated Spent wash along with Bagasse or Rice Husk (250 MT/day)/ coal (150 MT/day). Spent wash will be generated in-house (from MEE), bagasse will be obtained from own sugar mills and coal/rice husk from local vendors. Spent wash generated from the analyzer column during the operation, will be concentrated in Multi –Effect Evaporator (MEE) from initial 12% solid to 55% solid and transferred for complete incineration in a special boiler designed for spent wash. Complete spent wash will be concentrated and incinerated. Used oil & grease generated from plant machinery/gear boxes as hazardous waste will be sold out to the authorized recycler. Water Treatment System and CPU will be installed. The process condensate from MEE will be

S.No.	Unit	Proposed capacity
1	Molasses based Distillery	200 KLPD
2	Co-Generation Power Plant	6 MW

treated and recycled back in the process.

viii. An Electrostatic Precipitator with stack of 60 m height will be installed to control the particulate and gaseous emissions due to combustion of fuel. The project will be based on "Zero Effluent Discharge". Concentrated spent wash will be incinerated with supplementary fuel (Bagasse/Rice Husk/Coal) in the incineration boiler. Ash from the boiler will be supplied to brick manufacturers/ soil amendment.

ix. The ambient air quality (AAQ) monitoring was carried out at 8 locations during March - May, 2016. The baseline data indicates that the ranges of concentrations as:- PM_{10} (63.0 µg/m^3 to 84.5 µg/m^3), $PM_{2.5}$ (30.2 µg/m^3 to 41.3 µg/m^3), SO_2 (5.1 µg/m^3 to 8.8 µg/m^3) and NOx (13.4 µg/m^3 to 20.4 µg/m^3). The concentrations are within the National Ambient Air Quality Standards (NAAQS).

x. As suggested by EAC, PP vide letter dated 24.01.2017 has committed that under ESC activities, PP shall make 77 toilet sets, provide safe drinking water to 4 nearby villages, provide free and subsidised education to 100 deserving students of the nearby villages, will take step to improve water storage in local ponds/johars of 10 villages, install 100 hand pump, subsidy to farmers for purchasing solar pumps (20 nos), 4 schools will be renovated and provide medical and health facilities.

xi. Public Hearing for the proposed project was conducted on 15th November, 2016 by Uttar Pradesh Pollution Control Board.

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding employment, Air & Water Pollution Abatement and CSR planning etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report. EAC noted that the water balance is high in the area. However, PP has been suggested to ensure rainwater harvesting and install piezometer for water recharge monitoring. EAC suggested PP to built toilet, drinking water and free education to the nearby villagers and PP agreed to the same. EAC also suggested PP to plant 1000 perennial trees/year till 5 years. EAC has noted that the AAQ concentrations are within the National Ambient Air Quality Standards.

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

A. Specific Conditions

i) Bagfilter shall be provided to the bagasse/slope fired boiler to control particulate emissions within permissible limit. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

ii) Total fresh water requirement after expansion project from ground water shall not exceed 1792KLPD and prior permission should be obtained from the CGWA/SGWA. PP shall ensure rainwater harvesting and shall install piezometer for water recharge monitoring.

iii) Spent wash generation from molasses based distillery shall not exceed 8 Kl/Kl of alcohol. The spent wash from molasses based distillery shall be treated in MEE followed by incineration boiler. Effluent from spentlees, utilities effluent and evaporator Condensate shall be treated in Condensate Polishing Unit (Secondary ETP followed by RO) and recycled/reused in process. No effluent

		shall be discharged outside the premises and 'Zero' discharge shall be maintained.
	iv)	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.
	v)	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.
	vi)	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
	vii)	Continuous online (24 x7) monitoring to be installed for flow measurement and measurement of pollutants within the treatment unit. Data to be uploaded on company's website and provided to the respective RO of MEF&CC, CPCB and SPCB.
	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 Lucknow and SPCB.
	ix)	Bagasse storage shall be done in such a way that it does not get air borne or fly around due to wind.
	x)	Boiler ash from distillery as well as sugar plant 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 along with the storm water. Direct exposure of workers to fly ash & dust shall be avoided. Proper ash management for its end use to drawn and consent to be obtained accordingly.
	xi)	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.
	xii)	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.
	xiii)	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.
	xiv)	As proposed, green belt 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. PP shall plant at least 1000 perennial trees.
	xv)	An Environment Cell will be set up with One environmental Manager having post graduate qualification in environmental sciences/ Environmental

	engineering. xvi) All the commitments made during the Public Hearing/Public Consultation meeting held on 15th November, 2016 shall be satisfactorily implemented and adequate budget provision shall be made accordingly. xvii) All the activities committed in the ESR vide letter dated 24.01.2017 has to be implemented. 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 Lucknow. Implementation of such program shall be ensured accordingly in a time bound manner.

Reconsideration of EC

18.3.5	**Expansion of Ammonia – Urea Fertilizer Plant at Udyog Nagar Industrial Area Panki Kanpur Uttar Pradesh by M/s Kanpur Fertilizer & Cement Limited.- Environmental Clearance-reg.** {J-11011/30/2014-IAII(I), IA/UP/IND2/30838/2014} The Member Secretary informed that EAC that the proposal was earlier considered in the 6th meeting of the EAC (Industry-2) held during 30th March to 2nd April 2016. The EAC has sought following additional information from the PP: i. GLC of SO_2 from proposed expansion is reported to be 20.24 µg/m^3, which is due use of coal as fuel and seems to be in higher side. Therefore, the Committee advised them to rework on the use of natural gas instead coal as fuel for CPP. ii. To bring down the water requirement of existing and proposed unit upto 6 m^3 per MT of urea production. iii. Detailed plan to be drawn for water conservation measures including rainwater harvesting. iv. Greenbelt layout plan of the existing and proposed plant to drawn. Now, the PP and the accredited consultant M/s EQMS India Pvt. Ltd, Karkardooma has made a detailed presentation on the proposal and additional information sought by the EAC, and informed the following: i. PP will setup the 85 MW natural gas based CPP along with expansion of Ammonia-Urea Fertilizer Plant. ii. Water requirement for existing unit and proposed expansion shall be upto 6.41 m3/MT of urea production. The total water consumption after proposed project will be 19445 m^3/day. iii. PP has constructed two water reservoirs having capacity of 32 and 64 million gallon within the plant premises and their collection surfcases are 34350 m^2 and 56550 m^2 respectively. PP has also constructed a big catchment pond. iv. PP has proposed for a green belt area of about 81 acres constituting more than 33 % of the total area 243.4387 acres. v. In addition, PP has informed that 2.5 % of the total cost of project is earmarked for ESR activities. EAC has deliberated on the additional documents and information submitted by

	the PP. EAC has noted that the information submitted by the PP in points (i-iii) is satisfactory. However, EAC noted that the green belt plan submitted by the PP lacks information on existing green belt area and do not have 10 m wide green belt. It is also noted that the PP has not submitted the proper green belt plan. EAC also suggested PP to provide ESR activities in quantifiable values. The PP submitted the information desired by the EAC during the meeting. The EAC after critical examination of the information provided by the PP recommended the project for grant of environmental clearance subject to compliance of following specific conditions along with other general environmental conditions: (i) The gaseous emissions (SO_2, NOx, NH_3, HC and Urea dust) and particulate matter from various process units shall conform to the norms prescribed by the CPCB/SPCB from time to time. 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. Stack emissions shall be monitored regularly. (ii) Adequate stack height shall be provided to Ammonia plant reformer, Heat recovery steam generator (HRSG), NG/ RLNG fired gas turbine and granulation. Low NOx burners shall be provided to control NOx emissions. (iii) As proposed, exhaust air from the granulator shall be passed through scrubber and conform to the norms prescribed by the CPCB/SPCB from time to time. vi. Water requirement for existing unit and proposed expansion shall not exceed 21, 200 m3/day. No ground water shall be used. vii. PP has constructed two water reservoirs having capacity of 32 and 64 million gallon within the plant premises and their collection surfcases are 34350 m^2 and 56550 m^2 respectively. PP has also constructed a big catchment pond. (iv) Industrial wastewater shall be treated in the ETP. As proposed, Urea plant process condensate shall be treated in a deep hydrolyser followed by stripping. Ammonia plant process condensate (APC) shall be stripped with steam followed by activated carbon and demineralization. Treated condensate shall be recycled/reused in the process. Utilities wastewater shall be treated in the ETP and treated effluent shall be recycled/ reused. Treated effluent shall also be monitored for the parameters namely ammonical nitrogen, Nitrate, Fluoride, pH etc. As proposed 3725 m 3 /day of treated effluents will be recycled back to plant. Balance only 19 m3 /day as sludge will be disposed off through Common Hazardous Waste Treatment Storage and Disposal Facility (CHW TSDF) of M/S Uttar Pradesh Waste Management Project. (UPWMP). Sewage shall be treated in STP. The plant shall adopt ZLD concept. (v) Regular monitoring of ground water by installing peizometric wells around the guard pond and sludge disposal sites shall periodically be done and report submitted to the Chennai Regional Office of the Ministry, CPCB and SPCB. (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. Measures shall be taken for firefighting facilities in case of emergency. (vii) Spent catalysts and used oil shall be sold to authorised recyclers/re-processors only.

	(viii) The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP). (ix) Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act. (x) As proposed, green belt area of about 81 acres constituting more than 33 % of the total area 243.4387 acres 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) All the commitments made during the Public Hearing/Public Consultation meeting held on 14.07.2015 at 2:00 pm in State Inter College, Bhaunti, Kanpur shall be satisfactorily implemented and adequate budget provision shall be made accordingly. (xii) 2.5 % of the total cost of project Cost 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 Chennai. Implementation of such program shall be ensured accordingly in a time bound manner. (xiii) Remote operated valve placed on NH_3 line to avoid leakage/equipment check should be performed to ensure that remote operated valve (ROV) is all time is functional.
18.3.6	**Expansion of Molasses based Distillery Plant (from 30 KLPD to 60 KLPD) at SurveyNo.290, Village Sainagar Ranjani, Tehsil Kallam, District Osmanabad, Maharashtra by M/s Natural Sugar & Allied industries Ltd.- Environmental Clearance-reg.** IA/MH/IND2/27630/2012 {J-11011/194/2012-IA II (I)} The project proponent has informed that : (i). The proposal was considered by the EAC (Industry -2) in its 3rd meeting held on 18th - 19th January, 2016 and recommended the project for environmental clearance. (ii) PP has informed that the SPCB has taken legal action against the PP for reported violations. Member secretary informed that EAC that, as it is a violation case and as the matter is sub-judice, it has been decided by the Ministry to hold on the file till the verdict of Hon'ble Court. After detailed deliberation, EAC has agreed to the point of Ministry and deferred the proposal till a decision is made by the Hon'ble Court.

18.4 Terms of Reference (TOR)

18.4.1	**Expansion and modification of pharmaceutical Industry (1388 TPA to 4827.3 TPA) at Plot No, 82/A, 83-P, 83-P1 & 72, KIADB Industrial Area, Jigani, Anekal Taluk, Bangalore by M/s Hikal Limited.- Terms of Reference-reg. [IA/KA/IND2/60368/2016, J- 11011/374/2016-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 proposes to expand its existing Bulk Drugs and intermediate Manufacturing facility from 1388 TPA to 4827.3 TPA.

ii. PP has obtained earlier EC from SEIAA, Karnataka vide No.SEIAA:14:IND:2007 dated 18th June, 2008.

iii. All Synthetic organic chemicals industry projects, located in a notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B'. However, considering the General Condition, i.e. location of project site within 5 km of the Protected Areas notified under Wild Life (Protection) Act, 1972, the project is categorized under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

iv. PP informed that the project is located within 4.8 km distance from Suddahalli Forest and 5.6 km from Raagihalli State Forest. During presentation PP clarified that the project is located near to Bannerghatta National Park.

v. The product details and the proposed additions are as below

	PRODUCT DETAILS (EXPANSION OF EXISTING AND PROPOSED ADDITIONS)				**CAS Number**	**Therapeutic Category**
SL. NO.	NAME OF THE PRODUCT	EXISTING	EXPANSION (MTPA)	TOTAL (MTPA)		
1	GABAPENTINE	700	1300	2000	60142-96-3	Anticonvulsant
2	BURPROPION HCL	50	25	75	31677-93-7	Antihyperlipoproteinemic
3	CINNARIZENE	5	15	20	298-57-7	Antihistaminic, vasodilator
4	ONDANSETRON HCL	1		1	103639-04-9	Antiemetic
5	ACEBUTALOL- HCL	15		15	34381-68-5	Antihypertensive, Antianginal and Antiarrhythmtic
6	P-BENZYLOXY ANILINE HCL	40		40	51388-20-6	Intermediates
7	ONDANSETR	1		1	103639	Antiemetic

	ON API				-04-9	
8	OXYPENTIFYLLINE	5	70	75	6493-05-06	Vasodilator
9	TRIPOLIDINE- HCL	4		4	5050-70-9	Histamine H1-receptor antagonist
10	GEMFIBROZIL	300	(- 120)	180	25812-30-0	Antihyperlipoproteinemic
11	DECOQUINATE	75	200	275	18507-89-6	Antiprotozoal: Agent against coccidiosis
12	LEVETIRACETAM	8.8		10.0	102767-28-2	Anticonvulsant
13	VERAPAMIL	20		20	152-11-4	Antianginal, Antiarrhythmic Antihypertensive
14	VALPROIC ACID	50		50	99-66-1	Anticonvulsant (Treatment of Epilepsy)
15	SODIUM VALPROATE	50		50	1069-66-5	Anticonvulsant (Treatment of Epilepsy)
16	DI-VALPROEX SODIUM	20		20	76584-70-8	Anticonvulsant (Treatment of Epilepsy)
17	MAGNESIUM VALPROATE	10		10	62959-43-7	Epilepsy & Migraines
18	TOPIRAMATE	20		20	97240-79-4	Anticonvulsant (Treatment of Epilepsy)
19	T-LUCINE	12		12	26782-71-8	Intermediates
20	FLUNARAZINE	1.2	10.8	12		
PROPOSED PRODUCT TO BE ADDED (NEW)					52468-60-7	Calcium channel blocke
21	VENLAFLAXINE HCl	--	40	40	99300-78-4	Antidepressant
22	NEOTAME	--	50	50	165450-17-9	Artificial sweetener
23	PIRACETAM	--	650	650	7491-74-9	Psycho stimulants and nootropics

		24	ETIRACETAM FRESH	--	500	500	33996-58-6	Intermediates
		25	ETIRACETAM RACEMIC		150	150	33996-58-6	Intermediates
		26	TPCA.HCL	--	10	10		Intermediates
		27	CMMDT	--	10	10	17661.72	Intermediates
		28	TRI-FLUROMETHYL CINNAMIC ACID	--	10	10	779-89-5	Intermediates
		29	MEMANTINE HCl	--	10	10	41100-52-1	Intermediates
		30	PIPERAZINENITRO HCl	--	50	50		Intermediates
		31	SEVELAMER CARBONATE	--	100	100	845273-93-0	Phosphate binding drug used to chronic kidney disease.
		32	COLESEVALAM HYDROCHLORIDE	--	100	100	182815-44-7	Treatment of dyslipidemia
		33	PREGABLIN	--	100	100	148553-50-8	Treatment Neuropathic pain
		34	SITAGLIPTIN	--	10	10	486460-32-6	antihyperglycemic (antidiabetic drug)
		35	VILDAGLIPTIN	--	10	10	274901-16-5	Antidiabetics
		36	LACOSAMIDE	--	20	20	175481-36-4	Anticonvulsant
		37	VALOCYCLOVIR HYDROCHLORIDE	--	50	50	124832-27-5	Antiviral
		38	OLMESARTAN	--	10	10	144689-63-4	Cardiovascular Agent
		39	DONEPEZIL HYDROCHLORIDE DIHYDRATE	--	2	2	884740-09-4	Anti-Alzheimer's agent
		40	QUETIAPINE FUMURATE	--	40	40	111974-72-2	Schizophrenia
		41	PRASUGREL (TPPO)	--	10	10		
		42	BUTRAPHANOL	--	0.3	0.3		

43	METHIMAZOLE	--	5	5		

vi. V.M Halli Lake (280 mtrs), Haragade Lake (1.86 Km), Hennagara Lake (2.0 Km) are located within 10 km radius of the project site. Cost of the project for expansion and modification is Rs. 80 Crores. The total Site area is 17.83 acre. Water requirement:1158 KLD which will be sourced from KIADB. Power requirement of 4000 KVA will be sourced from BESCOM.

vii. Effluent Shall be treated in ETP followed by MEE and ATFD. The Distillate along with RO permeate given to cooling tower make up. Hazardous waste Shall be collected in a leak proof containers & disposed only to KSPCB registered authorized re-processors provided the oil meets the standards as per schedule-5 part A of the rules.

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

i. PP shall produce the copy of application/letter submitted for the recommendation of SC NBWL.
ii. PP shall submit the copy of certified compliance reported for the conditions in the existing EC from the Regional Office, Bangalore of Ministry.
iii. PP shall change the layout plan of green belt development incorporating 10 metre width in the peripheral of the boundary of the project site.

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.

18.4.2 Proposal for expansion and modification of pharmaceutical Industry at Plot No, 82/A, 83-P, 83-P1 & 72 , KIADB Industrial Area, Jigani, AnekalTaluk, Bangalore Urban by M/s Hikal Limited. [IA/KA/IND2/60540/2016,J- 11011/374/2016-IA.II(I)]

This project is repetition of project at agenda no. 18.4.1.

18.4.3 **Onshore Oil & Gas development 179 drilling wells and production setups including the associated pipelines in North Hapjan-Tinsukia-Dhola area in Tinsukia District, Assam by M/s OIL INDIA LIMITED-Terms of Reference-reg.** [IA/AS/IND2/60372/2016, J- 11011/375/2016-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 present proposal is for Onshore Oil & Gas development 179 drilling wells and production setups including the associated pipelines in North Hapjan-Tinsukia-Dhola area in Tinsukia District, Assam by M/s OIL INDIA LIMITED.

ii. The PP has obtained EC for existing development and exploratory wells vide Ministry's letter No. J-11011/1255/2007 - IA II (I) dated 01st November, 2011.

iii. 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.

iv. The total area of the proposed project is 390 km^2. The project cost is Rs. 3500 crore.

v. The Dibru-Saikhowa National Park, Podumoni WLS and Borajan WLS are located within 10 km radius from the block boundary. The Bherjan WLS (1.05 Sq Km) is located within the block area. However, no proposed locations are falling within the WLS. A part of the Dehing-Patkai WLS is falling in the southern part of the block.

vi. The Brahmaputra River is located in the North-Western part outside of the Block area flowing in East-West direction. There are no major rivers within the block area but a few rivulets exist in the area.

vii. The PP informed that applicable clearances will be taken with respect to ESZ notification.

viii. PP has requested for exemption from public hearing as Public hearings have been held in this area earlier on 08.07.2011 & 26.08.2011 for North Hapjan-TinsukiaDhola Block area in Tinsukia District and recently public hearing for Tinsukia District for this area for another proposal was held on 26.12.2016. PP has produced the copy of public hearing minutes.

EAC has noted that PP has provided coordinates of 4 Block only. EAC desired that PP shall submit coordinates of all the sites while submitting EIA/EMP report. Based on the information provided by the PP, EAC suggested PP to submit revised Form I. Considering that public hearing has been conducted several times in the location, EAC after due diligence have exempted the public hearing.

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

A. Specific TOR

i. PP shall provide the details of ESA within 10 km radium of project site.

ii. PP shall provide copy of application submitted for recommendation of SC NBWL, if applicable.

iii. Certified compliance report of the conditions in the existing EC, from the concerned Regional Office of Ministry shall be submitted.

iv. Coordinate of all 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.
18.4.4	**Expansion of sugar capacity (8500 TCD to 11000 TCD), Cogeneration Plant (38 MW to 49 MW), Distillery (60 KLPD to 150 KLPD) project by M/s Vitthalrao Shinde Sahakari Sakhar Karkhana Ltd at Gat No. 415, 417, 418, 419 At-Pimpalner, Tal.-Madha, Dist.: Solapur, Maharashtra –Terms of Reference-reg.**[IA/MH/IND2/60430 /2016,J- 11011/376/2016-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 proposal is for Expansion of sugar capacity (8500 TCD to 11000 TCD), Cogeneration Plant (38 MW to 49 MW), Distillery (60 KLPD to 150 KLPD) project by M/s M/s Vitthalrao Shinde Sahakari Sakhar Karkhana Ltd at Gat No. 415, 417, 418, 419 At- Pimpalner, Tal.-Madha, Dist.: Solapur, Maharashtra. 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). iii. PP has obtained EC for the existing unit vide Ministry's letter no. J-11011/57/2009-IA II(I) dated 03rd February, 2004. iv. The total plot area is 63.65 ha. The cost of the project us Rs 116 crore. v. The total water requirement shall be 2017 cum/day. VSSSKL will receive water from Ujjani Dam as well as open well, Bore well to constructed raw water reservoir. vi. Electricity required during season is 7201.5KW which will be sourced from own Power Generation vii. The effluent storage shall be done in HDPE sheet lined tanks. All storage tanks shall be provided with dyke walls. Effluent generated will be treated in Effluent Treatment Plant . After detailed deliberations, the Committee prescribed the following Specific TOR in addition to Generic TOR (refer Ministry's website) for preparation of EIA-EMP report: **A. Specific TOR:** 1. 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. 2. The fresh water requirement for Industrial use shall not exceed 655 m^3/day. The total water requirement shall be restricted to 1305 CMD. 3. Only surface water shall be used as source of water. Certificate from concerned authority regarding withdrawal of water for the industry and water availability in the river shall be produced by PP.

	4. No ground water shall be used. 5. Green belt shall be developed with 10m width around the periphery of the unit with perennial trees. 6. Certified compliance report of the conditions in the existing EC, from the Regional Office of Ministry shall be submitted. 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. It was recommended that 'TORs' along with Public Consultation 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.
18.4.5	**Expansion of pigment manufacturing in existing unit of M/s. Unity Organics Pvt. Ltd. Plot no. 117/6, Ravi Industrial estate, Behind Prestige Hotel, Ahmedabad-Mehsana Highway, Vill: Bileshwarpura, PO: Chhatral, Tal: Kalol, Dist : Gandhinagar, Gujarat-** [IA/GJ/IND2/60505/2016, J- 11011/377/2016-IA.II(I)] **- Terms of Reference** 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 proposal is for expansion of pigment manufacturing in existing unit of M/s. Unity Organics Pvt. Ltd. Plot no. 117/6, Ravi Industrial estate, Behind Prestige Hotel, Ahmedabad-Mehsana Highway, Vill: Bileshwarpura, PO: Chhatral, Tal: Kalol, Dist : Gandhinagar, Gujarat 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. PP informed that the existing unit is operating before 2006 and based on suggestion of EAC, PP has produced copy of consent order issued by Gujarat SPCB vide no. 1203 dated 02.01.2004. iv. Total Project Cost for proposed expansion project activity is Rs. 10 Crores. v. Total project area is 7,954 sq. Meter.; out of this area about 2,444 sq. meter (30.72 %) area will be developed as greenbelt and other forms of greenery. vi. Total water requirement will be 215 m^3/day which is met through Bore Well water supply and reuse. The waste water generation will be 184.4 m^3/day. The effluent will be treated in ETP consists of primary treatment then it will be evaporated in MEE and MEE condensate will be treated in secondary and tertiary treatment for further treatment and treated effluent will be reused in plant premises.

vii. Power required from GEB is 500 KVA (existing).Standby power supply from D.G. set (500 KVA) in emergency case (existing). Power required from GEB is 2000 KVA (total after expansion).Standby power supply from D.G. set (2000 KVA) in emergency case (total after expansion).

viii. The fuel for expansion project is Coal: 15 MT/Day; Wood waste/ Briquette: 3 MT/Day and HSD: 20 Liter/Hr

ix. There will be flue gas emission from Boiler, THF and D.G. Sets and process gas emission from process vent only. Company will install Multicyclone Separator with Bag filter, Scrubbers to reduce air pollution.

x. Domestic Waste water will be disposed by septic tank & soak pit.

xi. The products details along with production capacity is below:

S.No.	Product Name	Existing Capacity (MT/Month)	Additional Capacity (MT/Month)	Total Capacity (MT/Month)
1.	Copper Phthalocynine Blue	15	285	300
2.	Beta Blue	--	50	50
3.	Alpha Blue	--	50	50
Total		15	385	400
By-Products				
4.	Spent Ammonium Carbonate	75	-75	00
5.	Ammonium Sulphate	--	450	450

EAC has deliberated on the proposal and observed that the toposheet submitted by the PP is not providing adequate information. EAC suggested PP to produce geo-referenced toposheet of the study area with 10 km radius while submitting the EIA/EMP report. EAC recommended that 10 m green belt area along the periphery of the unit shall be developed with perennial trees. EAC suggested PP to use briquette as fuel and surface water shall be used as water source.

After detailed deliberations, the Committee prescribed the following additional TOR in addition to Standard TOR (refer Ministry's website) for preparation of EIA-EMP report, along with public hearing/consultation:

A. Additional TOR

1. PP shall produce the geo-referenced toposheet of the study area with 10 km radius.
2. PP shall change the layout plan of green belt development incorporating 10 metre width in the peripheral of the boundary of the project site with perennial trees.
3. Briquette shall be used as fuel.
4. Surface water shall be used as water source.

	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. It was recommended that 'TORs' along with Public Consultation 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.
18.4.6	**Expansion of molasses based distillery from 18 KLPD to 30 KLPD along with the installation of 2 KLPD Malt Spirit Plant within the existing plant premises at Village Begumabad, Tehsil- Modinagar, District- Ghaziabad, Uttar Pradesh by M/s. Modi Distillery (A Unit of Modi Industries Limited)-** [IA/UP/IND2/60722/2016, J-11011/378/2016-IA.II(I)] **-Terms of Reference.** 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 proposal is for expansion of molasses based distillery from 18 KLPD to 30 KLPD along with the installation of 2 KLPD Malt Spirit Plant within the existing plant premises at Village Begumabad, Tehsil- Modinagar, District- Ghaziabad, Uttar Pradesh by M/s. Modi Distillery. 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). iii. Total Modi Industries Complex land is 125 Acres. Existing Distillery Plant area is 12.45 Acres. No additional land is required for the proposed expansion & installation, as the same will be done within the existing plant premises. iv. No National Parks, wildlife Sanctuaries, Reserved Forests , Protected Forests, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife corridors etc. within 10 km radius. Upper Ganga Canal (5 km in West direction). Left Bhola distributary (1.2 km in SE direction), Puth Distributary (7.0 km in East Direction) and some seasonal drains exist within 10 km radius of the project site. v. After proposed Expansion and installation the Fresh Water requirement will be 250 KLPD (Distillery Unit – 210 KLPD, Malt Spirits Plant - 12 KLPD Bottling & Blending – 28 KLPD). The source of water is groundwater. vi. The total power requirement after the proposed expansion will be 400 KWH which will be met by Power plant of the own existing sugar mill. 500 KVA D.G. set will be used for power back up. Fuels are Biogas & Bagasse. vii. A stack of adequate height equipped with Multi-cyclone dust collector is installed with the boiler to control the particulate and gaseous emissions, which will be replaced by bag filters after the proposed expansion.

viii. Process condensate from MEE will be treated and recycled back in the process.

ix. Spent Wash generated during the process, will be first treated in Bio-Digester (Bio-Methanation) and after that will be concentrated in Multi-effect evaporator and concentrate is used for bio composting.

x. Ash from the Boiler will be used in bio-composting & also given to nearby brick manufacturers.

xi. The existing and proposed products and capacity is as below:

S.No.	Unit	Existing Product & Capacity	Proposed Product & Capacity	Products & capacity after Expansion
1.	Molasses Based Distillery	Rectified Spirit, ENA & IMFL - 18 KLPD	12 KLPD	Ethanol, Malt spirit, Rectified Spirit, Extra Neutral Alcohol, IMFL - 30 KLPD
2.	Malt Spirit Plant	-	Malt Spirit - 2 KLPD	Malt Spirit - 2 KLPD

xii. The PP has produced copy of valid CTO from Uttar Pradesh SPCB.

EAC has deliberated on the proposal. It is suggested that green belt area with 10 m width along the periphery of the unit with perennial trees have to be developed. PP shall ensure Zero Liquid Discharge.

After detailed deliberations, the Committee prescribed the following Specific TOR along with public hearing/consultation in addition to Generic TOR (refer Ministry's website) for preparation of EIA-EMP report:

A. Specific TOR:

1) 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.
2) Green belt with 10 m width of perennial trees (Neem, Seasam, Teak etc.) along the periphery of the unit shall be developed.
3) Zero Liquid Discharge shall be ensured.

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.

It was recommended that 'TORs' along with Public Consultation 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.

18.4.7 **Expansion of Specialty Chemicals, Pesticide, Fluoro Chemicals & Captive Power Plant in the existing unit of M/s. SRF LIMITED at Plot No. D-2/1, Village: Suva, GIDC Phase II, Dahej, Taluka: Vagra, District: Bharuch, Gujarat-**.[IA/GJ/IND2/60725/2016, J-11011/379/2016-IA.II(I)]- **Terms of Reference**

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 for expansion of Specialty Chemicals, Fluoro Chemicals, Pesticide & Captive Power Plant manufacturing at Plot No. D-2/1, Village: Suva, GIDC, Dahej, Tehsil: Vagra, District: Bharuch (Gujarat).

ii. All Pesticides industry and pesticide specific intermediates (excluding formulations) Units are listed at S.N. 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. PP informed that they have obtained TOR, submitted Final EIA/EMP report after public hearing and obtained EC from SEIAA, Gujarat for the expansion of same project under category B.

iv. However, PP came to know that the product at S.No 24 of the table *[3-(4,5-dihydro-1,2-oxazol-3-yl)-4-mesyl-o-tolyl](5-hydroxy-1-methylpyrazol-4-yl)methanone (Topramezone) is a Pesticide and hence submitted the application for EC under category A projects.*

v. The total plot area is 223.65 Acres from which Approx 74 acres will be developed as green cover which is 33% of the total plot area. The Capital Cost of the project will be Rs 4800 Crores of which Rs 100 Crores has been allocated towards Environmental Protection.

vi. PP has requested EAC to consider the TOR received from State, Final EIA/EMP along with public hearing submitted to the SEIAA for the project and to consider for EC with the same documents.

The Products along with Production Capacity is as below:

Sr. No.	Name of Product	Existing Capacity (MT/Annum)	Additional Capacity (MT/Annum)	Proposed Capacity (MT/Annum)

	1	Trifluoro Acetic Acid	0	2000	2000	
	2	Parabromofluorobenzene	0	500	500	
	3	**Specialty Product**				
	i	Tetrafluorobenzyl Alcohol	10000	15100	25100	
	ii	Ethyldifluoroacetate				
	iii	Ethyltrifluroacetate				
	iv	Ethyltrifluoroacetoacetate				
	v	Amino crotonate				
	vi	Trifluoroacetic anhydride				
	vii	Pentafluorobenzoic Acid				
	viii	Pyrazole Acid				
	ix	Chlorotrichloro Methyl - Cyclopentene				
	x	2-methyl-4- (1,1,1,2,3,3,3-heptafluoro-2-propyl aniline				
	xi	Fluoromethyl ester				
	xii	Diphenylphenol				
	xiii	Tetrafluoropropene - 1234yf				
	xiv	Isobutyl Acetophenone				
	xv	2-Bromo-5-fluorobenzotrifluoride				
	xvi	2,2-Difluroethylamine				
	xvii	2,3-Dichloro-5-trifluoromethyl-pyridine				
	xviii	N[1-{6-Chloro-3-pyridinyl)methyl)-2(1H)-pyridinylidene]-2,2,2, trifluoroacetamide				
	xix	(1-(3-Chloropyridine-2-yl)-3-((5-(trifluoromethyl)-2H-tetrazol-2-yl)methyl)-1H pyrozol-5-carboxylic acid)				
	xx	(N-(4-fluorophenyl)-2-hydroxy-N-isopropyl-acetamide				

	4	1,1,2,2-Tetrafluoroethyl Methyl Ether	0	4000	4000	
	5	Hexafluoropropylene	0	1000	1000	
	6	Ethyl Difluoroacetoacetate	0	1000	1000	
	7	Difluoromethanesulphonlychloride	0	1000	1000	
	8	Triflic Acid	0	1000	1000	
	9	Trifluoromethanesulfonic Anhydride	0	1000	1000	
	10	Trimethylsilyltrifluoromethanesulfonate	0	520	520	
	11	3-Trifluoromethylacetophenone	0	1000	1000	
	12	2,6-Dichloro-4-(trifluoromethyl) aniline	0	1000	1000	
	13	Cyanapyrazole	0	2000	2000	
	14	Trifluoromethylbenzamide	0	2000	2000	
	15	Trifluoroacetyl chloride	0	1000	1000	
	16	Sulphur Tetrafluoride	0	500	500	
	17	2- Trifluoromethylbenzoylchloride	0	1000	1000	
	18	TrifluoroMethyl-2-EthoxyVinyl Ketone	0	1000	1000	
	19	2-(2-Methoxy-ethoxymethyl)-6-trifluoromethyl-nicotinic acid ethyl ester	0	2000	2000	
	20	Mefenamic Acid	0	1000	1000	
	21	Hexafluoropropylene oxide	0	500	500	
	22	Pentaflurophenol	0	500	500	
	23	Monomethylhydrazine	0	4000	4000	
	24	[3-(4,5-dihydro-1,2-oxazol-3-yl)-4-mesyl-o-tolyl](5-hydroxy-1-methylpyrazol-4-yl)methanone (Topramezone)	0	500	500	
	25	Tri Fluoro acetone	0	500	500	
	26	Methyl tri fluoro acetate	0	500	500	

	27	Chlorodifluoroacetic Anhydride	0	100	100	
	28	Bromopentafluorobenzene	0	500	500	
	29	4-Chlorobenzotrichloride	0	600	600	
	30	4-Chlorobenzotrifluoride	0	600	600	
	31	Methyl HydroxyPyrazole	0	100	100	
	32	6-Fluoro methyl indole	0	100	100	
	33	Difluoroethoxy ethanol	0	200	200	
	34	5-Bromo-2-2-difluoro-1-3-benzodioxole	0	1000	1000	
	35	Difluorobenzodioxole methyl ester	0	20	20	
	36	2-Fluoro-5-nitrobenzoic acid	0	30	30	
	37	5-Chloro-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxaldehyde	0	500	500	
	38	3-Difluoromethyl-5-fluoro-1-methyl-1H-pyrazole-4-carboxaldehyde	0	500	500	
	39	2,5-Dichloro-4-(1,1,2,3,3,3-hexafluoropropoxy)benzenamine	0	500	500	
	40	2,4,5-Trifluorophenyl acetic acid	0	50	50	
	41	3-Aminobenzotrifluoride	0	1000	1000	
	42	2,4-Dichloro-3,5-dinitrobenzotrifluoride	0	1000	1000	
	43	3-phenoxy benzaldehyde	0	4000	4000	
	44	3-phenoxy toluene	0	200	200	
	45	Methyl-2- Fluoroacrylate	0	700	700	
	46	Lithium tetrakis (pentafluorophenyl) borate	0	100	100	
	47	2-fluoro-5-bromobenzonitrile	0	50	50	
	48	Ethyl-Trifluoropyruvate	0	200	200	
	49	Isoflurane	0	250	250	
	50	Desflurane	0	100	100	

	51	Sevoflurane	0	200	200	
	52	Trichloroacetyl chloride	0	2000	2000	
	53	**Chlorinated Compound**				
	i	Trichloroethylene	80000	10000	90000	
	ii	Perchloroethylene				
	iii	Methylene dichloride				
	iv	Chloroform				
	v	Carbon tetrachloride				
	54	Caustic Chlorine Plant				
		Chlorine	60000	56725	72000	
		Caustic lye 47.5 %		147485	187200	
		Hydrochloric Acid (30-33%)		17018	21600	
		Hydrogen		1588	2016	
	55	Anhydrous Hydrofluoric acid	15000	25000	40000	
	56	Chlorotrifluoroethane (HCFC 133a)	0	500	500	
	57	**HFC Refrigerant**				
	i	1,1,1,2 Tetrafluroethane (HFC 134a)	10000	52000	62000	
	ii	Pentafluoroethane (HFC 125)				
	iii	Difluoromethane (HFC - 32)				
	iv	1,1 difluoroethane (HFC - 152a)				
	v	Refrigerant blend of Difluoromethane (HFC-32) + Pentafluoroethane (HFC-125) (R410a)				
	vi	Refrigerant blend of Pentafluoroethane (HFC-125) + 1,1,1-Trifluoroethane (R143a) + 1,1,1,2 Tetrafluroethane (HFC 134a) (R404a)				
	vii	Refrigerant blend of Difluoromethane (HFC-32) + Pentafluoroethane (HFC-125) +				

	1,1,1,2 Tetrafluroethane (HFC 134a) (R407c)				
viii	Blend of 1,1-Difluoroethane (HFC-152a) + 1,1,1,2 Tetrafluroethane (HFC-134a)				
58	Butane (R600a)	0	1000	1000	
59	Propane (R290)	0	1000	1000	
60	Blend of 1-Chloro-1,1-difluoroethane (R142b) + Chlorodifluoromethane (R22)	0	500	500	
61	Blend of 1,1,1,2 Tetrafluroethane (R134a) + Di Methyl Ether (DME)	0	500	500	
62	**R&D Products**	0	2000	2000	
i	Organo Heterocyclic Compounds				
ii	Aryl/Alkyl/Alicyclic Compounds				
iii	Elemental Fluorine/Bromine/Iodine and their Products/Derivatives				
iv	Alkali Metal/Boron/Phosphorous/Sulphur based Product/ Derivatives				
63	Hydrofluoric acid (20-70%)	0	34641	34641	
64	Anhydrous Hydrochloric Acid	0	1500	1500	
Total		**175000**	**412177**	**587177**	

Sr. No.	**Name of Product**	**Existing Capacity**	**Additional Capacity**	**Proposed Capacity**
65	Captive Power Plant	25 MW	50 MW	75 MW

*(Product No. 24: [3-(4,5-dihydro-1,2-oxazol-3-yl)-4-mesyl-o-tolyl](5-hydroxy-1-methylpyrazol-4-yl)methanone (**Topramezone)** is a Pesticide.*

List of Existing and Proposed By-products

Sr. No.	Name of By-Product	Existing Capacity (MT/Annum)	Additional Capacity (MT/Annum)	Proposed Capacity (MT/Annum)
1	Succinimide (C4H5NO2)	0	31	31
2	Mix of Ethane + n-Butane + Isobutane (R600a) + Propane (R290)	0	7327	7327
3	Calcium Chloride	0	176	176

vii. 18460 KLD of water will be recovered after UF & RO treatment and taken back to the raw water collection tank. 17933 KLD of fresh water will be consumed for the proposed expansion project. 100 % Domestic effluent will be reused in greenbelt development with drip irrigation system. 4509 KLPD of waste water will be finally discharged to Sea through GIDC Sewer. (It includes the 1895 KLPD UF & RO reject & 2614 KLPD from Biological Treatment)

viii. The Power & Fuel Requirements is as below

Existing Power Requirement	Proposed Additional Power Requirement	Total Power Requirement after Expansion
Power Plant – 25 MW	Power Plant - 50 MW	Power Plant - 75 MW
DG - 500 KW X 2 Nos. DG - 840 KW X 2 Nos.	DG -4200 KVA X 3 Nos. 12500 KVA Grid Power	DG-500 KW X 2 Nos. DG-840 KW X 2 Nos. DG-4200 KVA X 3 Nos 12500 KVA Grid Power

Fuel	Total Quantity	Source
Coal	2400 MT/Day	ADI Tradlink
Furnace Oil / LSHS	400 KL/Day	IOCL
HSD	210 KL/Day	IOCL

	Natural Gas	1808185 Nm^3/Day	GAIL/GSPL

EAC has deliberated on the proposal and recommended that PP shall conduct a rapid EIA with one month data. EAC has exempted the public hearing. However, EAC desires to have certified compliance report from the regional office of Ministry. EAC also suggested PP to provide 5% of total cost for CSR activities and directed to submit detailed plan.

