

MINUTES FOR 32nd RECONSTITUTED EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) HELD DURING 20-21st JANUARY , 2015

VENUE: Indus Hall, Ground Floor, Jal Wing, Ministry of Environment, Forests and Climate Change, Indira Paryavaran Bhawan Aliganj, Jorbagh Road, New Delhi - 110003.

Time : 10: 00 AM

32.1 Opening Remarks of the Chairman

32.2 Confirmation of the Minutes of the 30th Reconstituted Expert Appraisal Committee (Industry-2) held during 22nd-23rd December, 2014.

20th January, 2015

Time : 10: 00 - 10: 30 AM

Discussion and finalization of Modal TOR for Industry -2 prepared by ILFS

To generate modal TOR for Industrial sector-2, copies of the draft TOR prepared by the ILFS were circulated to all committee members. Member Secretary stated that these are drafts of 12 sectors in the industry-2. It was requested to give the suggestion and feedback for finalization of modal TOR. The Chairman was of the view that after preliminary discussion in these two days and same could be finalized in separate meeting with the Industry-1, which is to be held during 10-11th February, 2015. The chairman suggested to prepare general summary points together for all industries as it is common for all sector. In response, Member secretary responded that same can be explored, subject to convenience in processing and will be discussed in the next meeting. Meanwhile all members are requested to respond early by mail before 5th February so that same can be finalized before next meeting with Industry-1.

1st Session: Time: 10.15 AM

32.3 Environmental Clearance

32.3.1 Expansion of Pesticide Manufacturing Unit at Plot no. 1, 15, 16, Opp. State Bank of India, GIDC Ind. Estate, Nandesari, District Vadodara, Gujarat by M/s GSP Crop Science Pvt. Ltd. reg EC..

The project proponent and their consultant (Aqua-Air Environmental Engineers Pvt. Ltd. Stay order no. SCA/4979/2012 dated 24/1/2013) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the 6th Meeting of the Expert Appraisal Committee (Industry) held during 5th-7th March, 2013 for preparation of

EIA-EMP report. All units producing technical grade pesticides are listed at S.N. 5(b) under category 'A' and appraised at Central level.

M/s GSP Crop Science Private Limited has proposed to expand their manufacturing of pesticide manufacturing unit at Plot no. 1,15,16, Opp. State Bank of India, GIDC Ind. Estate, Nandesari, District Vadodara, Gujarat. Total plot area is 20873 m² of which, area earmarked for greenbelt is 5050 m². Cost of project is Rs. 35 Crore. Rs.3 Crore and Rs. 1.5 Crore are earmarked towards capital cost and recurring cost per annum for environmental management plan.No National Park/ Wildlife Sanctuary/reserve forest is located within 10 km radius of the project site. Mahi River is flowing at distance of 2.0 Km. Following are the details of the existing and proposed product:

Sr. No.	Name of Product	Existing Capacity (MT/Month)	Proposed Additional Capacity (MT/Month)	After Proposed Expansion (Total) (MT/Month)
1.	Chlorpyrifos	100	25	125
2.	Glyphosate	50	-50	00
3.	Pendimethaline	50	75	125
4.	Triazophos	58	-33	25
5.	Profenofos	25	25	50
6.	Hexaconazole technical	--	20	20
7.	Metribuzin	--	50	50
8.	Diafenthiuron technical	--	50	50
9.	Fipronil	--	10	10
10.	Tricyclazole	--	25	25
11.	Bifenthrin	--	5	5
12.	Fenpyroximate	--	5	5
13.	Propanil	--	40	40
14.	Azoxystrobin	--	20	20
15.	Cyproconazole	--	20	20
16.	Carboxin	--	5	5
17.	Thiomethoxozim	--	20	20
Total		283	312	595

By-products

S. No.	Name of <u>By-products</u>	Existing Capacity (MT/Month)	Proposed Additional Capacity (MT/Month)	After Proposed Expansion (Total) (MT/Month)
1.	Spent HCl (30%)	5	9	34
2.	HBr	8	2	20
3.	Poly Aluminium Chloride	-	5	25
4.	Liquid Ammonia	-	4	14
5.	NaBr	-	4.4	4.4
6.	Methyl Acetate	-	0	30
7.	Spent Sulphuric Acid (45% - 50%)	-	87.5	187.5

8.	Sodium Sulphite (Na ₂ SO ₃)	-	1	11
9.	Sodium Formate	-	5	15

Additionally, the PP informed the Committee that ambient air quality monitoring was carried out at 8 locations during March-May, 2013 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (82.4 µg/m³ to 96.2 µg/m³), PM_{2.5} (45.8 µg/m³ to 56.7 µg/m³), SO₂ (18 µg/m³ to 32 µg/m³) and NO_x (27.0 µg/m³ to 36 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.11 µg/m³ and 0.01 µg/m³ with respect to PM and SO₂. The resultant concentrations are within the National Ambient Quality Monitoring Standards (NAAQM). Multi-cyclone followed by bagfilter will be provided to imported coal/saw dust/DOC fired boiler to control particulate emissions. Scrubber will be provided to control process emissions viz. HCl, HBr, SO₂ and NH₃. Water requirement from GIDC water supply will be increased from 141 m³/day to 503 m³/day after expansion. Effluent generation will be 317 m³/day. Effluent (217 m³/day) will be treated in ETP comprising MEE. Treated effluent will be sent to CETP for further treatment. Condensate water from MEE will be treated in ETP. Effluent (40 m³/day) will be incinerated at common incinerator. The Committee suggested them to treated domestic effluent. Sludge will be sent to TSDF. Used oil and spent catalyst will be sent to authorized recycler/re-processors. Distillation residue will be sent for co-processing in cement industry.

The Committee also discussed the compliance status report on the conditions stipulated in the existing environmental clearance (J-11011/592/2008 IA II (I) dated 10.02.2009), which were monitored by the Ministry's Western regional office, Bhopal. It is reported that there are three streams of effluent namely, (i) High COD & Toxic effluent stream as send to common incineration facilities; (ii) High TDS effluent stream has been evaporated in the triple effect evaporating system (iii) Effluent (77 m³/day) has been treated before discharging into CETP. Cyclone followed by bagfilter and scrubber have been provided as air pollution control device. The committee advised them to upload the EC's compliance report on their website.

The Committee exempted the public hearing as per Section 7 (i), III Stage (3), Para (i) (b) of EIA Notification 2006 as project is located in the notified industrial area.

After detailed deliberations, the Committee found the EIA Report adequate and suggested to stipulate following specific conditions alongwith other environmental conditions while considering for accord of environmental clearance:

- 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. Multicyclone followed by bagfilter alongwith adequate stack height shall be provided to imported coal/saw dust/DOC fired boiler and thermic fluid heater to control particulate emissions.
- iii. Two stage water scrubber followed by alkali scrubber shall be provided to process vent to control SO₂, HCl and HBr emissions. Two stage water scrubber shall be provided to process vent to control NH₃ emissions. 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.

- iv. 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%.
- v. 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.
- vi. All necessary steps should be taken for monitoring of chlorine, HCl and HBr as well as VOCs in the proposed plant.
- vii. A proper Leak Detection and Repair (LDAR) Program for pesticide industry shall be prepared and implemented as per the CPCB guidelines.
- viii. Alarm for chlorine leakage if any in the liquid chlorine storage area is provided alongwith automatic start of the scrubbing system.
- ix. Total water requirement from GIDC water supply should not exceed 503 m³/day and prior permission should be obtained from the Competent authority.
- x. As proposed, industrial effluent should be treated in ETP followed by MEE. Treated effluent from ETP should be discharged into CETP after conforming to the standards prescribed for the effluent discharge and obtaining permission from the GPCB. Domestic sewage should be treated in STP.
- xi. Treated effluent should be passed through guard pond. Online pH meter, flow meter and TOC analyzer should be installed.
- xii. 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.
- xiii. As proposed, greenbelt should be developed at least 5050 m² area 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.
- xiv. All the recommendations made in the risk assessment report should be satisfactorily implemented.
- xv. Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.

32.3.2 Synthetic Organic Chemical Manufacturing Unit at Sy. No. 297 (part), village Jagdevpur, Mandal Jagdevpur, district Medak, Andhra Pradesh by M/s Elite Pharmaceutical Pvt. Ltd. F. No. J-11011/78/2013- IA II (I)- reg. EC

The project proponent did not attend the meeting. The Committee decided to consider the proposal as and when requested by the proponent.

32.3.3 Manufacturing Unit of Aluminum Phosphide and its and its Formulation at Plot No. 11/L, GIDC, Kuvadva, District Rajkot, Gujarat by M/sSarthiChem-Tech Pvt. Ltd. - reg. EC

The project proponent and their consultant (M/s San Envirotech Pvt. Ltd.) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the 7th Meeting of the Expert Appraisal Committee (Industry) held during 4th-5thApril, 2013 for preparation of EIA-EMP report. All units producing technical grade pesticides are listed at S.N. 5(b) under category 'A' and appraised at Central level.

M/s SarthiChem-Tech Private Limited have proposed to manufacture Aluminium Phosphide and its formulation at Plot No. 11/L, GIDC, National Highway 8-B, Kuvadava, District Rajkot, Gujarat. Total plot area is 4611 m² of which greenbelt will be developed in 1400 m². Cost of project is Rs. 4 Crore. It is reported that no National Park, Wildlife Sanctuary is located within 10 km radius of the project site. Fofal dam is located at a distance of 2.0 Km. Following are the details of the proposed product.

Sr. No.	Name of Product	Quantity (MT/Month)
Technical Product		
1.	Aluminum Phosphide	150
Formulation Product		
1.	Aluminium Phosphide 56-60 %TC	250-270
By Products		
1	H ₃ PO ₄ (55-60%)	25

Additionally, the PP informed the Committee that ambient air quality monitoring was carried out at 6 locations during January, 2014- March, 2014 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (48.3 µg/m³ to 81.6 µg/m³), PM_{2.5} (25.6 µg/m³ to 43.8 µg/m³), SO₂ (12.5 µg/m³ to 20.2 ug/m³) and NO_x (13.4 µg/m³ to 28.5 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.128 µg/m³, 0.009 µg/m³ and 0.013 µg/m³ with respect to SPM, SO₂ and NO_x. The resultant concentrations are within the NAAQS. Cyclone separator will be provided to bio fuel fired boiler. The Committee suggested them to install bagfilter to control particulate emissions. Two stage water

scrubber will be provided to control process emission viz. P_2O_5 . Total water requirement will be $13.5 \text{ m}^3/\text{day}$ of which, fresh water requirement from GIDC water supply will be $11.5 \text{ m}^3/\text{day}$. Scrubber media water will be used as by-product (H_3PO_4). No process effluent will be generated. Effluent from utilities will be treated in ETP and treated effluent will be reused for greenbelt. No effluent will be discharged outside the plant premises. Waste oil will be sent to authorized recycler/re-processors. Ash will be sold to brick manufacturers.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Gujarat Pollution Control Board on 11th November, 2014. The issues were raised regarding local employment, impact on environment due to proposed project, CSR etc. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

After detailed deliberations, the Committee found the EIA Report adequate and suggested to stipulate following specific conditions alongwith other environmental conditions while considering for accord of environmental clearance:

- 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. Multicyclone followed by bagfilter alongwith adequate stack height shall be provided to bio fuel fired boiler to control particulate emissions.
- iii. Two stage water scrubber will be provided to control process emission viz. P_2O_5 . 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.
- 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. All necessary steps should be taken for monitoring of chlorine, HCl and HBr as well as VOCs in the proposed plant.
- vi. A proper Leak Detection and Repair (LDAR) Program for pesticide industry shall be prepared and implemented as per the CPCB guidelines.
- vii. Fresh water requirement from GIDC water supply should not exceed $11.5 \text{ m}^3/\text{day}$.
- viii. Trade effluent should be treated in ETP. 'Zero' effluent discharge should be adopted and no effluent will be discharged outside the premises.
- 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. Green belt should be developed at least in 1400 m² 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.
- xi. All the recommendations made in the risk assessment report should be satisfactorily implemented.
- xii. Detailed plan for Occupational health and surveillance of the workers should be exercised on a regular basis and records maintained as per the Factories Act.
- xiii. All the issues raised during the public hearing/consultation meeting held on 11th November, 2014 should be satisfactorily implemented.
- xiv. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details should be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program should be ensured accordingly in a time bound manner.

32.3.4 Proposed 150 KLPD Grain/Starch Based Distillery or 50 KLPD (Molasses based) at Plot No.-01, Sector-1, Phase-2, Integrated Industrial Estate, Sidcul, Sitarganj, Uttarakhand by M/s Golden Infracon Pvt. Ltd. J-11011/184/2013-IA II (I) – reg. EC

The project proponent and their consultant (Perfect Enviro Solutions Pvt. Ltd.) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the 11th and 19th Meetings of the Expert Appraisal Committee (Industry) held during 26th-27th August, 2013 and 28th-30th May, 2014 for preparation of EIA-EMP report. All molasses based distillery are listed at S.N. 5(g) (i) under category 'A' and appraised at Central level.