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

A. Specific TOR

1. Zero Liquid Discharge system to be adopted.
2. Regional Office, MoEF&CC Certified compliance to the existing EC to be submitted.
3. 5% of total cost for CSR activities with detailed plan.
4. Copy of TOR, Final EIA/EMP with earlier public hearing report, copy of EC by SEIAA has to provided along with rapid EIA report.

It was recommended that 'TORs' prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of rapid 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 EIA Notification, 2006.

18.4.8 **Expansion Project of Active Pharmaceuticals Ingredients (APIs) with R&D Facility at Sy. No: 11, 12, 13 of Yawapur& 233, 233 E2, 261, 261AAE, 262, 262 AAE, 267, 267 A2, 267E, 276, 276AA, 276 E, 276/A/1, 278, 279 AA, 280, 280A, 281, 281AA, 281 VU, 285, 285E, 287, 287A1, 288, 288A, 289, 290, 290/VU, 291 & 291/A of Maddikunta villages, Sadasivpet (M), Sangareddy District, Telangana State by M/s. AVR Organics Pvt. Ltd.-** [IA/TG/IND2/60745/2016, J-11011/380/2016-IA.II(I)] **- Terms of Reference**

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 proposal is Expansion Project of Active Pharmaceuticals Ingredients (APIs) with R&D Facility at Sy. No: 11, 12, 13 of Yawapur& 233, 233 E2, 261, 261AAE, 262, 262 AAE, 267, 267 A2, 267E, 276, 276AA, 276 E, 276/A/1, 278, 279 AA, 280, 280A, 281, 281AA, 281 VU, 285, 285E, 287, 287A1, 288, 288A, 289, 290, 290/VU, 291 & 291/A of Maddikunta villages, Sadasivpet (M), Sangareddy District, Telangana State by M/s. AVR Organics Pvt.
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. About 1500 employees (including existing of 40 nos.)will be benefitted after

expansion. About 1000 nos. will be direct and 500 nos. will be indirect employees.

iv. PP informed that EC was not applicable to the existing unit as the industry is established prior EIA notification 2006 to manufacture only API intermediates. It is informed that consent order for trial production has been obtained vide letter dated 11.12.1995 from PCB. PP has obtained renewal of CFO from APPCB and the latest CFO from Telangana SPCB vide no. TSPCB/RCP/SRD/HO/CFO/2016-2767 dated 29.02.2016 which is valid upto 30.11.2017.

v. Existing land area is 3.26 Ha, additional land required is 39.44 Ha. Total land area for the project will be 42.7 Ha.

vi. The total cost of the project is Rs. 285Crores including existing Rs.35 Crores.

vii. Total 863KLD (Fresh water requirement- 556KLD and307 KLD reused wastewater after reatment). Fresh water requirement will be met from ground water.

viii. 2750 HP (incl. permitted 750 HP) is the total power requirement which will be met from TelanganaState Power Distribution Corporation Limited (TSPDCL).

ix. Coal of about 102 TPD will be used for proposed 2 X 6 TPH, 10 TPH and existing 3 TPH Coal Fired Boilers and 4 Lac K.cal/hr proposed Coal Fired Thermic Fluid Heater.

x. Diesel of about 670 Lit/hr will be used in the Proposed 2 X 1000 KVA, 2 X 500 KVA in addition to the existing 125 KVA D.G sets and proposed 2 nos of 2 Lac.Kcal / hr Diesel fired Thermic Fluid Heaters.

xi. Gases generated from process will be sent to Multi stage scrubber / dispersed in atmosphere/ flame arrestor to control the gaseous emissions based on the characteristics of gases.

xii. Multicyclone separator and bag filters will be provided for control with suitable stack height for effective dispersion of particulate matter (within statutory limit of 115 mg/Nm^3) from the proposed 2 X 6 TPH, 10 TPH and existing 3 TPH coal fired boilers. The NOx emissions from the boilers will be controlled by controlling combustion measures at source which will be approached by way of low NOx burners or by air staggingin boiler. The NOx emissions will be restricted to below 500 mg/Nm^3.

xiii. 30 m Stack will be provided to 4 Lakh K Cal/hr Coal fired thermic fluid heater & for 2 nos of 2 lakK.Cal /hrDiesel fired thermic fluid heaters.

xiv. Stack will be provided as per CPCB norms to the Proposed2 X 1000 KVA, 2 X 500 KVA along with existing DG sets of 125 KVA and will be used as standby during power failure.

xv. Solvents will be handled in closed conditions and providing vent condensers to the tanks thereby reducing the losses in the form of evaporation. Primary and secondary condensers to reactors and solvent distillation system with cooling water and chilled brine circulation will be carried out to condense the solvent vapor and reduce the fugitive emissions.

xvi. Effluent generated from industry will be segregated as HTDS/HCOD effluent (170 KLD) and LTDS/ LCOD effluent including Domestic (178KLD) and sentto upgraded ETP with ZLD for further treatment.

xvii. Waste will be segregated and stored in suitable containers / HDPE bags and place in elevated covered platform with leachate collection system before sending to authorized agencies.

The detail of existing product and proposed products with capacity is as below:

CFO Permitted (Existing) Products and By-Product & their Capacities

Sl. No.	Product	Existing Products Quantity		Status in proposal
		(kg/day)	(TPA)	
1.	Thionyl Chloride	6670	2401	Dropped
2.	Mono Chloro Acetic Acid	2550	918	Dropped
3.	Tri chloro Acetyl Chloride	2000	720	Dropped
Total		**11220**	**4039**	
By Products				
1.	HCl Acid	15000	5400	Dropped

Proposed Products, their Capacities and Therapeutic category

Sl. No.	Product	Quantity (Kg/Day)	Quantity (TPA)	Therapeutic Category
1.	Abacavir Sulfate	33.3	12	*Anti-Retroviral*
2.	Aceclofenac	166.7	60	*Anti-Inflamatry*
3.	Albendazole	1000	36	*Antihelmintics*
4.	Amlodipine Besylate	166.7	60	*Anti-Hypertensive*
5.	AtazanavirSulphate	66.7	24	*Anti-Retroviral*
6.	Azacitidine	3.3	1.2	*Anti-Neoplastic*
7.	Bimatoprost	6.7	2.4	*Anti-Glaucoma*
8.	Bortezomib	0.8	0.3	*Anti-Neoplastic*
9.	Bupropion Hydrochloride	16.7	6	*Anti-Deprasent*
10.	Capecitabine	66.7	24	*Anti-Neoplastic*
11.	Carboplatin	0.7	0.4	*Anti-Neoplastic*
12.	Ciprofloxacin Hydrochloride	166.7	60	*Anti-Biotic*
13.	Cisplatin	0.7	0.2	*Anti-Neoplastic*
14.	Citalopram Hydrogen Bromide	100	36	*Anti-Deprasent*
15.	ClopedegralBisulphate	166.7	60	*Anti-Platelet*
16.	Darunavir	100.0	36	*Anti-Retroviral*
17.	Dexrazoxane	0.8	0.3	*Anti-Neoplastic*
18.	Diclofenac Sodium	33.3	12	*Anti-Inflamatry*
19.	Docetaxel	0.8	0.3	*Anti-Neoplastic*
20.	Doletagravir	**666.7**	**240**	*Anti-Retroviral*
21.	Domepridone	166.7	60	*Anti-Emitic*
22.	Efavirenz	166.7	60	*Anti-Retroviral*
23.	Emtricitabine	66.7	24	*Anti-Retroviral*
24.	Erlotinib	16.7	6	*Anti-Neoplastic*
25.	Escitalopram Oxalate	100	36	*Anti-Deprasent*
26.	Felbamate	16.7	6	*Anti-Consulvant*
27.	Flucanazole	**166.7**	**60**	*Anti-Fungal*
28.	Folic Acid	**166.7**	**60**	*Vitamin*
29.	Fosampanavir	**333.3**	**120**	*Anti-Retroviral*
30.	Gabapentain	**333.3**	**120**	*Anti-Consulvant*
31.	Gefitinib	16.7	6	*Anti-Noplastic*
32.	Gemcitabine Hydrochloride	3.3	1.2	*Anti-Noplastic*

33.	ImatinibMesylate	66.7	24	*Anti-Neoplastic*
34.	Irbesartan	66.7	24	*Anti-Hypertensive*
35.	Irinotecan Hydrochloride	1.7	0.6	*Anti-Neoplastic*
36.	Lamivudine	66.7	24	*Anti-Retroviral*
37.	Latanoprost	6.7	2.4	*Anti-Glaucoma*
38.	Lenalidomide	0.8	0.3	*Anti-Neoplastic*
39.	LevocetirizineHCl	**166.7**	**60**	*Anti-Histamines*
40.	Levoflaxacin Hemihydrate	100.0	36	*Anti-Biotic*
41.	Lopinavir	6.7	2.4	*Anti-Retroviral*
42.	Lopiramide	3.3	1.2	*Anti-Neoplastic*
43.	Loratidine	66.7	24	*Anti-Histamines*
44.	Losartan Potassium	**166.7**	**60**	*Anti-Hypertensive*
45.	Mefenamic Acid	**166.7**	**60**	*Anti - Inflammatory*
46.	Montelukast Sodium	33.3	12	*Anti-Asthmetic*
47.	Moxifloxacin Hydrochloride	66.7	24	*Anti-Biotic*
48.	Naproxen	33.3	12	*Anti-inflammatory*
49.	Naratriptan	100	36	*Anti-Migraine*
50.	Nevirapine	100	36	*Anti-Retroviral*
51.	Norfloxacin	100	36	*Anti-Biotic*
52.	Oseltamavir Phosphate	33.3	12	*Anti-Retroviral*
53.	Oxaliplatin	0.7	0.2	*Anti-Neoplastic*
54.	Pantoprazole Sodium Sesquihydrate	**166.7**	**60**	*Anti-Ulcerative*
55.	Pemetrexed	0.8	0.3	*Anti-Neoplastic*
56.	Phenylepherine Hydrochloride	16.7	6	*Nasal decongestant*
57.	Pregablin	**1000**	**360**	*Neuropathic*
58.	Raltegravir	33.3	12	*Anti-Retroviral*
59.	Rilpivirine Hydrochloride	**166.7**	**60**	*Anti-Retroviral*
60.	Ritonavir	33.3	12	*Anti-Retroviral*
61.	Rosuvastatin Calcium	33.3	12	*Antihyperlipidemic*
62.	SaqunairMesylate	10	3.6	*Anti-Retroviral*
63.	Sildnafil Citrate	**333.3**	**120**	*Anti-Erectile*
64.	Sunitinib	3.3	1.2	*Anti-Neoplastic*
65.	Telmisatran	**166.7**	**60**	*Anti-Hypertensive*
66.	Temozolamide	1.7	0.6	*Anti-Neoplastic*
67.	TenofovirDiisoproxilFumarate	**233.3**	**84**	*Anti- Retroviral*
68.	Thalidomide	3.3	1.2	*Anti-Neoplastic*
69.	Tramadol Hydrochloride	**333.3**	**120**	*Analgesic*
70.	Travoprost	6.7	2.4	*Antiglaucoma*

71.	Valgancyclovir	**166.7**	**60**	*Anti-Retroviral*
72.	Valsartan	100	36	*Anti-Hypertensive*
73.	Zidovudine	10	3.6	*Anti-Retroviral*
Total Production on campaign basis		**4733.5**	**1704**	
R & D Facility				
74.	**R & D**	**66.7**	**24**	
Total Production on campaign basis + R&D (any 16 products at a time)		**4800.2**	**1728**	

xviii. PP has submitted that, baseline data collection has been started since December, 2016 after submission of proposal from TOR. The TOR application has been submitted during November, 2016.

EAC has deliberated on the proposal. EAC has accepted the period of data collection from December, 2016. EAC desired to have valid permission from competent authority for ground water extraction while submitting EIA/EMP report. Being an expansion case, 5 % of total amount may be earmarked for CSR activities. PP shall submitted detailed CSR plan in the EIA/EMP report.

After detailed deliberations, the Committee prescribed the following additional TOR along with public hearing in addition to Generic TOR (refer Ministry's website) for preparation of EIA-EMP report:

A. Additional TOR:

1. Permission from competent authority for ground water extraction.
2. Detailed CSR plan with measurable targets.
3. 10 m width green belt area around periphery of unit.
4. Regional Office, MoEFCC Certified compliance to the existing EC to be submitted.

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.

It was recommended that 'TORs' along with Public Consultation 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.

18.4.9	**Expansion of Grain/Molasses based industry (From 70 KLPD to 130 KLPD) by**

installation of 60 KLPD Grain/Molasses based Ethanol Plant along with 2 MW Co-generation Power Plant in the existing Distillery Plant (70 KLPD) at Village Hamjheri, Jakhal Road, Patran, District Patiala, Punjab by M/s PICCADILY SUGAR & ALLIED –Terms of Reference -reg.[IA/PB/IND2/60814/2016, J-11011/381/2016-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 proposal is for Expansion of Grain/Molasses based industry (From 70 KLPD to 130 KLPD) by installation of 60 KLPD Grain/Molasses based Ethanol Plant along with 2 MW Co-generation Power Plant in the existing Distillery Plant (70 KLPD) at Village Hamjheri, Jakhal Road, Patran, District Patiala, Punjab by M/s PICCADILY SUGAR & ALLIED.

ii. All molasses/non-molasses (≥60 KLD) based distilleries are listed at Sl.No. 5(g) of Schedule of EIA Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

i. PP has obtained EC for existing project -70 KLPD Molasses/ Grain based distillery and 1.0 MW Co-generation Power Plant, vide letter No. F. No. J-11011/240/2011- IA II (I) as amended on 26th February, 2013.

iii. The products along with capacity is below:

S. No.	Unit	Existing Products & Capacity	After Proposed expansion Products & Capacity
1.	Grain/ Molasses based distillery	Ethanol (70 KLPD)	Ethanol (130 KLPD)
2.	Co –generation Power	Power (1.0 MW)	Power (3.0 MW)

iv. Proposed installation of Unit II will be done within existing Distillery plant premises which is 70 Acres.No additional land is required for the proposed expansion & installation, as the same will be done within the existing plant premises. Capital cost of the expansion & installation project is 47 Crores. No National Parks, wildlife Sanctuaries, Reserved Forests , Protected Forests, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife corridors etc. within 10 km radius. Ghagghar River (9.0 km in SE direction), ChoaNala (1.0 km in NW direction), Kalbhanu Drain (1.0 km in South direction), Main Drain no 1(9.0 km in WNW direction) and agricultural canals like Alan Branch (1.5 km in East direction), Hariau Branch (4.0 km in WSW direction), Bhakra Canal (6 km in ESE direction), Ladbanjara Distributary (7.5 km in WNW direction) are located within 10 km area of the project site.

v. The total water requirement for the proposed installation of Unit II will be 526 KLPD which will be sourced from Ground Water.

vi. The total power requirement for the proposed installation of Unit II will be 1.2 MW. Source: Proposed 2.0 Co-generation Power Plant & D.G. Sets (for Back-up purposed only) Fuel : Multi-Fuels like (Rice Husk/Bagasse/ Coal & Biogas)

vii. In Molasses based operation, spent wash will be generated. Proposed installation of Ethanol Project will be based on "Zero Effluent Discharge".

viii. Stack of adequate height equipped with ESP/Bag Filter will be installed to maintain PM emissions within permissible limits. CO2 generated during the fermentation process will be collected by utilizing CO2 Scrubbers and sold to authorized vendors.

ix. Spent Wash generated during the process will be first treated in Bio-Digester (Bio-Methanation) and thus production of useful Biogas (used as fuel in boiler), which will be followed by concentration in Multi-effect Evaporator. Concentrated Spent Wash will be mixed with Press Mud generated from Sugar Unit for manufacturing Organic Manure (Bio composting). Process condensate from MEE will be treated and recycled back in the process.

x. Grain slops (Spent Wash) will be taken care through Centrifuge Decanters for separation of Suspended Solids separated as Wet Cake and which goes as cattle feed as it contains high protein. (Also known as DWG – Distillers Wet Grains). Thin slops from the Decanter Centrifuge will be partly recycled back to process (30-35%) and partly taken to the Thins Slops Evaporation Plant for concentration of remaining solids to form a Syrup. This Syrup is also mixed into the Wet Cake coming out of Centrifuge and forms a part of Cattle Feed. (Also known as Soluble – Collectively known as DWGS). DWGS Drier – Wet Cake / DWGS will be passed through steam tube bundle drier for drying with 10-12% moisture (max.) to give higher shelf life. Solid dry cakes will be obtained finally as DDGS. The process condensate will be cooled and collected into a neutralization tank with sufficient residence time. After neutralization and filtration this process condensate will be recycled into process use.

xi. Ash from the Boiler will be used in bio-composting & also given to nearby brick manufacturers. Used oil generated from the plant machinery/ gear boxes as hazardous waste is being/will be sold out to the CPCB authorized recycler.

EAC has deliberated on the proposal. It is recommended to have 10 m width green belt area, maintain ZLD, compliance report from Regional Office, permission for ground water and implementation of ZLD while considering the proposal with final EIA/EMP.

After detailed deliberations, the Committee prescribed the following additional TOR in addition to Generic TOR (refer Ministry's website) for preparation of EIA-EMP report:

A. Additional TOR:

1) 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.
2) Green belt area of 10 width with perennial trees (Neem, Seasam, Teak etc.) shall be developed around the periphery of the unit.
3) Zero Liquid Discharge shall be ensured.
4) Certified Compliance report from Regional office of Ministry for existing EC conditions.

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.

	It was recommended that 'TORs' along with Public Consultation 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.
18.4.10	**Expansion of Sugar Plant (6000 TCD to 11500 TCD) and Cogeneration power (37 MW to 57 MW) with existing Distillery (90 KLPD) at Hullatti Village (survey nos. 6/1 part, 6/2 part, 7/1 part, 7/2, 9 part, 10, 11 part, 12/1, 12/2, 12/3, 13/1, 13/2, 13/3, 13/4, 14/1 part, 14/2 part, 16/1, 17, 18/1, 18/2, 18/3, 19, 20/1, 21/1, 20/2, 21/2, 22, 23, 24, 25, 26, 27/1, 27/2 A, 27/2B, 28, 30, 31/1, 31/2, 80 part, 81/1, 81/2 A, 81/2B, 81/2C, 81/2D, 82, 83/1, 86 Part, 90, 115/3 Part, 122/A3, 123/2 Part, 124 part, 125/1A Part, 125/1B, 126/part) and Alloli village (survey nos. 18/1, 18/2), Haliyal Taluk, Uttara Kannada District, Karnataka by M/s. E.I.D.-Parry (India) Limited-** [IA/KA/IND2/60833 /2016, J-11011/382/2016-IA.II(I)]**- Terms of Reference** 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 proposal is for Expansion of Sugar Plant (6000 TCD to 11500 TCD) and Cogeneration power (37 MW to 57 MW) with existing Distillery (90 KLPD) at Hullatti Village (survey nos. 6/1 part, 6/2 part, 7/1 part, 7/2, 9 part, 10, 11 part, 12/1, 12/2, 12/3, 13/1, 13/2, 13/3, 13/4, 14/1 part, 14/2 part, 16/1, 17, 18/1, 18/2, 18/3, 19, 20/1, 21/1, 20/2, 21/2, 22, 23, 24, 25, 26, 27/1, 27/2 A, 27/2B, 28, 30, 31/1, 31/2, 80 part, 81/1, 81/2 A, 81/2B, 81/2C, 81/2D, 82, 83/1, 86 Part, 90, 115/3 Part, 122/A3, 123/2 Part, 124 part, 125/1A Part, 125/1B, 126/part) and Alloli village (survey nos. 18/1, 18/2), Haliyal Taluk, Uttara Kannada District, Karnataka by M/s. E.I.D.-Parry (India) Limited. ii. All Sugar Industry (≥ 5000 TCD cane crushing capacity) are listed at Sl.No. 5(j) of Schedule of EIA Notification under Category 'B'. All molassesbased distilleries are listed at Sl.No. 5(g) of Schedule of EIA Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC). iii. The PP has obtained EC for the existing unit vide Ministry's letter No. J–11011/336/2012 – IA II (I) dated 04.02.2015. iv. The capital cost of the Project is Rs 230 Crores. v. Tattihala River (2.2 Kms) is flowing within 10km distance of the project site. vi. The existing capacity and proposed capacity is as below:

Unit	**Capacity**		
	Existing (EC vide order No. J – 11011 / 336 / 2012 – IA II (I) dated 04-02-2015)	**Expansion**	**Total**
Sugar	6000 TCD	5500 TCD	**11500 TCD**
Co-gen Power plant	34 MW	20 MW	**54 MW**
Distillery	90 KLPD	--	**90 KLPD**

Power from incineration boiler	3 MW	--	**3 MW**

vii. Total land in possession of the PP is is 226 acres. No additional land will be acquired for the proposed expansion of Integrated Sugar complex.
viii. The water requirement after proposed expansion of Integrated Sugar Complex is 3491 m^3/day. The water required will be met from Kali river which is at a distance of 23 Kms from the Plant site. The permission for drawing water from Kali river has already been obtained.
ix. Power required for operation of Sugar, Co-gen and Distillery will be met from the 54 MW cogeneration power plant (existing – 34 MW & expansion – 20 MW).
x. The fuel required for Boiler will be Bagasse. Bagasse will be met from 11,500 TCD Sugar plant (existing – 6000 TCD, expansion – 5500 TCD).
xi. The effluent from Sugar plant expansion will be treated in ETP consisting of Bar screen, Oil & Grease trap, Equalization tank, neutralization tank, UASB reactor, Aeration tank, Secondary clarifier, Chlorine contact Tank, Duel Media Filter and Sludge drying beds.
xii. Bagasse will be used as fuels in Boiler. The emissions of concern from this Boiler will be PM, SO_2 and NOx.
xiii. High efficiency ESP will be provided for control of particulate matter to below 50 mg/Nm^3. Adequate stack height will be provided as per CPCB norms for effective dispersion of SO_2 emissions into the atmosphere.

EAC has deliberated on the proposal. It is recommended to have 10 m width green belt area, maintain ZLD, compliance report from Regional Office while considering the proposal with final EIA/EMP. EAC suggested to use only surface water for the industry.

After detailed deliberations, the Committee prescribed the following additional TOR in addition to Generic TOR (refer Ministry's website) for preparation of EIA-EMP report:

A. Additional TOR:

1. 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.
2. Only surface water shall be used for the industrial purpose. Permission of competent authority has to be provided for water utilization..
3. Green belt area of 10 width with perennial trees (Neem, Seasam, Teak etc.) shall be developed around the periphery of the unit.
4. Zero Liquid Discharge shall be ensured.
5. Certified Compliance report from Regional office of Ministry for existing EC conditions.

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.

It was recommended that 'TORs' along with Public Consultation 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.

18.4.11 **Expansion project for Manufacturing of Dyes and Dye-Intermediates (825 MT/Month) at Plot No.A- 1/ 4701 & 202/B, GIDC Industrial Estate, Ankleshwar, Bharuch, Gujarat by M/s. A-One Chemicals–Terms of Reference- reg.** [IA/GJ/IND2/61019/2016, J-11011/383/2016-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 proposal is for Manufacturing of Dyes and Dye-Intermediates at Plot No.A-1/ 4701 & 202/B, GIDC Industrial Estate, Ankleshwar, Bharuch, Gujarat by M/s. A-One Chemicals.

ii. All Synthetic organic chemicals industry projects, located in a notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B'. However, considering the General Condition, i.e. location of project site within 5 km from the boundary of Critically Polluted areas as notified by the Central Pollution Control Board constituted under the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974); the project is categorized under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

iii. The expected cost of project is Rs. 5 Crore.

iv. The plot has been purchased by M/s. A-One Chemical from GIDC. The total plot area of the unit is 5460Sq. Mt. The green belt area will be 1350.45sq. Mt.

v. It is reported that a lake is approximately 4 km away from project site. Narmada river is situated at 20 km distance.

vi. The details of products with production capacity is as below:

Sr. No.	Product	Quantity as per CCA-50195 in MT/Month	Quantity as per Proposed for EC MT/Month	Quantity After Expansion in MT/Month
1	CPC Blue	300	350	650
2	Beta Blue	25	125	150
3	Alfa Blue	25	0	25
By-Product				
4	Ammonia Liquor (10 to 15 %)	300	-300	0
5	Ammonium Carbonate	1500	-1500	0

6	Ammonium Sulphate	120	120	240
	Total	2270	-1205	1065

vii. The water consumption for industrial purpose is 285 KL/day. The water consumption for the domestic& gardening purpose is 15 KL/day fresh water. The water consumption for industrial purpose is 347 KL/day (180 fresh + 167 recycle & reuse). The water consumption for the domestic & gardening purpose is 14 KL/day (5 fresh +9 recycle) water. The source of water is GIDC water supply scheme.

viii. The unit is using Natural gas as fuel for Boiler 1 &2, Thermopek1,2,3,4,5 & 6 and Pre-heating tank. Coal will be used in spray dryer, Boiler 3 and MEE.

ix. The unit have electricity from Daxin Gujarat Vij Company Ltd. The existing electricity consumption is 750 KVA and proposed consumption will be 950 KVA. Total electricity consumption will be 1700 KVA.

x. The industrial waste water generation is 250 KL/day and domestic waste water is4.5KL/day. The effluent is treated in ETP .Treated effluent will be discharged in to GIDC Pumping station – B through above ground fixed pipeline leading to the inlet of CETP for further treatment and its ultimate disposal to NCTL. The industrial waste water generation will be 312KL/day and domestic waste water will be 4.5KL/day. The waste water generated from last wash (120 KL/Day) will be reused in first and second wash and total effluent generation will be 312 KL/day. Out of 312 KL/day, 64 KL/day acidic effluent will be used in ammonium sulphate plant and remaining 250 KL/day will be treated in ETP. Treated effluent will be send to MEE.MEE distillate will be reused and MEE residue will be sent to spray dryer.

xi. There is one stack of two boiler (2TPH), six stack of Thermic fluid heater (capacity: 4 Lac Kcal/Hrs. each) and one stack of Pre-heating tank. There will be one stack of Hot Air Generator for Spray Dryer and one stack of Boiler (5TPH) due to Proposed Expansion.

xii. There is generation of ETP waste (2400 MT/Year), Spent Oil (0.060MT/Year) and, Discarded containers (1, 20,000 Nos/Year). There will be generation of Spent Oil (0.040MT/Year) and, Discarded containers (1, 20,000 Nos/Year).There will be no change in hazard waste generation. ETP sludge will be disposal at TSDF M/S BEIL. Spent Oil will be send to registered Re-refiners. Discarded containers will be sold to registered recyclers or reused in waste filling or disposed to approve TSDF after decontamination.

xiii. PP has requested for exemption of public hearing, being the project located in Industrial area/estate.

xiv. PP has informed that the Ministry has lifted the moratorium imposed in the area.

EAC has deliberated on the proposal. It is recommended to have 10 m wide green belt area around the periphery of the unit. Unit shall maintain ZLD. EAC noted that as per Form I submitted by the PP, the project cost is 1 crore, however during

	presentation PP has informed that the total project cost is Rs. 5 crore. EAC desired that PP shall change accordingly in Form I. EAC has recommended the project for exemption of public consultation. After detailed deliberations, the Committee prescribed the following additional TOR in addition to Generic TOR (refer Ministry's website) for preparation of EIA-EMP report: **A. Additional TOR** 1. Zero Liquid Discharge shall be ensured. 2. Green belt area of 10 width with perennial trees (Neem, Seasam, Teak etc.) shall be developed around the periphery of the unit. 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. It was recommended that 'TORs' 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.

18.5 <u>Any Other</u>

18.5.1	**Setting up of Active Pharmaceutical Ingredients Manufacturing Unit (2225 MT/Month) at Naickenpatti Village (Sy. F No. 28/8, 29/(1,2), 30/(1,4), 31/(1A,1B,1C,3), 32/2, 33/(7,8,9), 34/(3,4,5) 35/(3A,3B, 4A,4B,4C,4D,4E,), 37/(8A, 8C, 8E, 8F, 8G, 8H)), Madurai East Taluka, Madurai District, Tamilnadu by M/s. Abhilash Chemicals and Pharmaceuticals Pvt. Ltd.** [IA/TN/IND2/56404/2016, J-11011/170/2016- IA II(I)]**-Reconsideration of Terms of Reference** Member Secretary informed the committee that the proposal has been considered by the EAC in its 11th meeting held during 20-21st July, 2016 and sought following additional information. a. Obtain information on flora-fauna and dominant species in the reserve forest. b. Perform option analysis. In response following information was presented before the EAC: i. PP has reported the work done as per EAC suggestions with primary data collected from TN forest Department and assessment of site by functional area experts. ii. PP has also undertaken the option analysis using Delphi Technique. iii. It is informed that the report has been uploaded in the website of the Ministry.

	EAC deliberated on the proposal. It was recommended to have 10 m width green belt area around the periphery of the unit. Considering the location of the area, EAC desired that PP shall develop 50 % of the area into plantation area . PP shall work with forest department to increase forest cover in the nearby forest areas. PP shall protect the native plant species. PP shall utilize 2.5% of the total cost for CSR activities. ZLD shall be maintained and permission for ground water shall be obtained while submitting the proposal with final EIA/EMP. After detailed deliberations, the Committee prescribed the following Specific TOR in addition to Generic TOR (refer Ministry's website) for preparation of EIA-EMP report: **A. Additional TOR:** 1. Zero Liquid Discharge shall be ensured. 2. Green belt area of 10 width with perennial trees (Neem, Seasam, Teak etc.) shall be developed around the periphery of the unit. The PP shall work with forest department to increase forest cover in the nearby forest areas in time bound manner. Minimum 1000 trees to be planted and protected. The survival rate of the plants, authenticated by the DFO concerned, to be submitted in 6 monthly compliance report to the regional office. PP shall protect the native plant species.. 3. PP shall utilize 2.5% of the total cost for CSR activities and shall submit a detailed plan of CSR activities in quantifiable form. 4. Permission for ground water extraction shall be obtained from competent authority. 5. Take up the measures for rainwater harvesting. A detailed plan to submitted in this regard. 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. It was recommended that 'TORs' along with Public Consultation 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.
18.5.2	**Manufacture of Formaldehyde (55%) (200 TPD) and Urea resin (40 TPD) at plot no. C21, Focal Point, Dera Bassi, Tehsil Dera Bassi District SAS Nagar, Punjab by M/s. Surbhee Polymers (P) Limited –Reconsideration of Terms of Reference-reg.** [IA/PB/IND2/53284/2016, J-11011/133/2016- IA II(I)] Member Secretary informed the committee that the proposal has been considered in the 10th meeting held on 11.07.2016 and sought additional information.

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 present proposal is for Manufacture of Formaldehyde (55%) (200 TPD) and Urea resin (40 TPD) at plot no. C21, Focal Point, Dera Bassi, Tehsil Dera Bassi District SAS Nagar, Punjab by M/s. Surbhee Polymers (P) Limited.

ii. All Synthetic organic chemicals industry projects, located in a notified industrial area/estate are listed at Sl.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B'. The project is located in Punjab adjoining the State of Haryana. Considering the General Condition, i.e. location of project site within 5 km of the inter-state boundaries and international boundaries, the project is categorized under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

iii. No Protected forest, Reserve forest, ecologically sensitive area, National Park, Biosphere Reserve & Bird Sanctuary are found within 10 km radius of the project site. Chhatbir Zoo is about 6 km from project Towards west side.

iv. The project is located in Industrial area. PP has produced copy of Department of Industries, Government of Punjab notification dated 4th November, 1988 and Punjab Small Industries & Export Corporation limited letter dated 15.03.2016 transferring the industrial plot to M/s. Surbhee Polymers Pvt. Ltd.

v. Ghaggar River about 3km towards west side.

vi. Capital Cost of the project Rs. 3.5 Cr. Total cost for Environmental Management Plan Rs. 0.15 Cr.

vii. The water requirement of the unit will be met from PSIEC. The daily requirement of fresh water will be about 120 m^3.

viii. 9 KLD of waste water from the project will be taken to E.T.P. through underground delivery system and treated to tertiary level. Treated water will be partly used for tree plantation, and the rest will be again reuse for cooling purpose. There will be no discharge of waste water from the project and it will be a zero discharge industry.

ix. Total power requirement for proposed project will be 350KW and it will meet from PSPCL Punjab. DG set of 125X2 KVA will be installed as Stand by source of power.

x. Proper measures will be employed for mitigation of impact on the environment and discharge and disposal of various by products will be done effectively. It is a "Zero Effluent discharge" plant.