M/s Golden Infracon Pvt. Ltd. has proposed for setting up of 150 KLPD Grain/Starch based Distillery or 50 KLPD (Molasses based) at Plot No.-01, Sector-1, Phase-2, Integrated Industrial Estate, Sidcul, Sitarganj, Uttarakhand. Plot area is 101200 m², of which area earmarked for greenbelt is 25000 m². Cost of project is Rs. 110 Crore. Water Bodies viz. Sukhi /Baingul River (2.5 KW), Kajlas River (0.6 Km) and Saryu/Deoha River (7 Km) are located within 10 Km distance. Gola Reserve Forest and Forest patch near Dhainpur villages are located within 10 Km distance. It is reported that no eco-sensitive area is located within 10 km distance. Following products will be manufactured :

S.N.	Products	
1	Distillery:	
	Grain/Starch based	150 KLPD
	Molasses based	50 KLPD
2	Bottling Facilities: Blending & Bottling of Country Liquor & Indian Made Foreign Liquor (IMFL)	8000 Cases/ day

3	By-products : DDGS	102 TPD
4	CO ₂	80 TPD (CO ₂ shall be purified, compresses and stored, which will be further sold in bulk, bottled in cylinders or converted into dry ice as per market demand)

Distillery will be operated for 330 days. Cogeneration power plant (6.5 MW) will be installed. Raw materials such as grains (wheat, broken rice, corn; 365 tonnes/day) from nearby production units transported through truck/lorries ; or starch (219 tonnes/day) from nearby food parks and molasses from nearby sugar unit through tanker will be consumed.

Ambient air quality monitoring was carried out at 8 locations during March, 2013 – May, 2013 and submitted data indicates as PM_{2.5} (24.0– 42.9ug/m³), PM₁₀ (54–94.9ug/m³), SO₂ (4.7 – 11.7ug/m³) and NO_x (12.7-34.9ug/m³). Predicted value of ground level concentration due to proposed project is SPM (7.21ug/m³). The resultant concentrations are within the NAAQS. ESP along with stack of adequate height will be provided to biomass/coal fired boiler (50 TPH) to control particulate emissions.ESP will be provided to the incineration boiler. It is reported that total water requirement for grain/starch based distillery will be 4332 m³/day. Out of which, fresh water requirement from SIDCUL water supply will be 1355 m³/day and remaining water requirement (2977 m³/day) will be met from recycled water. Total water requirement for molasses based distillery will be 1496 m³/day. Out of which, fresh water requirement from SIDCUL water supply will be 440 m³/day and remaining water requirement (1056 m³/day) will be met from recycled water. Spentwash from molasses based will be concentrated in Multiple Effect Evaporator (MEE) and concentrated spentwash will be incinerated with rice husk in the incineration boiler. Spentlees, condensate and utilities will be treated in the ETP comprising primary, secondary and tertiary treatment process. Treated effluent will be reused in the process. Spent wash will be passed through decanter and concentrated in multi-effect evaporator (MEE). Thick syrup and wet cake will be mixed together to form Distiller's Wet Grains with Soluble (DWGS) to achieve zero discharge. DWGS will be dried to form Distiller's Dry Grains with Soluble (DDGS). DDGS will be used as cattlefeed. Fly ash from coal will be sent to brick manufacturers /cement plant. Fly ash from rice husk will be sent landfilling and soil conditioning. Used oil will be sent to authorized recycler/re-processors. DG sets (2 x 500 KVA) will be installed.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Environment Protection And Pollution Control Board, Uttarakhand on 15th October, 2014 under the chairmanship of Additional District Magistrate. The issues were raised regarding impact on ground water, employment to women, local employment, training, CSR, rain water harvesting, safety etc. In response, PP informed that water shall not be drawn from ground water and it shall be taken from SIDCUL water supply. Rain water harvesting shall be installed to recharge the ground water. The project is based on zero discharge concept and no effluent will be discharged outside the plant. Due to proposed project, it would improve the direct and indirect employment. Presently, the project shall give employment to 120 skilled and unskilled workers. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

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

- i. Distillery unit shall be based on Grain /Starch(150 KLPD) or molasses (50 KLPD) only and production of the plant shall never exceed the maximum capacity defined for both the cases.
- ii. ESP alongwith stack of adequate height should be provided to rice husk/coal fired boiler to control particulate emission within 50 mg/Nm³. ESP alongwith stack of adequate height shall be provided to the rice husk/ concentrated spent wash fired incineration boiler.
- iii. Pucca approach road to project site should be constructed prior to commencing construction activity of the main distillery so as to avoid fugitive emissions.
- iv. Total fresh water requirement from SIDCUL Water Supply should not exceed 1355 m³/day for distillery and cogeneration unit and prior permission shall be obtained from Competent Authority. Water consumption should be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- v. Spent wash generation from molasses and grain based distillery shall not exceed 8 KI/KI of alcohol and 6 KI/KI of alcohol respectively. The spent wash from molasses based distillery shall be concentrated in Multiple Effect Evaporator (MEE) and concentrated spent wash shall be incinerated with rice husk in the incineration boiler to achieve 'Zero' effluent discharge. Spent wash from grain based distillery shall be treated through decanter and concentrated in multi-effect evaporator (MEE) to form DWGS. DWGS shall be dried to form DDGS. Spent wash shall be stored in impervious pucca 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. No effluent from distillery and co-generation power plant should be discharged outside the premises and Zero discharge should be adopted.
- vii. Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area should 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 should be monitored.
- viii. No storage of wet cake should be done at site. An additional dryer should be installed so that at any time wet cake is not sold then wet cake should be converted into dry cake by operating additional dryer.
- ix. Rice husk storage should be done in such a way that it does not get air borne or fly around due to wind.
- x. Boiler ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing alongwith the storm water. Direct exposure of workers to fly ash & dust should be avoided.

- xi. Occupational health surveillance programme should be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre should be strengthened and the regular medical test records of each employee should be maintained separately.
- xii. Dedicated parking facility for loading and unloading of material should be provided in the factory premises. Unit should develop and implement good traffic management system for their incoming and outgoing vehicles to avoid congestion on the public road.
- xiii. 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.
- xiv. All the commitment made regarding issues raised during the public hearing/consultation meeting held on 15th October, 2014 shall be satisfactorily implemented.
- xv. At least 5 % of the total cost of the project (i.e. Rs5.5 Crore) should be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details should be prepared and submitted to the Ministry's Regional Office at Lucknow. Implementation of such program should be ensured accordingly in a time bound manner.

32.3.5 Expansion for Manufacturing of Linear Alkyl Benzene Sulphonic Acid (LABSA) at Plot no. 295, phase II, GIDC Vapi, District Valsad, Gujarat by M/s Rama Pulp & Papers Ltd. – reg EC.

The project proponent and their consultant (M/s Precitech Laboratories Pvt. Ltd.) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the 4th Meeting of the Expert Appraisal Committee (Industry) held during 8th–9th January, 2013 for preparation of EIA-EMP report. All Synthetic Organic Chemicals Industry located inside the notified industrial area/estate are listed at S.N. 5(f) under category 'B' and appraised at State level. However, applicability of general condition due to project location within Critically Polluted Area, proposal is treated as category 'A' and appraised at Central Level.

M/s Rama Pulp and papers Ltd. have proposed for expansion of Synthetic Organic Chemicals Unit at Plot No. 295, GIDC Vapi, District Valsad, Gujarat. The proposed expansion project will be accommodated in the exiting plots with a total plot area of 39528 m². The required expansion of 816.90 m² will be carried out in the existing constructed area of 16239.32 m². Area earmarked for greenbelt is 3900 m². No additional land is required for proposed expansion. Total cost of proposed project is Rs. 2.13 Crore. It is reported that there are no national park/wildlife sanctuary is located within 10 km radius. However,

patches of reserved forests fall within the periphery. River Damanganga is flowing at a distance of 3.63 km. Following products will be manufactured:

S.N.	Products	Quantity (MTPM)	Quantity (MTPA)
1	LABSA	1500	18000
2	Diluted Sulphuric Acid 80%	1327.50	15930

Additionally, the PP informed the Committee that ambient air quality monitoring was carried out at 6 locations during February-May, 2013 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (49 µg/m³ to 92 µg/m³), SO₂ (16 µg/m³ to 32 µg/m³) and NOx (17.0 µg/m³ to 37 µg/m³) respectively. It is reported that no additional utilities will be installed. Therefore, modeling for determination of GLC to evaluate the probable impacts of emissions on air environment was not carried out. Dust collector followed by bagfilter have been provided in the existing coal fired boilers to control particulate emissions. No additional installation of the boiler is proposed. Fresh water requirement from GIDC water supply will be increased from 97 m³/day to 109 m³/day after expansion. Effluent generation will be increased from 66 m³/day to 66.5 m³/day after expansion. There will be no generation of process effluent from LABSA project as water retained in the products. Effluent from the existing unit will be treated in the ETP and part of treated effluent will be discharged into CETP. Remaining treated effluent (25 m³/day) will be recycled in the paper and pulp unit. ETP sludge will be sent to TSDF. Waste oil will be sent to authorized recyclers/re-processors. Fly ash will be sent to brick manufacturers.

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

- i) Multicyclone followed by bagfilter alongwith adequate stack height shall be provided to the imported coal/saw dust/DOC fired boiler and thermic fluid heater to control particulate emissions.
- ii) As proposed, adequate scrubbing system shall be installed in to control HCl and Cl₂ emissions. The scrubbing solution shall be sent to effluent treatment plant (ETP) for 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.
- 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 imposed by GPCB.
- iv) Total fresh water requirement from GIDC water supply should not exceed 109 m³/day after expansion and prior permission should be obtained from the concerned Authority.
- v) Industrial effluent shall be treated in ETP and part of treated effluent shall be discharged to the CETP after conforming the norms prescribed by GPCB. Water quality of treated effluent should meet the norms prescribed by CPCB/SPCB.
- vi) Treated effluent should be passed through guard pond. Online pH meter, flow meter and TOC analyzer should be installed.

- vii) The company should obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from GPCB should be obtained for disposal of solid / hazardous waste in the TSDF. Measures should be taken for fire fighting facilities in case of emergency.
- viii) As proposed, greenbelt should be developed in an area of 3900 m².
- ix) Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
- x) At least 2.5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details should be prepared and submitted to the Ministry's Regional Office. Implementation of such program should be ensured accordingly in a time bound manner.

32.3.6 Greenfield Soda Ash Plant (1500TPD) alongwith Captive Power Plant (50 MW) at Village Kuranga, Taluka Dwarka, District Jamnagar, Gujarat by M/s RSPL Ltd. – reg. EC.

The project proponent and their consultant (NEERI) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the 3rd Meeting of the Expert Appraisal Committee (Industry) held during 3rd– 5th December, 2012 for preparation of EIA-EMP report. All the Soda Ash Industries are listed at S.N. 4(e) under Category 'A' and appraised at the Central level.

M/s RSPL Ltd has proposed for setting up of greenfield soda ash plant (1500 TPD) alongwith CPP (50 MW) at Village Kuranga, Taluka Dheraka, District Jamnagar, Gujarat. Total plot area is 400 ha of which, area earmarked for greenbelt is 189 ha. Plant area comprises of Government Waste Land and Private Un-Irrigated agriculture land. There is no forest land within the plant area. 0.94 ha. forest land of underground sea water intake and effluent disposal pipelines will pass through forest land. The land will be restored back on completion of pipeline laying job.

PP informed that application for stage-1 forest clearance has been submitted vide their letter no. RSPL/CCG/VKG/ENV-003/106/2014-15 dated 02.07.2014. Gaga wildlife sanctuary located at a distance of 6.4 Km. PP informed that they have submitted the application to the State Government for clearance from National Wildlife Board. Site is located at a distance of 1.0 Km from Arabian sea. Kalipat River is located at a distance of 2.0 Km. Kuranga lake is located at a distance of 4.5 Km. Gojiness Creek is at a distance of 2.5 km. Reserve Forests are located within 10 km distance (i.e. Gojiness reserve forest; Kuranga Reserve Forest; Bhogat RF (6 Km); Bhatvadiya RF (500 m) and Gaga RF (8.0 Km). It is reported that no mangroves eco-system near Kuranga Sea Coast as well as within study area. Gujarat Coastal Zone Management Authority (GCZMA), Forest & Environment Department, Gandhinagar vide letter no. ENV-10-2014-72E dated 17.12.2014 has forwarded necessary recommendation for grant of environment clearance under the CRZ notification for laying of sea water intake and effluent facilities in Arabian Sea. The committee deliberated upon the recommendations of SCZMA, Gujarat.

Following products will be manufactured:

S.N.	Plant	Capacity	
1	Soda Ash plant	Light soda Ash Dense soda ash	1500 TPD 770 TPD
2	Coal/Lignite based CPP	Steam 3 nos. x 150 TPH	50 MW
3	DG Set		6MVA

Soda ash plant process is based on Dry Liming Technology having features of less effluent; less sweet water use; Less steam requirement for ammonia recovery and most energy efficient technology. Raw materials i.e. Limestone (2700 TPD) will be sourced from captive limestone mines and from domestic/international market by road/sea; Salt (2580 TPD) from captive saltworks and from market by road/sea; Coke (174 TPD) from open market by road/sea; Ammonia (3.5 TPD) and Sodium Sulphide (2.24 TPD) from open market by road; Coal /Lignite from imported coal i.e. Indonesian or South African/GMDC/Open Market by road/sea.