EAC has deliberated on the proposal. It is noted that as per the documents submitted by the PP, the project is located in the Industrial area and thus public consultation is exempted. EAC desired that PP shall make 10 m wide green belt area around the periphery of the unit and shall maintain ZLD.

After detailed deliberations, the Committee prescribed the following Specific TOR in addition to Generic TOR (concerned to the project) (refer Ministry's website) for preparation of EIA-EMP report:

A. Additional TOR

	1. PP shall develop green belt area of 10 m width with perennial trees (Neem, Seasam, Teak etc.) around the periphery of the unit. 2. PP shall ensure Zero Liquid Discharge. It was recommended that 'TORs' 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.
18.5.3	**Expansion of Synthetics Filaments Yarns (i.e, Partially Oriented Yarn, Polyester Filament Yarn,(POY) Textured Yarn and Twisted Yarn) (from 45 MTD to 300 MT/Day) at Survey no.255/1/16 & 255/1/17P, B/h IPCA Labs, Industrial Zone, Village- Athal, Naroli, U.T. of Dadra and Nagar Haveli by M/s Geelon Industries Pvt. Ltd.-** [IA/DN/IND2/31527/2015 , J-11011/286/2015-IA II (I)]**- Amendment in Terms of Reference** The Member Secretary informed the EAC that the project has been considered in the 3rd EAC meeting held on 19.01.2016 and subsequently TOR letter has been issued by Ministry vide letter dated 05.03.2016 with public hearing. The PP had informed that the project is located in Industrial area and thus public hearing is exempted under the provisions of the EIA Notification, 2006. The proposal for amendment to the TOR was considered by EAC in its 13th meeting held on 26.09.2016 and PP has been directed to provide copy of the notification issued by the concerned authority. PP has now informed the following: i. Project is located in the notified Industrial zone. PP has provided the copy of notification no. 13-1(39)/95/PWD-I/200/752 dated 05.07.2001 issued by Town and Country Planning Department, Administration of Dadra and Nagar Haveli. PP has also provided the copy of letter dated 26.04.2016 issued by Member Secretary, DNHPDA, Silvassa stating that the Survey no.255/1/16 & 255/1/17P, of Village Athal falls in the Industrial zone. EAC examined the documents submitted by the Project Proponent and after detailed deliberations recommended for exemption from public consultation as per para 7 III. Stage (3) (b) of the EIA notification, 2006, being the industry is proposed to be located in the notified industrial area/estate.
18.5.4	**Jagdishpur - Haldia & Bokaro - Dhamra Natural Gas Pipeline Project (JHBDPL) - Phase - II` passing through the states of Jharkhand, West Bengal & Odisha by GAIL India Ltd.-** [IA/OR/IND2/61689/2017, IA-J-11011/16/2017-IA-II(I)] **Clarification.** The project proponent gave a detailed presentation on the salient features of the project and informed the following: i. The proposal is regarding Jagdishpur - Haldia & Bokaro - Dhamra Natural Gas Pipeline Project (JHBDPL) - Phase - II` passing through the states of Jharkhand,

	West Bengal & Odisha by GAIL India Ltd. ii. The proposed gas pipeline passes through the states of Jharkhand, West Bengal & Odisha. iii. The total cost of the project is Rs. 9380 crores. iv. PP has informed that the proposed natural gas pipeline is not passing through any national parks /sanctuaries/coral reefs /ecologically sensitive areas including LNG Terminal. v. All Oil & gas transportation pipe line (crude and refinery/ petrochemical products), passing through national parks /sanctuaries/coral reefs /ecologically sensitive areas including LNG Terminal are listed at Sl.No. 6(a) of Schedule of EIA Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC). vi. PP has requested that, as the proposed pipeline is not passing through any national parks /sanctuaries/coral reefs /ecologically sensitive areas including LNG Terminal, the proposal may be exempted from environmental clearance. EAC has deliberated on the proposal. EAC has noted that availability of natural gas is absolutely required. It is also noted that, ensuring natural gas availability is one of the priority area of Government. After detailed deliberation, based on the submission of PP, and considering that the proposed pipeline is not passing through any national parks /sanctuaries/coral reef areas/ecologically sensitive areas including LNG Terminal, EAC has recommended for exemption of Environmental Clearance for the proposed project. However, it is suggested to take all the permissions required for the project from the concerned authorities.
18.5.5	**Active Pharmaceutical Ingredients (APIs) manufacturing (Unit - II) (270 TPA) at Sy. No. 707 & 708 Village Tangadpally Tehsil Choutuppal District Yadadri District (Formerly Nalgonda District) State Telangana by M/s. Rantus Pharma Pvt. Ltd-[** IA/TG/IND2/60331/2006, J-11011/315/2006-IA II (I)]- **Terms of Reference** The project proponent gave a detailed presentation on the salient features of the project and requested for extension of validity of EC. The PP has informed the following: i. PP has obtained EC for the existing unit vide No. J-11011/315/2006-IA.II(I) dated 14.09.2006 and has obtained extension for validity of EC vide letter dated 11.01.2013. ii. All Synthetic Organic Chemicals Industry located outside the notified industrial area/estate are listed at S.N. 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. Due to financial issues, PP has been unable to start the project in time. It is informed that the project will start functioning within six months and requested for extension of EC. iv. The proposal is for manufacture of 5.5 TPM of Tramadol Hydrochloride, 2.0 MTPM of Mebeverine HCl, 15.0 TPM of Diclofenac sodium, 1.0 TPM of Glimepiride, 1.07 TPM of Clopidogrel hydrogen Bisulphate and 1.0 TPM of Zidovudine. Any three products out of the six products will be manufactured at a time. v. Malkapuram RF – 1.4 (W), Hafizpura RF – 3.6 Km (SSW), RF near Choutuppal – 2.7 Km (E), Choutuppal RF – 5.6 Km (ENE) and Lakkaram RF – 3 Km (NE)

	Malkapur are located within 10 km distance of the project site. vi. Chinna Musi River at 8.4 Km (NW), Mammaiah Vagu – 9.6 Km (W), Tangallapalli Cheruvu 3.4 Km (SSE), Nagaram Cheruvu – 2 Km (SSW), Malkapur Lake – 4.6 Km (WNW), Pond near Borollagudem – 2.7 Km (NW), Pond near Dharmojigudem – 2.6 Km (ENE) are located within 10 km distance of the project site. vii. The existing land area is 2.7725 ha. viii. As per the existing EC, water requirement is 60.34 KLD. Source of water is ground water/private tankers. Waste water generation is 14 KLD. ix. Coal of about 12 TPD is used for 3 TPH Coal fired boiler. Diesel of about 100 L/hr is used for 2x250/500 KVA DG set. EAC has deliberated on the proposal. EAC noted that the proposal has got extension of validity of EC one time. EAC suggested PP to undertake a rapid EIA with one month AAQ data. PP has agreed to the suggestion of EAC. After due diligence, EAC has recommended for grant of TOR exempting public hearing for preparation of rapid EIA/EMP report. EAC desired that 10 m wide green belt of perennial trees (Neem, Teak, Season etc.) shall be developed by PP along the periphery of the unit and shall also strict to ZLD. After detailed deliberations, the Committee prescribed the following additional TOR in addition to Generic TOR (concerned to the project) (refer Ministry's website) for preparation of rapid EIA-EMP report with one month AAQ data: **A. Additional TOR** 1. PP shall develop 10 m wide green belt along the periphery of the unit. 2. Zero Liquid Discharge shall be ensured. 3. Valid consent order from SPCB shall be provided. 4. Permission from concerned authority for ground water extraction shall be provided. 5. PP shall undertake one moth data collection for the requisite parameters. It was recommended that 'TORs' prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of rapid 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. After due diligence, EAC has recommended for exemption of Public hearing under para 7(ii) of EIA Notification, 2006.
18.5.6	**Polyester (PET) Granules (96000 TPA), Polyester Filament Yarn (POY/FDY) from PET Granules (96000) TPA and Polyester Texturized Yarn from POY/FDY (88000 TPA) at Survey no. 196, 206, 207/1 & 208/1-2, Industrial Zone, Village Velugam,Silvassa, U.T. of Dadra and Nagar Haveli by M/s Dodhia Synthetics Ltd.-** [IA/DN/IND2/53616/2016, J-11011/146/2016- IA II(I)]- **TOR Amendment** The Member Secretary has informed the committee that the EAC has considered the project proposal in its 9th meeting held on 28th June 2016 and subsequently the TOR

	letter was issued by Ministry vide letter dated 02nd August, 2016 with public hearing. Now the PP has informed the following: i. The project is located in the notified industrial zone of Velugam, Silvassa. PP has produced the copy of Regional Plan 2000-2020 notified vide no. 13-1[39)/95/PWD-I/2000/752 dated 05.07.2001 and notification from the concerned authority. ii. PP has requested to exempt public hearing for the proposed project, as the project is located in the notified industrial zone EAC after examination of the documents submitted by the Project Proponent accepted the amendment and recommended for exemption from Public Consultation under the provisions as per para 7 III. Stage (3) (b) of the EIA notification, 2006 for the proposal.
18.5.7	**Proposed Molasses based Distillery (45 KLPD) at Gat No.74 and 79 Village Mangrul, Tehsil Tuljapur, District Osmanabad, Maharashtra by M/s Kancheshwar Sugar Ltd.- EC Amendment** {J-11011/224/2013- IA II (I) ; IA/MH/IND2/60405/2016} The PP has not attended the EAC meeting. The EAC decided to defer the proposal.
18.5.8	**Bulk Drug Unit of M/s Mylan Laboratories Limited. Unit-3(Earlier known as M/s Matrix Laboratories Limited (Unit -3Phase-IV, IDA Jeedimetla, Tehsil Quthubullapur in Ranga Reddy District, Telangana State- Amendment in EC reg**. [IA/TG/IND2/56644/2005, J-11011/142/2005-IA-II(I)] The PP has not attended the EAC meeting. The EAC decided to defer the proposal.
18.5.9	**Pesticide Manufacturing Plant (900 MT/Month) at Plot No. E-362 , GIDC Estate, Dahej-I, Tal: Vagra, Dist. Bharuch – 392 130, Gujarat by M/s. Hemani Intermediates Pvt. Ltd. (Unit-IV) (**IA/GJ/IND/26202/2013; J-11011/378/2013- IA II (I)**)** The project proponent and the accredited consultant M/s Aqua-Air Environmental Engineers P. Ltd., Surat made a detailed presentation on the proposal and informed that: i. The proposal is for setting up of Pesticide Manufacturing Plant (900 MT/Month) at Plot No. E-362 , GIDC Estate, Dahej-I, Tal: Vagra, Dist. Bharuch – 392 130, Gujarat by M/s. Hemani Intermediates Pvt. Ltd. (Unit-IV). ii. All Pesticides industry and pesticide specific intermediates (excluding formulations) Units producing technical grade pesticides are listed at S.N. 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. The proposal was considered by EAC in its 16th meeting held on 20-21st February, 2014 for TOR. TOR has been issued vide Ministry's letter dated 23rd April, 2014. iv. The proposal was earlier considered for EC by the EAC (Industry-2) in its meeting held during 20th-21st, July, 2015 and 13th meeting of EAC held on 26-

27th September, 2016.

v. The List of Products Along With Production Capacity is as below:

Sr. No.	Name of the Products	Quantity in MT/Month
		Proposed
1. Fungicides		
a)	Hexaconzole (T)	300
b)	Tebuconzole (T)	
c)	Propioconzole (T)	
2. Herbicides		
a)	Dicamba (T)	300
b)	Metribuzine (T)	
c)	Pendimethalin (T)	
3. Insecticides		
a)	Transfluthrin (T)	300
b)	Cyfluthrin & Beta Isomers (T)	
c)	Bifenthrin (T)	
d)	Cypermethrin (T) & Beta/Zeta/Theta Isomers (T)	
e)	Imidacloprid (T)	
Total		**900**

vi. List of By-Products and their capacity is as below:

Sr.No.	Name of the Products	Quantity in MT/Month Proposed
1.	HCl (32%)	250
2.	Sodium Sulphate Solution (30% to 35%)	2000
3.	Aluminum Chloride (25%)	1000
4.	Potassium Chloride Solution	860
5.	H_2SO_4 (70%)	100
6.	Sodium Sulfite Solution (20%)	600

vii. The total Project Cost for proposed project is Rs. 15 Crores. Capital cost of air & water pollution control system and environmental monitoring equipments will be Rs. 2.5 Crore. Recurring cost of air & water pollution control system and environmental monitoring equipments will be Rs. 1.10 Crore/annum. The total Plot Area is 9705m^2. No reserve National park/sanctuary/eco-sensitive area are located within 10 km distance from the project site. Narmada River is flowing at a distance of 3.5 Km.

viii. Daily water consumption shall be 366 m^3/ day and daily wastewater

generation shall be 139 m^3/ day (119 m^3/day: Industrial & 20 m^3/day: Domestic). Water requirement for the proposed project shall be met through GIDC water supply. GIDC water supply authority is ready to supply the required water to M/s. Hemani Intermediates Pvt. Ltd. (Unit-IV). Wastewater from Industrial Operations will be treated in effluent treatment plant. The final treated effluent (69 m^3/day) will be discharged through GIDC pipeline line to deep sea. And MEE Condensate (50 m^3/day) will be resued in plant premises.

ix. The PP has informed the EAC that the ambient air quality (AAQ) monitoring was carried out at 7 locations during March to May, 2014. The baseline data indicates the average ranges of concentrations as:- PM_{10} (55 µg/m^3 – 85 µg/m^3), $PM_{2.5}$ (32 µg/m^3– 49 µg/m^3), SO_2 (13 ug/m^3–29 ug/m^3), NOx (16 µg/m^3–38 µg/m^3) and O_3(11 µg/m^3 -15 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental ground level concentrations (GLCs) after the proposed project are within the National Ambient Air Quality Standards (NAAQS).

x. The fuel and source of fuel are; Coal for Boiler: 35 MT/day, LDO: 10 KL/Day and Diesel: 50 Liters/Hr (Emergency).

xi. Treated effluent will be disposed into deep sea through GIDC Drainage pipeline. High COD effluent will be sent to MEE plant.

xii. Alkali scrubber will be provided to control process emissions viz. HCl, Cl2 and SO2. ESP alongwith 50 m stack height will be provided to coal fired boiler (20 TPH). DG set (1000 KVA) will be installed.

xiii. ETP sludge will be sent to TSDF. Process sludge from $CaCl_2$ will be sold to agriculture use. Used oil/spent oil and spent catalyst will be sent to Authorized reprocessors. Fly ash to be sent to brick manufacturers.

EAC has deliberated on the proposal. EAC has noted the PP has submitted all the queries raised by EAC during the previous meetings along with valid documents. EAC has deliberated on the revised EIA report. EAC has also noted that, as the PP has submitted EIA/EMP report in time, the AAQ data is valid. EAC has also considered the revised product table as per the NOC. It is noted that Public hearing was exempted as the project is located in the notified industrial area. It is observed that the AAQ are within National Ambient Air Quality Standards.

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

A. Specific Conditions:

i) National Emission Standards for Pesticide Manufacturing and Formulation Industry issued by the Ministry vide G.S.R. 46(E) dated 3rd February, 2006 and amended time to time shall be followed by the unit.

ii) Imported coal (with sulphur content less than 5 %)/briquettes/natural gas shall be used as fuel.

iii) Adequate stack height shall be provided to gas fired boiler to control particulate emissions.

iv) Two stage water scrubber followed by alkali scrubber shall be provided to process vent to control process emissions viz. HCl, SO2, Cl2, NOx, HBr. Acidic scrubber shall be provided to process vent to control process emissions viz.

	NH3 & HC. The scrubbed water should be sent to ETP for further treatment. Efficiency of scrubber shall be monitored regularly and maintained properly. Scrubbers vent shall be provided with on-line detection and alarm system to indicate higher than permissible value of controlled parameters. At no time, the emission levels shall go beyond the prescribed standards. The system should be interlocked with the pollution control equipment so that in case of any increase in pollutants beyond permissible limits, plant should be automatically stopped. v) In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored and records maintained. vi) A proper Leak Detection and Repair (LDAR) Program for pesticide industry shall be prepared and implemented as per CPCB guidelines. Focus shall be given for prevention of fugitive emissions for which preventive maintenance of pumps, valves, pipelines are required. Proper maintenance of mechanical seals of pumps and valves shall be given. A preventive maintenance schedule for each unit shall be prepared and adhered to. vii) Company shall take all the measures in order to protect the machineries and equipment for pesticide producing unit from ageing. viii) Continuous monitoring system for chlorine, HCl, Cl_2 as well as VOCs shall be installed at all important places/areas. Effective measures shall be taken immediately, when monitoring results indicate above the permissible limits. Alarm for chlorine leakage if any in the liquid chlorine storage area is provided alongwith automatic start of the scrubbing system. ix) 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. x) Solvent management shall be carried out as follows : (a). Chilled brine circulation system shall be provided to condensate solvent vapors and reduce solvent losses. It shall be ensured that solvent recovery should not be less than 95%. (b). Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c). The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery (d). Solvents shall be stored in a separate space specified with all safety measures. (e). Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (f). Entire plant shall be flame proof. The solvent storage tanks should be provided with breather valve to prevent losses. xi) Total water requirement from GIDC water supply shall not exceed 366 m^3/ day and prior permission should be obtained from the competent authority. xii) Industrial effluent generation shall not exceed 139 m^3/day. As proposed, wastewater will be segregated at source and treated based on its

		characteristics viz High COD & High TDS and Low COD & Low TDS. High COD & High TDS effluents will be sent to MEE followed by RO while Low COD & Low TDS effluents will be treated in ETP followed by RO. The treated wastewater shall be discharged to Common Effluent Treatment Plant (CETP) for final treatment.
	xiii)	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
	xiv)	Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps.
	xv)	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. Membership of TSDF for hazardous waste disposal shall be obtained.
	xvi)	ETP sludge, inorganic waste shall be sent to TSDF site. High calorific value waste such as spent organic shall be sent to cement factory/incinerated.
	xvii)	The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 *as* amended in October, 1994 and January, 2000. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
	xviii)	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
	xix)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
	xx)	Green belt should be developed as proposed in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Selection of plant species should be as per the CPCB guidelines.
	xxi)	An Environment Cell will be set up and 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.
	xxii)	One Environmental Manager having post graduate qualification in environmental sciences/ Environmental engineering.
	xxiii)	At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment and item-wise details along with time bound action plan 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
	xxiv)	All the recommendations made in the risk assessment report should be satisfactorily implemented.
	xxv)	The unit shall adhere to Zero Liquid Discharge (ZLD).
	xxvi)	Continuous online (24 x7) monitoring to be installed for flow measurement and measurement of pollutants within the treatment unit. Data to be

	uploaded on company's website and provided to the respective RO of MEF&CC, CPCB and SPCB.

24th January, 2016 (Day 2)

18.6. Consideration of Proposals: (Environmental Clearance)

18.6.1	**Exploratory and appraisal Drilling of ten wall in Hydrocarbon leads off the Coast of Nallore Distt. Andhra Pradesh in PR-OSN-2004/1 (Polar Block), Bay of Bengal by M/s Cairn Energy India Pvt. Ltd.(CEIL)- EC reg. [J-11011/97/2010-IA-II(I)]** The project proponent gave a detailed presentation on the salient features of the project and informed that: i. Ministry had issued Environmental clearance vide letter no. J-11011/97/2010-IAII (I) dated 24th January, 2011 to M/s Cairn Energy Pvt. Ltd., for Exploratory and appraisal Drilling of ten wall in Hydrocarbon leads off the Coast of Nallore Distt. Andhra Pradesh in PR-OSN-2004/1 (Polar Block), Bay of Bengal. ii. CRZ clearance was not required during EC application as CRZ Notification (1991) did not include offshore areas between LTL & 12NM. As per CRZ Notification (issued on 6th Jan 2011), proposed project falls under CRZ-IV area as drill locations are located approx. 9-22 km from the coast. The project was recommended from CRZ perspective (ref 6553/ENV/CZMA/2015 dated 28th April 2016) by Andhra Pradesh Coastal Zone Management Authority. iii. The MoEF&CC recommended the project from CRZ perspective in its meeting on 29thAugust 2016 and forwarded their recommendations for revising the EC accordingly. iv. All the projects related to offshore and onshore Oil and Gas exploration, development and production are listed in para 1(b) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level. v. No National Park/ Wild Life Sanctuary in 10 km radius area around the wells. vi. This is a short term activity and no activity is envisaged on onshore and /or in Inter-tidal zone. After detailed deliberations the EAC accept the recommendations of SCZMA and CRZ division of the Ministry and recommended for revising the EC accordingly with the following stipulated specific condition: i. Temporary continuous monitoring station/ mechanism shall be installed to avert any possible adverse impacts on the marine environment/ ecology in the exploratory zone.
18.6.2	**Proposed installation of Unit-II Grain Based Ethanol/ENA/RS/Industrial Alcohol Plant (500 KLPD(2x250 KLPD)] & Co-Generation power Plant (40mw(2x20 MW)} in Existing Distillery Plant at Village-Mansoorwal, Tehsil-Zira, Faridkot Road, District Ferozepur, Punjab by M/s Malbros International Pvt. Ltd. - Environmental Clearance reg. [IA/PB/IND2/30448/2006, J-**

11011/187/2006-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 Proposed installation of Unit-II Grain Based Ethanol/ENA/RS/Industrial Alcohol Plant (500 KLPD(2x250 KLPD)] & Co-Generation power Plant (40mw(2x20 MW)} in Existing Distillery Plant at Village-Mansoorwal, Tehsil-Zira, Faridkot Road, District Ferozepur, Punjab.

ii. The project proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) in its 1st EAC meeting held during 30th November-1st December, 2015 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/228/2015-IA II (I); dated 28th December, 2015.

iii. All grain based distilleries 30 KLPD are listed at Sl.No. 5(g) (ii) of Schedule of EIA Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

iv. Ministry has issued EC earlier vide letter no. J-11011/187/2006-IA II (I); dated 25th September, 2006 for 100 KLPD grain based distillery to M/s Malbros International Pvt. Ltd.

v. Total Plant area is 14.8 ha (36.5 Acre) Proposed expansion will be done in the existing plant premises. Almost 33% i.e. 4.9 ha (12.10 acre) of the total plant area has already been developed as greenbelt/plantation. No additional land will be required for the proposed installation of Unit II.

vi. The total Cost of the project for the expansion is Rs. 583 Crores. Capital cost for Environmental Protection Measures will be Rs. 58 Crores and Recurring Cost will be Rs. 10 Crores / annum.

vii. The raw materials for the production will be Grains (damaged grain feed stock, nakku,Kinki, sorghum, maize,bajra, barley) (1200- 1300 TPD) which will be obtained from nearby areas by road, chemicals and enzymes will be obtained from nearby market.

viii. Proposed project will provide employment to 800 persons.

ix. 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.

x. The number of working days will be 350 days/annum.

xi. 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 (65.0 µg/m3 to 88.5 µg/m3), PM2.5 (26.5 µg/m3 to 42.3 µg/m3), SO2 (5.8 µg/m3 to 10.8 µg/m3) and NO2 (14.7 µg/m3 to 23.8 µg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.43 $\mu g/m^3$, 2.57 $\mu g/m^3$ and 2.43 $\mu g/m^3$ with respect to PM_{10}, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

xii. The fresh water requirement for the proposed expansion of Grain based distillery will be 4110 m3/day, which will be met from canal water.

xiii. Spent Wash will be taken through centrifuge decanters and thin slops from the decanter centrifuge will be partly recycled back to process (30-35 %) and partly taken to the Thin Slops Evaporation plant for concentration of remaining solids to form a syrup. This syrup will also be mixed into the wet cake coming out of centrifuge and forms part of cattle feed. Wet Cake/DWGS from decanter will be passed through steam tube bundle drier

	for drying into cake with 10-12% moisture (max.) to give higher shelf life. DDGS will be ideally used as cattle feed/ poultry feed/ etc. No effluent will be generated from the plant as the distillery is based on "Zero Effluent Discharge". xiv. The total power requirement for proposed project will be 9.0 MW which will be sourced from proposed 40 MW (2 x 20 MW)Co-Generation Power Plant & 3 x 1000 KVA of D.G. set (for back up). The remaining power will be exported to the state power grid. xv. Two Biomass/ Rice Husk/ Bagasse/ Paddy & Wheat straw fired boiler of 100 TPH capacity will be installed. A stack of 63 m height will be equipped with Electrostatic Precipitator (ESP) will be installed to encounter the emission from boiler stack. CO2 generated during the fermentation process will be scrubbed, purified & collected for sale as by-product. DG Sets will have adequate height of stack as per CPCB Guidelines. Adequate measures for control of Fugitive Dust Emissions will be taken. xvi. Ash from the boiler will be given to the brick manufacturers. xvii. Public Hearing for the proposed project has been conducted by the State Pradesh Pollution Control Board on 04th May, 2016. xviii. The project will be installed in two phases: • Phase 1:- 250 KLPD Ethanol/ ENA/ RS/ Industrial alcohol Plant and 20 MW Co- generation Power Plant • Phase 2:-250 KLPD Ethanol/ ENA/ RS/ Industrial alcohol Plant and 20 MW Co- generation Power Plant The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding employment, smoke emission, DDGS distribution on subsidized rates, odour problem and chemical waste generation 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 deliberated on the certified compliance report dated 16.02.2016 issued by the Regional Office (Northern Region) of MoEF&CC and committee found certified compliance report satisfactory. The EAC observed that in plant layout there is no sufficient space for halting of raw material transportation carriers which may affect the traffic on NH passing at very close distance from the proposed plant. The committee was also of the view that this type of plants which uses food grain as a raw material, is a great concern as the uncontrolled use of grains in alcohol production may create scarcity of food grains in the region. After deliberation, the Committee sought following additional information: 1. Study report on viability of production of Potable liquor vs Fuel ethanol. 2. Traffic management plan in consultation with NHAI w.r.t. Raw material transportation. 3. Commitment to produce fuel grade ethanol in place of Potable liquor. The proposal was deferred till the desired information is submitted. The above information shall be provided through online with the uploading of minutes on the website.
18.6.3	**Proposed 30 KLPD capacity of distillery unit in existing Sugar complex at Post - Sadashivnagar, Tahsil Kagal, District Kolhapur, Maharastra by M/s Sadashivrao Mandlik Kagal Taluka SSK Ltd.- reg EC** [IA/MH/IND2/58636/2015,

J-11011/18/2015-IA II (I)]

The Project Proponent and the accredited Consultant M/s Ultra-Tech Environmental Consultancy & Laboratory., gave a detailed presentation on the salient features of the project and informed that:

i. The proposal is for Proposed 30 KLPD capacity of distillery unit in existing Sugar complex at Post - Sadashivnagar, Tahsil Kagal, District Kolhapur, Maharastra by M/s Sadashivrao Mandlik Kagal Taluka SSK Ltd.
ii. The project proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) in its 34th REAC meeting held during 17-19th February, 2015 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter dated 29th April, 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. Total land area is 22.11 hectares. The proposed project will be commissioned in the premises of existing factory, out of which green belt will be developed in 73700 m2 area. Total Cost for distillery project will be Rs. 4315 Lakhs. The raw materials for the production will be Molasses which will be obtained from own sugar mills.
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. River Chikotra is 1.7 km away from the project site at up-stream.
vi. The number of working days will be 330 days/annum.
vii. Ambient air quality monitoring was carried out at 8 locations during March 2015-May 2015 and submitted baseline data indicates that ranges of concentrations of PM10 (55 µg/m3 to 83 µg/m3), PM2.5 (26 µg/m3 to 49 µg/m3), SO2 (10 µg/m3 to 31 µg/m3) and NO2 (17 µg/m3 to 38 µg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.85 $\mu g/m^3$ and 16.08 $\mu g/m^3$ with respect to PM and SO_2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
viii. Total fresh water requirement from irrigation department will be 405 m^3/day. Effluents will be distributed in three streams (a) Sober effluent from cooling, boiler blow down, purging water, (b) Moderate effluent from vessel/floor washing, process and (c) High BOD effluent (Spent wash).Wastewater from stream (a) and (b) mentioned above, will be sent to ETP for treatment. Treated water will be further sent to recycle/re-use. Spent wash from stream (c) will be sent for evaporation and the condensate water will be treated before recycling. Concentrated spent wash will be used as fuel for incineration boiler.
ix. The total power requirement of the plant will be 3500 kW which will be sourced from Govt. Electricity Board and own generation.
x. The factory has two existing boilers of 15 TPH each installed in Sugar Co-gen unit. Proposed distillery will require new Bagasse, Coal and CSW fired boiler of 15 TPH. Committee suggest to use only Bagasse/ Briquettes/ CSW as a boiler fuel, PP agree with that. ESP with 55 m stack height will be installed to control particulate emissions.
xi. The solid in process generate only as ETP sludge, spent catalyst and boiler ash. Ash will be sent to Cement mills and for soil enrichment. Other will be

empty drums which can be used for refill or may be disposed to original vendors.

xii. CSR plan is prepared for expenditure of 2.5 % of project cost.

xiii. Public Hearing for the proposed project has been conducted by the State Pradesh Pollution Control Board 20.01.2016.

xiv. The following products will be generated by the company:

#	Product	Production			Unit
		Existing	Additional	Total	
1	Ethyl Alcohol(*)	-	30	30	KLPD
2	Sugarcane	4000	-	4000	TCD
3	Co-gen Power	15	-	15	MW

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding spent wash management through incineration route, Mitigation measures to control air pollution, benefits of the project 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) The total steam requirement shall be met from 15 TPH boiler. Concentrated spent wash/ Bagasse/ Briquettes shall be used as boiler fuel. ESP with stack height of 55 m shall be installed with the proposed boiler. CO_2 generated during the fermentation process shall be scrubbed, purified & collected for sale as by-product. DG set shall 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 405 m^3/day from irrigation department and prior permission should be obtained from the concerned authority. No ground water shall be used.

(iv) Spent wash shall be sent for evaporation and the condensate water shall be treated before recycling. Concentrated spent wash shall be used as fuel for incineration boiler. Domestic wastewater shall be sent to Septic Tank. Sober and Moderate wastewater shall be treated in ETP and reused for operations like cooling and for green belt.

(v) No effluent should be discharged outside the premises and Zero Liquid Discharge should be maintained.

(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 Cement mills and for soil enrichment. Used oil & grease generated from plant machinery/Gear boxes as hazardous waste will be sold out to the CPCB authorized recycler.

(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.

(ix) All the commitments made during the Public Hearing / Public Consultation

	meeting held on 20.01.2016 should be satisfactorily implemented and adequate budget provision should be made accordingly. (x) 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. (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.
18.6.4	**Expansion of Sugar Plant (from 4950 to 7000 TCD), Co-gen Power Plant (from 12.5 MW to 28 MW) and Molasses based Distillery unit (from 45 KLPD up to 60 KLPD) at Village &TalukaKagal, District Kolhapur, Maharashtra by M/s Shree Chhatrapati Shahu Sahakari Sakhar Karkhana Ltd.-Environmental Clearance reg. [IA/MH/IND2/30200 /2015, J-11011/225/2015-IA II (I)]** The Project Proponent and the accredited Consultant M/s. Equinox Environments (India) Pvt. Ltd., gave a detailed presentation on the salient features of the project and informed that: i. The proposal is for Expansion of Sugar Plant (from 4950 to 7000 TCD), Co-gen Power Plant (from 12.5 MW to 28 MW) and Molasses based Distillery unit (from 45 KLPD up to 60 KLPD) at Village & Taluka Kagal, District Kolhapur, Maharashtra. ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 1st EAC meeting held during 30th November-1st December, 2015 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/228/2015-IA II (I); dated 28th December, 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. Ministry has issued EC earlier vide letter no. J-11011/39/2001-IA II (I); dated 11th December, 2001 for 45 KLPD distillery to M/s Shree Chhatrapati Shahu Sahakari Sakhar Karkhana Ltd. v. Total Plant area is 14,00,000 m^2, Out of which green belt will be developed in 4,67,980 m^2 (33 %) area. vi. The existing project cost is Rs. 222 crore and proposed Cost of the project for the expansion is Rs. 75 Crores. Capital cost for Environmental Protection Measures will be Rs. 40 Crores and Recurring Cost will be Rs. 7.15 Crores/ annum. vii. The raw material i.e. molasses, which will be obtained from own Sugar Factory. viii. Proposed distillery will work for about 270 days. It will not work during monsoon. ix. Proposed project will provide employment to 180 persons. x. 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. xi. Ambient air quality monitoring was carried out at 8 locations during December, 2015 – February 2016 and submitted baseline data indicates that ranges of concentrations of PM10 (20.57 µg/m3 to 87.30 µg/m3), PM2.5 (4.27 µg/m3 to 43.5 µg/m3), SO2 (6.47 µg/m3 to 23.90 µg/m3) and

NO2 (7.87 µg/m3 to 24.17 µg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.0 µg/m^3, 0.60 µg/m^3 and 0.50 µg/m^3 with respect to PM_{10}, $PM_{2.5}$ and SO_2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

xii. Existing fresh water for Sugar and Co-gen unit is 368 m3/day. Under proposed expansion additional fresh water requirement for Sugar + Co-gen unit will be 5 m3/day. Fresh water requirement for distillery unit will be decreased from 517 m3/day to 291 m3/day. Committee suggest to PP that no additional fresh water for Sugar and Co-gen unit will be used, PP agree with this. Fresh water will be sourced from Dudhganga River.

xiii. Spent wash will be treated in Bio-methanation Plant followed by Concentration in MEE & used for bio-composting along with filler material. Effluent from existing as well as expansion of sugar factory & co-gen plant will be treated in existing ETP. Further, the treated effluent shall be used for gardening in own factory premises as well as industry's farm land. Domestic waste water will be treated in STP.

xiv. Bagasse would be used as fuel for existing 70 TPH & 60 TPH boiler with ESP and 70.5 m stack height. Additionally Biogas or Bagasse fired boiler of 40 TPH will be used under proposed expansion with ESP and 40 m Stack height. Electricity required for manufacturing operations will be met from in-house co-generation plant. The D.G. Sets is used only during power failure. Under existing Sugar factory, co-gen plant and distillery two D.G. sets of 500 KVA & two DG sets of 300 KVA capacity are already installed.

xv. Used Oil in MS Barrels will be burnt in boiler with bagasse. Boiler ash will be sent to Brick manufacturing unit/ composting. Yeast sludge will be used in Bio composting.

xvi. Public Hearing for the proposed project has been conducted by the State Pradesh Pollution Control Board on 8th November, 2016.

xvii. Following are the list of existing and proposed products:

Industrial Unit	**Product**	**Quantity**		
		Existing (4,950 TCD)	**Expansion (2,050 TCD)**	**Total (7,000 TCD)**
Sugar Factory	White Sugar	19,850 MT/M	7,380 MT/M	27,230 MT/M
	By-product			
	Molasses	5,940 MT/M	2,460 MT/M	8,400 MT/M
	Bagasse	44,550 MT/M	18,450 MT/M	63,000 MT/M
	Press mud	5,940 MT/M	2,460 MT/M	8,400 MT/M
Co-Gen	Product	Existing	Expansion	Total
	Electricity	12.5 MW	15.5 MW	28 MW
Distillery	Product	Existing (45 KLPD)	Expansion (15 KLPD)	Total (60 KLPD)
	Rectified Spirit /ENA	1,350 KL/M	450 KL/M	1,800 KL/M

xviii. The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding Effluent treatment method, Pollution control equipments for the boiler, development programme in future, details of By-products, method to store Alcohol, working days of distillery and provide water for trees during summer 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 deliberated on the certified compliance report dated 22.07.2016 issued by the Regional Office, Nagpur of MoEF&CC and committee found that as per specific condition no. IV of existing EC, distillery is operating for 240 days in place of 200 days without amending the EC but as per the certified compliance report issued by RO, MoEF&CC stat that MPCB has issued consent to operate for the operation of distillery for a period of 270 days in a year. Committee also found that PP did not complied 03 general conditions. During presentation PP confirms that they will strictly follow the conditions in future. After deliberation the committee got satisfied with the submissions/commitments made by the PP regarding compliance of conditions of earlier EC.