Ambient air quality monitoring has been carried out at 11 locations during November, 2012- January, 2013 and the data submitted indicated: PM₁₀(33 to 69 µg/m³), PM_{2.5} (12 to 39 µg/m³), SO₂ (8 to 21 µg/m³) and NO_x (12 to 23 µg/m³). AAQ study for point source emissions indicates that the maximum incremental GLCs would be 1.0 µg/m³, 16.9µg/m³, 7.1µg/m³and 4.5 µg/m³with respect to PM₁₀, SO₂, NO_x and Ammonia respectively. Scrubbers and drop trap will be provided to the 5 nos. Lime Kilns. Scrubber will be provided to ammonia recovery system. Bagfilter will be provided to lime grinding system. Scrubber will be provided to filtration /calcinations. ESPs will be provided to coal fired boiler. All crushers and transfer points will be provided with dust extraction system consist of hoods, bag house, ID fans and exhaust duct. Closed storage, covered belt conveyor, baghouse/bagfilterhave been provided at transfer points. Total water requirement will be 60 MLD water, which will be drawn from Arabiansea through submarine pipeline from the point suggested by the NIO. Return cooling water will be mixed with process effluent from soda ash plant, rejects from RO/DM plant and brine preparation rejects. To achieve the GPCB/CPCB norms, effluent will be further treated in the effluent treatment plant & diluted with sea water. Treated /diluted mixed effluent will be discharged in the Arabian Sea at a designated point having diffuser system as recommended by NIO. Sewage will be treated in STP. Fly ash from coal as fuel will be used for cement manufacturing/brick manufacturing. If from Lignite only, it will be used for road making, pavement and flooring etc. Used oil will be sent to authorized recycler/re-processors.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Gujarat Pollution Control Board on 10th June, 2014. The issues were raised regarding village development activities such as drinking water, water supply, action plan for disposal of fly ash, greenbelt, local employment, etc. In response, PP informed that company will provide necessary help for up gradation of basic infrastructure of the villages. Company will meet the fresh water requirement by installing RO plant for sea water and supply to some extent free of cost drinking water to nearby villages. PP committed that company will provide employment to locals based on the skill and experience. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

After deliberation, the Committee sought following additional information :

- i) Action plan for reduction/control of ammonia leakage from the process.
- ii) Disaster management plan for cyclone, Tsunami etc.
- iii) A note based on available data indicating social economic impact on fisherman due to the project.
- iv) Action plan for Enterprises Social Commitment considering 2.5 % of the project cost for five years.
- v) MoU with the cement plant/brick manufacturers for fly ash utilization.

The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.

32.3.7 Expansion of Chemicals Manufacturing unit at 84 Vaanapadi Road, Ranipet, District Vellore Tamilnadu by M/s Stahl India Pvt. Ltd. reg. EC .

Project proponent did not attend the meeting. The Committee decided that proposal should be considered afresh as per the priority whenever requested.

32.3.8 Expansion of Refinery from 9MMTPA to 11.25MMTPA of HPCL-Mittal Energy Ltd Village PhuloKheri Tehsil, Bhatinda, Punjab by M/s HPCL-MITTAL ENERGY LIMITED - reg EC

The project proponent and their consultant (M/s Cholamandlam) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the 16th Meeting of the Expert Appraisal Committee (Industry) held during 20th-21st February 2014 for preparation of EIA-EMP report. All the Petroleum Refinery Plants are listed at S.N. 4(a) under Category 'A' and appraised at the Central level.

M/s HPCL- Mittal Energy Ltd. has proposed for augmentation of refinery capacity from 9 MMTPA to 11.25 MMTPA by debottlenecking. Environmental clearance was obtained vide MoEF letter no. J-11011/24/98-IA II (I) dated 6th November, 1998 for establishing grass root refinery. Subsequently environmental clearance was amended with MoEF's letter no. J-11011/275/2007-IA II (I) dated 16th July 2007 for modified refinery configuration and to process 9 MMTPA of crude. The 9 MTPA capacity existing unit is fully operational since April 2013. It is reported that no ecological sensitive area/ reserve forest /protected forest is located within 10 km distance. Bakhra canal is flowing at a distance of 3.4 Km. Total plot area is 2000 acres. The following are the existing and proposed products:

S.N.	Products	Existing Configuration @ 9 MMTPA	Proposed Configuration @ 11.25 MMTPA
1	LPG (TMTPA)	737	963 TMTPA
2	Naptha (TMTPA)	396	871.7 TMTPA
3	Gasoline (TMTPA)	Euro IV Reg 750	Bharat IV Reg.

		Euro IV PRE 250	1306.4 Bharat IV PRE 25
4	ATF (TMTPA)	500	500 TMTPA
5	Kerosene (TMTPA)	200	200 TMTPA
6	Diesel (TMTPA)	3692 (Euro IV)	Bharat IV 4842.6 MMTPA
7	Sulphur (TMTPA)	198	227 TMTPA
8	Coke (TMTPA)	904	991.5 TMTPA
9	Hexane (TMTPA)	5	5TMTPA
10	Motor Turpentine oil (TMTPA)	25	25TMTPA
11	Polypropylene (TMTPA)	358	500 TMTPA
12	Bitumen	--	520 TMTPA

In addition, some new facilities are being added to improve the profitability of the refinery. The new process units have been proposed to be installed under expansion are New Bitumen Blowing Unit (0.52 MMTPA) and New Sulphur Recovery Unit (1x 300 TPD). Following offsite additional tanks will be created :

Tank	No. of Tanks	Additional Total Capacity (m ³)
Crude	1	60000
VGO HDT Feed	1	34410
DHDT Feed/Product	1	20000
FCC-PC Feed	1	35000
Dry Slop (Light)	1	20000
MS Component Tanks	1	6000
	1	3000
MS-III	1	9000
Naptha	1	9000
HSD-III/IV	2	2x55000=110000
Sweet SKO	1	4500
Bitumen	3	3x17500=52500
Day Storage Tanks		
MS-III	1	1000
MS-IV	1	5000
HSD-III	1	1000
HSD-IV	1	5000
ATF	1	1000
LPG	6	6x2900= 17400

To increase the reliability of current steam generation system and to provide flexibility in use of fuels, 2 new CFBC type coal/petcoke fired steam generators are planned to installed. Each steam generator would be of 300 TPH capacity.