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

i. ESP along with 40 m stack height shall be provided to Biogas or Bagasse fired boiler (40 TPH) to control particulate emission.

ii. Existing fresh water for Sugar and Co-gen unit is 368 m3/day. Fresh water requirement for distillery unit will be decreased from 517 m3/day to 291 m3/day. No additional fresh water shall be required. Necessary permission shall be taken from the concerned authority.

iii. Spent wash shall be treated in Bio-methanation Plant followed by Concentration in MEE & used for bio-composting along with filler material. Effluent from existing as well as expansion of sugar factory & co-gen plant shall be treated in existing ETP. Further, the treated effluent shall be used for gardening in own factory premises as well as industry's farm land. Domestic waste water shall be treated in STP.

iv. 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 30 days capacity.

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 storage shall be done in such a way that it does not get air borne or fly around due to wind.

viii. As proposed, Used Oil in MS Barrels will be burnt in boiler with bagasse. Boiler ash will be sent to Brick manufacturing unit/ composting. Yeast sludge will be used in Bio composting.

	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 avoid congestion on the public road. xii. As proposed, green belt over 4,67,980 m^2 (33 %) area 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. xiii. All the commitments made during the Public Hearing/Public Consultation meeting held on 8th November, 2016 shall be satisfactorily implemented and adequate budget provision shall be made accordingly. 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.

Reconsideration of EC

18.6.5	**Bulk Drug Manufacturing Unit at Plot/Survey nos 447, 450-52, 455 to 476, 482 to 510 at Village Ontimamidi (Kona), Mandal Thodangi, District East Godavari, Andhra Pradesh by M/s Divis Laboratories Limited Unit-IV –EC reg. {(J-11011/408/2014-IA II (I)}** Proposal was considered by EAC (Industry-2) in its 14th meeting held during 26th to 27th October, 2016. During the presentation on 14th EAC meeting, the committee asked to submit the following information: 1. Revised water balance chart with special emphasis on water recycling and reuse. 2. Action plan to be drawn at the rate of 5% of project cost under ESR activities. During presentation before the EAC in its 17th meeting held during 23rd-25th January, 2017, the PP has submitted the revised water balance chart with special emphasis on water recycling and action plan at the rate of 5% of project cost under ESR activities.

	After examining the facts and detailed deliberations the committee decided to recommended 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. Bag filter/ESP shall be provided to coal fired boiler with stack of height 40m to control particulate matter emission. ii. Fugitive emissions in the work zone environment, product, raw materials storage area etc. should be regularly monitored. The emissions should conform to the limits stipulated by SPCB. iii. 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. iv. Total fresh water requirement from Jammeruvagu, Samarlakota canal and Thandava River in phase-1 and alternate sources for freshwater requirement shall be Pumpa and Eleswaram canal shall not exceed 4300 m^3/day and permission from concerned authority to be obtained. v. Wastewater shall be segregated into High TDS/COD and Low TDS/COD effluent streams. High TDS/COD effluent stream shall be treated through steam stripper followed by multiple effect evaporators (MEE) and agitated thin film drier (ATFD). Low TDS effluent stream shall be treated in ETP followed by RO. Treated effluent will be reused. No effluent should be discharged outside the premises and Zero Liquid Discharge should be maintained. vi. 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 for management of hazardous wastes and prior permission from SPCB should be obtained for disposal of solid / hazardous waste in the TSDF. The concerned company should undertake measures for fire fighting facilities in case of emergency. vii. As proposed, greenbelt should be developed at least in the area 221.3 acres in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Selection of plant species should be as per the CPCB guidelines. viii. All the recommendations made in the risk assessment report should be satisfactorily implemented. ix. At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on need of local people and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. x. Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.

18.6.6	**Proposal for expansion of drug formulation products at Plot no. A 1128, RIICO Industrial area Phase III, Village Bhiwadi, Tehsil Tijara, District Alwar, Rajasthan by M/S Auronext Pharma Ltd.- reg. EC { IA/RJ/IND2/34909/2014, (J-11011/284/2014-IA II (I)}** Proposal was considered by EAC (Industry-2) in its 14th meeting held during 26th to 27th October, 2016. During the presentation on 14th EAC meeting, the committee asked to submit the following information: (i) Recheck the VOC for one month. (ii) Commitment to send spent organic waste to cement industry. (iii) Revise water balance chart to be submitted. Water requirement need to be reworked. During presentation before the EAC in its 17th meeting held during 23rd-25th January, 2017, the PP has submitted the one month data of VOC, Commitment to send spent organic waste to cement industry and Revise water balance chart. During presentation PP informed that there was some corrections have been found in the minutes of 14th EAC meeting held during 26th to 27th October, 2016 which are as follows: i. Fresh water requirement will be increased from 30 m3/day to 70 m3/day in place of Fresh water requirement will be increased from 30 m3/day to 100 m3/day. ii. Total Wastewater generation will be 41.58 m^3/day, out of which industrial effluent generation will be 60 m^3/day in place of Total Wastewater generation will be 105 m^3/day, out of which industrial effluent generation will be 80 m^3/day. iii. Product s.no. 1a i.e Mertopenem Trihydrate Sterile in place of Meropenem Trihydrate Sterile. After examining the additional information and detailed deliberations the committee decided to recommended 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. Wet scrubber followed by Stack of height 33 m will be provided as pollution control measure for Furnace Oil fired boiler of capacity 4 TPH to control particulate matter emission within 50mg/Nm^3. ii. Chilled brine circulation system should be provided to condensate solvent vapors and reduce solvent losses. It should be ensured that solvent recovery should not be less than 95%. iii. Fugitive emissions in the work zone environment, product, raw materials storage area etc. should be regularly monitored. The emissions should conform to the limits stipulated by SPCB. iv. Total water requirement from RIICO water supply and ground water shall not exceed 100 m^3/day and permission from RIICO and CGWA/SGWA to be obtained. v. Effluent generation shall not exceed 105 m^3/day. As proposed, effluent shall be treated in the ETP. No effluent should be discharged outside the premises

	and Zero Liquid Discharge should be maintained. Domestic sewage should be treated in STP. vi. 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 for management of hazardous wastes and prior permission from SPCB should be obtained for disposal of solid / hazardous waste in the TSDF. The concerned company should undertake measures for fire fighting facilities in case of emergency. vii. As proposed, greenbelt should be developed at least in the area 3337 m^2 (33 %) in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Selection of plant species should be as per the CPCB guidelines. viii. All the recommendations made in the risk assessment report should be satisfactorily implemented. ix. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on need of local people and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. x. Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
18.6.7	**Bulk Drugs and Intermediates as well as Chemicals Manufacturing Unit of M/s Challa Chlorides Pvt. Ltd. located at Plot No. F-2, MIDC Chincholi, Taluka Mohol, District Solapur, Maharashtra–[IA/MH/IND2/56973/1900, J-11011/356/2013-IA-II(I)]- Environmental Clearance** Proposal was considered by EAC (Industry-2) in its 14th meeting held during 26th to 27th October, 2016. During the presentation the committee noted that Ministry has awarded the TOR with public hearing, however, PP submitted the EIA-EMP without conducting public hearing. At that time the committee advised PP to conduct public hearing and resubmit the revised EIA-EMP report. Now PP again applied for consideration for EC without conducting public hearing and informed the committee that project site is located in MIDC Chincholi notified industrial area and as per the EIA notification, 2006, Public hearing is exempted as per para 7(i) III Stage (3)(i)(b) being site is located in the Notified industrial area. After reviewing the documents EAC recommended to exempt the public hearing under para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006 being site is located in the Notified industrial area. The EAC permitted the PP to present the case for grant of TOR. The Project Proponent and the accredited Consultant M/s Green Circle, Inc., gave a detailed presentation on the salient features of the project and informed that: i. M/s. Challa Chlorides Pvt. Ltd. has proposed for setting up of Bulk Drugs & Intermediates and Chemicals Manufacturing Plant at Plot No. - F-2, MIDC Chincholi, Ta: Mohol, Dist. Solapur, Maharashtra. ii. The project proposal was considered by the Expert Appraisal Committee

(Industry-2) in its 20th REAC meeting held during 23rd- 24th June, 2014 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/356/2013-IA II (I); dated 29th September, 2014.

iii. All Synthetic organic chemicals located inside the notified industrial area/estate are listed at S.N. 5(f) under category 'B' but it is treated as 'A' and appraised by SEIAA in Maharashtra. SEIAA considered this case in its 126th SEAC meeting and observed that the ESZ of GIB sanctuary has not been finalised yet by MoEF&CC hence project falls in category A.

iv. Total Plant area is 16,000 m^2, Out of which green belt will be developed in 2790.50 m^2 area.

v. The proposed project cost will be Rs. Rs. 4.5 crores. Capital cost for Environmental Protection Measures will be Rs. Rs. 132 Lacs and Recurring Cost will be Rs. 18.25 Lacs/ annum.

vi. It is reported that no national parks, Reserve Forest (RF)/ Protected Forests (PF), Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Great Indian Bustard Sanctuary is situated at a distance of 2.37 km in NNE direction. Sina river is flowing at a distance of 6.20 km in SE direction.

vii. Ambient air quality monitoring was carried out at 6 locations during October, 2014 to December, 2014 and submitted baseline data indicates that ranges of concentrations of PM10 (38.2 µg/m3 to 65.5 µg/m3), PM2.5 (8.9 µg/m3 to 15.5 µg/m3), SO2 (10.5 µg/m3 to 18.6 µg/m3) and NO2 (12.1 µg/m3 to 20.6 µg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.03 µg/m^3 and 0.03 µg/m^3 with respect to SPM and SO_2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

viii. Total Power requirement will be 250 KVA and will be sourced from MSEB. DG set of 250 KVA will be used as standby. Coal/ Bagasse fired boiler of 2 TPH capacity will be used and Bag filter with 30 m stack height will be used to control particulate emission. Scrubber will be provided to control the process emissions like HCl and Ammonia gases during manufacturing process.

ix. The total water requirement under proposed activity would be to the tune of 73.68 m^3/day out of this 45 m^3/day would be fresh water and 24.68 m^3/day would be condensate from Multiple Effective Evaporator (MEE) and Steam condensate would be 4 m^3/day. Fresh water will be sourced from MIDC water supply. The condensate water would be used for boiler feed and MEE condensate would be used for cooling tower makeup, scrubber, softener purpose. Industrial wastewater will be treated in ETP followed by MEE. Domestic wastewater will be sent to Septic tank followed by soak pits. No effluent will be discharged outside the plant premises.

x. Distillation residue and Process residue will be sent to CHWTSDF. Spent Carbon will be sold to brick manufacturers, Sodium Chloride (1.2 MT), Sodium Sulphate (5.26 MT), Chromic Sulphate (0.48 MT), Sodium Hydroxide (1.62 MT) and Sulphur (0.99 MT) will be sold as byproduct to outside parties. Discarded containers will be sent to authorized reprocessor. ETP sludge will be sent to CHWTSDF.

xi. EAC exempted Public hearing under para 7(i) III Stage (3)(i)(b) being site is located in the Notified industrial area.

xii. Following products will be manufactured:

Sr. No.	Name of Products	Quantity (MT/M)

1	Metformin Hydrochloride	50.4
2	Lumefatrine	3
3	Aluminium Chloride	36.15
4	Ibuprofen	23.6
5	Ambraxol Hydrochloride	10.75
6	Ambraxol Baselate	2
7	Folic Acid	2
8	Oxyclozanide	2
9	Cinnarzine	1
By- products		
1	Aluminum Hydroxide	96 m^3
2	Sodium Sulphate	6.51 MT
3	Chromic Sulphate	0.48 MT
4	Sodium Chloride	0.80 (From Folic Acid)+ 0.38 (From Amolodipine Baselate)+ 0.64 (From Cinnarzine) = 1.82
5	Sodium Acetate	1.08 (From Folic Acid)
6	Hydrochloric acid	0.34(From Oxyclozanide)

The EAC noted that there is a court case (Special Civil suit No. 1/2016) under consideration of Hon'ble District Judge-9, Kolhapur, Maharashtra filed by M/s. EQINOX Environments (India) Pvt. Ltd. (EEIPL), M/s (plantiff) against M/s. Challa Chlorides Pvt. Ltd.; wherein, the Hon'ble court while hearing the matter on 24th October, 2016 ordered that:

1] Let the hearing on 26.10.2016 before Expert Appraisal committee go on, but defendant No. 4 and 5 shall not give environmental clearance certificate to defendant no. 1 till 17.11.2016.

2] Inform the authority.

Accordingly, the Committee after examination of the project details and detailed deliberations recommended the project for grant of Environmental Clearance subject to outcome of the above mentioned court matter and compliance of following specific conditions:

i. Bag filter with 30 m stack height alongwith stack of 30 m height shall be provided to Coal/ Bagasse fired boiler of 2 TPH capacity to control particulate matter emission within 50mg/Nm^3.
ii. Scrubber will be provided to control the process emissions like HCl and Ammonia gases during manufacturing process.
iii. Fugitive emissions in the work zone environment, product, raw materials storage area etc. should be regularly monitored. The emissions should conform to the limits stipulated by SPCB.
iv. Total fresh water requirement from MIDCsupply shall not exceed 45 m^3/day and permission from concerned authority to be obtained.

	v. Industrial wastewater shall be treated in ETP followed by MEE. Domestic wastewater shall be sent to Septic tank followed by soak pits. No effluent shall be discharged outside the plant premises. vi. 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 for management of hazardous wastes and prior permission from SPCB should be obtained for disposal of solid / hazardous waste in the TSDF. The concerned company should undertake measures for fire fighting facilities in case of emergency. vii. As proposed, greenbelt should be developed at least in the area 2790.50 m^2 in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Selection of plant species should be as per the CPCB guidelines. viii. All the recommendations made in the risk assessment report should be satisfactorily implemented. ix. At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on need of local people and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. x. Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.

18.7 Terms of Reference (TOR)

18.7.1	**Manufacture Mono Chloro Acetic Acid and Sodium Mono Chloro Acetic Acid Located at Survey No. 57/1/P3, At Hamirpar, Mitana-Padadharihighway,Taluka: Tankara, District: Morbi, Gujarat by M/s. Fortune Industries Pvt. Ltd. [IA/GJ/IND2/59501/2016, J-11011/338/2014-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. Fortune Industries Pvt. Ltd., has proposed for Manufacture Mono Chloro Acetic Acid and Sodium Mono Chloro Acetic Acid Located at Survey No. 57/1/P3, At Hamirpar, Mitana- Padadharihighway,Taluka: Tankara, District: Morbi, Gujarat. 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 Plot Area is 6,341 m^2out of which 1902 m^2 area will be developed as green Belt.

iv. Total project cost for the proposed project is Rs. 2 Crore.

v. It is reported that no National park, Wildlife sanctuary, Reserved forest/protected forest lies within 10 Km radius of project site.

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

Sr. No.	Name of Product(s)	Proposed Production Capacity
1	Mono Chloro Acetic Acid (MCAA)	200 MT/Month
2	Sodium Mono Chloro Acetic Acid (SMCAA)	50 MT/Month
Byproduts		
3	Hydrochloric Acid (30%)	242.8 MT/Month
4	Sodium Hypochlorite	10.5 MT/Month

vii. Total power requirement will be 160 KVA, which will be sourced from PGVCL.

iii. Agro waste fired boiler of 0.8 TPH will be used with Cyclone separator to control particulate emission. Two Stage Water Scrubber followed by Alkali Scrubber will be used to control process emissions.

ix. Fresh water requirement will be 23.5 m3/day, which will be met through ground water/Narmada water. Committee suggest to use only Narmada water, PP agree with it.

x. Domestic effluent will be discharged by a septic tank/soak pit system. Industrial effluent will be treated in an ETP and ultimately be evaporated in an evaporator.

xi. ETP sludge along with evaporation residue will be disposed to TSDF site. Used/ Spent Oil will be again used for low grade lubrication of machinery and for rust proofing. Excess if any, will be sold to authorized recyclers/ re-processors. Discarded Plastic Bags/ Barrels will be sold to authorized vendors.

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

A. 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. Valid the copy of valid CTO.
iii. Commitement to reduce the production of Chloro Acetic Acid from 200 to 150 MT/month.
iv. Commitment for Chlorine storage not more than 7 MT/day

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.
18.7.2	**Distillery project at Shahuwadi Unit Village Sonawade, Tehsil Shahuwadi, Dist. Kolhapur, Maharashtra. Stand-alone unit, with Sister concern Sugar and Co-gen plant in the vicinity by M/s. Athani Sugars Limited-TOR reg.[IA/MH/IND2/61382/2016, J- 11011/372/2016-IA.II(I)]** The project proponent gave a detailed presentation on the salient features of the project and informed that: i. M/s. Athani Sugars Limited, has proposed for Distillery project of 90 KLPD capacity at Shahuwadi Unit Village Sonawade, Tehsil Shahuwadi, Dist. Kolhapur, Maharashtra. ii. All molasses based distillery are listed at S.No. 5(g) (i) under category 'A' and appraised at central level. iii. Total cost for the project is Rs. 115 crores. iv. It is reported that no National Park, Wildlife sanctuary,reserved forest/protected forest lies within 10 Km radius of project site. Warna river and Kadvi river are flowing at a distance of 7 km and 39. Km respectively away from the project site. v. Power requirement will be 2500 KW, which will be met through Govt. Electricity Board and own captive generation. vi. Baggasse fired boiler will be used and ESP with adequate stack height will be provided to control particulate emission. DG set with adequate stack height will be provided. vii. Two Molasses Storage Tanks of 10000 MT capacities each are proposed. The sister concern will be sparing their produced molasses for us. This transport may either be through tankers or may be through a short pipeline. iii. Water requirement will be 1400 m3/day, which will be met from Kadvi and Warne River. ix. Waste water will be segregated into three streams i.e. Sober, moderate and highly polluted wastewater. Highly pollted wastewater will be treated in MEE and concentration, as fuel & incineration in boiler. Unit will be based on Zero Liquid discharge. x. ETP sludge will be sold. Ash will be sent to brick manufacturer. PP requested to exempt public hearing as Public hearing was conducted recently. The Committee agreed for exemption of public hearing as per para 7(ii) of EIA, Notification, 2006. 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. Additional TOR** i. Public hearing is exempted as per para 7 (ii) of EIA, Notification,

2006.

ii. 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.

18.7.3 **Sugar and Co-gen Power at Shahuwadi Unit Village Sonawade - Bambawade, Tehsil Shahuwadi, Dist. Kolhapur, Maharashtra. Sister concern Distillery plant in the vicinity M/s. Athani Sugars Limited- [IA/MH/IND2/61387/2016, J-11011/373/2016-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. Athani Sugars Limited, has proposed for Sugar and Co-gen Power at Shahuwadi Unit Village Sonawade - Bambawade, Tehsil Shahuwadi, Dist. Kolhapur, Maharashtra. Sister concern Distillery plant in the vicinity M/s. Athani Sugars Limited.

ii. All Sugar Industry of more than 5000 TCD cane crushing capacity are listed at S.No. 5(j) under category 'B' but due to SEIAA is not available in Maharashtra hence project will consider under category 'B' and appraised at central level.

iii. It is reported that no National Park, Wildlife sanctuary,reserved forest/protected forest lies within 10 Km radius of project site. Warna river and Kadvi river are flowing at a distance of 7 km and 39. Km respectively away from the project site.

iv. Total cost for the project is Rs. 263 Crores. Proposed expansion will be carried out in within existing plant premises.

v. Power requirement will be 2500 KW, which will be met through Govt. Electricity Board and own captive generation.

vi. Water Need is about 3500 cum/d and shall be met partly from Kadvi – Warne River and partly by recycle. A small size pipeline may also be considered if the treated wastewater is to be used in the sister concern.

vii. Two Molasses Storage Tanks of 4500 MT capacities each are available. The sister concern will have their own molasses storage. This transport may either be through tankers or may be through a short pipeline.

viii. Sugar will be stored in separate sugar godowns and for other materials, warehouses provided.

ix. proposed products and quantities for expansion are as below: -

S. No	Products	Existing	Proposed	Total
1	Sugar	2500 TCD	5500 TCD	8000 TCD
2	Co-gen	-	35 MW	35 W

PP requested to exempt public hearing as Public hearing was conducted recently. The Committee agreed for exemption of public hearing as per para 7(ii) of EIA, Notification, 2006.

After detailed deliberations, the Committee prescribed the following

	Additional TOR in addition to Generic TOR provided at Annexure-I (refer Ministry's website) for preparation of EIA-EMP report: **A. Additional TOR** i. Public hearing is exempted as per para 7 (ii) of EIA, Notification, 2006. ii. Green belt 10m wide around the periphery with perennial trees. 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.
18.7.4	**Ammonia- 2200 MTPD and Urea- 3850 MTPD Fertilizer Project at Barauni, Dist-Begusarai, Bihar by M/s Hindustan Urvarak and Rasayan Limited (HURL)-TOR reg.[IA/BR/IND2/61377/2016, J- 11011/371/2016-IA.II(I)]** The project proponent gave a detailed presentation on the salient features of the project and informed that: i. M/s Hindustan Urvarak and Rasayan Limited, has proposed Ammonia-2200 MTPD and Urea- 3850 MTPD Fertilizer Project at Barauni, Dist-Begusarai, Bihar. ii. All Chemical fertilizers industry are listed at S.N. 5 (a) under category 'A' and appraised at Central level. iii. HFCL Barauni Unit was commissioned in November 1976. The installed capacities of the main plants were 600 MTPD Ammonia and 2×500 MTPD Urea. iv. It is reported that no National park, Wildlife sanctuary, Reserved forest/protected forest lies within 10 Km radius of project site. v. Existing Plot Area is 630 acre. Total project cost is Rs. 5847.10 Crore. vi. Power requirement of proposed fertilizer complex, provision of NG based Gas Turbo Generator (GTG) set (1) of 15 MW ISO rating capacity and Steam Turbine Generator (STG) of 10 MW capacity has been kept to ensure uninterrupted power supply to the plant. vii. NG / R-LNG will be made available for the proposed project from 18" & 922 Km long (mainline) GAIL's Jagdishpur-Phulpur-Haldia pipeline. viii. The total requirement of treated water for the complex is envisaged to be around 1100 m3/hr. Raw water requirement (1265 m3/hr) will be made available from proposed new 10 nos. of bore wells. ix. Ammonia plant process condensate will be treated in the process condensate stripper and recycled to the process as Boiler Feed Water. Urea plant process condensate shall be treated in in-built Urea hydrolyser and recycled to the process as Boiler Feed Water.Cooling tower and DM plant effluent shall be treated and re-used in the system. Domestic effluent after treatment in the STP shall be used for green belt development, to the extent possible. x. Hazardous waste generated in the Ammonia-Urea plants such Spent Catalyst, used Oil etc. shall be sold to authorized vendors as per Hazardous & Other Waste (Management & Trans-boundary) Rules, 2016. xi. The details of the facilities of proposed Fertilizer Complex are as follows:

S. No.	Facility	Capacity
1	Ammonia Plant	2200 MTPD
2	Prilled Urea (Neem Coated) Plant	3850 MTPD
3	Ammonia Storage	(2x5000) MT & associated facilities
4	Urea Storage & Handling Facilities	
4.a	Silo	60000 MT
4.b	Empty Bag Storage	2.0 Million
4.c	Bagged Storage	1000 MT (on platform)
4.d	Bagging Plant	(7+1) Slats of 60 MTPH each

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

A. Specific 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. 10 m wide greenbelt around the periphery to be developed.
iii. ZLD plan to be submitted.
iv. Demolition plan to be submitted.

It was recommended that 'TORs' 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.

18.7.5 **Proposed expansion of manufacturing of Synthetic Organic products plant at Plot No. 609/610, 100 shed area, GIDC Estate, Vapi, Valsad, Gujarat by M/s AArti Industries Limited (Apple Organics Division)- [IA/GJ/IND2/61144/2016, J- 11011/384/2016-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 AArti Industries Limited (Apple Organics Division)** has proposed for expansion of manufacturing of Synthetic Organic products plant at Plot No. 609/610, 100 shed area, GIDC Estate, Vapi, Valsad, Gujarat.

(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 CPA and are appraised at Central Level by Expert Appraisal Committee (EAC). Project was established in 2004 i.e. prior EIA Notification, 2006.

(iii) It is reported that no National park, Wildlife sanctuary, Eco sensitive area lies

	within 10 Km radius of project site. A Forest is situated at a distance of 7 km from the project site. (iv) The expansion will be carried out at existing plot located in GIDC. The expected cost of proposed expansion is Rs. 500 Lacs. The total plot area of the unit is 1752 sq. m. The existing green belt area is approx. 183 sq. m. After expansion, the green belt area will be remaining same. (v) As per consent, the unit is using 1MT/day of furnace oil as fuel for Boiler. The existing electricity load is 125 KVA from DGVCL. Under proposed expansion Natural gas of 894 SCM/Hr. will be used in boiler instead of furnace oil. The unit is proposing 3 stacks from reactors out of which 2 stacks will be connected to water scrubber followed by alkali scrubber and the other one stack will be connected to water scrubber followed by acid scrubber. The existing electricity consumption is 125 KVA and electricity consumption due to proposed expansion will be 125 KVA. Total electricity requirement after proposed expansion will be 250 KVA. (vi) The source of water is GIDC. In the existing scenario, the unit is using 18 m3/day fresh water for industrial and domestic purpose. For proposed expansion, the unit has proposed 32 KLD of water consumption. The total fresh water consumption after expansion will be 50 m3/day. (vii) Existing and proposed effluent will be treated in unit"s own ETP. In which existing waste water will be treated in Effluent treatment plant and after treatment, treated water will be sent to CETP - Vapi Waste & Effluent Management Co. Limited. (viii) Existing unit has one stack of boiler having 11 m height. Now, the unit has proposed one D.G set of 250 KVA. Thus there will be proposed one D.G set stack having height 11 m. (ix) There is no process gas emission stack in existing unit. The unit is proposing 3 stacks from reactors out of which 2 stacks will be connected to water scrubber followed by alkali scrubber and the other one stack is connected to water scrubber followed by acid scrubber. (x) ETP waste, Distillation Residue will be disposed to TSDF. Used oil will be sold to registered reprocessor and Discarded Container/Bags will be sold to authorize recyclers. Spent catalyst and spent carbon will be sent for co-processing. During presentation the committee noted that PP has not finalized the list of products yet. After detailed deliberations committee deferred the proposal for want of following additional information: i. Revised existing and proposed product list to be submitted. ii. ZLD plan to be submitted.
18.7.6	**Manufacture of Activated Pharma Ingredients at Survey no.: 247/1, Village: Hadala, Taluka: Rajkot, District: Rajkot, Gujarat-363650 by M/s Spentica Life Science – [IA/GJ/IND2/61180/2016, J- 11011/368/2016-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 Spentica Life Science has proposed for Manufacture of Activated

Pharma Ingredients at Survey no.: 247/1, Village: Hadala, Taluka: Rajkot, District: Rajkot, Gujarat.

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. It is reported that no National park, Wildlife sanctuary, Eco sensitive area lies within 10 Km radius of project site. Aji river is flowing at a distance of 8 Km in WSW direction, Kob Nadi is flowing at a distance of 5.29 km in SSW direction, Demi Nadi is flowing at a distance of 4.9 km in ENE direction, Aji Dam is situated at a distance of 8.17 km in S direction and Mitana Dam is situated at a distance of 9.3 km in N direction.

iv. Total plot area will be 6833 m2 of which green belt will be developed in 2288 m^2 area. Total Project cost is Rs. 3.5 Crore. Total budget allocation towards Environmental Management Facilities will be Rs. 50 Lacs. Total 15 persons will be employed including skilled persons, unskilled persons and office staff.

v. Total fresh water requirement will be 36 m3/day, which will be sourced from ground water. Stream Containing Ammonical Nitrogen will treated in ammonia stripper and than will be mixed with other low COD streams. Utilities wastewater and scrubber wastewater will be taken to collection cum neutralization tank of ETP where pH correction will be carried out using Lime and alum, after that it will be passed through nutch filter for sludge separation. Filter water will be taken to holding tank. Than wastewater will be evaporated in steam based evaporator. High COD high TDS process stream (process wastewater and distillation residue) along with washing water will be taken to government approved common incineration facility (CHWIF). Domestic waste water will be disposed off into soak pit.

vi. Energy/power requirement will be 100 KVA which will be procured through Paschim Gujarat Vij Company Limited. Briquettes fired boiler of 1 TPH with Dust collector followed by Bag Filter and adequate stack height will be used. HSD fired DG set of 100 KVA with adequate stack height will be used.

vii. Caustic scrubber with adequate stack height will be provided to control process emission from reactor of 2-Nitro 4-Thiocyno Aniline. Acidic scrubber with adequate stack height will be provided to control emission from reactor of 1H-1,2,4- Triazole.

viii. ETP waste 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 and waste, Spent Catalyst/ Spent Carbon and Spent Solvent will be disposed to approved incineration facility. Discarded plastic bags will be sold to authorized vendor.

ix. Following product will be manufactured:

Name of Proposed Products	**Quantity (MT/Month)**
1,3-Dichloroacetone	8.5

	1H-1,2,4-Triazone	6.4
	4-AMINO-1,2,4-TRIAZOLE	7.6
	2-Nitro 4-Thicyno Aniline	11.5
	Chemphor Sulphonic Acid	2.9
	Octenidine Hydrochloride	0.9
	Pralidoxime iodide	2.56
	Ropivacaine Hydrochloride Monohydrate	0.57
	RASAGILINE -L- HEMITARTRATE	0.0776
	By-Product	
	Basic chromium sulphate	67.01
	Spent Hydrochloric Acid (20%)	26.84
	NaOCl solution from HCl scrubber NaOH scrubber of Chlorine gas	0.06

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

A. Specific TOR:

1. 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.
2. 10 m wide greenbelt around the periphery to be developed.

It was recommended that 'TORs' 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.

18.7.7	**Expansion of Agro Chemicals Manufacturing Unit (from 70 TPM to 200 TPM at Plot No. 54 to 56, 58 to 61, Phase II IDA, Pashamylaram, PatancheruMandal, Sangareddy District, Telangana by M/s. Nectar Crop Sciences Private Limited-[IA/TG/IND2/61178/2016, J- 11011/385/2016-IA.II(I)]- Terms of Reference** PP did not attend the meeting. The EAC decided to defer the proposal.
18.7.8	**Acrylics/Oxo Alcohol Project, Creation of necessary facility for origination of Koyali-Ahmednagar-Sholapur Pipeline (KAhPL) & installation of Tank truck loading facility (TTL) for Linear Alkyl Benzene and laying of 9 piggable, dedicated hydrocarbon service cross country pipelines (including LPG supply and return) between Refinery and Dumad in the existing Right of Way (ROW) at Dumad near Gujarat Refineryby M/s Indian Oil Corporation Limited- [IA/GJ/IND2/61303/2016, J- 11011/370/2016-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 Indian Oil Corporation Limited has proposed for Acrylics/Oxo Alcohol Project, Creation of necessary facility for origination of Koyali-Ahmednagar-Sholapur Pipeline (KAhPL) & installation of Tank truck loading facility (TTL) for Linear Alkyl Benzene and laying of 9 piggable, dedicated hydrocarbon service cross country pipelines (including LPG supply and return) between Refinery and Dumad in the existing Right of Way (ROW) at Dumad near Gujarat Refinery.

ii. All the projects related to Petrochemical complexes are listed in para 5(c) and all Petroleum refining industry are listed in para 4(a) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.

i. It is reported that no National park, Wildlife sanctuary, Eco sensitive area lies within 10 Km radius of project site.

ii. Ministry has issued EC to M/s IOCL, Gujarat Refinery vide letter no. J-11011/ 49/2015-IA II (I) dated 22nd June, 2015.

iii. Total area will be required for KAHPL and TTL shifting will be 81 and 6 acres respectively. Are required for Acrylics/Oxo Alcohol project will be 60 acres.

iv. Total power requirement for KAHPL and TTL shifting will be 6 MW, which will be sourced from existing refinery captive power generation facilities will be sufficient and total power will be required for Acrylics/Oxo Alcohol project will be 17 MW, New Petcoke based Captive power plant (CPP) of 17 MW power and 200 T/hr steam production capacity has been envisaged. Natural gas will be used as fuel.

v. Total fresh water requirement for KAHPL and TTL shifting will be 960 m3/day, which will be sourced from Vishwamitri/Borewell and total fresh water will be required for Acrylics/Oxo Alcohol project will be 12250 m3/day, which will be sourced from Mahi river. Waste water will be treated in ETP.

vi. Total Salt (dry basis) from ETP will be disposed in secured landfill through MoEF approved consultant. Gypsum from CPP will be sold in market or disposed in secured landfill through MoEF approved consultant. Spent Catalyst will be used as Metal reclamation or disposed in secured landfill through MoEF approved consultant.

After detailed deliberations, the Committee prescribed the following additional TOR along with Generic TOR provided at Annexure-I (refer Ministry's website) for preparation of EIA-EMP report:

A. 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. 10 m wide greenbelt around the periphery to be developed.

iii. A Copy of certified compliance report to the environmental conditions prescribed in the existing EC. Action taken report/ detailed action plan on the partly/non-compliance conditions reported by the MoEF&CC Regional Office.

It was recommended that 'TORs' 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.

18.7.9 **Proposed to Manufacture of Aluminum Phosphide technical, Zinc Phosphide technical and its formulation at Survey No. 717/4, at Post: Kathlal, Taluka: Kathlal, Dist: Kheda by M/s. Ambic Organic–[IA/GJ/IND2/59456/2016, J-11011/334/2014-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. Ambic Organic** has proposed for Manufacture of Aluminum Phosphide technical, Zinc Phosphide technical and its formulation at Survey No. 717/4, at Post: Kathlal, Taluka: Kathlal, Dist: Kheda.
ii. All Pesticide manufacturing unit are listed at S.N. 5(b) under category 'A' but it is treated as 'A' and appraised by Central.
iii. It is reported that no National park, Wildlife sanctuary, Eco sensitive area and Reserved forest/ Protected forest lies within 10 Km radius of project site.
iv. Total area will be required for proposed project will be 1518 m^2. The cost of the project will be Rs. 5.0 crore.
v. Power requirement will be 175 KVA and it will be fulfilled by MGVCL.
vi. Agro waste (350 kg/day) will be used as fuel in boiler. HSD (10 lit/hr) will be used as fuel in D.G. set.
vii. Total water requirement will be 13 KLD (11 KLD fresh + 2 KLD recycle) from Ground water.Process waste water generation is2 KLD from utility only and utilize for the greenbelt development. Total sewage generation will be 1.8 KLD and disposed into soak pit.
viii. No disposable solid waste generation. Only used lubricating oil with quantity of 0.2 KL/yr and discarded container 200 nos./month and liners 2.0 kg/month, which will be sold to authorized recycler and dealers.
ix. Following products will be manufactured:

Sr. No.	Name of Product	Capacity (MT/Month)
Technical Products		
1	Aluminum Phosphide (79 – 82%)	150
2	Zinc Phosphide (92 – 95%)	60
Formulation Products		
1	Aluminium Phosphide (56-60% TC)	215
2	Zinc Phosphide (80% TC)	70

	By Product		
	1	H_3PO_4 (56-60%)	45

After detailed deliberations, the Committee prescribed the following additional along with Generic TOR provided at Annexure-I (refer Ministry's website) for preparation of EIA-EMP report:

A. 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. Commitment for Zero Liquid discharge (ZLD).

It was recommended that 'TORs' 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.

18.7.10 **setting up new manufacturing unit at Plot no. W-5 and W-6, MIDC Tarapur, District Palghar, Maharashtra by M/s S Kant CHEMICALS PRIVATE LIMITED- [IA/MH/IND2/61478/2017, IA-J-11011/2/2017-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 S Kant Chemicals Private Limited has proposed for setting up new manufacturing unit at Plot no. W-5 and W-6, MIDC Tarapur, District Palghar, 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 in absence of SEIAA in Maharashtra project appraised at Central Level by Expert Appraisal Committee (EAC).
iii. It is reported that no National park, Wildlife sanctuary, Eco sensitive area and Reserved forest/ Protected forest lies within 10 Km radius of project site.
iv. Total area will be required for proposed project will be 2000 m^2. The cost of the project will be Rs. 6.84 Cr.
v. Power requirement of proposed project will be 200 KW and will be sourced from State Electricity Board. One D. G. set of capacity 200 KVA are proposed to meet emergency power requirement of the plant.
x. There will be 2 nos. of boilers having capacity 1 TPH each. One will be used as standby. Fuel required will be around 1248 kg/day of LDO for one boiler. LDO will procure form local sources. Stack of 30 m height will be provided to the boiler.
xi. Proposed water requirement of the project for domestic and industrial activity during operation phase will be 124 CMD. The water requirement will be sourced from MIDC.

xii. Trade effluent generated will be 48 CMD. The trade effluent generated will be treated in full-fledged effluent treatment plant. Treated water ensuring parameters within MPCB norms will be sent to CETP for further treatment. The sewage generated due to domestic activities will be treated in combined ETP.

xiii. Chemical sludge from waste water treatment, Process wastesludge/ residue and Spent carbon will be sent to MWML.

xiv. List of roposed products area as follows:

Sr. No.	Product Name	Quantity MT/Month
1.	**Anti-Diabetic Products**	
1.1	Gliclazide	**3.5**
1.2	Glibenclamide	**1**
1.3	Glimipride	**1**
1.4	Glipizide	**1**
2.	**Anti-Viral Products**	
2.1	Aciclovir	**4**
2.2	Ganciclovir	**2**
2.3	Valganciclovir	**0.5**
2.4	Fluconazole	**2**
3.	**Anti – Malarial**	
3.1	Sodium Sulfanilamide	**5**
3.2	4,7 Dichloroquionoline	**2**
3.3	Amodiaquine	**2**
3.4	Piperaquine Phosphate	**1**
3.5	Hydroxy Chloroquine Sulfate	**1**
3.6	Atovaquone	**0.25**
3.7	Sulfadimethoxine	**3**
3.8	Sulfa Salazine	**2.5**
3.9	Sulfadoxine	**2.5**
3.10	Artemether	**2**
3.11	Artesunate	**0.75**
3.12	Lumefantrine	**3**

After detailed deliberations, the Committee prescribed the following Specific along with Generic TOR provided at Annexure-I (refer Ministry's website) 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. Additional TOR:

i. Public hearing is exempted under the provisions as per para 7 III. Stage (3) (b) of the EIA notification, 2006.

ii. 5 m wide greenbelt (in view of plot area) around the periphery to be developed.

iii. Commitment for Zero Liquid discharge (ZLD).

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.
18.7.11	**Proposal for expanding the existing few products & also plans to add few new products at the existing site Plot No. 805/806, GIDC Estate, Ankleshwar, Dist.: Bharuch, Gujarat, India by M/s. Gujarat Insecticides Limited- [IA/GJ/IND2/61482/2017, IA-J-11011/3/2017-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. Gujarat Insecticides Limited has proposed for expanding the existing few products & also plans to add few new products at the existing site Plot No. 805/806, GIDC Estate, Ankleshwar, Dist.: Bharuch, Gujarat. ii. All Pesticide manufacturing unit are listed at S.N. 5(b) under category 'A' but it is treated as 'A' and appraised by Central. iii. It is reported that no National park, Wildlife sanctuary, Eco sensitive area and Reserved forest/ Protected forest lies within 10 Km radius of project site. Narmada river is flowing at a distance of 7.40 km in NNW direction fro the project site. iv. Ministry has issued EC earlier vide letter no. J-11011/1287/2007-IA II (I) dated 17th April, 2008 for Insecticide manufacturing unit. v. Existing land area is 73,084 m2. During presentation committee noted that PP did not provide the information w.r.t. existing green belt. Proposed project will be carried out within existing plant premises. Proposed project cost will be Rs 193.02 crore.Proposed project will provide employment to 200 persons. vi. Existing Power requirement is 1800 KVA and additional 1200 kVA power will be required for proposed expansion, which will be sourced from DGVCL. After the commencement of 3 MW Power Plant the power supply from DGVCL shall be discontinued. Proposed additional power shall be consumed from its own power plant, having capacity of 3 MW. Existing unit has one CPP of 945 kVA capacity. Proposed additional 2 Nos. DG Sets of 1500 kVA. After the proposed commencement of DG sets, existing CPP of 945 kVA shall be surrendered. vii. Existing unit has Natural gas fired two boilers of 5 TPH capacity, Thermic Fluid Heater- 2 lakh kcal/h (2 nos.), Heiza hot oil unit - 2 lakh kcal/h (1 no.). Existing 5 TPH boilers (2 Nos.) shall be replaced by 10 TPH solid fuel based boiler for which CTE is granted. Under proposed expansion Hot oil unit-2 lakh kcal/h (3 nos.), Hot oil unit-4 lakh kcal/h (2 nos.), Coal Fired Boiler - 25 TPH (1 no.) (for 3 MW Power Plant), Captive Power plant and Two DG Set of 1500 kVA capacity (standby) will be installed. viii. Fresh water requirement will be increased from 1011 m3/day to 1983 m3/day which will be met from GIDC. Against which 1027 m3/day Industrial wastewater will be generated. Industrial wastewater will be treated in ETP and treated effluent from ETP shall be discharged into U/G pipeline connected to FETP of M/s. NCT (formerly known as BEAIL). Domestic effluent will be treated in proposed STP. ix. **Hazardous waste** – unit has existing hazardous waste storage areas and provisions as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Same shall be followed after

proposed expansion. Unit has valid membership with TSDF and CHWI facility (BEIL, Ankleshwar) for disposal of hazardous waste. Unit also has co-processing agreement with UltraTech cement for co-processing of distillation residue.

x. Following are the list of existing and proposed products:

Product List (Existing + Proposed after EC Expansion)

Sr. No.	Name of Product	CTO Available	EC Applied for additional production	Total After EC Expansion	End uses	CAS No.	Remarks
		MT/Annum					
1	Fenvalerate OR	100	2300	2400	Agriculture	51630-58-1	Existing Products
	Lambda Cyhalothrin or					91465-08-6	
	Bifenthrin or					82657-04-3	
	Deltamethrin or					52918-63-5	
	Thiamethoxam or					153719-23-4	
	Buprofezin					953030-84-7	
2	Quinalphos or	1200	1200	2400	Agriculture	13593-03-8	
	Triazophos or					24017-47-8	
	Chlorpyriphos or					2921-88-2	
	Temephos or					3383-96-8	
	Methyl Chlorpyriphos or					5598-13-0	
	Profenophos					41198-08-7	
3	Meta Phenoxy Benzaldehyde (MPB) or	2400	3600	6000	Intermediate	39515-51-0	
	Dichloro Phenol (DCP)				Intermediate	583-78-8	
4	Indoxacarb or	130	2270	2400	Agriculture	173584-44-6	
	Tricyclazole or					41814-78-2	
	Hexaconazole or					79983-	

						71-4	
	Propiconazole or					60207-90-1	
	Metalaxyl					57837-19-1	
5	Crude Pigment Violet-23 or	300	700	1000	Paint and Ink	215247-95-3	
	Poly Ether Ketone (PEK) or				Engineering plastics	27380-27-4	
	Poly Ether Ketone Ketone (PEKK) or					74790-25-5	
	Poly (2,5 Benzamidazole) (ABPBI) or					25928-81-8	
	Polybenzoxazole (ABPBO) or					89718-41-2	
	Poly Ether Imide (PEI)					61128-46-9	
6	N-Acetoacetyl Aminobenzimidazalone (NAA)	50	-	50	Raw material for pigment	26576-46-5	
7	Bromine Recovery	700	5590*	6290	Raw material for MPB	7726-95-6	
9	Dicamba	-	5000	5000	Agriculture	1918-00-9	New products
10	Diafenthiuron	-	1200	1200	Agriculture	80060-09-9	
11	Carbendazim	-	1200	1200	Agriculture	10605-21-7	
	TOTAL	**4880**		**27940**			
12	Formulation of Technical Product	1400 kL	3600 kL	5000 kL	Agriculture		Existing
13	Captive power plant – Gas based	0.945 MW**	-	0.945 MW	--	--	Existing
14	Captive power plant – DG Set (1500 kVA)- (Standby)	--	1500 kVA x 2	3000 kVA	--	--	Proposed
15	3 MW – Coal based Power plant	--	3 MW	3 MW	--	--	

*Bromine recovery is a part of MPB, Profenophos, Propiconazole and Diafenthiuron production and is used for captive consumption.

After detailed deliberations, the Committee prescribed the following Specific along with Generic TOR provided at Annexure-I (refer Ministry's website) 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. Additional TOR:** i. Public hearing is exempted under the provisions as per para 7 III. Stage (3) (b) of the EIA notification, 2006. ii. 10 m wide greenbelt around the periphery to be developed. iii. Commitment for Zero Liquid discharge (ZLD). iv. A Copy of certified compliance report to the environmental conditions prescribed in the existing EC. v. Recommendations of SPCB to be submitted. 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.
18.7.12	**Setting up medicine formulation plant for allopathic & cosmetic license for External medicine preparation by M/s ISH MEDICOS Pvt. Ltd. At plot no. 9 pharmacity selaqui dehradun (Uttrakhand) [IA/UK/IND2/61486/2017, IA-J-11011/4/2017-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 ISH MEDICOS Pvt. Ltd. has proposed for Setting up medicine formulation plant for allopathic & cosmetic license for External medicine preparation. at plot no. 9 Pharmacity, SIDCUL, selaqui Dehradun, Uttrakhand. 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 project attaract Doon Valley Notification, 1989 and unavailability of SEIAA in the state, hence project appraised at Central Level by Expert Appraisal Committee (EAC). iii. It is reported that no National park, Wildlife sanctuary, Eco sensitive area and Reserved forest/ Protected forest lies within 10 Km radius of project site from the project site. iv. Total plot area is 2606 m^2. 33% area has been reserved for green belt. Cost of the proposed project will be Rs. 400 Lacs. v. Total fresh water requirement is 14.5 m3/day, which will be sourced from tube well, against which 5.5 m3/day wastewater will be generated. Wastewater will be treated in ETP and treated water will be used for Horticulture and gardening. vi. Total Power requirwement will be 400 KVA, which will be met from Uttrakhand Power Corporation. DG set of 65 KVA will be used as standby. Boiler capacity will be 300 kg/hour. vii. ETP sludge will be sent to TSDF site.

viii. Following product will be manufactured:

S. NO.	Items	Capacity
1	Tablets	10.0 lacs Nos/day
2	Capsules	3.0 lacs Nos/day
3	food suppliments	1.5 MT/day
4	medical devices	1000 units/day
5	Ointment	3 MT/day
6	Powder	1 MT/day

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

A. Additional TOR:

i. Public hearing is exempted under the provisions as per para 7 III. Stage (3) (b) of the EIA notification, 2006.
ii. 5 m wide greenbelt of perennial trees (Neem, Seasam, Teak etc.) around the periphery to be developed.

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.

18.8 <u>Any Other</u>

18.8.1 **Bulk Drugs and Intermediates as well as Chemicals Manufacturing Unit of M/s Challa Chlorides Pvt. Ltd. located at Plot No. F-2, MIDC Chincholi, TalukaMohol, District Solapur, Maharashtra – [IA/MH/IND2/60198/2014 , J-11011/356/2013-IA-II(I)]- TOR Amendment reg.**

Ministry had issued TOR to M/s Challa Chlorides Pvt. Ltd., vide letter No.J-11011/356/2013-IA II (I) dated 29th September, 2014 for Bulk Drugs and Intermediates as well as Chemicals Manufacturing Unit at Plot No. F-2, MIDC Chincholi, TalukaMohol, District Solapur, Maharashtra. The TOR was awarded with public hearing.

Now, Project Proponent has applied online application vide dated 7th November, 2016 seeking amendment in TOR's for exemption of Public Hearing.

PP has submitted the documents regarding notification of the area where the site is located. Accordingly the Committee exempted the project from public hearing.

After deliberation, the Committee recommended the aforesaid amendment for exemption of Public Hearing in existing the TOR issued on 29th September, 2014.

18.8.2 **Expansion of synthetic organic products Plot No. 285,286/1,A-1-322/23, Phase II, GIDC Estate, Pardi, Valsad, Gujarat by M/s. Aarti Industries Ltd. (Amine Division)- [IA/GJ/IND2/55595/2016, J-11011/162/2016-IA-II(I)]- TOR**

	Amendment reg. Ministry had issued TOR to M/s. Aarti Industries Ltd. (Amine Division), vide letter No.J-11011/162/2016-IA II (I) dated 25th October, 2016 for Expansion of synthetic organic products Plot No. 285,286/1,A-1-322/23, Phase II, GIDC Estate, Pardi, Valsad, Gujarat. During presentation PP informed that there is discrepancy in product list table as submitted in Form-1 (pre-feasibility report) and the list of products given in the TOR letter No.J-11011/162/2016-IA II (I) dated 25th October, 2016 issued by the Ministry. In the product list submitted in Form-1 the existing quantity of products namely Para Chloro Ortho Nitro Aniline (PCONA), Di Chloro Ortho Nitro Aniline (DCONA) and 6-Chloro Ortho Nitro Aniline is 75, 130 & 10 MT/M respectively; whereas, in the received TOR letter it is mentioned as 130, 10 and 0 MT/M respectively. PP also informed that product named as 'Amination Product' is not mentioned in received TOR letter. The EAC examined the details in Form-1 (pre-feasibility report) uploaded in the Ministry website and found that there is no discrepancy in product table. EAC also deliberated on the issue related to any other Amination Product which is not mentioned in received TOR letter. In this regard the EAC observed that the quantity mentioned in the product table in Form-1(pre-feasibility report) against this product item is 0. This product has not been proposed to be manufactured in the proposed proposal i.e., after expansion. So the EAC felt that there was no need to mention that item in product list of TOR letter. After detailed deliberation the committee did not agree with this amendment proposal.
18.8.3	**Capacity expansion of Existing Ramanmandi-Bahadurgarh Petroleum Products Pipeline (RBPL) passing through states of Haryana and Punjab by M/s HPCL.- [IA/PB/IND2/58142/2016, J-11011/196/2016-IA-II(I)]- TOR Amendment- reg** PP did not attend the meeting. The EAC decided to defer the proposal.
18.8.4	**Construction of Ennore installation for storing and transportation on petroleum products at Vallur & Athipattu village, near Ennore, Thiruvallur district, Tamilnadu by M/s BPCL– [IA/TN/IND2/52975/2014, J-11011/34/2015-IA-II(I)]-EC Amendment** Ministry had issued EC to M/s BPCL, vide letter No.J-11011/34/2015-IA II (I) dated 18th April, 2016 for Construction of Ennore installation for storing and transportation on petroleum products at Vallur & Athipattu village, near Ennore, Thiruvallur district, Tamilnadu. During presentation PP informed that due to increase in the percentage of addition of Ethanol with MS and proposed addition of Bio diesel with HSD as per the directive of Ministry of Petroleum and Natural Gas, GOI, they want to put up additional tankage of 4 nos for Ethanol and 4 nos for Bio Diesel. PP also informed that due to market expansion they alos want to construct 2 nos of ATF (Aviation Turbine fuel) and 02 nos SKO (Superior Kerosene Oil) tanks. The proposed additional tankage are as follows:

1	Ethanol	4X1931=7724 KL	Above ground vertical tank
2	Bio Diesel	4X1871=7484 KL	Above ground vertical tank
3	ATF	2X8242= 16484 KL	Above ground vertical tank
4	SKO	2X8242= 16484 KL	Above ground vertical tank

After deliberation, the Committee recommended the aforesaid amendment in existing EC.

18.8.5 **BS-VI Fuel Quality Upgradation& New Catalytic Dewaxing Unit at Village Haldia, PurbaMedinipur, Tehsil Tamluk, District East Mednipur, West Bengal by M/s IOCL Haldia Refinery - [IA/WB/IND2/56071/2016, J-11011/175/2016- IA II(I)] - TOR Amendment**

Ministry had issued TOR to M/s IOCL Haldia Refinery, vide letter No.J-11011/175/2016-IA II (I) dated 23rd September, 2016 for BS-VI Fuel Quality Upgradation& New Catalytic Dewaxing Unit at Village Haldia, PurbaMedinipur, Tehsil Tamluk, District East Mednipur, West Bengal.

Now PP want to change and drop some facilities which are as follows:

S. No	**Units Approved in TOR**		**Amendment Required in TOR**		
	Name of the unit	**Capacity**	**Name of the unit**	**Capacity**	**Rema**
1.	Diesel Hydrotreating Unit	1200 TMTPA	Diesel Hydrotreating Unit	1200 TMTPA	No Chang
2.	Naptha Hydrotreating Unit	750 TMTPA	Naptha Hydrotreating Unit	750 TMTPA	Unit t dropp from
3.	Isomerisation Unit	250 TMTPA	Isomerisation Unit	250 TMTPA	Unit t dropp from
4.	Continuous Catalytic Reforming Unit	500 TMTPA	Continuous Catalytic Reforming Unit	500 TMTPA	Unit t dropp from
5.	Sulfur Recovery Unit	90 MTPD	Sulfur Recovery Unit	90 MTPD	Unit t dropp from
6.	Wet Sulphuric Acid Plant	520 MTPD	Sulphuric Acid Plant	375 MTPD	Chang Capac
7.	Catalytic Dewaxing Unit	270 TMTPA	Catalytic Dewaxing Unit	270 TMTPA	Unit t dropp from
8.	Amine regeneration	315 TPH	Amine regeneration unit	200 TPH	Chang Capac

	unit					
9.	Sour water stripping unit	135 TPH	Sour water stripping unit	100 TPH	Change in Capacity
10.	Boiler	150 TPH	Boiler	150 TPH	Unit to be dropped from TOR
11.	RO based DM Plant	150 TPH	RO based DM Plant	150 TPH	Unit to be dropped from TOR
12.	Cooling Tower	3X 4000 m^3/hr	Cooling Tower	3X 4000 m^3/hr	No Change
13.	Instrument air+ plant air	3800 Nm^3/h	Instrument air+ plant air	Instrument air+ plant air	No Change
14.	Nitrogen Plant	1100 Nm^3/h	Nitrogen Plant	1100 Nm^3/h	No Change
15.	Flare(hydrocarbon & Acid)	60"/12" headers	Flare(hydrocarbon & Acid)	60"/12" headers	No Change
16.	Power	Import from external sources			
17.	Prime-G	200(SHU)/290(HDS0 TMTPA	Prime-G	200(SHU)/290(HDS0 TMTPA	No Change
18.			HGU-11 Revamp	90 TMTPA	Revamp is to be included in the amendment of TOR

After deliberation, the Committee recommended the aforesaid amendment in existing TOR issued on 23rd September, 2016.

18.8.6 **Expansion of existing unit by adding synthetic filament yarn at Survey No. 394/P, Industrial Zone, Village Saily, Silvassa, U.T. of Dadra & Nagar Haveli by M/s AYM Syntex Limited.- TOR Amendment {J-11011/102/2016- IA II(I) ;,IA/DN/IND2/51548/2016}**

Ministry had issued TOR to M/s AYM Syntex Limited, vide letter No.J-11011/102/2016-IA II (I) dated 15th July, 2016 for Expansion of existing unit by adding synthetic filament yarn at Survey No. 394/P, Industrial Zone, Village Saily, Silvassa, U.T. of Dadra & Nagar Haveli. The TOR was awarded with public hearing.

Now, Project Proponent has applied online application vide dated 3rd December, 2016 seeking amendment in TOR's for exemption of Public Hearing.

PP has submitted the documents regarding notification of the area and land allotment letter from Dadra & Nagar Haveli planning and development Authority, where the site is located. Accordingly the Committee exempted the project from public hearing.

	After deliberation, the Committee recommended the aforesaid amendment for exemption of Public Hearing in existing the TOR issued on 15th July, 2016.

25th January, 2016 (Day 3)

18.9. Consideration of Proposals: (Environmental Clearance)

18.9.1	**Expansion of existing production capacity and adding new product at Plot No. 5, 6, 29, 30, 33, 34, 35, 37, 38, 80, 81, 84, 85, 91 Survey No. 274, 275, 276, Tehsil & District Valsad, Gujarat by M/s Atul Ltd.- [IA/GJ/IND2/57601/2015, J-11011/108/2015-IA II (I)]- Environmental Clearance** Project was considered in 17th EAC meeting held during 26th-29th December, 2016, Wherein committee observed 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 and deferred the proposal to submit the latest certified compliance report of the Regional office. Now PP has submitted the action taken report on non complied points. Committee again review the certified compliance report and found that as per the EC, wastewater generation should not increase beyond 1191 m3/day but as per the Environmental audit report, 2012 it was found that unit is generating 7009 m3/day wastewater. The EAC suggested the PP to submit the latest certified compliance report from the Regional office, Bhopal. The committee also recommended to the ministry to take up the matter with RO, Bhopal in this regard. Committee also noted that as per the EC granted in 2009, wastewater shall be segregated in High COD effluent stream and normal effluent stream but during site visit as such no segregation system found in place. EAC has decided to defer the proposal till the submission of above information/documents. The Member Secretary informed the EAC that the proposal has been considered during 18th EAC meeting held during 26th -29th December, 2016 wherein 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. The EAC decided to defer the proposal till the submission of above information/documents. The Member Secretary informed the EAC that the site visit was done by the Regional Office, Bhopal on dated 09.05.2016; however, the site visit report was forwarded by the regional office, Chandigarh vide letter 3-7/90/RO (NZ)/1021 dated 29.09.2016. The PP also informed that the proposed project falls under the jurisdiction of RO, Bhopal; hence, the project to be monitored by the officials from RO, Bhopal.

	The EAC in view of the above facts recommended to the Ministry to write to RO, Bhopal for site visit and for providing the compliance status report expeditiously so that EAC can appraise the proposal appropriately.
18.9.2	**Expansion & Debottlenecking of Petrochemical Plant of Dahej Manufacturing Division (DMD) at Tehsil vagra district Bahuruch, Gujarat by M/s Reliance Industries Limited – [IA/GJ/IND2/51643/2016, J-11011/39/2016-IA II (I)]- Environmental Clearance** The Project Proponent and the accredited Consultant M/s. ERM India Pvt. Ltd., gave a detailed presentation on the salient features of the project and informed that: xix. The proposal is for Expansion & Debottlenecking of Petrochemical Plant of Dahej Manufacturing Division (DMD) at Tehsil vagra district Bahuruch, Gujarat by M/s Reliance Industries Limited. xx. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 8th and 12th EAC meeting held during 26-27th May, 2016 and 23rd-24th August, 2016 respectively and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/39/2016-IA II (I); dated 1st November, 2016. xxi. All Petrochemical complexes(Industries based on processing of petroleum fractions and natural gas and/ or reforming to aromatics) are listed at S.N. 5(c) under category 'A' and appraised by Expert Appraisal Committee (I). xxii. MoEF&CC vide letter no J-11011/402/2007- IA II (I) dated 20.03.2008 has issued EC to for expansion project of M/s Reliance Industries Limited, Dahej Manufacturing Division, Dahej, Tal: Vagra, District: Bharuch, Gujarat. xxiii. SEIAA vide letter No. SEIAA/GUJ/EC/1(d) & 7(e)/ 96/2015 dated 2, March 2015 has issued EC to M/s Reliance Industries Limited for Setting up of a coal based captive cogeneration power plant (CCPP) of 3X90 MW (270 MW) within the premises of Dahej manufacturing division (RIL-DMD) and proposed to modification in existing Reliance Dahej marine Terminal (RDMT) Jetty for receiving the coal by creating coal handling facility with 2.5 MMTPA capacity in the Narmada Estuary at Dahej, District: Bharuch, Gujarat. Public hearing was conducted on 20.11.2013. xxiv. It is reported that no national parks and Wildlife Sanctuaries lies within 10 km distance. A Reserve forest is situated at a distance of 5 km distance from the project site. xxv. Existing Plant area is 700 Ha, proposed expansion will be carried out within existing plant premises. RIL-DMD has developed the greenbelt in 231 ha (33 %) of land. xxvi. The estimated cost of the project is Rs. 13,250 crores. The budget for Environment protection & conservation in the proposed project is Rs. 400 crores. Proposed expansion project will provide employment to 300 persons. xxvii. Ambient air quality monitoring was carried out at 10 locations during April, 2016-May 2016 and submitted baseline data indicates that ranges of concentrations of PM10 (38.7 µg/m3 to 89.4 µg/m3), PM2.5 (23.2 µg/m3 (at Suva) to 55.9 µg/m3), SO2 (10.2 µg/m3 to 20.8 µg/m), NO2 (20.1 µg/m3 to 36.0 µg/m) and CO (0.34 mg/m3 to 0.83 mg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be

12 µg/m^3, 14 µg/m^3 ,17 µg/m^3 and 109 µg/m^3 with respect to PM, SO_2, NOx and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

xviii. Total water requirement will be increased from 1,36,380 m3/day to 1,86,315 m3/day, which will be sourced from the already sanctioned water allocation by Govt. of Gujarat, Vadodara Irrigation Division (VID) and from GIDC as well as recycling of treated effluent by deploying RO system.

xxix. Existing Wastewater generation is 22,725 m3/day, additionally 16,961 m3/day wastewater will be generated. DMD facility has two (02) effluent treatment plants of 13,560 m3/day and 32,400 m3/day with a total of 45,960 m3/day. The capacity of the ETPs is sufficient to treat the total effluent generated i.e 39,686 m3/day post the proposed project.

xxx. The fuel used for the proposed project shall largely ethane, lean gas, & off gas. The power required for the proposed project activities will also be met from existing CPP. DG sets are provided for back-up and state grid supply on need basis.

xxxi. The major sources of solid wastes due to proposed project will consist of oily sludge, used oil, molecular sieve, biological sludge, canteen/office wastes, metal scraps, batteries, surplus drums, etc. Present practice of solid andhazardous wastes management as per Solid Waste Management Rules, 2016 and Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016 will be extended to the wastes from proposed project as well.

xxxii. Public hearing is exempted as per para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006.

xxiii. Following are the list of existing and proposed products:

Product	**Production (MTPA)**		
	Existing	**Proposed**	**Total**
Ethane/Propane	6,50,000	0	6,50,000
Ethylene	5,00,000	2,00,000	7,00,000
Propylene	1,60,000	0	1,60,000
Ethylene Dichloride	4,98,960	89,040	5,88,000
Vinyl Chloride Monomer	3,15,000	45,000	3,60,000
Polyvinyl Chloride	3,15,000	45,000	3,60,000
Chlorine	1,41,200	45,800	1,87,000
Caustic Soda	1,68,150	52,850	2,21,000
EO	20000	30000	50,000
EG	3,08,350	0	3,08,350
HDPE-I	160000	20,000	1,80,000
HDPE-II	60000	0	60,000
UHMW-PE	2500	0	2,500

Ethylene Vinyl Acetate (EVA)	13000	2000	15,000
PTA	3000000	0	30,00,000
PET	10,00,000	0	10,00,000
Polyester Complex a. Polyester Staple Fiber b. Polyester Fiber Yarn	8,00,000	0	8,00,000
Pure Ethylene Oxide	200000	0	2,00,000
Ethanol Amines	60000	0	60,000
Glycol Ethers	60000	0	60,000
Glycol Ether Acetates	30000	0	30,000
Ethoxylates –Ethylene Oxides Condensates	200000	0	2,00,000
Crude Acrylic Acid	160000	0	1,60,000
Glacial Acrylic Acid/High Purity Acrylic Acid	40000	0	40,000
Butyl Acrylate	120000	0	120000
Ethyl Acrylate	20000	0	20000
Methyl Acrylate	20000	0	20000
Acrylate (2EHA)	40000	0	40000
Phenol	250000	0	250000
Acetone	155000	0	155000
Captive Cogeneration Power Plant			
a. Gas Based	195 MW	0	195 MW
b. Coal Based	270 MW	0	270 MW
Chlorinated Poly Vinyl Chloride	New Project	70,000	70,000
VCM	New Project	12,00,000	12,00,000
PVC	New Project	12,00,000	12,00,000
Ethane Storage Tank	New Project	90,000 Tons (1 Tank)	90,000 Tons

By products	**Production (MTPA)**

	Existing	Proposed	Total
Mixed C4 +	40000	7450	47450
RARFS (Pyrolysis Gasoline)	40000	14750	54750
Fuel Oil	40000	0	40000
Tar Residue	5472	0	5472
HCl (from existing VCM + New VCM Plant)	36000	1,20,000	1,56,000
Sodium Hypochlorite	8,400	2,600	11,000
Dilute H_2SO_4	3530	1,070	4600
HCl (CA)	9600	5,400	15,000
Di Ethylene Glycol	30550	0	30550
Tri Ethylene Glycol	1270	0	1270
PEG	19850	0	19850
TEG Bottom	2880	0	2880
Crude Benzoic Acid Mix	60000	0	60000
Light Ends	0	15,600	15,600

The Committee deliberated on the certified compliance report dated 26.10.2016 issued by the Regional Office, Bhopal of MoEF&CC and 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) Compliance to all the environmental conditions stipulated in the earlier environmental clearance shall be satisfactorily implemented and compliance reports submitted to the Ministry's Regional Office at Bhopal.

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, Greenbelt, uploading of compliance report on the website etc have been implemented.

iii) The fuel used for the proposed project shall largely ethane, lean gas, & off gas.

iv) The levels of PM_{10}, $PM_{2.5}$, SO_2, NOx, 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 State Pollution Control Board (SPCB).
	v)	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.
	vi)	Total water requirement from Govt. of Gujarat, Vadodara Irrigation Division (VID) and from GIDC shall not exceed 1,86,315 m3/day and prior permission shall be obtained from the Competent Authority. No ground water shall be used without permission.
	vii)	Effluent generation shall not exceed 39,686 m3/day after expansion. Effluent shall be treated in existing ETP followed by RO. The treated effluent shall be partly recycled after RO for in plant use and rest shall be discharged to Gulf of Khambhat through an existing diffusor into Narmada estuary after confirming the standards prescribed by CPCB.
	viii)	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.
	ix)	Process effluent/any wastewater shall not be allowed to mix with storm water.
	x)	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.
	xi)	Solid wastes management shall be undertake as per Solid Waste Management Rules, 2016 and Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016 will be extended to the wastes from proposed project as well.
	xii)	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.
	xiii)	The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 *as* amended time to time. All Transportation of Hazardous Chemicals shall be *as per* the Motor Vehicle Act (MVA), 1989.
	xiv)	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.
	xv)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
	xvi)	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 at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner.
	xvii)	As proposed, green belt over 231 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.
18.9.3	**Proposed BS-IV and BS-VI Project of Gujarat Refinery at District Vadodara , Gujarat by M/s IOCL Ltd. -** [IA/GJ/IND2/60736/2016, J-11011/96/2015-IA II(I)] **-Environmental Clearance** The Project Proponent and the accredited Consultant M/s Hubert Enviro Care Systems Pvt. Ltd., gave a detailed presentation on the salient features of the project and informed that: i. The proposal is for BS-IV Project of Gujarat Refinery from BS-III to BS-IV compliant HSD production at District Vadodara , Gujarat by M/s IOCL Ltd. ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 40th REAC 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 no. J-11011/96/2015-IA II (I); dated 13th July, 2015. iii. All Petroleum refining industry are listed at S.N. 4(a) under category 'A' and appraised by Expert Appraisal Committee (I). iv. MoEF&CC vide letter no J-11011/35/2000-IAII(I) dated 27.04.2006 has issued exemption from environmental angle for the proposed resid upgradation project at Gujarat Refinery. v. Ministry has issued Amendment in TOR vide letter dated 7th September, 2016 for conversion from BS IV to BS VI compliant HSD production and revamps. vi. It is reported that no national parks, Reserved forest/ Protected forest and Wildlife Sanctuaries lies within 10 km distance. vii. Gujarat Refinery has a total area of 925 acres. Green belt of 148 acres have already been developed around the periphery of Refinery with a total of about 2,15,000 trees planted in the green belts. Additionally, about 70 acres of green patch has been developed at Refinery Township area (at a distance of approx 1 km from Refinery battery area) which also includes 40 acres of land consisting of dense plantations. PP also requested that since no additional vacant land is available in and around Gujarat Refinery, it has been planned that further development of dense plantation of around 21 acres shall be undertaken at Headworks area (owned by IOCL) which is at a distance of about 10 km from Refinery. viii. Capital Cost for BS IV is Rs 930.76 Crore and and for BS VI is Rs 2770.68 Crore. Proposed expansion project will provide employment to 106 persons. ix. Ambient air quality monitoring was carried out at 8 locations during March to May 2016 and submitted baseline data indicates that ranges of concentrations of PM10 (58.07 - 82.96 µg/m3), PM2.5 (23.62 - 41.06 µg/m3), SO2 (11.8 to 12.71 µg/m3), NO2 (31.55 to 23.01 µg/m) and TVOC (1.08 - 12.3 mg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2 $\mu g/m^3$, 5 $\mu g/m^3$, 4 $\mu g/m^3$ and 300 $\mu g/m^3$ with respect to PM, SO_2, NOx and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). x. Total water requirement will be increased from 56.37 MLD to 60.07 MLD, which will be sourced from Mahi river. Additional generation of 50-100 m3/hr of wastewater envisaged in the proposed projects. Wastewater will be treated in CETP and balance quantity of Treated Effluent is discharged to Vadodara Enviro Channel Ltd (VECL) which is

finally discharged into Gulf of Khambat.

xi. No additional infrastructure for Power for BS-VI will be made, as the requirement will be met through the existing power infrastructure available. Fuel Consumption for proposed BS-IV project: 20 MT/ hr. Natural Gas (NG) requirement for HGU-3 will increase by 30% i.e. by 10.1 KNm3/hr (8.7 MT/hr). However same can be met by refinery naphtha in case of unavailability of NG. Incremental Fuel Consumption for proposed BS-VI project: Natural Gas (NG) requirement will increase by 134 KTPA. Emission from emission post BS-IV/BS-VI project is as follows:

- SOx: 40 kg/hr (960 kg/day)
- NOx: 30 kg/hr (720 kg/day)
- PM: 7 kg/hr
- CO: 1 kg/hr.

During presentation EAC restricted the SOx and NOx emission within 900 kg/day and 720 kg/day respectively.

xii. CSR plan is prepared for expenditure of 5% of project cost.

xiii. Public Hearing for the proposed project has been conducted by the Uttar Pradesh Pollution Control Board 5.11.2016.

xiv. The following products will be generated by the company:

xv.