Ambient air quality monitoring was carried out at 8 locations during 19thMarch, 2014 – 30th June, 2014 and submitted data indicates as PM10 (112–139ug/m³), PM2.5 (30–49ug/m³), SO₂ (9 – 12 ug/m³) and NO_x (16-20ug/m³). PP informed that reasons for higher PM10

value is the soil degradation problem such as soil erosion, water logging, sand dunes and topography for the Bathinda District. Predicted value of ground level concentration due to proposed project is SO₂ (49.37ug/m³) and NO_x (24.9ug/m³). The resultant concentrations are within the NAAQS. Limestone will be injected to pet coke/coal fired boiler to control SO₂ emission. ESP will be provided control particulate emissions. Additional new sulphur recovering unit will be installed to recover additional sulphur generation due to processing of additional crude in the plant. As per Standards Refinery design practice, a suitable incinerator will be installed in proposed Bitumen Blowing unit to complete oxidize the VOC emission. Proper dust control system will be provided to coal and petcoke handling area. The overall water consumption in the existing facility is about 1902 m³/hr against the consented level of 3700 m³/hr. Water requirement after debottlenecking/expansion project when the plant is operated at 11.25 MMTPA capacity will be in order of 2420 m³/hr, which is well below the consented levels. The facility is permitted to draw 20 MGD of water from Kotla Canal and hence no additional permits and consent for drawl of water is envisaged. Total effluent generation from the existing facility is 720 m³/hr. Out of which, 325 m³/hr of wastewater generated from cooling tower blow down and boiler blow down will be treated in Reverse Osmosis and Demineralize Plant (DM) and the permeate is reused in the plant. The balance wastewater from process and other facilities to the tune of 360 m³/hr is treated in the existing ETP, which is designed to treat 500 m³/hr. Wastewater generated from the process of refinery is treated in the ETP comprises of API and TPI oil removal units, biological treatment units such as SBR, MBR and tertiary treatment unit, treated wastewater collection and storage ponds and sludge handling and treatment systems. Molecular sieves from air purification unit, oil sludge from tank storage area, Spent clay /sand from process units, oil contaminated cotton, spent resin from DM plant, chemical sludge from RO DM plant as well as Oily and Chemical sludge from ETP will be sent to secured landfill within factory premises. Spent catalyst and used oil will be sent to authorized recycler/re-processors. A fully fledged oily sludge treatment facility based on bio-remediation has been installed.

The Committee also discussed the compliance status report on the conditions stipulated in the existing environmental clearance, which were monitored by the Ministry's Southern regional office, Chandigarh. It is reported that the stack monitoring carried out by the lab namely Detox Corporation in February, 2014 indicate all the results within the permissible limits. Online analyzers have been commissioned in the stack for monitoring of SO₂ and NO₂. Additional measures have been taken for control of air pollution such as Low Sulphur fuel oil and fuel gas to be used by the refinery; low NO_x burners have been installed in all the heaters; TSS and FSS have been installed in FCCU to minimize particulate emissions. It was observed that effluent generated from refinery is being treated using the best available technology of SBR and MBR. Oily sludge generated from ETP will be processed in Delayed Coker Unit and balance sludge is processed in the bio-remediation unit within ETP. Till date, the project authorities have planted approximately 2,00,000 saplings in 300 acres of land. The Committee was satisfied with the compliance report.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Punjab Pollution Control Board on 14th October, 2014 under the chairmanship of Deputy Commissioner. The issues were raised regarding compensation paid for the land acquisition is not adequate; local employment, bad road, pollution caused by refinery; air pollution from refinery, impact on the nearby villages; etc. The Committee suggested to prepare pointwise reply against the issues raised and the same may be present before the Committee.

After deliberation, the Committee sought following additional information :

- i) Sulphur balance chart to be rechecked.
- ii) Measures to be taken to bring down incremental sulphur dioxide.
- iii) A Note on the public hearing issues and commitment made on the issued to be submitted.
- iv) ESR plan considering 2.5 % of the project cost to be submitted. Next 2 years plan to be prepared how to spend Rs. 20 Crore.

The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.

Lunch Break: 1:30 – 2:00 PM

2nd Session: Time: 2.00 PM

Reconsideration for Environmental Clearance

32.3.9 Expansion of NPK Fertilizer Manufacturing Unit at DFPCL Complex, K-1 to K-5 MIDC Industrial Area, District Raigad, Maharashtra by M/s Deepak Fertilizers and Petrochemicals Corporation Ltd. - Regarding EC.

The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 17th meeting held during 18th - 19th March, 2014 and the Committee deferred the proposal for want of following addl. information:

- i) To examine the possibility of installation of another additional ammonia storage tank of 10000 T capacity.
- ii) To prepare a Risk Assessment and Disaster Management Plan for transportation of ammonia.
- iii) Re-calibration of continuous ambient air quality monitoring stations and to cross check the results.
- iv) Submit a time bound action plan/ compliance report for the fully complying with the conditions stipulated in the existing EC.

PP vide letter dated 19th May, 2014 has submitted the above addl. information. PP informed that they have two ammonia storage tanks capacities 18,000 MTs & 3000 MTs each at DFPCL Fertilizers complex in Taloja MIDC. Generally storage quantity of ammonia at Taloja complex is maintained at about 7,500 MTs for the first tank and 3,000 MTs in the second tank. Post expansion, they expect marginal increase of 250 MTPD in overall ammonia requirement for the complex from the present 1,150 MTPD.

After detailed deliberations, the Committee recommended the project for environmental clearance and stipulated following specific conditions alongwith other environmental conditions while considering for accord of environmental clearance:

- (i). Unit shall never store ammonia more than 10,000 Ton at the site. If eventuality arises and it needs to be emptied, the additional 3000 T ammonia storage to be kept standby and the rest of NH₃ to be transported to JNPT site, where they store Imported ammonia.
- (ii). Calibration of continuous ambient air quality monitoring stations shall be conducted quarterly.
- (iii). All the conditions stipulated in environmental clearance J-11011/218/2004-IA (II) dated 24th February, 2006 accorded for the existing projects shall be implemented.
- (iv). Ammonia bearing fumes from the reactor and granulator of the Complex Fertilizer shall be scrubbed. Scrubbing shall have interlocking system with main plant.
- (v). The gaseous emissions (SO₂, Nox, NH₃, HC and Fluoride) 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.
- (vi). Total fresh water requirement from MIDC water supply shall not exceed 500 m³/day for the proposed unit and prior permission shall be obtained from Competent Authority and a copy submitted to the Ministry's Regional Office at Bhopal.
- (vii). Industrial effluent shall be treated in effluent treatment plant (ETP) and recycled back in the process.
- (viii). No effluent shall be discharged outside the premises and 'Zero' effluent discharge shall be ensured.
- (ix). Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (x). The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes. Measures shall be taken for firefighting facilities in case of emergency.
- (xi). Spent catalysts and used oil shall be sold to the authorised recyclers/re-processors only.
- (xii). The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP).
- (xiii). 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 OISD 117 norms.