Capacity of process units pre and post revamp for BS-IV

S.No	Unit	Present capacity (MMTPA)	Post revamp Capacity (MMTPA)	New Unit Capacity
1	DHDT	2.2	2.86	--
2	DHDS	1.77	2.2	--
3	VGO-HDT	2.1	2.73	--
4	SWS-VI (New Unit)	--	--	55 MT/hr

Capacity of process units pre and post revamp for BS-VI

S. No.	Process Units	Capacity	Present capacity	Post revamp Capacity
1.	New DHDT	2.0 MMTPA	--	--
2.	New HGU	72.5 KTPA	--	--
3.	New FCC-GDS	700 KTPA	--	--
4.	New ARU	190 TPH	--	--
5	CCRU (Revamp)	--	600 KTPA	780 KTPA
6	ISOM (Revamp)	--	230 KTPA	276 KTPA

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding Employment, Green belt, Pollution problem, CSR fund shall be used for local villages, drinking water supply and provide training and education and cutting of trees 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) 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. ii) SO2 emissions after expansion from the plant shall not exceed 900 kg/day and further efforts shall be made for reduction of SO_2 load through use of low sulphur fuel. Sulphur recovery units shall be installed for control of H2S emissions. iii) Ambient air quality data shall be collected as per NAAEQS standards notified by the Ministry vide G.S.R. No. 826(E) dated 16th September, 2009. The levels of PM_{10}, $PM_{2.5}$, SO_2, NOx, 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 state Pollution Control Board (SPCB). iv) In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. 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 SPCB. v) 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. vi) Total fresh water requirement from Mahi river shall not exceed 60.07 MLD and prior permission shall be obtained from the Competent Authority. No ground water shall be used without permission. vii) Wastewater shall be sent to CETP and balance quantity of treated effluent shall be discharged to Vadodara Enviro Channel Ltd. (VECL) which is finally discharged into Gulf of Khambat. viii) 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. ix) Adequate odour management plan and its mitigation measure to be implemented on priority. x) Regular VOC monitoring to be done at vulnerable points. xi) The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system. xii) Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme. xiii) Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises. xiv) 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. xv) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 *as* amended time to time. All Transportation of Hazardous Chemicals shall be *as per* the Motor Vehicle Act (MVA), 1989. xvi) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. xvii) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act. xviii) 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. xix) All the commitments made during the Public Hearing / Public Consultation meeting held on 5.11.2016 should be satisfactorily implemented and adequate budget provision should be made accordingly. xx) As proposed, green belt over 70 acres area shall be developed at Refinery Township area and dense plantation of around 21 acres shall be undertaken at Headworks area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO. Existing Green belt of 148 acres shall be maintained around the periphery of Refinery with a total of about 2,15,000 trees in the green belts.
18.9.4	**Proposed Revamp of Diesel Hydro De-Sulphurisation (DHDS) unit from 1.8 MMTPA to 2.34 MMTPA and BS-VI Fuel quality upgradation project (Revamp of DHDT unit, New FCC GDS unit and SRU Block for MS quality by M/s CHENNAI PETROLEUM CORPORATION LIMITED- [IA/TN/IND2/60940/2016, J-11011/42/2016-IA II(I)]- Environmental Clearance** The Project Proponent and the accredited Consultant M/s Hubert Enviro Care Systems Pvt. Ltd., gave a detailed presentation on the salient features of the project and informed that: i. The proposal is for Proposed Revamp of Diesel Hydro De-Sulphurisation (DHDS) unit from 1.8 MMTPA to 2.34 MMTPA and BS-VI Fuel quality upgradation project (Revamp of DHDT unit, New FCC GDS unit and SRU Block for MS quality by M/s Chennai Petroleum Corporation Limited. ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 4th EAC (Industry-2) meeting held during 11-12th February, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/42/2016-IA II (I); dated 31st March, 2016. iii. All Petroleum refining industry are listed at S.N. 4(a) under category 'A' and appraised by Expert Appraisal Committee (I). iv. MoEF&CC vide letter no J-11011/94/1996-IAII(I) dated 09.04.1997 has issued EC for installation of Diesel Hydrodesulphurisation (DHDS) unit at MRL. v. MoEF&CC vide letter no J-11011/190/2016-IAII(I) dated 30.11.2016 has

		issued Amendment in TOR to adding Revamp of DHDT (1.8 to 2.4 MMTPA), New FCC GDS (0.6 MMTPA) for MS quality up gradation and increased BS VI Diesel production. vi. It is reported that there is no National Park, Wildlife Sanctuary within the distance of 10 km. Bakingham Canal is flowing adjacent to project site. Korttalaiyar River is flowing at a distance of 2.5 km. and Ennore Creek is at a distance of 8.2 km. from the project site. vii. Refinery plant area is 800 acres. Cost of the project is 350.33 Crore. About 20 personals will be employed. viii. The existing Diesel Hydro-desulphurisation (DHDS) unit in CPCL is designed for treating the feed consisting of straight run gas oil, light vacuum gas oil, spindle oil and FCCU's and LCO / HCO to produce treated diesel to meet the required specifications. ix. The DHDS unit is proposed to be revamped to meet the new specifications for diesel as outlined in "AUTO FUEL VISION & POLICY 2025" (AFV), submitted in the year 2014. Presently BS-IV specification diesel with sulphur content of 350 ppm wt is being supplied to major cities and BS-III specification diesel with sulphur content of 50 ppm wt is being supplied to rest of the country. As per AFV recommendation, 100% BS-IV specification fuels have to be supplied by 1st April 2017 and 100% BS-V specification fuels by 1st April 2020. x. Ambient air quality monitoring was carried out at 8 locations during February to March 2016 and submitted baseline data indicates that ranges of concentrations of PM10 (52.8 – 55.8 µg/m3), PM2.5 (22.37 – 25.93 µg/m3), SO2 (11.8 to 13.00 µg/m3), NO2 (22.8 to 24.01 µg/m) and TVOC (0.6 – 1.8 mg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.10 $\mu g/m^3$, 0.03 $\mu g/m^3$ and 0.40 $\mu g/m^3$ with respect to PM, SO_2, and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). xi. Existing water requirement for DHDS unit is 770 m3/day. During operation phase 2500 m3/day is used for the existing DHDT unit. 500 m3/day water is required for each FCC GDS unit and SRU. The water is sourced from Chennai Metro Water Supply & Sewerage Board (CMWSSB). Three effluent treatment plants are being continuously operated for treatment of all the wastewater generated in the refinery to meet the Minimal National Standards (MINAS). The treated effluent is partly used for peripheral application like greenbelt development, fire water net work, construction (~200 KL/hr) and the balance portion (~350 KL/Hr is further processed in ultra filtration membranes (UF) & in Reverse Osmosis (RO) membranes to make it suitable for in boilers & in process. All the trade effluent generated is reused in Fire water network, green belt and plant will be based on Zero liquid discharge. xii. Power requirement will increase from 2.5 MW to 3.2 MW which will be met from existing captive power plant. Consumption of fuel gas will remain same i.e. 0.29 TPH. xiii. 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. After detailed deliberation committee noted that PP did not submitted the Certified compliance report of existing EC, Committee sought following additional information: 1) Certified compliance report from RO, MoEF&CC of existing EC to be submitted. 2) Measure the SO_2 emissions from the existing unit. Any additional SO_2 emission from the proposed unit. 3) List of existing and proposed utilities to be submitted.

	4) Revised green belt plan to be submitted. 5) Proper response and commitment w.r.t. issues raised during public consultation. 6) Existing and proposed water balance chart to be submitted. 7) CSR plant at the rate of 5 % to be submitted. The proposal was deferred till the desired information is submitted.
18.9.5	**Development drilling of 108 wells laying of 4"and 8" oil and gas flow lines & establishment of 03 numbers of EPS, 01 number of WHI, 03 Nos of Water injection Facilities and 03 Nos. of ETP of M/s ONGC in operation areas of Cambay Sub Asset, in Gujarat-[IA/GJ/IND/23027/2014, J-11011/187/2014-IA-II(I)]- Environmental Clearance** The Project Proponent and the accredited Consultant M/s ONGC., gave a detailed presentation on the salient features of the project and informed that: i. The proposal is for Development drilling of 108 wells laying of 4"and 8" oil and gas flow lines & establishment of 03 numbers of EPS, 01 number of WHI, 03 Nos of Water injection Facilities and 03 Nos. of ETP of M/s ONGC in operation areas of Cambay Sub Asset, in Gujarat. ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 20th REAC (Industry) meeting held during 23-24th June, 2014 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/187/2014-IA II (I); dated 26th September, 2014. iii. All the projects related to offshore and onshore Oil and Gas exploration, development and production are listed in para 1(b) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level. iv. Ministry had issued EC vide letter J-11011/431/2011- IA II (I) dated 25.06.2014 and certified compliance report of the same has been obtained from Regional Office – MoEF &CC, Bhopal vide letter 5-26/2014(ENV)/284 dated 16.08.2016. v. Ministry had issued EC vide letter J-11011/102/2012- IA II (I) dated 22.08.2013 and certified compliance report of the same has been obtained from Regional Office – MoEF &CC, Bhopal vide letter 5-60/2013(ENV)/282 dated 16.08.2016. vi. It is reported that there is no National Park, Wildlife Sanctuary, protected area and ESZ within the distance of 10 km. vii. Approximately 110 m x 110 m land area required for drilling a single well. Majority of proposed wells are to be drilled on old locations. If extra land is required then additional land may be acquired. Total cost of the project is Rs. 890 crore. Time completion for drilling 1 well: 30 – 35 days approx. viii. Ambient air quality monitoring was carried out at 9 locations during October 2014 to December 2014 and submitted baseline data indicates that ranges of concentrations of PM10 (39 – 86 µg/m3), PM2.5 (18 – 29 µg/m3), SO2 (7 to 19.00 µg/m3) and NO2 (10 to 26 µg/m) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.77 µg/m^3, 1.125 µg/m^3 and 1.125 µg/m^3 with respect to PM, SO_2, and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). ix. Fresh water requirement will be 25 m3/day per well, which will be sourced from nearest ONGC installations through tankers. Approx. 0.9 M^3 of waste water is generated for 1.0 meter of drilling. Waste water generated is disposed in specially designed HDPE lined pit at site and is solar dried. Domestic waste water shall be disposed through soak pit. Produced water will be treated in ETP/ mobile ETP/ CETF.

x. 3 DG sets of 1250 KVA (out of which one is on standby). Each DG set consume approximately 6 KL of fuel (HSD) per well, when in operation.

xi. Disposal of drill cuttings and drilling mud will be in specially designed pit with HDPE lining and is topped with native soil. Other hazardous waste like empty bags, cotton waste, gloves etc are transported to TSDF site. Whereas, POL/chemical containers and spent oil are recycled through authorized vendors.

xii. Public Hearing has been conducted by the Gujarat Pollution Control Board on 4.05.2016 at Kheda district, 10th May, 2016 at Anand district and 11th May, 2016 at Vadodara district.

xiii. **Proposed Drilling Locations area as follows:**

S. No.	Fields/Blocks	Well No.	Lat	Long	Near by Village
1	**Akholjuni**	1	22°20'4.11"N	72°30'8.94"E	Navagam Bara
2		2	22°22'2.09"N	72°30'9.84"E	Navagam Bara
3		3	22°20'55.93"N	72°30'54.72"E	Navagam Bara
4		4	22°20'51.89"N	72°32'1.86"E	Navagam Bara
5	**Kathana**	1	22°18'27.85"N	72°48'54.22"E	Diwel
6		2	22°18'14.79"N	72°49'3.62"E	Diwel
7		3	22°18'6.09"N	72°48'52.24"E	Diwel
8	**Siswa**	1	22°22'2.46"N	72°52'42.04"E	Vadeli
9		2	22°21'55.06"N	72°52'56.67"E	Vadeli
10		3	22°21'47.30"N	72°52'28.28"E	Vadeli
11		4	22°21'23.52"N	72°52'25.16"E	Vadeli
12		5	22°21'12.75"N	72°52'23.15"E	Vadeli
13		6	22°20'57.17"N	72°52'30.68"E	Vadeli
14		7	22°20'47.20"N	72°53'29.96"E	Bhadrniya
15		8	22°18'18.32"N	72°54'10.07"E	Vadeli
16		9	22°20'35.53"N	72°53'55.78"E	Bhadrniya
17	**Anklav**	1	22°19'18.55"N	72°55'0.83"E	Valvod
18		2	22°19'9.41"N	72°54'59.48"E	Valvod
19		3	22°20'25.84"N	72°54'31.35"E	Valvod
20		4	22°18'58.31"N	72°55'0.62"E	Valvod
21		5	22°18'56.35"N	72°55'7.96"E	Valvod

22		6	22°18'51.59"N	72°55'4.63"E	Valvod
23		7	22°18'46.26"N	72°55'5.25"E	Valvod
24		8	22°18'46.75"N	72°54'58.78"E	Valvod
25		9	22°18'42.45"N	72°54'57.05"E	Valvod
26		10	22°20'0.97"N	72°54'49.91"E	Valvod
27		11	22°19'44.12"N	72°54'57.86"E	Valvod
28		12	22°19'59.48"N	72°54'45.83"E	Valvod
29		13	22°20'26.82"N	72°55'30.16"E	Valvod
30		14	22°20'18.75"N	72°55'26.96"E	Valvod
31		15	22°20'26.25"N	72°55'19.09"E	Valvod
32	**Chaklasi**	1	22°43'27.53"N	72°52'45.42"E	Nadiad
33		2	22°41'34.43"N	72°56'41.97"E	Kanjoda
34		3	22°39'59.65"N	72°55'56.00"E	Chakasi
35	**Mahi High**	1	22°18'0.93"N	72°36'28.46"E	Khambhat
36	**Padra**	1	22°17'52.78"N	73° 5'24.40"E	Ampad
37		2	22°17'33.83"N	73° 5'19.33"E	Ampad
38		3	22°17'54.16"N	73° 6'8.52"E	Ampad
39		4	22°17'50.19"N	73° 6'17.93"E	Ampad
40		5	22°16'46.12"N	73° 5'51.73"E	Rajpura
41		6	22°16'44.68"N	73° 6'4.89"E	Rajpura
42		7	22°16'44.25"N	73° 5'45.20"E	Rajpura
43		8	22°15'57.56"N	73° 4'58.56"E	Ganpatpura
44		9	22°15'50.31"N	73° 5'8.64"E	Ganpatpura
45		10	22°15'16.00"N	73° 4'8.39"E	Tajpura
46		11	22°15'12.15"N	73° 4'6.87"E	Tajpura
47		12	22°14'55.84"N	73° 4'11.09"E	Tajpura
48		13	22°12'44.56"N	73° 0'39.37"E	Ranu
49		14	22°12'44.69"N	73° 0'27.31"E	Ranu
50		15	22°13'18.25"N	73° 8'50.21"E	Chapad
51		16	22°13'9.01"N	73° 8'49.05"E	Chapad

52		17	22°14'11.24"N	73° 3'49.47"E	Padra
53		18	22°14'3.14"N	73° 3'50.32"E	Padra
54	**Nadiad**	1	22°39'39.52"N	72°54'44.87"E	Uttarsanda
55		2	22°39'30.59"N	72°54'40.41"E	Uttarsanda
56		3	22°39'39.90"N	72°54'31.14"E	Uttarsanda
57		4	22°42'2.23"N	72°52'11.14"E	Nadiad
58		5	22°41'41.08"N	72°52'48.69"E	Nadiad
59		6	22°42'23.25"N	72°51'58.53"E	Nadiad
60		7	22°42'19.37"N	72°52'38.99"E	Nadiad
61	**Vadatal**	1	22°36'49.15"N	72°53'58.47"E	Rajnagar
62		2	22°35'32.89"N	72°54'31.69"E	Becharpur
63		3	22°35'18.15"N	72°54'38.20"E	Becharpur
64		4	22°34'58.74"N	72°54'38.53"E	Becharpur
65		5	22°34'37.23"N	72°54'42.82"E	Bakrol part
66		6	22°35'56.71"N	72°54'15.72"E	Bakrol part
67		7	22°35'10.22"N	72°54'7.69"E	Bakrol part
68		8	22°34'29.63"N	72°54'24.41"E	Bakrol part
69		9	22°40'9.98"N	72°51'54.97"E	Piplag
70		10	22°39'43.32"N	72°52'2.50"E	Piplag
71		11	22°39'24.72"N	72°51'48.93"E	Piplag
72		12	22°39'10.20"N	72°52'3.42"E	Gutal
73		13	22°38'47.60"N	72°51'54.13"E	Gutal
74		14	22°38'28.21"N	72°51'58.78"E	Gutal
75		15	22°37'58.11"N	72°51'45.65"E	Keriavi
76		16	22°37'16.72"N	72°51'29.30"E	Akhdol
77		17	22°39'11.81"N	72°52'4.60"E	Gutal
78		18	22°39'39.90"N	72°52'3.65"E	Piplag
79		19	22°39'45.67"N	72°51'38.71"E	Piplag
80		20	22°39'3.53"N	72°51'34.45"E	Piplag
81		21	22°38'25.77"N	72°51'36.39"E	Keriavi

82		22	22°37'38.64"N	72°51'35.64"E	Keriavi
83		23	22°37'4.37"N	72°51'37.11"E	Bamroli
84		24	22°33'47.18"N	72°49'13.09"E	Mahelav
85		25	22°33'15.98"N	72°49'35.49"E	Bandhani
86		26	22°33'12.63"N	72°49'59.76"E	Bandhani
87		27	22°32'51.03"N	72°50'9.28"E	Bandhani
88		28	22°32'25.42"N	72°50'20.82"E	Porda
89		29	22°32'3.85"N	72°50'26.26"E	Porda
90		30	22°33'17.31"N	72°49'12.86"E	Mahelav
91		31	22°32'43.41"N	72°49'32.22"E	Mahelav
92		32	22°32'16.01"N	72°49'56.37"E	Porda
93		33	22°38'13.16"N	72°52'45.24"E	Gutal
94		34	22°38'9.54"N	72°52'56.78"E	Gutal
95		35	22°37'31.79"N	72°52'42.36"E	Narshanda

96		36	22°37'56.99"N	72°53'7.74"E	Gutal
97		37	22°37'52.82"N	72°51'7.59"E	Keriavi
98		38	22°36'26.86"N	72°53'53.15"E	Rajnagar
99		39	22°36'27.16"N	72°53'39.53"E	Rajnagar
100		40	22°36'54.15"N	72°54'20.19"E	Kanjari
101		41	22°34'49.73"N	72°53'50.36"E	Bakrol Part
102		42	22°34'27.35"N	72°49'25.01"E	Mahelav
103		43	22°34'27.16"N	72°49'35.69"E	Mahelav
104		44	22°34'43.98"N	72°48'49.41"E	Mahelav
105		45	22°34'41.12"N	72°48'40.37"E	Mahelav
106		46	22°34'29.72"N	72°50'40.99"E	Ralvi
107		47	22°34'32.89"N	72°50'27.17"E	Ralvi
108		48	22°34'55.89"N	72°49'52.63"E	Padgol

	The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding impact of project in future, provide gas to nearby villagers, road get damage and soil erosion due to ONGC pipeline supply, supply of drinking water and impact of drilling 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, Bhopal vide dated 16.08.2016 and found satisfactory. The Committee after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions: i. 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 16th November, 2009 for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, CH_4, HC, 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 from nearest ONGC installations through tankers shall not exceed 25 m^3/day/well and prior permission should be obtained from the Competent Authority. 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. xiv. Disposal of drill cuttings and drilling mud will be in specially designed pit with HDPE lining and is topped with native soil. Other hazardous waste like empty bags, cotton waste, gloves etc are transported to TSDF site. Whereas, POL/chemical containers and spent oil are recycled through authorized vendors. vii. No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. viii. Produced water shall be treated in ETP/ mobile ETP/ CETF. Treated produced water shall be disposed off through injection well as per CPCB/MoEF guidelines. 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 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.

	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. The company shall develop a contingency plan for H_2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H_2S detectors in locations of high risk of exposure along with self containing breathing apparatus. xiii. Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India. xiv. All the commitments made to the public during public hearing/public consultation meeting held on 4.05.2016 for Kheda district; on 10th May, 2016 for Anand district; on 11th May, 2016 for Vadodara district shall be satisfactorily implemented and adequate budget provision shall be made accordingly. xv. 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 at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner. xvi. Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. xvii. Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office at Bhopal. xviii. 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. xix. Company shall have own Environment Management Cell having qualified persons with proper background. xx. Company shall prepare operating manual in respect of all activities. It shall cover all safety & 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. xxi. On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.
18.9.6	**Proposed 8 no of exploratory drilling in ML areas of Sivasagar, Assam by M/s ONGC - [IA/AS/IND2/60920/2014, J-11011/343/2014- IA II (I)]- Environmental Clearance** The Project Proponent and the accredited Consultant M/s VIMTA Labs Limited., gave a detailed presentation on the salient features of the project and informed that:

	i. The proposal is for Proposed 8 no of exploratory drilling in ML areas of Sivasagar, Assam by M/s ONGC. ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 38th REAC (Industry) meeting held during 20-21st April, 2015, and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/343/2014-IA II (I); dated 22nd June, 2015. iii. All the projects related to offshore and onshore Oil and Gas exploration, development and production are listed in para 1(b) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level. iv. Ministry had issued EC vide letter J-11011/396/2008- IA II (I) dated 11.07.2008 and certified compliance report of the same has been obtained from Regional Office of MoEF &CC, Shillong. v. It is reported that all the proposed drilling locations are situated in revenue land and are neither located in forest land nor within 10 km distance of any Protected Areas. A reserve forest block (Geleki RF) is situated within the study area. The major water bodies in the project block area are Deopani nadi¬ & Jhansi river. vi. The names of the proposed eight wells, are GKBS in SE Geleki ML, GKBT in Geleki ML, MKAD & NGAB in Makeypore-Santak-Nazira ML, DGAJ & LKBB Lakwa ML, CHAQ &CHAR in Charali ML areas of ONGC in Sivasagar district of Assam. ONGC has drilled hundreds of well in the district and is producing hydocarbons for decades. The tentative target depth of the wells will be from 3000-3300 m. Forest land is involved in the project. vii. Land requirement for each well site during drilling will be 125 m x 125 m, i.e., 1.56 ha. The estimated cost of the proposed exploration well drilling per each well would be approximately Rs. 40 Crores and total of Rs. 320 crores for eight exploratory drilling wells. viii. Ambient air quality monitoring was carried out at 11 locations during 18th January, 2016 to 7th April, 2016 and submitted baseline data indicates that ranges of concentrations of PM10 (30.0 to 51.8 µg/m3), PM2.5 (12.6 to 17.2 µg/m3), SO2 (10 to 16.5 µg/m3) and NO2 (12.1 to 20.8 µg/m) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.8 µg/m3 and 3.7 µg/m3 with respect to SO_x, and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). xv. Fresh water requirement will be 25 m3/day per well, which will be sourced from local water sources through tankers/ Contactors. About 15 m3/day drilling wastewater will be generated. All wastewater streams except sewage will be directed to a 1 mm HDPE lined pit. Wastewater collected in the pit will be clarified and treated in solar evaporation pond or packaged wastewater treatment plant for removal of oil and suspended solids to meet the regulatory discharge standards. Domestic waste water shall be disposed through septic tank followed by soak pit. Produced water generation is not envisaged during the exploratory drilling phase. xvi. The total power requirement at the drilling site will be 2250 KVA. The power requirement in the drilling site will be catered through Diesel Generator (DG) sets. The power requirement will be met by 3 Nos of 750 KVA DG sets at drilling site. Stand by DG set arrangement of 750 KVA at drilling site will be made. xvii. Used / spent lubricating oil from pumps or other machinery would be trapped and manually collected and stored in a paved dedicated waste oil storage area. Approximately 150-200 liters/month of used / spent oil would be generated from a drilling operation. Stored waste oil would be disposed off to CPCB & MoEF registered used / spent oil recyclers.

xviii. Public Hearing has been conducted by the Assam Pollution Control Board on 4.10.2016 and 6.10.2016 at Athkhel Bazar Cultural Centre, Makeypore, Geleky, Sivasagar and Srijani Natya Mandir, Lakwa, Sivasagar, Assam respectively.

Proposed Drilling Locations area as follows:

S. No.	Proposed Location	Well Coordinates (WGS-84)		District
		Latitude	Longitude	
1	GKBS	26°45'31.82"N	94 °40'05.54"E	Sibsagar, Assam
2	GKBT	26 °47'41.65"N	94 °43'04.71"E	Sibsagar, Assam
3	MKAD	26 °52'03.991"N	94 °46'47.221"E	Sibsagar, Assam
4	NGAB	26 °49'45.130"N	94 °46'00.093"E	Sibsagar, Assam
5	DGAJ	26 °58'14.69"N	94 °46'34.70"E	Sibsagar, Assam
6	LKBB	27 °01'41.296"N	94 °49'53.111"E	Sibsagar, Assam
7	CHAQ	26 °56'12.73"N	94 °41'11.13"E	Sibsagar, Assam
8	CHAR	26 °57'51.849"N	94 °40'23.018"E	Sibsagar, Assam

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding impact of project in future, Flare of GGS effects horticulture and agriculture activity, employment and impact of drilling 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, Bhopal vide dated 16.08.2016 and found there are few partial and not complied points raised. During presentation PP informed that now they have complied all conditions, EAC accept the declaration and found satisfactory. The Committee after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions:

i) 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 16th November, 2009 for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, CH_4, HC, 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 from nearest ONGC installations through tankers shall not exceed 25 m^3/day/well and prior permission should be obtained from the Competent Authority.

	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) Disposal of drill cuttings and drilling mud will be in specially designed pit with HDPE lining and is topped with native soil. Other hazardous waste like empty bags, cotton waste, gloves etc are transported to TSDF site. Whereas, POL/chemical containers and spent oil are recycled through authorized vendors. viii) No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. ix) Produced water shall be treated in ETP/ mobile ETP/ CETF. Treated produced water shall be disposed off through injection well as per CPCB/MoEF guidelines. x) Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/ soak pit. xi) 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. 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_2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H_2S detectors in locations of high risk of exposure along with self containing breathing apparatus. xiv) Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India. xv) All the commitments made to the public during public hearing/public consultation meeting held on 4.05.2016 for Kheda district; on 10th May, 2016 for Anand district; on 11th May, 2016 for Vadodara district shall be satisfactorily implemented and adequate budget provision shall be made accordingly. xvi) 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 at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner. xvii) Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. xviii) Restoration of the project site shall be carried out satisfactorily and report

	shall be sent to the Ministry's Regional Office at Bhopal. xix) 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. xx) Company shall have own Environment Management Cell having qualified persons with proper background. xxi) Company shall prepare operating manual in respect of all activities. It shall cover all safety & 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. xxii) On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.
18.9.7	**Proposed exploratory drilling of 13 Exploratory wells in PML area of SAS Block in Sarupathar tehsil District Golaghat, Assam by M/s ONGC Ltd.-.[IA/AS/IND2/27496/2015, J-11011/111/2015-IA II (I)]- Environmental Clearance** The Project Proponent and the accredited Consultant M/s VIMTA Labs Limited., gave a detailed presentation on the salient features of the project and informed that: i. The proposal is for Proposed exploratory drilling of 13 Exploratory wells in PML area of SAS Block in Sarupathar tehsil District Golaghat, Assam by M/s ONGC Ltd. ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 40th REAC (Industry) 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 no. J-11011/111/2015-IA II (I); dated 6th July, 2015. iii. Ministry has also issued amendment in TOR for change in drilling location of NL-10 with NL-10/KHBF in Golaghat district, Assam vide letter dated 23rd January, 2017. iv. All the projects related to offshore and onshore Oil and Gas exploration, development and production are listed in para 1(b) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level. v. It is reported that there is no National Park, Wildlife Sanctuary, protected area and ESZ within the distance of 10 km. There are three reserve forests block (Renga, Nambar and Dayang Reserve Forest) and Nambar Doigrung and Garampani Wild life sanctuary in the study area. vi. During presentation PP has informed that due to forest clearance of two drilling locations is still pending at various stages. PP has submitted letter to drop two drilling locations out of 15 drilling locations i.e. NL-4 and NL-9. Now the proposed proposal is for 13 drilling locations in place of 15 drilling locations. vii. Land required at each well site during drilling will be around 125 m x 125 m, i.e., 1.5-2.0 ha. Land requirement for the base camp will be about 0.5 ha The estimated cost of the proposed exploration well drilling is about Rs. 600 crores (per each well would be approximately Rs. 40 Crores). At each drill site construction, local employment will be generated for about 25 person/shift of 12 hrs. in two shifts.

viii. Ambient air quality monitoring was carried out at 10 locations during 15th January 2016 to 8th April 2016 and submitted baseline data indicates that ranges of concentrations of PM10 (39.3 to 51.7 µg/m^3), PM2.5 (12.0 to 17.6 µg/m^3), SO2 (10.1 to 17.2 µg/m^3) and NO2 (12.4 to 19.8 µg/m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.3 µg/m^3 and 2.6 µg/m^3 with respect to SO_x, and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

ix. Fresh water requirement will be 25 m3/day per well, which will be sourced from local water sources through tankers/ Contactors. About 15-20 m3/day drilling wastewater will be generated. All wastewater streams except sewage will be directed to a 1 mm HDPE lined pit. Wastewater collected in the pit will be clarified and treated in solar evaporation pond or packaged wastewater treatment plant for removal of oil and suspended solids to meet the regulatory discharge standards. Domestic waste water shall be disposed through septic tank followed by soak pit. Produced water generation is not envisaged during the exploratory drilling phase.

x. The total power requirement at the drilling site will be 4290 KVA. The power requirement in the drilling site will be catered through Diesel Generator (DG) sets. The power requirement will be met by 3 Nos of 1430 KVA DG sets at drilling site. Stand by DG set arrangement of 1430 KVA at drilling site will be made.

xi. The waste oil will be collected and handed over to ASPCB and MoEF&CC authorized waste oil recyclers at the end of the exploratory drilling campaign. Cuttings will be collected and disposed off in an environmentally safe manner. The cuttings disposal pit will be similar in construction to the wastewater pit. Typically the pit would be about 25 m x 10 m x 2 m deep and will be lined with polypropylene liner. The cuttings disposal pit will be placed within the drilling lease area to prevent the transport of waste mud and cuttings from the drilling site to another area to prevent any spillage on the other areas.

xii. Sludge containing oil will be disposed through ASPCB/CPCB registered wasteoil re-processor. Drilling mud and other drilling waste will be disposed onsite in lined pits after treatment through land farming or other bioremediation techniques. Used/ spent and Wastes/residue oil will be sent to registered re-processors.

xiii. Drilling location URAA is located in forest land.

xiv. Public Hearing has been conducted by the Assam Pollution Control Board on 21.10.2016 at Khoraghat, Golaghat, Assam.

Proposed Drilling Locations area as follows:

S. No.	Location Name	To be drilled from existing wells or common point	Location Coordinates	District
1	NL 1 NL-1 (KHBG)	KH-35, (KHAS) CP	26° 03' 14.72" 93° 55' 30.64"	Golaghat
2	NL-2	KH-7, (KHF) CP	26° 02' 40.708" 93° 55' 40.324"	Golaghat
3	NL-3	KH-9, NR-2 CP	26° 03' 18.537" 93° 54' 37.439"	Golaghat
4	NL-5 (KHBE)	KH-30 (KHAT) CP	26° 05' 17.539" 93° 53' 20.996"	Golaghat

5	NL-6	KH-23 (KHAF) CP	26° 06' 18.760" 93° 57' 52.699"	Golaghat
6	NL-7	KH-16 (KHAB) CP	26° 05' 42.163" 93° 56' 22.399"	Golaghat
7	NL-8	KH-13 (KHD) CP	26° 06' 13.243" 93° 55' 22.512"	Golaghat
8	NL-10	KH-4 (KGA) CP	26° 05' 03.33" 93° 54' 36.70"	Golaghat
9	NL-11	KH-27 (KHAQ) CP	26° 07' 01.771" 93° 54' 15.008"	Golaghat
10	URAA	New Point	26° 09' 46.207" 93° 57' 12.736"	Golaghat
11	NL-12	URRA/CP	26° 09' 49.331" 93° 57' 17.530"	Golaghat
12	NL-13	New Point	26° 16' 41.590" 93° 56' 40.078"	Golaghat
13	NL-14	New Point	26° 14' 54.876" 93° 56' 02.584"	Golaghat

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding employment, oil spillage, CSR activity and agriculture activity, employment and impact of drilling 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) Forest Clearance to be obtained for those drilling locations located in forest land.

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 16th November, 2009 for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, CH_4, 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 from tankers shall not exceed 25 m^3/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)	The drill cuttings shall be disposal in pit of about 25 m x 10 m x 2 m deep and shall be lined with polypropylene liner. The cuttings disposal pit shall be placed within the drilling lease area to prevent the transport of waste mud and cuttings from the drilling site to another area to prevent any spillage on the other areas.
	ix)	No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies.
	x)	Wastewater collected in the pit will be clarified and treated in solar evaporation pond or packaged wastewater treatment plant for removal of oil and suspended solids to meet the regulatory discharge standards. Domestic waste water shall be disposed through septic tank followed by soak pit.
	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 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.
	xiv)	The company shall develop a contingency plan for H_2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H_2S detectors in locations of high risk of exposure along with self containing breathing apparatus.
	xv)	Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.
	xvi)	All the commitments made to the public during public hearing/public consultation meeting held on 21.10.2016 for Golaghat district shall be satisfactorily implemented and adequate budget provision shall be made accordingly.
	xvii)	At least 2.5 % 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.
	xviii)	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.
	xix)	Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office.

	xx) Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office. xxi) Company shall have own Environment Management Cell having qualified persons with proper background. xxii) Company shall prepare operating manual in respect of all activities. It shall cover all safety & 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. xxiii) On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.

Reconsideration of EC

18.9.8	**Drilling of Development well (108 nos.) in oil field of Ahmedabad Asset of ONGC Ltd. at Mehsana and Gandhinagar Gujarat by M/s ONGC Ltd.-Reg. EC {IA/GJ/IND2/26895 /2012, J-11010/90/2012-IA- II (I)}** Project was considered in 15th EAC meeting held during 10th November, 2016, wherein the committee deferred the proposal for the following ;- 1 Coordinate of well to be submitted 2 Full details of wells within or outside the ESZ to be provided alongwith coordinate in tablular form. In case some wells are within ESZ of Thol WL sanctuary then status of permission from Monitoring committee of ESZ to be confirmed. Now PP has submitted the following additional information: 1. Coordinate of drilling locations. 2. During presentation PP informed that no proposed wells are wthin ESZ, Thol wildlife sanctuary. PP also informed that out of 108 wells, 86 wells are falling outside 10 km of Thol Wildlife sanctuary i.e. other parts of Gandhinagar and Mehsana districts. Out of 108 wells, only 22 wells are falling within 10 km of Thol Wildlife sanctuary. However all these 22 wells are outside the Eco Sensitive zone (ESZ) of Thol Wildlife sanctuary as notified by the ministry. PP has submitted the signed map showing distance and direction of 22 wells from Thol Wildlife sanctuary ESZ issued by Chief Wildlife Warden, Gujarat.

The Project Proponent and the accredited Consultant M/s Kadam Environmental Consultants., gave a detailed presentation on the salient features of the project and informed that:

i. All the projects related to offshore and onshore Oil and Gas exploration, development and production are listed in para 1(b) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.

ii. The area of land required would be approximately of the order of 110 m x 110 m for each well. Depth of drilling will be 800-2000 m. Cost of drilling a vertical well is INR 4.0 crore/well while that of horizontal well is INR 12 crore /well, ONGC is planning to drill 100 vertical wells and 8 horizontal wells, will be 10 Crore, hence a total Project Cost of INR 496 Crores. Water based mud are used for drilling of well containing Barite, Bentonite, Caustic Soda, Soda ash, Xanthum gum etc.

iii. Ambient air quality monitoring was carried out at 11 locations during during summer season 2013 and submitted baseline data indicates that ranges of concentrations of PM10 (76 µg/m3 to 123 µg/m3), PM2.5 (45 µg/m3 to 57 µg/m^3), SO2 (8.0 to 12.4 µg/m^3) and NO2 (13.8 to 22.2 µg/m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.67 µg/m^3 and 71.71 µg/m^3 with respect to SO_x, and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

iv. Fresh water requirement will be 27 m3/day per well, which will be sourced from through water supplied by tankers sourced from nearest ONGC installation. Waste water generated is disposed in specially designed HDPE lined pit at site and is solar dried. Domestic waste water shall be disposed through soak pit.

v. The power required for driving the drilling rig, circulation system and for providing lighting shall be generated by DG sets attached with the drilling rig. and a stand by DG set of 125 KVA will be kept at site

vi. Disposal of drill cuttings and drilling mud is as per Gazette notification dated 30.08.2005 , G.S.R. 546 (E) , Section C "Guidelines for Disposal of Solid Waste, Drill Cutting and Drilling Fluids for Offshore and Onshore Drilling Operation". It is excavated in specially designed pit with HDPE lining and is topped with native soil. Other hazardous waste like empty bags, cotton waste, gloves etc are transported to TSDF site. Whereas, POL/chemical containers and spent oil are recycled through authorized vendors.

vii. Public Hearing has been conducted by the Gujarat Pollution Control Board on 23.01.2015 at Gandhinagar, on 29.01.2015 at Mehsana, Gujarat.

Proposed Drilling Locations area as follows:

S.No	Well No	Latitude	Longitude
1	W-1	23°15'41.92"N	72°19'57.56"E
2	W-2	23°15'16.87"N	72°19'58.26"E
3	W-3	23°14'34.26"N	72°19'48.18"E
4	W-4	23°14'37.15"N	72°18'23.25"E
5	W-5	23°14'7.27"N	72°18'42.06"E
6	W-6	23°14'21.37"N	72°17'41.91"E
7	W-7	23°13'51.57"N	72°19'22.99"E
8	W-8	23°13'32.12"N	72°18'31.22"E
9	W-9	23°14'35.61"N	72°20'43.62"E
10	W-27	23°12'31.61"N	72°32'13.53"E

11	W-28	23°12'47.41"N	72°31'28.52"E
12	W-29	23°13'9.26"N	72°33'32.09"E
13	W-30	23°13'12.20"N	72°32'39.00"E
14	W-31	23°13'39.27"N	72°33'51.56"E
15	W-32	23°11'41.21"N	72°31'57.32"E
16	W-33	23°13'29.86"N	72°29'41.01"E
17	W-34	23°15'1.76"N	72°30'37.12"E
18	W-35	23°14'44.09"N	72°31'45.93"E
19	W-36	23°15'17.03"N	72°31'26.78"E
20	W-37	23°15'45.97"N	72°32'13.95"E
21	W-38	23°14'59.97"N	72°29'36.48"E
22	W-39	23°15'39.67"N	72°30'48.84"E
23	W-40	23°16'13.78"N	72°32'5.56"E
24	W-41	23°16'32.88"N	72°31'40.26"E
25	W-42	23°15'14.81"N	72°28'31.07"E
26	W-43	23°16'7.92"N	72°30'16.12"E
27	W-44	23°17'2.95"N	72°30'36.22"E
28	W-45	23°17'48.56"N	72°31'34.29"E
29	W-46	23°17'36.38"N	72°30'34.04"E
30	W-47	23°17'1.96"N	72°28'44.81"E
31	W-48	23°17'58.67"N	72°30'0.13"E
32	W-49	23°16'16.83"N	72°29'1.10"E
33	W-51	23° 7'57.08"N	72°34'44.62"E
34	W-52	23° 8'48.99"N	72°34'25.76"E
35	W-53	23°18'41.21"N	72°25'26.96"E
36	W-54	23°19'20.69"N	72°25'43.94"E
37	W-55	23°19'32.13"N	72°26'13.77"E
38	W-56	23°23'38.77"N	72°29'32.13"E
39	W-57	23°23'22.25"N	72°30'13.25"E
40	W-58	23°22'26.48"N	72°29'57.23"E
41	W-59	23°21'47.33"N	72°30'25.38"E
42	W-60	23°22'25.31"N	72°33'0.83"E
43	W-61	23°21'39.13"N	72°32'57.37"E
44	W-62	23°20'43.86"N	72°32'47.40"E
45	W-63	23°19'49.72"N	72°32'9.21"E
46	W-64	23°19'26.40"N	72°30'56.54"E
47	W-65	23°18'56.73"N	72°31'21.02"E
48	W-66	23°18'56.01"N	72°33'36.99"E
49	W-67	23°17'35.20"N	72°34'7.22"E

50	W-68	23°17'12.09"N	72°33'1.84"E
51	W-69	23°17'46.66"N	72°35'39.58"E
52	W-70	23°16'6.55"N	72°34'41.60"E
53	W-71	23°15'7.65"N	72°35'7.07"E
54	W-72	23°15'43.71"N	72°36'12.23"E
55	W-73	23°17'5.80"N	72°37'0.14"E
56	W-74	23°17'48.09"N	72°37'49.16"E
57	W-75	23°14'53.85"N	72°36'43.85"E
58	W-76	23°16'16.66"N	72°37'46.98"E
59	W-77	23°16'26.31"N	72°23'49.76"E
60	W-78	23°14'59.90"N	72°23'45.23"E
61	W-79	23°17'41.73"N	72°39'33.59"E

62	W-80	23°18'29.26"N	72°40'35.88"E
63	W-81	23°19'49.13"N	72°40'11.64"E
64	W-82	23°20'35.86"N	72°38'56.01"E
65	W-83	23°21'29.99"N	72°38'54.24"E
66	W-84	23°14'16.43"N	72°36'51.28"E
67	W-85	23°13'44.03"N	72°37'31.05"E
68	W-86	23°10'17.46"N	72°35'6.63"E
69	W-87	23°10'25.79"N	72°34'14.77"E
70	W-88	23° 9'44.44"N	72°37'20.66"E
71	W-89	23° 9'39.89"N	72°36'1.78"E
72	W-90	23° 9'10.61"N	72°35'50.95"E
73	W-91	23°10'28.00"N	72°36'5.22"E
74	W-92	23° 9'25.54"N	72°38'0.84"E
75	W-94	23°11'51.67"N	72°34'4.30"E
76	W-95	23°11'56.54"N	72°34'38.29"E
77	W-96	23°11'33.89"N	72°35'15.42"E
78	W-97	23°10'51.58"N	72°35'57.89"E
79	W-98	23°10'14.60"N	72°35'36.13"E
80	W-99	23°10'25.15"N	72°36'53.40"E
81	W-100	23° 8'35.63"N	72°32'49.95"E
82	W-101	23° 8'14.28"N	72°37'21.76"E
83	W-102	23° 7'28.60"N	72°37'1.48"E
84	W-103	23° 6'52.71"N	72°37'0.05"E
85	W-104	23° 7'3.41"N	72°38'14.00"E
86	W-105	23° 6'23.31"N	72°39'1.56"E

S.No	**Well No**	**Latitude**	**Longitude**
87	W-10	23°12'20.62"N	72°20'9.92"E
88	W-11	23°11'31.40"N	72°19'56.02"E
89	W-12	23°12'28.47"N	72°21'20.50"E
90	W-13	23°11'18.27"N	72°21'49.19"E
91	W-14	23°10'20.44"N	72°19'47.57"E
92	W-15	23°10'16.25"N	72°21'25.55"E
93	W-16	23° 9'52.79"N	72°22'0.41"E
94	W-17	23° 8'43.94"N	72°21'52.19"E
95	W-18	23° 7'49.37"N	72°26'36.17"E
96	W-19	23° 7'35.14"N	72°26'34.37"E
97	W-20	23° 7'17.96"N	72°27'18.94"E
98	W-21	23° 4'57.76"N	72°24'25.73"E
99	W-22	23° 4'22.48"N	72°24'4.96"E
100	W-23	23° 4'31.38"N	72°24'54.33"E
101	W-24	23° 4'34.95"N	72°26'7.27"E
102	W-25	23° 4'33.90"N	72°26'43.83"E
103	W-26	23° 3'47.70"N	72°25'57.45"E
104	W-106	23° 8'43.15"N	72°27'21.26"E
105	W-107	23° 7'34.07"N	72°27'54.47"E
106	W-108	23° 6'53.50"N	72°28'5.19"E
107	W-50	23°12'41.86"N	72°24'29.74"E
108	W-93	23°12'57.28"N	72°28'9.89"E

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding employment, education, CSR activity and agriculture activity, employment and impact of drilling 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 deliberated on the certified compliance report dated 06.07.2015 issued by the Regional Office of MoEF&CC and 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) 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 16th November, 2009 for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, CH_4, HC, 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 from tankers shall not exceed 27 m^3/day/well and prior permission should be obtained from the Competent Authority.

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) Disposal of drill cuttings and drilling mud is as per Gazette notification dated 30.08.2005 , G.S.R. 546 (E) , Section C "Guidelines for Disposal of Solid Waste, Drill Cutting and Drilling Fluids for Offshore and Onshore Drilling Operation". It is excavated in specially designed pit with HDPE lining and is topped with native soil. Other hazardous waste like empty bags, cotton waste, gloves etc are transported to TSDF site. Whereas, POL/chemical containers and spent oil are recycled through authorized vendors.

viii) No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies.

ix) Waste water shall be disposed in specially designed HDPE lined pit at site and is solar dried. Domestic waste water shall be disposed through soak pit.

x) Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/ soak pit.

	xi) 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. 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_2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H_2S detectors in locations of high risk of exposure along with self containing breathing apparatus. xiv) Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India. xv) All the commitments made to the public during public hearing/public consultation meeting held on 23.01.2015 at Gandhinagar, on 29.01.2015 at Mehsana, Gujarat shall be satisfactorily implemented and adequate budget provision shall be made accordingly. xvi) 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. xvii) Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. xviii) Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office. xix) Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office. xx) Company shall have own Environment Management Cell having qualified persons with proper background. xxi) Company shall prepare operating manual in respect of all activities. It shall cover all safety & 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. xxii) On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.

18.10 Terms of Reference (TOR)

18.10.1	**Expansion of Bulk drugs unit with change in capacity(from 3376.4 TPA to 5783.84 TPA) at Plot no. A-1/A, A-1/B, A-1/C, A-2/B, A-2/C, A-2/D, C8-3/C, C8- 3/A, C-7/2, Kudikadu Village, SIPCOT Cuddalore, district Cuddalore, Tamil Nadu by M/s Strides Shasun Limited [IA/TN/IND2/58794/2016, J-11011/326/2016-IA II (I)] - Reconsideration of TOR** The Member Secretary informed the EAC that the above proposal was earlier considered in 14th Expert Appraisal Committee (Industry-2) meeting held during 26th to 27th October, 2016. After deliberation, the Committee deferred the proposal for want of following information; (i) Tabular form details of existing and proposed products in context of EC issued by the Ministry and SEIAA, TN. (ii) Confirmation from the SPCB on validity of current CTO issued by TNPCB on the existing production w.r.t EC granted by Authorities. (iii) Topo sheet within 10 km radius as per scale 1: 25000/50000. During the presentation 18th EAC meeting the PP presented the point wise status on the above points: **(i) Tabular form details of existing and proposed products in context of EC issued by the Ministry and SEIAA, TN.** The PP informed that they have requested TOR for 77 nos. products with capacity of 5783.84 MTPA vide application no. IA/TN/IND2/58794/2016. The list of proposed 77 nos. products have been uploaded on the MoEF&CC website. **(ii) Confirmation from the SPCB on validity of current CTO issued by TNPCB on the existing production w.r.t EC granted by Authorities.** The PP informed that TNPCB has issued CTO vide 160711515796 dated 18/1.2016 for 32 products out of 53 products approved by SEIAA in EC dated 24/6/2014. Due to market dynamics, we have applied CTO for 32 products and for balance products CTO will be applied on need basis. **(iii) Topo sheet within 10 km radius as per scale 1: 25000/50000.** The PP informed that the Topo sheet within 10 km radius as per scale 1: 25000/50000 has been submitted. The PP has also submitted an affidavit signed on 25.1.2017 mentioning that they have obtained EC from SEIAA, Tamil NADU for 53 products with a capacity of 3376.40 TPA vide letter no. SEIAA/TN/F.774/EC/5(f)/12/2014 dated 24.06.2014. They have obtained CTE (vide proceeding number T3/TNPCB/F.21355/RL/CUD/W&A/2015 dated 09.03.2015) for 53 products and partial CTO (vide proceeding no. T3/TNPCB/F.0006/RL/CUD/W&A/20156 dated 18.01.2016) for 32 products only as per EC obtained on date 24.06.2014 from SEIAA, Tamil Nadu. It is also mentioned in the affidavit that they are declaring that they are not manufacturing other than 32 products specified in CTO as referred in para number 2. The EAC critically examined the information submitted by the PP and after having satisfied with the additional information decided to consider the proposal. PP

	presented the details of the proposed project before EAC and informed that: (i) The project involves expansion of Bulk drugs unit with change in capacity (from 3376.4 TPA to 5783.84 TPA) at Plot no. A-1/A, A-1/B, A-1/C, A-2/B, A-2/C, A-2/D, C8-3/C, C8- 3/A, C-7/2, Kudikadu Village, SIPCOT Cuddalore, district Cuddalore, Tamil Nadu by **M/s Strides Shasun Limited** (ii) Proposed 77 products with a capacity of 5783.84TPA and by products Sodium Dichromate Solution – 11412 MTPA and Spent acid -360 MTPA. (iii) Existing EC (EC-SEIAA/TN/F.774/EC/5(f)/12/2014 dt. 24.06.2014) provided for 53 products for a capacity of 3376.4 TPA (iv) The facility is proposed within its existing plant of 19.3 Acres. The raw materials will be stored in drums and transported through road. The fresh water requirement for proposed project will be 732KLD, recycled water will be 513KLD and total water requirement is estimated as 1245KLD. The required fresh water will be met from SIPCOT. The power requirement is 5500 KVA which will be sourced from TNEB. Quantity of Bio briquette used as a fuel for boiler and thermic fluid heaters will be 51T/day. (v) Raw materials are sent to reactors with purified water. During the reaction, air emissions are released which are sent for scrubbing to remove acid vapours and VOC. In the next stage materials are transferred to extraction / distillation then sent to washing along with purified water followed by filtration, milling, packing and shipping. During the extraction, washing, filtration an aqueous layer is released which is sent to ETP and then ETP Sludge is sent to hazardous waste shed for disposal. The effluent is treated and fully utilized in process. Zero Liquid Discharge system is adopted. (vi) Sewage will be treated in sewage treatment plant and used for gardening. Effluent generated will be treated in ETP and will be fully utilized in Utility. ZLD system is adopted for existing facility and for proposed expansion the same will be adopted. (vii) Air pollution control measures such as scrubbers, stack, activated carbon filter and bag filter are available for existing facility and the same will be proposed for expansion. The hazardous waste will be stored separately in hazardous waste storage area and disposed to CPCB/SPCB authorized vendors. (viii) Cost of the project - Project cost is 75 crores. Estimate time of completion of project is 2years. (ix) The proposed project is located with existing facility of Strides Shasun Limited, located in Notified critically polluted area- Cuddalore. The Site is located in SIPCOT Industrial area. The land use is Notified Special Hazardous Industrial Use Zone. (x) Water bodies such as Uppanar. River is located within 600m distance from site and 300 m from proposed new green belt area. Bay of Bengal at2Km distance from site and 1.6 Km from proposed new green belt area. The new green belt area is 205 m from existing site. (xi) There is no forest or any eco-sensitive zones identified within 10Km radius. Nearby industries - Clariant Chemicals, Asian Paints, TANFAC, Tagros Chemicals & Aurobindo Pharma. (xii) Emergency Management plan contain Identification of potential emergency scenarios and schedule for Local wet drills. Revision of Emergency Management plan based on Consequence Analysis, gap observations during Periodic evacuation mock drills, Table top exercises, Emergency Management plan training is given to all the employees. (xiii) There is no forest land involved in the project. The site is located in notified SIPCOT Industrial Complex.

(xiv) Provided individual toilets to 150 households, drinking water supply, medical assistance, provided waste bins, tree plantation in Kudikadu Village and some other CSR activities like STP for Seva Mandir School is proposed.

The EAC in view of the affidavit given by the after detailed deliberations recommended the proposal for prescribing following additional TOR along with other generic TOR (refer Ministry's website) for preparation of EIA/EMP report:

1. Public consultation is exempted under para 7(i) III Stage (3)(i)(b) being site is located in the Notified industrial area.
2. ZLD system to be adopted.
3. 24x7 monitoring stations for monitoring of gaseous emissions to be installed.

18.10.2 **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 FERTLIZER PROJECT- IA/RJ/IND2/61546/2017, IA-J-11011/9/2017-IA-II(I)]- TOR reg.**

It was noted that the proposal was earlier considered in 17th EAC meeting. 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.

During presentation in the 18th EAC meeting the PP informed that they have change the site location and lay out plan accordingly. The EAC accepted the request of PP for considering the baseline data during December, 2016 to February, 2017.

The EAC after thorough examination of the present lay out plan and other details recommended the proposal for grant of standard TOR as available on the Ministry's website.

18.10.3 **Pigments Manufacturing Plant at Plot No. FS- 34, Mahad Five star Industrial area, MIDC, Mahad, Raigad, Maharashtra by M/s Sapphire Pigments Private Limited [IA/MH/IND2/61538/2017, IA-J-11011/8/2017-IA-II(I)] -TOR**

The project proponent informed following:-

(i) The project involves pigments Manufacturing Plant at Plot No. FS- 34, Mahad Five star Industrial area, MIDC, Mahad, Raigad, Maharashtra by **M/s Sapphire Pigments Private Limited.**

(ii) The PP informed that the plant is located in notified industrial area. The project category is 'B' but due to non existence of SEIAA IN Maharshtra the project is being considered at central the Ministry.

(iii) Products and capacities:-

Product	**TPM**
CPC Blue	100
Alpha Blue	40
Beta Blue	40

Green 7	25
Turquoise Blue	10
Total	**215**

(iv) Requirement of Land - 8000 m^2

(v) Raw Material:-

S. No.	Raw Material	Quantity in TPM
A) CPC Blue		
1	Phthalic Anhydride	100
	Technical grade Urea	140
	Nitro Benzene	15
	Ammonium Molybdate	3
	Cuprous Chloride	18
	98 % Sulphuric acid	80
B) Pigment Alpha Blue		
	Crude copper phthalocyanine Blue	40
	Sulphuric Acid	320
	Caustic	2
	O - Xylene	3
	Triehylaminosulphate	2
C) Pigment Beta Blue		
	Crude copper phthalocyanine blue	40
	Gum Rosin	3
	Caustic Flakes	2
	N-BUTYL ALCOHOL	2
	Hydrochloric Acid (30%)	1
D) Pigment green 7		
	CPC Blue	11
	Cupric Chloride	1.2
	Aluminium Chloride	37
	Common Salt	7

	Chlorine Gas	25
	Monochlorobenzene	2
	Caustic	1.5
	Olic acid	0.25
	NX-100 Emulsifier	1.2
E) Direct Turquoise Blue		
	CPC Blue	7
	Chlorosulphonic acid	35
	OLEUM 23% or Chlorosulphonic acid	35
	Caustic	1
	Soda Ash	1

(vi) Water - Net water requirement from MIDC is 93 m^3/day
(vii) Power - Connected Load: 150 KW, Maximum Demand 112 KW
(viii) Fuel with source of supply (Quantitative) - Type:- Imported Coal/Indian Coal; Source:- Indonesia / India; Quantity : 2000 Kg/day; Diesel : 8.2 Kg/hr
(ix) Pollution Control Equipment: One Stack of height 16 m dia 1.2m , ETP
(x) Gaseous Emission: CO_2 GAS, CHLORINE GAS, NH_4 GAS
(xi) Waste Generation:

Non hazardous solid waste generation	**Type of waste**	**Total Qty**	**Management**
From Domestic Activities	Dry garbage	19 Kg/ day	Handed over to the authorised recyclers
	Wet garbage	8 Kg/d day	Composing
From Process	Coal Ash	200 Kg/ day	DISPOSAL AT CHWTSDF / Brick Manufacturing
	Plastic Drums / Containers	2 no./day	Handed over to the authorised recyclers
Haz. waste	ETP Sludge	15 MT/day	Disposal at CHWTSDF

(xii) Effluent generated 74.5 m^3/day will be treated in ETP, 32m^3/day will be reused in process, 17.5 m^3/day will be used for gardening and remaining (25 m^3 /day) will be connected to CETP.
(xiii) Cost of the project - Rs 5 Crore

(xiv) Estimated time of completion - 12 – 18 month

(xv) Descriptions of Environmental sensitivity in 10 km radius form the site:-

Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
Kal River	~0.4 Km
Savitri River	~8 Km
KotasvariTalav	~ 12.48 Km
VireshwarTalav	~ 12.61 Km
Chavdar Tale	~ 12.78 Km

(xvi) CSR Plan - 2 % of net profit will be allotted for CSR as per Companies Act; Details will be covered in EIA

The EAC observed that project site is proposed to be located in notified industrial area. The PP also submitted the relevant government notification in support of their claim. The EAC exempted the public hearing.

The EAC after detailed deliberations recommended the proposal for grant of following additional TOR along with other generic TOR(refer Ministry's website) for preparation of EIA-EMP report:

A. Additional TOR :

4. 5 M green belt around the plant periphery with two rows of perennial trees like Neen, Seasam, Teak etc.
5. Storage of Chlorine cylinders to be reduced up to 2 Tonne/day.
6. Details on solvents to be used, measures for solvent recovery and for emissions control.
7. Details of process emissions from the proposed unit and its arrangement to control.
8. Work zone monitoring arrangements for hazardous chemicals.
9. Action plan for odour control to be submitted.
10. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they co-process organic solid/hazardous waste generated.
11. Authorization/Membership for the disposal of solid/hazardous waste in TSDF, if any.
12. Action plan for utilization of MEE/dryers salts.
13. Material Safety Data Sheet for all the Chemicals are being used/will be used.
14. Detailed effluent treatment scheme to be provided in the EIA/EMP report ensuring that the discharge quality is meeting with the prescribed standards of CPCB/SPCB.
15. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
16. Details of incinerator if to be installed.
17. Risk assessment for storage and handling of hazardous chemicals/solvents. Action plan for handling & safety system to be incorporated.
18. Arrangements for ensuring health and safety of workers engaged in handling of toxic materials.
19. The Public Consultation is exempted under para 7(i) III Stage (3)(i)(b) being site is located in the Notified industrial area.

18.10.4	**Setting up medicine formulation plant for allopathic & cosmetic license for External medicine preparation Plot No. 34, Pharma City, Selaqui, Dehradun, Uttarakhand, M/s Premier Nutraceuticals Private Limited. [IA/UK/IND2/61485/2017, IA-J-11011/5/2017-IA-II(I)]- TOR** The PP informed that they have started construction on the site on the basis of CTE issued by the State Government vide Sr. No. CEO –CTE-12254 dated 16.02.2012 and letter no. UEPPCB/ROD/NOC-Dehradun-3227 dated ------ In view of the submissions made by the PP the committee was of the view that the PP has committed the violation of the provisions of the EIA Notification, 2006. The EAC recommended to the Ministry to take necessary action in this regard.
18.10.5	**Proposal for manufacture pesticides and its intermediate at Plot No. SPM-29, Sterling SEZ & Infrastructure Ltd. At & Po: Sarod-392180, Tal: Jambusar, District: Bharuch M/s. PI Industries Limited (Unit II) reg. [IA/GJ/IND2/61491/2017, IA-J-11011/6/2017-IA-II(I)] - TOR** PP made a presentation before the EAC and informed that: (i) The project involves proposal for manufacture pesticides and its intermediate at Plot No. SPM-29, Sterling SEZ & Infrastructure Ltd. At & Po: Sarod-392180, Tal: Jambusar, District: Bharuch **M/s PI Industries Limited (Unit II)** (ii) Proposed Capacity –

Sr. No.	Common Name	IUPAC Name	Quantity (MTPA)
Insecticides and Intermediates			**4800**
1	Amino Triazines		
a	THM	Bis (1,2,3 - Trithiacyclohexyl Dimethyl Ammonium) Oxalate	
2	Diamides		
a	Flub	3-Iodo-N2-(2-Methyl-1-(Methyl sulfonyl) Propan-2-yl)-N1-(2-Methyl-4-(Perfluoropropan-2-yl) phenyl) Phthalamide	
b	SOD	N2-(2-Methyl-1-(Methylsulfinyl)propan-2-yl)-N1-(2-Methyl- 4 - (perfluoropropan-2-yl) phenyl) phthalamide	
c	MMTPA/SAA	2-Methyl 1-Methylthio-2-Propanamine	
3	Hydazinopyridine		

a	CHDP	3-Chloro-2-Hydrazino Pyridine	
4	Nicotinamides		
a	TFNA	2,6-Dichloro-4-(Triflurомethyl) pyridine-3-Carbonitrile	
5	Nitroguanidines		
a	BNHT	5-Benzyl-1-Methyl, 2-Nitro 2 imino-tetrahydro 1, 3, 5-trizan.	
b	AETF	3-Amino methyl Tetrahydrofuran	
6	Organophosphorus Insecticide		
a	MTN	3-(Dimethoxy Phosphinothioyl sulfanyl methyl) -5-Methoxy-1,3,4-thiadiazol-2-one	
7	Phenyl organo thiophosphate		
a	PTF	(RS)-(O-2,4-Dichlorophenyl O-Ethyl S-Propyl Phosphorodithioate)	
8	Phthalimides		
a	PMT	Phosmet	
9	Pyrazole-diamides		
a	Q4039	3-Methyl Antranilic Acid	
b	YB449	3-Methyl-2-Nitrobenzoic acid	
c	DPX	2-Amino-5-Chloro-N,3-Dimethyl Benzamide	
d	BPCA	3-Bromo-1-(3-Chloropyridin-2-yl)-1H-pyrazole-5-Carboxylic Acid	
10	Quinazoline		
a	FNZQ	3-[2-[4-(1,1-Dimethylethyl) phenyl] ethoxy] Quinazoline	
11	Quinolinyl carbonate		
a	FMTQ	2-Ethyl-3,7-Dimethyl-6-[4-(trifluoromethoxy) phenoxy]-4-Quinolyl Methyl Carbonate	
12	Thiazolidines		

a	CCITM	Dimethyl Cyano Dithioimido Carbonate	
b	CCMP	2-Chloro-5-Chloromethyl Pyridine	
Herbicides and Intermediates			**5650**
1	Alkylazines		
a	DMI	2,6-Dimethylindanone	
b	DMAI	2,6-Dimethyl-2,3-Dihydro-1H-inden-1-amine	
2	Amide-triazolones		
a	IAT	3H-1,2,4-Triazol-3-one, 4-amino-2,4-dihydro-5-(1-methylethyl)-	
3	Aryloxyphenoxy propionates		
a	FPES	Ethyl(2R)-2-{4-[6-chloro-1,3-benzoxazol-2-yl)oxy] phenoxy} propanoate	
4	Benzoyl cyclohexanediones		
a	AE 473	(2-{2-chloro-4-mesyl-3-[(RS)]-tetrahydro-2- furylmethoxymethyl} benzoyl)-cyclohexane-1, 3-Dione)	
b	Tembutrion	2-{2-chloro-4-(methylsulfonyl)-3-[(2,2,2-trifluoroethoxy)methyl]benzoyl}cyclohexane-1,3-dione	
c	747 Either	2-Chloro-4-(methyl sulfonyl)-3-[(2, 2, 2-trifluoroethoxy) methyl] Benzoic acid	
d	2C6SMT	3-Chloro-2-Methylthioanisole	
5	Furanones		
a	FLURT	5-(Methylamino)-2-Phenyl-4-[3-(Trifluoromethyl) phenyl] furan-3(2H)-one	
6	Intermediate of Herbicide		
a	MTAA	Methyl (methylthio) Acetate	
7	Active nitrile Herbicide		
a	PYCL	1-(3-Chloro-4,5,6,7-tetra hydropyrazolo [1,5-a] pyridin-2-yl)-5-[methyl (prop-2-	

		ynyl)amino] pyrazole-4-carbonitrile
8	Oxazinones	
a	MY-100	3-[1-(3,5-dichlorophenyl)-1-methylethyl]-3,4-dihydro-6-methyl-5-phenyl-2H-1,3-oxazin-4-one
9	Oxazoles	
a	Lake Palace	3-[[(2,5-dichloro-4-ethoxyphenyl) methyl] sulfonyl]-4,5-dihydro-5,5-dimethylisoxazole
10	Oxazolidinediones	
a	KPP	Pantoxazone
11	Phosphinates	
a	MPBS	Methyldichlorophosphine
12	Pyrimidinediones	
a	PCM	N-(2 Chloro-4 Fluoro-5-((ethoxy carbonyl)-amino)-benzoyl)-N-iso-propyl-N-methyl-sulfamid
b	EATB	Ethyl 3-amino-4,4,4-trifluorobut-2-enoate
13	Pyrimidinyloxybenzoic acid	
a	Bispyribac sodium	2,6-bis(4,6-dimethoxypyrimidin-2-yloxy)benzoic acid
14	Pyrimidinylsulfonylurea	
a	FRSF	N,N-Dimethyl-2-[N-[N-(4,6-dimethoxy pyrimidin-2-yl)-Amino carbonyl] Amino sulfonyl]-4-(N-formylamino) benzamide, sodium salt
b	ESPS	3-ethylsulfonyl-2-pyridine sulfonamide
15	Sulfonylurea	
a	AMSB(Mesylamide)	Methyl 2-Amino-4-{[(methyl sulfonyl)amino] methyl} benzoate
b	OTMA	2-(Trifluoro Methoxy) Aniline
16	Triazines	

a	CNZ	Cyanazine	
17	Triazopyrimidine sulfonamides		
a	DTPBS	N-(5,8-Dimethoxy [1,2,4] Triazolo [1,5-c] pyrimidine-2-yl)-2-Fluoro-6-(Trifluoro Methyl) Benzene Sulfonamide	
Fungicides and intermediates			**3550**
1	Active amide Fungicides		
a	SSF-126/OXIME	(2E)-2-(methoxyimino)-N-Methyl-2-(2-Phenoxy Phenyl) Acetamide	
b	TRFRN	N,N'-[1,4-Piperazinediyl-bis(2,2,2-Trichloro Ethylidene)]-Bis-[Formamide]	
c	FNXL	N-(1-Cyano-1,2-Dimethylpropyl)-2-(2,4—Dichlorophenoxy) Propanamide	
d	MIPD	(1E)-1-(2,5,5-Trimethyl-1,3-dioxan-2-yl) Propane -1,2-dione 1-(O-Methyloxime)	
e	ORST	Orysastrobin	
2	Benzamides		
a	ZXMD	(RS)-3,5-Dichloro-N-(3-Chloro-1-Ethyl-1-Methyl-2-Oxopropyl)-p-Toluamide	
3	Carboxamides		
a	AMB	3,4,5-Trifluoro-Amino biphenyl	
4	Organophosphates		
a	KTZ(Kitazin)	S-benzyl O,O-Diisopropyl Phosphorothioate	
5	Pyridine Fungicides		
a	CTPE	2-[3-Chloro-5-(Trifluoro methyl) Pyridin-2-yl] Ethanamine	
6	Pyrimidines		
a	AZST	Methyl (E)-2-{2-[6-(2-Cyanophenoxy) pyrimidin-4-yloxy] phenyl}-3-Methoxy acrylate	

7	Quinoxalines		
a	CMTH	4-(Methoxy-6-(trifluoro methyl)-1,3,5-triazin-2-amine	
8	Triazoles		
a	IPCZ	(1RS, 2SR, 5RS; 1RS, 2SR, 5SR)-2-(4-Chlorobenzyl)-5-Isopropyl-1-(1H-1,2,4-triazol-1-ylmethyl) Cyclopentanol	
b	FTL	1-(2-Fluorophenyl)-1-(4-Fluorophenyl)-2-(1, 2, 4-Triazol-1-yl) Ethanol	
c	FOX	2-(2-Fluorophenyl)-2-(4-Fluoro phenyl) Oxirane	
d	IBCZ	(4-Chlorophenyl) Methyl N-(2,4-Dichlorophenyl)-1H-1,2,4-Triazole-1-Ethanimidothioate	
Fine Chemicals			**7500**
1	Substituted Anthraanilic acid		
a	ACBM	2-Amino-3-Chlorobenzoic Acid Methyl Ester	
2	Substituted 1,2,4-Triazole		
a	AMT	5-Amino-1,2,4-Triazole-3-thiol	
3	Substituted tetrahydo pyran		
a	ATHP	1-(Tetrahydropyran-4-yl) Ethanone	
4	Dimethyl halo substituted benzene		
a	CDMA	4-Chloro-2,6-Dimethyl Aniline	
b	CDMB	4-Chloro 2,6-Dimethyl-Bromo benzene.	
5	Substituted cyclopropyl ethanone		
a	CPFK	1-Cyclopropy-2(2 Fluorophenyl) Ethanone	
6	Substituted alkyl diamine		
a	DAEEA	N,N'-Bis(2-Hydroxyethyl) Ethylene Diamine	

7	Substituted dihalo pyridine		
a	DCTFP	2,3-Dichloro-5-(Trichloromethyl) Pyridine	
8	Subsituted dimethyl dioxane methanol		
a	DHD	2, 2-Dimethyl-5-Hydroxymethyl-1, 3-Dioxane	
9	Substituted Butanone		
a	DMB	4,4-Dimethoxy-2-Butanone	
10	Substituted Butanoic acid		
a	EMBA	2-Ethyl-2-Methyl Butanoic acid	
11	Substituted Hydrazine		
a	MMH	Mono Methyl Hydrazine	
b	UDMH	1,1,-Dimethyl Hydrazine	
C	SDMH	1,2-Dimethyl Hydrazine	
12	Substituted Phenothiazine		
a	10-H Phenotiazine	10-H Phenotiazine	
13	Substituted diphenyl ether		
a	Metaphenoxy benzaldehyde	3-Phenoxy Benzaldehyde	
Pyrazoles			**5500**
1	n-alkyl 3,4,5 sustituted pyrazoles		
a	PFD	N-{3-Isobutyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl) ethyl] phenyl}-1,3,5-Trimethyl Pyrazole -4- Carboxylic Amide	
b	TBFN	4-Chloro-N-[[4-(1,1-Dimethylethyl) Phenyl] Methyl]-3-Ethyl-1-Methyl-1H-Pyrazole-5-Carboxamide	
c	TLF	Tolfenpyrad	
d	IBA	3-Isobutylanoline	
e	OCTOPUSSY	3-[[[5-(Difluoro methoxy)-1-methyl-3-	

		(Trifluoromethyl)-1H-pyrazol-4-yl] methyl] sulfonyl]-4,5-Dihydro-5,5-Dimethyl isoxazole	
f	MY-71	3-[1-(3,5-Dichlorophenyl)-1-Methylethyl]-3,4-Dihydro-6-Methyl-5-Phenyl-2H-1,3-oxazin-4-one	
g	MTP	1-Methyl-3-(Trifluro methyl)1H-Pyrazol-5-ol	
h	DCPA	1,3-Dimethyl-5-Chloro-4-Pyrazolyl Carboxylic Acid Chloride	
i	CFPA	3,4-Dichloro-5-Fluoro Biphenyl-2-Amine	
j	ACH	3-(Difluoro Methyl)-1-Methyl-1H-Pyrazole-4-Carboxylic Acid	
k	BDB	4-Bromo- 1,2-Dichloro Benzene	
l	PRZ	Difluoro Methyl-N-Methyl Pyrazolic acid	
Fluorospeciality products			**2000**
1	Fluoro substituted alkyl amine		
a	DFEA	2,2-Difluoro Ethylamine	
Pharma intermediates			**1000**
1	Substituted triazole carboxylate		
a	EMTC	Ethyl-4-Methyl-1,3-Thiazole-5-Carboxylate	
Specialty Chemicals			**1000**
1	Substituted cyclohexane carboxylate		
a	ETMD	Methyl cis-1-[2-(2,5-Dimethyl phenyl)-Acetyl amino]-4-Methoxy-Cyclohexane Carboxylate	
2	Hepta Fluoro Alkane		
a	HFMOP	1,1,1,3,3,3-Hexafluoro Isopropyl Methyl	

		Ether	
3	Substituted 1,3-dioxalane		
a	MDO	2,2-Dimethyl-4-Methylene-1,3-Dioxalane	
4	Substituted Isobutyrate		
a	CMIBA	Chloromethyl 2-Methyl Propanoate	
5	Substitued plenyl ether		
a	CMTB	2-Chloro-4-(Methyl sulfonyl)-3-[(2,2,2-trifluoro ethoxy) methyl] Benzoic Acid	
Performance Chemicals			**13000**
1	Substituted phenyl morpholoine Ketone		
a	PCBM	1-(4-Chlorophenyl)-2-methyl-2-(morpholin-4-yl)propan-1-one	
2	Catecol mixed salt		
a	Negolyte	Titanium Biscatecholate Monopyrogallate Sodium Potassium Salt	
New R&D product for Pilot scale			**240**
		Total	**44240**

Sr. No.	**List of By-products**	**Quantity (MTPA)**
1	27% NaSH	1000
2	30 % HCl	12000
3	Ammonia Solution 15%	1000
4	H_2SO_4	300
5	Distill Solvent	6900
6	Sodium Propionate	2400
7	Acetic Acid	1200

8	Orthocresol	300
9	Propionic Acid	900
10	Ammonium Chloride	500
11	HBr	1000
12	Sodium hypochloride solution	900
13	$AlCl_3$	1800
	Total	**30200**

(iii) **Water Requirement:** Total water requirement will be 2973 KLD (2839 KLD fresh + 134 KLD recycle) from SEZ water supply.Total w/w generation will be tune around 1385 KLD; out of which 60 KLD goes to incinerator, 19 KLD system loss & salt generation and 134 KLD treated water recycle and resulted 1172 KLD waste water generation goes to ETP.