- (xiv). Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xv). Green belt shall be developed in 33 % of the plant area. Selection of plant species shall be as per the CPCB guidelines.
- (xvi). Remote operated valve placed on NH₃ line to avoid leakage/equipment check shall be performed to ensure that remote operated valve (ROV) is all time is functional.

32.3.10 Expansion of Brownfield Ammonia, Urea Plant, New Aniline, TDI-MDI Blend, Water Soluble Fertilizers (NPK) and CPSU Plants at GNFC, Narmadanagar, Bharuch, by m/s Gujarat Narmada valley, Fertilizers & Chemicals limited – Reg EC.

The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 19th meeting held during 28th - 30th May, 2014 and the Committee deferred the proposal. As per this Ministry's OM No. J-11013/36/2014-IA-I dated 16th May, 2014, individual units may be exempted from Public Hearing in cases where the industrial areas/estates have obtained prior environmental clearance under EIA Notification, 2006 as provided for under 7 (c) of the schedule. Further, MoEF&CC vide OM No. J-11011/36/2014-IA I dated 10th December, 2014 has clarified that the exemption from public consultation, as provided under para 7(i) III Stage (3)(i)9b) of EIA Notification, 2006 is available to the projects or activities or units located within the industrial Estates or parks, which were notified prior to 14.09.2006, i.e. the EIA Notification, 2006 coming into force. The Committee noted that the said project proposal is located in the notified industrial area and no public hearing is required.

After detailed deliberations, the Committee recommended the project for environmental clearance and recommended the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

- (i) All the conditions stipulated in environmental clearance letter J-11011/1218/2007-IA (II) dated 28th April, 2008 and letter no. J-11011/731/2007 IA (II) dated 19th March, 2008 accorded for the existing projects shall be implemented.
- (ii) The gaseous emissions (SO₂, NO_x, NH₃, 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.
- (iii) Adequate stack height shall be provided to Ammonia plant reformer, Heat recovery steam generator (HRSG), NG/ RLNG fired gas turbine and Prilling Tower. Low NO_x burners shall be provided to control NO_x emissions.
- (iv) In Urea Plant, particulate emissions shall not exceed 50mg/Nm³. Monitoring of Prilling Tower shall be carried out as per CPCB guidelines.
- (v) Air pollution control devices as proposed in the environmental management plan shall be implemented in order to meet the prescribed standards.

- (vi) Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R. No. 826(E) dated 16th September, 2009. The levels of PM₁₀ (Urea dust), SO₂, NO_x, Ammonia, Ozone and HC shall be monitored in the ambient air 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 Gujarat Pollution Control Board (GPCB).
- (vii) 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. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions should conform to the limits stipulated by the GPCB.
- (viii) Fresh water requirement from Narmada River, Ukai Canal and Narmada Canal should not exceed 83654 m³/day after expansion and prior permission shall be obtained from concerned Authority and a copy submitted to the Ministry's Regional Office at Bhopal.
- (ix) 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.
- (x) All the effluents after treatment shall be routed through a properly lined guard pond/holding pond for equalization and final control. In the guard pond/holding pond, automatic monitoring system for flow, and relevant pollutants (i.e. pH, ammonical nitrogen, nitrate nitrogen etc) shall be provided with high level alarm system.
- (xi) The treated effluent shall be discharged into the River Bhukhi after conforming to the standards prescribed for the effluent discharge and after obtaining permission from the GPCB. No process effluent shall be discharged in and around the project site. Sewage shall be treated in STP and treated water shall be recycled/reused within factory premises to achieve zero discharge except rainy season.
- (xii) 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 Bhopal Regional Office of the Ministry, CPCB and SPCB.
- (xiii) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes. Measures shall be taken for fire fighting facilities in case of emergency.

- (xiv) Spent catalysts and used oil shall be sold to the authorised recyclers/re-processors only.
- (xv) 20,000 Ton ammonia shall be stored in (2x 10000 Tons Tanks). Both tanks shall be converted into double walled and double integrity. Otherwise one more tank of 10,000 Ton should be installed.
- (xvi) The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP).
- (xvii) Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
- (xviii) As proposed, green belt over 33 % of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- (xix) 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.*
- (xx) Remote operated valve placed on NH₃ line to avoid leakage/equipment check should be performed to ensure that remote operated valve (ROV) is all time is functional.

32.4 Terms of Reference (TOR)

32.4.1 Manufacturing Plant for H-Acid and Vinyl Sulphoneat at Village Suryapur, Tehsil & District 24 Parganas (N), West Bengal by M/s Spectrum Dyeing (P) Limited - reg TOR

The project authorities and their Consultant (M/s EQMS) 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. All Synthetic Organic Chemicals Industry (Dyes and Intermediates) located outside the notified industrial area/estate are listed at S.N. 5(f) under category 'A' and appraised by Expert Appraisal Committee (I).

M/s Spectrum Dyeing (P) Limited has proposed for Manufacturing Plant for H-Acid and Vinyl Sulphoneat at Village Suryapur, Tehsil & District 24 Parganas (N), West Bengal.

Total plot area is 8026.82 m² of which area earmarked for greenbelt is 2600 m². Total cost of project is Rs. 40 Crore. No national park/wildlife sanctuary is located within 10 km distance. No reserved forest/protected forest is located within 10 km distance. Hoogly River is flowing at a distance of 5.6 km. Following products will be manufactured :

S.N.	Product	Capacity
1	H-Acid	200 MTPM
2	Vinyl Sulphone	100 MTPM
	Byproduct	
1	Sodium Sulphite	400 MTPM
2	Acetic Acid	20 MTPM
3	Liquid Sodium bisulphate	75 MTPM

Pet coke/coal fired boiler and hot water generator will be installed. Committee suggested to install bagfilter for particulate emissions. Total water requirement is 246 m³/day out of which fresh water requirement from ground water source is 158 m³/day and remaining (88 m³/day) will be met from recycle water. Wastewater generation is 107.4 m³/day. Effluent will be treated in the ETP and treated effluent will be recycled in the process. No effluent will be discharged outside the plant premises.