(iv) **Power Requirement:**Power requirement will be 25000 KVA and it will be fulfilled by DGVCL.

(v) **Fuel Requirement:**Consumption of furnace oil will be 204 MT/day (350 kg/day) will be used as fuel in boiler. HSD (10 lit/hr) will be used as fuel in D.G. set.

(vi) **Solid/Hazardous waste generation**: Details are given as under

Sr. No.	**Type of Waste**	**Category of Waste as per HWM Rules 2016**	**Quantity**	**Disposal facility**
1.	ETP Sludge & MEE salt	35.3	900 MTPM 2700 MTPM	Collection, Storage, Transportation & Disposal in approved common TSDF/co-processing.
2	Used Oil	5.1	25 KL/month	Collection, storage and reused or sold to registered refiners
3	Residues after distillation, fractionation, condensation recovery etc./Solvent Distillation Residue	20.3	20000 MTPM	Collection, storage, & Incineration in house or in approved common incineration facility or co-Processing/ incineration
4	Spent Carbon	36.2	50 MTPM	Collection, storage & Incineration in house or in approved common

					incineration facility or Send to Authorized recyclers/ re-processors for recovery/co-processing
	5	Process Waste (Process Waste Sludge/residue)	29.1	1800 MTPM	Collection, storage, & Incineration in house or in approved common incineration facility or Co-processing/co-incineration facility
	6	Incineration Ash	37.2	1000 MTPM	Collection, Storage, Transportation & Disposal in approved common TSDF site.
	7	Discarded containers / drums/ liners	33.1	300 MTPM & 50000 Nos.PM	Recycled or sold to authorized scrap dealer or end users or disposal in approved common TSDF/incineration in-house as well approved common facility or sent for common decontamination facility
	8	Date Expired off specification products	29.3	100 MTPM	Collection, storage, & Incineration in house or in approved common incineration facility/co-processing
	9	Spent/Crude Solvent	29.4	30000 MTPM	Collection, storage, & Incineration in house or at authorized CHWI facility or Co-processing or reuse by in-house solvent distillation. In Some of the product where purity requirements are very high, recycling is not possible due to build-up of moisture or some specific impurity, such solvents are required to be sent to authorized as well as CPCB registered solvent

				distillation unit. Sold to GPCB Authorized recyclers/distillators/re-processor
10.	Spent Catalyst	29.5	50 MTPM	Collection, storage & Incineration in house or in approved common incineration facility or co-processing, Send to Authorized recyclers/ re-processors for recovery or sent for regeneration to supplier.
11.	Spent Acid	29.6	1500 MTPM	Collection, storage, & Incineration in house or in approved common incineration facility or co-processing, Send to Authorized recyclers/ re-processors, reuser
12.	Spent Resin	34.2	2 MTPM	Collection, storage, transportation and disposal in approved common TSDF
13.	NaBr/MgBr		5000 MTPM	Collection, storage, transportation and sold to bromine manufacture or any recovery or processing or incineration/co-processing/ common effluent treatment

(vii) **Capital cost:** The cost of the project is estimated around ` 393 crores.
(viii) **CSR plan:** Promotion of education and possible infrastructure development in nearby villages will be undertaken possibly.
(ix) **Descriptions of Environmental sensitivity:** No Eco-sensitive location falls within the 10 km radius including National Park, Wild Life Century and any Eco Sensitive area declared by MoEF&CC.
(x) **Forest land involved:** No forest land involved in proposed project.
(xi) CRZ not applicable.
(xii) 10 M green belt proposed around the periphery of the plant.
(xiii) Project location is in Notified Industrial Area.

EAC after detailed deliberations recommended the proposal for grant of following

	additional TOR along with other generic TOR (refer Ministry's website) for preparation of EIA/EMP report. i. ZLD will be adopted essentially. ii. 24hr indoor monitoring of volatile compounds. iii. Peripheral green belt to be developed inside the plant boundary as per CPCB norms. iv. In view of the production quantity and toxicity of the chemical the EAC emphasized on the need of public hearing even though the project is located in an notified industrial estate. 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 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.
18.10.6	**Expansion of Manufacturing Capacity of existing products and manufacturing new pesticides and intermediates at E51-1&2, E52, MIDC Notified Industrial Estate, Tarapur, Boisar, Dist: Palghar, Maharashtra by M/S. UPL LIMITED UNIT # 10-[IA/MH/IND2/61495/2017, IA-J-11011/7/2017-IA-II(I)]- Terms of Reference** The project is located in notified industrial area. i. The proposed project is for the expansion of Manufacturing Capacity of existing products and manufacturing new pesticides and intermediates at UPL Tarapur Unit # 10 located at E51-1&2, E52, MIDC Notified Industrial Estate, Tarapur, Boisar, Dist: Palghar, Maharashtra. ii. The proposed project having geological co-ordinates LATITUDE: $19^0$48'19.34" and LONGITUDE: $72^0$43'41.41" with total plot area around 23454 sqm. iii. Total 140 company employee & 160 contract workers will be utilized for proposed expansion project and All the manpower will be locally utilized. iv. The unit is manufacturing pesticides product like Metribuzin and the Company now plans to expand the capacity of certain existing products like Phosphorus Tri Chloride (PCL3), Phosphorus Oxy Chloride (POCL3), Phosphorus Acid both crystals & Solution, DPHP, Tri Phenyl Phosphite (TPPI), Ammonium Sulphate and Metribuzin. v. The company is also planning to add few more pesticide Technical, Intermediate and Formulation products such as Triazinone, Acephate, DDVP, Glyphosate, Clomazone, Sulfosulfuron, Pyrazosulfuron ethyl, Bensulfuron Ethyl, Metsulfuron Ethyl, Asulam, Azoxystrobin, Devrinol, Tri Phenyl Phosphate (TPPA) and Asulox. vi. The Unit is having various infrastructure facilities to take care of effluent generated and control air pollution. The facilities include effluent treatment plant with primary and secondary treatment. The treated effluent from the unit is discharged to the common effluent treatment plant (CETP), Tarapur for further treatment and disposal. The solid / hazardous waste generated is sentto TSDF Facility operated by Mumbai Waste Management Limited Taloja for Treatment and disposal.

vii. **The Company had obtained Environmental Clearance for Agro Chemicals. & intermediate Chemicals on dated April 15, 2008 in the name of M/s Punjab Chemicals and Crop Protection Ltd vide Environmental Clearance No.: J-11011/712/2007-IA-II (I).**

viii. Now, the Company proposes to expand production of existing 11 products & also plans to add 14 new products at the site. UPL has expertise in the manufacturing and marketing various pesticides and it is proposed to manufacture 25 pesticides and intermediate chemicals at Tarapur site.

ix. The proposed project falls under item 5(b) of schedule, Category 'A' as per EIA Notification 14th Sep, 2006 and amended thereof.

x. The proposed Expansion will be in existing premises only of proponent by using spare existing land & infrastructure.

xi. Total existing water consumption as per CC&A is @ 166.56 m^3/day & Additional for proposed EC is 538.5 m^3/day. Total water consumption after EC expansion will be 705.06 m^3/day. The entire water requirement is being met through MIDC.

xii. Total Power requirement after expansion will be 4332.14 kW. The provision for power backups for existing 2nos. of DG set (capacity: 500 KVA 1 Nos and 250 KVA 1 Nos) and Proposed additional DG Sets of 750KVA (2 Nos.) as standby source of electricity in case of power supply failure.

xiii. The total Project cost will be around Rs. 227.06 Crores.

xiv. The project site is well connected with rail and road. There are about 35 villages falling within the area of 10 kms radius of project site as center State Highway (SH)-74 is adjacent to the site and Boisar Railway Station is 4 km away from project site.

xv. The products and production capacity of existing and proposed plant are as follows:

S. No	By Product Name	Existing Generation (MT/Month)	Additional Generation (MT/Month)	Total Generation (MT/Month)
Existing By-Products				
1	30% HCl	100	1776	1876
Proposed By- Products				
2	30% NaSH	0	780	780
3	Methyl Chloride	0	22.85	22.85
4	Ammonium Acetate	0	783.35	783.35
5	Methanol	0	98.4	98.4
6	Phenol	0	12.95	12.95
7	Ammonium Sulphate	0	330.5	330.5

8	Ammonium Sulphate Solution (15%)	0	473.6	473.6
9	Acetic Acid (30%)	0	708	708
10	Acetic Acid (45%)	0	472	472
11	Acetic Acid (99%)	0	214.5	214.5
12	Sodium Acetate (27%)	0	1075	1075
13	Sodium Sulphate	0	83.2	83.2
14	NaBr	0	2750	2750
TOTAL		**100**	**9580.35**	**9680.35**

The EAC critically examined the project details and in view of the production and toxicity of chemicals product be produced the EAC emphasized on conduct of Public hearing and the PP agreed. The EAC after detailed deliberations recommended the proposal for grant of following additional TOR along with other generic TOR (refer Ministry's website) for preparation of EIA/EMP report.

1. ZLD system to be installed.
2. Lay out plan will be modified making provisions for at least 10M wide green belt of perennial indigenous trees around plant periphery.
3. Public hearing to be conducted as per provisions of the EIA Notification, 2006.
4. Certified compliance report of the existing EC to be submitted.

18.10.7 **BS VI Fuel Quality project of Guru Gobind Singh Refinery Limited by M/s HPCL-MITTAL ENERGY LIMITED (HMEL)- [IA/PB/IND2/61343/2016, J-11011/386/2016-IA.II(I)]- Terms of Reference**

The PP made a presentation before the EAC and informed that:

i. Project site is located at Village- Phullokhari, District – Bathinda, State – Punjab.
ii. Guru Gobind Singh Refinery has presently current capacity of 9 Million Metric tons per Annum (MMTPA) at Bathinda, Bathinda district of Punjab.
iii. The refinery is expanding capacity to 11.25 MMTPA and the EC has been obtained on 22nd June 2015.
iv. As per directive by Ministry of Petroleum and Natural Gas (MoPNG) and Govt. of India Auto Fuel (AF) Vision and Policy 2025, there will be introduction of 100% BS-VI Auto Fuel in the entire country by 1st April 2020.
v. HMEL Refinery would meet the 100% BS-VI HSD mandate with commissioning of DHDT.
vi. During Construction Phase indirect employment will be generated for approximately 500 - 1000 labourers/ day.
vii. The proposed project of Guru Gobind Singh Refinery is given below.

a) Diesel Hydro Treating Unit: 1.9 MMTPA (New)

b) Revamp of Hydrogen Generation Unit (25 % increase in capacity): 2 x 11 KTPA

viii. The above project will enable to produce 5018 KTPA BS VI HSD.

ix. Previous Environmental Clearances issued to Guru Gobind Singh refinery are as follows.

Sl No	Environmental Clearances	Environmental Clearance MoEFCC Document No.	Date	Compliance
1	Refinery expansion from 9 to 11.25 MMTPA	J-11011/275/2007 IA II (I)	22/06/2015	Complied
2	Modification of 9 MMTPA refinery configuration	J-11011/275/2007-IA II (I)	16/07/2007	Complied
3	9 MMTPA Grass root refinery project	J-11011/24/98-IA II(I)	06/11/1998	Complied

x. **Land:** BS VI project is coming within the refinery land and no additional land is required.

xi. **Raw Material:** Fuel Oil from refinery will be used.

xii. **Water:** Additional water requirement for proposed BS VI project is 32 m^3/hr. The water shall be sourced from Kotla Canal.

xiii. **Power:** Total power requirement shall be 6.9 MW. The requirement will be met from power generated from refinery.

xiv. **Fuel:** Additional fuel consumption 1.4 MT/hr for the proposed project.

xv. **Gaseous Emission**: An additional 0.16 TPD SOx emission is envisaged from refinery post BS VI project. The present stipulated limit prescribed by MoEFCC is 23.64 TPD.

xvi. **Liquid Effluent**: Additional liquid process effluent of 5 m3/hr will be generated. The present ETP is adequate to handle the extra flow. The present ETP capacity is 500 m3/hr.

xvii. **Solid Hazardous Wastes**: There will be additional 375 MT spent catalyst generation in 3 years which will be disposed to authorized recyclers.

xviii. Capital cost of the project: Rs 1100 Crores. Estimated time of completion of BS VI project: 36 months**.**

xix. **Environmental sensitivity:** Project is coming up within the existing refinery premises. The environmental consideration surrounding 10 km radius from refinery is given below.

xx. Emergency Preparedness Plan has been prepared for the existing refinery and the same will be updated after Post BS VI project.

xxi. No Forest land involved.

xxii. Guru Gobind Singh Refinery existing CSR programmes shall be continued post BS VI project.

The EAC deliberated on the proposal and noted that the project is for quality up gradation of product and is for betterment of the environment. The EAC after detailed deliberations unanimously recommended for grant of following additional TOR alongwith with other generic TOR (refer Ministry's website) for preparation of EIA/EMP report.

i. Public hearing is exempted under para 7 (ii) of the EIA Notification, 2006.

ii. ZLD to be adopted.

18.10.8	**Development drilling of 200 wells in Sivasagar District, Assam by M/s ONGC Ltd.[IA/AS/IND2/61229/2016, J- 11011/369/2016-IA.II(I)]- Terms of Reference** The PP made a presentation before the EAC and informed that: i. **Land:** 1.96 hectare of land is required for each well. ii. **Power:** The power requirement for each exploratory well will be met through the operation of AC-SCR DG set. One DG set will be operable during site construction, two operable and one standby during drilling operation and one for lighting and other power requirements. iii. **Fuel**: It is estimated that 4.8 KL/D of diesel will be required during drilling Phase. iv. **Source:** Fuel will be supplied onsite by local supplier through mobile tankers v. **Water:** The water requirement in a drilling rig is mainly meant for preparation of drilling mud apart from washings and domestic use. While the former consumes the majority of water requirement, the water requirement for domestic and wash use is very less. The daily water consumption will be 25 m3/d of which 15 m3/d will be used for mud preparation and 10 m3/d will be used for domestic purposes including drinking. vi. S**ource:** Water will be sourced from contractors through tanker or tube well after validating their permission from concerned authorities. vii. The proposed activity for exploratory well drilling involves. viii. **Gaseous Emissions:** Air emissions from point sources expected from the proposed drilling will be mainly from diesel engines and power generators operated during the drilling phase and the campsite. The principal pollutants will be Particulate Matter (PM), Sulphur and Nitrogen Dioxides (SO_2 and NO_2) and other Hydrocarbons (HC). ix. **Liquid Effluents:** A total of 1400-1800 m3 of Drilling and Wash Wastewater will be generated peak drilling period x. **Solid and Hazardous waste:** About 10-20kg/day of kitchen waste is estimated to be generated. Besides, • Construction of access roads and drill sites • Well drilling and testing • Site Closure and Well decommissioning The major solid waste generated during peak drilling period will be **400-600 M^3**of mud Cuttings, **600 M^3** of waste drilling mud (liquid) would also be generated. xi. Drill cuttings generated will be collected and separated using a solid control system and temporarily stored on-site in HDPE lined pits. xii. Drilling and wash wastewater generated will also be stored at an onsite HDPE lined pit. xiii. The water will be adequately treated in a mobile ETP. xiv. Investment in flood prevention/ control infrastructure measures to reduce effect on project and on surrounding agricultural areas. xv. Optimal usage of natural resources, raw material. Especially, groundwater should be abstracted from aquifers deeper than the one in existing use to prevent over extraction of groundwater. xvi. Control measures to manage transportation impacts on people xvii. The risk associated with the project activity is **Blow Out** {uncontrolled release of well fluid (primarily hydrocarbons viz. oil and/or gas and may also include drilling mud, completion fluid, water etc.) from exploratory well}. ONGC will be adopting and implementing Safe Operating Procedures (SOPs) developed as part of its Onsite Emergency Response Plan to prevent and address any blow out risks. EAC after detailed deliberations recommended the proposal for grant of following additional TOR along with other generic TOR (refer Ministry's website) for preparation of EIA/EMP report :

	i. The Public hearing to be conducted as per provisions of the EIA Notification, 2006. ii. Minimum disturbance to the natural ecosystem to be ensured during drilling operations. iii. Regular monitoring of air and water to be done within 10 km of drilling locations. iv. No disturbance is allowed to the tribal population, if any, during project operations.
18.10.9	**Capacity Enhancement of ADB Gas Collecting Station (GCS) from existing 2.2 MMSCMD to 2.71 MMSCMD and ETP of capacity 100m3/day by M/s ONGC Ltd.[IA/TR/IND2/61661/2017, IA-J-11011/15/2017-IA-II(I)] -** The PP made a presentation before the EAC and informed that: i. With a view to monetize the idle gas reserves and improve the power scenario of the North-East, ONGC conceptualized setting up Mega Power Plant of 726.6 MW capacity through a joint venture company viz. ONGC Tripura Power Company (OTPC) at Palatana in 2005. Subsequently, keeping in view the latest gas demand scenario in the state, ONGC Management has recently strategized to produce and supply 5.0 MMSCMD from the Tripura state. ii. This project includes the following activities: a) Capacity Enhancement of Agartala Dome GGS to 2.71 MMSCMD in same area b) Effluent Treatment Plants (ETPs): ETP for handling 100 m3/day at ADB GCS iii. The proposed project is "De-bottlenecking study for handling additional gas at ADB GCS, Tripura Asset". There is no requirement of extra land for this project. The construction completion schedule is 15 months. The major part is construction of concrete foundation and assembling of instruments. The environment protection measures already in place are sufficient. No deviation from the current environmental condition is envisaged. iv. Major emergency situations during operations are fire and gas leakage. Emergency control measures are defined for each situations. Already Fire/smoke detectors, gas detectors are provided for early detection of fire in GCS. To minimize the consequences of disaster due to the situations mentioned above, disaster management plans (DMP) are already in place. v. Agartala Dome GCS, a gas installation of Tripura Asset currently supplies gas to OTPC, Palatana via ONGC operated trunk line and to NEEPCO via GAIL's trunk lines. The GCS also supplies gas to the Piped Natural Gas (PNG) network of Agartala city and CNG stations. Currently the designed capacity of GCS is 2.2 MMSCMD of Gas, 52.3 m3/day of condensate and 52.8 m3/day of produced water. vi. As the latest production profile indicates peak production of 2.71 MMSCMD of gas. The study envisages adequacy check of the existing facilities, identifying bottlenecks in the GCS and suggesting remedial measures for handling additional 0.51 MMSCMD gas. Based on the study, the constraints in processing additional

0.51 MMSCMD gas can be resolved by installing another i) scrubber, ii) filter and iii) flare knock-out drum. Cost of the Project is estimated as 5.0 Crore. There is no requirement of extra land.

vii. Moreover, based on the liquid production profiles furnished by study, the above GGSs shall also be capable of handling the process water and condensate. Based on the expected liquid profile, 41-95 m3/d water is expected at ADB GCS. The facilities envisaged in ETP are to treat the effluent for the sub-surface disposal. Cost of the Project is estimated as 20.94 Crore.

viii. The environmental impact and safety issues of the proposed locations are briefly discussed. At the outset it is brought out that all existing installations of Tripura Asset have been holding QHSE accreditation (Quality Health, Safety & Environment Management System i.e. QMS-ISO 9001, EMS-ISO 14001 & OHSAS 18001) by third party certification body since March, 2005 and are timely renewed.

ix. The total cost including cost of ADB GCS up gradation and ETP construction of 100m3/day is approximately Rs. 26 Crores.

The EAC deliberated on the proposal. The PP requested for exemption from public hearing; however, it was noted that no public consultation was held earlier for the project. The EAC observed that it is an small expansion project; hence after due diligence recommended for exemption from public hearing under para 7 (ii) of the EIA Notification, 2006.

The EAC after detailed deliberations recommended the project for grant of Standard TOR (refer MoEF&CC website) as relevant to the activity, for preparation of the EIA/EMP report.

18.11 Any Other

18.11.1 **Expansion of Synthetic Organic chemicals (API's & Intermediates) manufacturing facility (338.3 MTPA to 650.0 MTPA) at existing plot no Plot No. 31 to 35, 48 to 51, 1 to 5, 26 & K (Gat No. 201), Lakhamapur, TalukaDindori, District Nashik, Maharashtra by M/s Megafine Pharma(P) Ltd.- TOR Amendment {J-11011/91/2016- IA II(I); IA/MH/IND2/50828/2016}**

Ministry had issued TOR to M/s Megafine Pharma(P) Ltd., vide letter No.J-11011/91/2016-IA II (I) dated 23rd September, 2016 for Expansion of Synthetic Organic chemicals (API's & Intermediates) manufacturing facility (338.3 MTPA to 650.0 MTPA) at existing plot no Plot No. 31 to 35, 48 to 51, 1 to 5, 26 & K (Gat No. 201), Lakhamapur, TalukaDindori, District Nashik, Maharashtra.

Now PP wants to add one product and change the production quantity of one product. New product list is as follows:

Sr. No.	Therapeutic Category (type)	Existing capacity (MTPA)	Add. Proposed capacity (MTPA)	Total (MTPA)
1	Coagulant	0.45	9.15	9.60

2	Antidepressants	46.30	61.80	108.10
3	Thrombotic	0.25	2.25	2.50
4	Alzhemiers	4.00	3.50	7.50
5	Antianginal	0.10	0.45	0.55
6	Anithypertensive	57.20	3.25	60.45
7	Scziophrenia	54.50	48.30	102.80
8	Over Active Bladder	1.55	2.40	3.95
9	Multiple sclerosis	12.00	-7.00	5.00
10	Acute coronary syndrome	0.35	0.20	0.55
11	Psoriatic Arthritis	0.00	1.50	1.50
12	Cystic fibrosis	0.00	1.10	1.10
13	Insomnia	0.00	0.80	0.80
14	Antiemetic	0.00	0.60	0.60
15	Antidiabetic	0.50	3.50	4.00
16	Anti occular Hypertensive.	0.10	0.40	0.50
17	**Cough suppressant and not antidepressants ***	**0.00**	**11.00**	**11.00**
18	Antifungal	25.00	0.00	25.00
19	Anthelmentic	136.00	164.00	300.00
20	Post Operative Distention	0.00	0.50	0.50
21	**Anti-hyperparathyroidism#**	**0.00**	**4.00**	**4.00**
	Total	338.3	311.7	**650.0**

* Quantity changed from 15 TPA (at the time of TOR) to 11 TPA
# Additional Therapeutic category

After deliberation, the Committee recommended the aforesaid amendment in existing TOR issued on 23rd September, 2016.

18.11.2 **Expansion of an Organic Pigment manufacturing unit BY M/S Ramdev Chemical Industries (Unit – II) –Extension of validity of EC reg. [IA/GJ/IND2/52718/2009, J-11011/993/2008-IA II(I)**

PP did not attend the meeting.

18.11.3 **Change of Technology for spent wash treatment of 60 KLPD Distillery / 30 KLPD ENA and 30 KLPD Ethanol based on 'Concentration and Incineration' instead of Bio composting alone by M/S. BHAURAO CHAVAN SAHAKARI SAKHAR KARKHANA LTD., AT A/P - LAXMINAGAR, DEGAON- YELEGAON TAL - ARDHAPUR, DIST - NANDED, MAHARASHTRA STATE. Amendment in EC reg. [IA/MH/IND2/55598/2009, J-11011/34/2009-IA II (I)].**

Ministry had issued EC to M/S. Bhaurao Chavan Sahakari Sakhar Karkhana Ltd., vide letter No.J-11011/34/2009-IA II (I) dated 13th April, 2009 for Expansion of Sugar mill, distilley unit and Co-gen power unit at Laxminagar, Nanded, Maharashtra.

Now PP propose to provide concentration & incineration technology instead of Anaerobic digestion followed by concentration in MEE and composting for the treatment of Spent wash. PP also wants to increase the operation days of the distillery from 270 to 330 days.

After deliberation, the Committee recommended the aforesaid amendment in existing EC.

18.11.4	**Expansion of Bulk Drug Manaufacturing unit by M/s DASAMI LAB PVT.LTD. (Formerly Known as Medchem Organics Pvt. Ltd.) SY.NO. 404, 405, 407, 408, 409 & 410, VELIMINEDU VILLAGE, CHITYAL MANDAL, NALGONDA DISTRICT, TELANGANA. Name change in EC [IA/TG/IND2/42430/1900, J-11011/533/2007-IA I (II)].** Ministry had issued EC to M/S. SVAKRM laboratories (P) Ltd., vide letter No.J-11011/34/2009-IA II (I) dated 21st February, 2008 for New Bulk Drug Manufacturing unit at Veliminedu village, Chityal Mandal, Nalgonda District, Telangana . During presentation PP informed that they had applied for TOR and project was recommended for TOR in April, 2016 EAC meeting since then it is pending for due to the name change of EC. Now PP has submitted the documents related to name change. After deliberation, the Committee recommended for name change M/S. SVAKRM laboratories (P) Ltd., to M/s Dasami Lab Pvt. Ltd.
18.11.5	**Proposed 51 MW Combined Cycle Power Plant inside ONGC Hazira Plant at Tehsil Chorasi, district Surat by M/s ONGC ltd.- TOR Amendment reg. [IA/GJ/IND2/53457/2016, J-11011/117/2016- IA II(I)]** Ministry had issued TOR to M/s ONGC ltd., vide letter No.J-11011/117/2016-IA II (I) dated 25th October, 2016 for Proposed 51 MW Combined Cycle Power Plant inside ONGC Hazira Plant at Tehsil Chorasi, district Surat. The TOR was awarded with public hearing. Now, Project Proponent has applied online application vide dated 5th January, 2017 seeking amendment in TOR's for exemption of Public Hearing. PP has informed that hazira plant is situated in Hazira notified area and submitted the letter from the office of Chief officer, Notified area office, Hazira where the site is located. Accordingly the Committee exempted the project from public hearing. After deliberation, the Committee recommended the aforesaid amendment for exemption of Public Hearing in existing the TOR issued on 25th October, 2016.
18.11.6	**Drilling of Exploratory Wells (26 Nos.) in PEL & PML blocks of Cachar Forward Base, in Assam by M/s ONGC Ltd. – reconsideration of EC {J-11011/229/2012- IA II (I))((IA/AS/IND/3530/2012)}** Project was considered in 15th EAC meeting held during 10th November, 2016, wherein the committee deferred the proposal for the following ;- 1. Ambient air monitoring was done inappropriate location. Therefore, to gather representative samples, air monitoring to be conducted in such a manner to represent background data of well locations. 2. Water quality monitoring to be repeated as consultant unable to explain the correlation between inconsistent values. 3. Action taken report on non complied points w.r.t inspection done by RO, MoEF&CC.

	Now PP vide letter dated 13.12.2016 has submitted the following additional information: 1. PP has submitted the report of re-analysis data for ambient air quality. 2. PP has submitted the report of re-analysis of water quality. 3. PP vide letter dated 4.11.2016 has submitted the action taken report w.r.t. non compliance points raised by RO, MoEF&CC, which are as follows: i. KSAF, KSAG cluster from KSAC. ii. PLAA cluster from ELAB. iii. MGAA is is private land. iv. KHAW & CLAA cluster from KHAI. v. KHAX cluster from KHAP. vi. KHBA, KHBB cluster from KHAT. vii. SUAB cluster from Suphyam-1. viii. Forest clearance has been obtained for NRAF. ix. MJAA, KSAH, KSAI, PLAB, ELAH, TLAA, KHBC, CJAA, NRAH, KHBD, KHBE, KHBF and KHBD are under process for forest clearance. The Committee after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions: i) Forest clearance to be obtained for MJAA, KSAH, KSAI, PLAB, ELAH, TLAA, KHBC, CJAA, NRAH, KHBD, KHBE, KHBF and KHBD drilling locations as mentioned in earlier EC. 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 16th November, 2009 for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, CH_4, 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 from tankers shall not exceed 25 m^3/day/well and prior permission should be obtained from the Competent Authority. vii) Water Based drilling mud shall be used. viii) 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. ix) Disposal of drill cuttings and drilling mud is as per Gazette notification dated 30.08.2005 , G.S.R. 546 (E) , Section C "Guidelines for Disposal of Solid Waste, Drill Cutting and Drilling Fluids for Offshore and Onshore Drilling Operation". It is excavated in specially designed pit with HDPE

	lining and is topped with native soil. Other hazardous waste like empty bags, cotton waste, gloves etc are transported to TSDF site. Whereas, POL/chemical containers and spent oil are recycled through authorized vendors. x) No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. xi) The rig wash water and drilling wastewater shall be treated through a mobile Effluent Treatment Plant installed at the drilling site. The plant shall be capable of handling 10 KLD of drilling effluents. Domestic wastewater will be treated through a soak pit/septic tank arrangement. xii) Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/ soak pit. xiii) 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. 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_2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H_2S detectors in locations of high risk of exposure along with self containing breathing apparatus. xvi) Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India. xvii) All the commitments made to the public during public hearing/public consultation meeting held on 14.9.206 at Karimganj District, on 15.09.2016 at Cachar District(Silchar), Assam shall be satisfactorily implemented and adequate budget provision shall be made accordingly. xviii) 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. 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. 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. xxii) Company shall have own Environment Management Cell having qualified persons with proper background.

xxiii) Company shall prepare operating manual in respect of all activities. It shall cover all safety & 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.

xxiv) On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.

18.11.7 **Exploratory Drilling of well ANOR-A (Onshore) in NELP-VII, block CBONN-2005/10 Block in Western Onshore Basin, Gujarat by M/s ONGC Ltd. Amendment in EC [IA/GJ/IND/5200/2012, J-11011/470/2009-IA-II(I)**

PP did not attend the meeting.

18.11.8 **Proposed 51 MW Combined Cycle Power Plant inside ONGC Hazira Plant at Tehsil Chorasi, district Surat by M/s ONGC ltd.-reg , Amendment in TOR {J-11011/117/2016-IA-II(I), IA/GJ/IND2/53457/2016}**

Repetition of agenda item no. 11.8.5

18.11.9 **Exploratory Drilling (24 additional wells) in On-shore PEL Block L-II of Cauvery Basin, District Nagapattinam, Tamil Nadu by M/s Oil & Natural Gas Corporation Ltd. (ONGCL)- regarding Amendment in EC. [IA/TN/IND/22816/1910, J-11011/2/2011-IA.II(I)]**

Ministry had issued EC to M/s Oil & Natural Gas Corporation Ltd. (ONGC) vide letter No.J-11011/2/2011-IA II (I) dated 21st August, 2013 for Exploratory Drilling (24 additional wells) in On-shore PEL Block L-II of Cauvery Basin, District Nagapattinam, Tamil Nadu.

Now PP want to change the drilling locations of 5 wells which are as follows:

S. No.	Name (old location)	Coordinates	Name (new location)	Coordinates
1	B-CY-WVDR-1 (NVAB) TD:1750m Thiruvonam, Pudukottai District	Lat: 10°24'03.88766"N Long: 79°04'45.13311"E	B-CY-WVDR-1 (NVAB) TD:1750m Alangudi, Pudukottai District	Lat: 10°21'33.88" N Long: 79°08'09.66" E
2	B-CY-NKK-4 (NKKAE) TD:2450m Mannargudi, Thiruvarur District	Lat: 10°37'06.58527"N Long: 79°30'42.17503"E	B-CY-NKK-4 (NKKAE) TD:2450m Thiruthuraipoondi, Thiruvarur District	Lat: 10°36'07.20" N Long: 79°32'47.00" E
3	B-CY-NVDR-3 (VDAD) TD:3560m Karambakudi, Pud ukottai District	Lat: 10°26'53.2"N Long: 79°06'31.65"E	B-CY-NVDR-3 (VDAD) TD:3560m G andarvakkottai, Pudu kottai District	Lat: 10°26'58.417 "N Long: 79°06'27.26" E

4	B-CY-PM-4 (KNAK) TD:4000m Thiruvarur, Thiruvarur District	Lat: 10°45'35.16"N Long: 79°38'43.03"E	B-CY-PM-4 (KNAK) TD:4000m Needamangalam, Thiruvarur District	Lat: 10°44'10.26" N Long: 79°28'46.78" E
5	B-CY-PD-4 (PDAC) TD:6500m Needamangalam, Thiruvarur District	Lat: 10°36'42.99"N Long: 79°35'02.94"E	B-CY-PD-4 (PDAC) TD:6500m Mannargudi, Thiruvarur District	Lat: 10°36'42.99" N Long: 79°35'02.94" E

The EAC noted that all the new proposed drilling locations are falling within 10 km of the earlier drilling locations for which EC has been issued on 21st August, 2013 except s. no. 4 i.e. drilling location B-CY-PM-4 (KNAK). The Committee noted that new drilling location B-CY-PM-4 (KNAK) is 18.30 km far from the existing drilling location.

After detailed deliberations the committee was of the view that the PP wants to change the drilling locations of above mentioned 5 wells and as PP has already conducted EIA and assessed the possible environmental impacts associated with the activity surrounding 10 km area at the time of EC, there is no need to conduct fresh EIA for the proposed change. Therefore Committee recommended the aforesaid amendment in existing EC except s. no. 4 i.e. drilling location B-CY-PM-4 (KNAK). Committee noted that new drilling location B-CY-PM-4 (KNAK) which is situated at 18.30 km far from the existing drilling location.

****

List of the Chairman and Members attended the Expert Appraisal Committee (EAC) for Industry-2.

S. No.	Name and Address	Position	Presence
1.	**Dr. J. P. Gupta** A- 1/2 Panchsheel Enclave, New Delhi- 110070 E-mail: jpglobalconsultinggroup@gmail.com	Chairman	P
2.	**Sh. R. K. Singh** 301, Tulsi Meadows Building, St. Anthony's Road, Near Uttam Society, Chembur, Mumbai-400071, Maharashtra E-mail: rksingh7854@gmail.com	Member	P
3.	**Dr. Ahmed Kamal** 8-2-619, Road no.11, Banjara Hills, Hyderabad 500034. E-mail: ahmedkamal@iict.res.in	Member	
4.	**Prof. J.R. Mudakavi** 1128, Adarsha Layout, West of Chord Road, III Stage, I Block, Basaveshwar Nagar, Bangalore-560079 E-mail: mudakavijr@gmail.com	Member	P
5.	**Dr. Ajay Gairola** 123 Thomsan Marg IIT, Roorkee campus E-mail: garryfce@iitr.ernet.in	Member	
6.	**Dr. N. Nandini** Reader Quarters 7, Jnanabharthi campus, Bangalore University E-mail: nandini.sai@rediffmail.com	Member	P
7.	**Prof. (Dr.) H.R. V Reddy** Director of Research, Karnataka Veterinary Animal & Fisheries Sciences University, College of Fisheries Campus, Kankanady, Mangalore- 575002 E-mail:hrvreddy@yahoo.co.in, drkvafsu@gmail.com	Member	P
8.	**Dr. Shashank Shekhar** 378 (First Floor), Sector-5, Vaishali, Ghaziabad, Uttar Pradesh. E-mail: shashankshekhar01@gmail.com	Member	
9.	**Ms. Saloni Goel** B-701,CSI Towers, Vipin Khand, Gomti Nagar, Lucknow-226010 E-mail sgoel.eac@gmail.com	Member	P
10.	**Shri Suhas RamchandraPharande** Ajinkyatara, Kala Nagar, Gangapur Road, Nashik-422002 E-mail: s_pharande@yahoo.com	Member	P

11.	**Shri G. C. Pati** Member (TT&WQ) ,Central Ground Water Board, Bhujal Bhawa, NH-IV, Faridabad-121001, E-mail: gcpati-cgwb@nic.in	Member	
12.	**Shri Sanjay Bist** Scientist- D Indian Meteorological Department, Mausam Bhawan, Lodhi Road, New Delhi- 110003 E-mail: sanjay.bist@imd.gov.in	Member	P
13.	**Sh. Paritosh Kumar** Additional Director, Central Pollution Control Board, New Delhi Email: 45pkumar@gmail.com	Member	P
14	**Prof. (Dr.) Y.V. Rami Reddy** Dept.of Chemistry, S V University, Tirupati Andhra Pradesh E-mail: dryvrsvu@gmail.com	Member	P
15.	**Shri Yogendra Pal Singh** Room No. 236, Vayu Wing, 2nd Floor, Ministry of Environment, Forest & Climate Change, Jor Bagh Road, New Delhi-110003, E-mail: yogendra78@nic.in Tele-fax : 011-24695365	Member Secretary	P