After detailed deliberations, the Expert Appraisal Committee prescribed the following Standard and Additional TORs for preparation of EIA/EMP:

A. Standard TOR:

1. Executive summary of the project
2. Justification of the project.
3. Promoters and their back ground.
4. Regulatory framework
5. A map indicating location of the project and distance from severely polluted area
6. Project location and plant layout.
7. Infrastructure facilities including power sources.
8. Total cost of the project alongwith total capital cost and recurring cost/annum for environmental pollution control measures.
9. Project site location alongwith site map of 10 km area and site details providing various industries, surface water bodies, forests etc.
10. Present land use based on satellite imagery for the study area of 10 km radius.
11. Location of National Park/Wild life sanctuary/Reserve Forest within 10 km radius of the project.
12. Details of the total land and break-up of the land use for green belt and other uses.
13. List of products alongwith the production capacities and list of solvents and its recovery plan.
14. Detailed list of raw material required and source, mode of storage and transportation.
15. Details of the existing Sulphonation plant alongwith the environment clearance, consent to establish/operate and point-wise compliance report.
16. Manufacturing process details alongwith the chemical reactions and process flow chart.

17. Action plan for the transportation of raw material and products.
18. Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall is necessary.
19. Ambient air quality monitoring at 6 locations within the study area of 5 km., aerial coverage from project site as per NAAQES notified on 16th September, 2009. Location of one AAQMS in downwind direction.
20. One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall and AAQ data (except monsoon) for PM_{2.5}, PM₁₀, SO₂, NO_x including HC and VOCs should be collected. The monitoring stations should take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests. Data for water and noise monitoring should also be included.
21. Air pollution control measures proposed for the effective control of gaseous emissions within permissible limits.
22. Name of all the solvents to be used in the process and details of solvent recovery system.
23. Design details of ETP, incinerator, if any alongwith control of Dioxin & Furan, boiler, scrubbers/bag filters etc.
24. Details of water and air pollution and its mitigation plan
25. Action plan to control ambient air quality as per NAAQES Standards notified by the Ministry on 16th September, 2009.
26. An action plan to control and monitor secondary fugitive emissions from all the sources as per the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008.
27. Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. Air quality modelling for proposed plant.
28. Permission for the drawl of 158 m³/day water from the Competent Authority. Water balance chart including quantity of effluent generated recycled and reused and effluent discharge.
29. Action plan for Zero Discharge of effluent as proposed should be included.
30. Ground water monitoring minimum at 6 locations should be carried out. Geological features and Geo-hydrological status of the study area and ecological status (Terrestrial and Aquatic).
31. The details of solid and hazardous wastes generation, storage, utilization and disposal particularly related to the hazardous waste calorific value of hazardous waste and detailed characteristic of the hazardous waste. Action plan for the disposal of fly ash generated from boiler should be included.
32. Precautions to be taken during storage and transportation of hazardous chemicals should be clearly mentioned and incorporated.
33. A copy of the ?Memorandum of Understanding? signed with cement manufacturers indicating clearly that they will utilized all the organic solid waste generated.
34. Details of land fill alongwith design details as per CPCB guidelines. Location of secured land fill/TSDF.
35. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF.

36. Ground water monitoring around the project site as well as around land fill site
37. Risk assessment for storage for chemicals/solvents and phosgenes. Action plan for handling & safety system, whenever any cyanide is involved in process.
38. An action plan to develop green belt in 33 % area
39. Action plan for rainwater harvesting measures at plant site should be included to harvest rainwater from the roof tops and storm water drains to recharge the ground water.
40. Occupational health of the workers needs elaboration including evaluation of noise, heat, illumination, dust, any other chemicals, metals being suspected in environment and going into body of workers either through inhalation, ingestion or through skin absorption and steps taken to avoid musculo-skeletal disorders (MSD), backache, pain in minor and major joints, fatigue etc. Occupational hazards specific pre-placement and periodical monitoring should be carried out.
41. Socio-economic development activities should be in place.
42. Note on compliance to the recommendations mentioned in the CREP guidelines.
43. Detailed Environment management Plan (EMP) with specific reference to details of air pollution control system, water & wastewater management, monitoring frequency, responsibility and time bound implementation plan for mitigation measure should be provided.
44. EMP should include the concept of waste-minimization, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.
45. Total capital cost and recurring cost/annum for environmental pollution control measures.
46. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof.
47. A tabular chart with index for point wise compliance of above TORs.

B. Additional TOR

1. Public hearing to be conducted by SPCB 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. CPCB Technology for H-Acid and Venyl sulphone shall be adopted.
3. Details of Zero discharge scheme.

The following general points shall be noted:

- i. All documents shall be properly indexed, page numbered.
- ii. Period/date of data collection shall be clearly indicated.
- iii. Authenticated English translation of all material provided in Regional languages.
- iv. The letter/application for EC shall quote the MOEF file No. and also attach a copy of the letter.
- v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
- vi. The final EIA-EMP report submitted to the Ministry must incorporate the issues in this letter. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report.

- vii. Certificate of Accreditation issued by the QCI to the environmental consultant shall be included.

The Committee prescribed the above ToRs for preparation of EIA/EMP reports. The proponent should prepare EIA/EMP Report based on the above TORs and submit the same to the State Pollution Control Board for conducting public hearing/consultation. The EIA/EMP Report should be as per the generic structure given in Appendix-III of EIA Notification, 2006. The concerns raised alongwith the replies during the Public Hearing/ Consultation should be incorporated in the EIA/EMP Report and the final EIA/EMP submitted to the Ministry for obtaining environmental clearance.

32.4.2 Synthetic organic chemicals industry (dyes & dye intermediates at Sakarwadi, TalukaKopargaon, District Ahmednagar, Maharashtra by M/s Godavari Biorefineries Ltd – reg. TOR

The project authorities 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. All Synthetic Organic Chemicals Industry located outside the notified industrial area/estate are listed at S.N. 5(f) under category 'A' and appraised by Expert Appraisal Committee (I).

M/s Godavari Biorefineries Ltd. has proposed for setting up of manufacturing unit of Synthetic Organic Chemicals in the existing distillery unit at Sakarwadi, TalukaKopargaon, District Ahmednagar, Maharashtra. Plot area of the existing unit is 194 ha. Cost of the proposed expansion is Rs. 21.0 Crore. It is reported that no reserved forest, wildlife sanctuaries, historical places are located within 10 km distance. Following products will be manufactured :

S.N.	Product	Existing Capacity (MTPM)	Addition (MTPM)	Total (MTPM)
1	Industrial Alcohol	1800	--	1800
2	Ethyl Acetate	5400	3300	8700
3	Acetaldehyde	1500	600	2100
4	Acetic Acid	1500	--	1500
5	Dilute Acetic Acid	110	--	110
6	Crotonaldehyde	500	--	500
7	Paraldehyde	60	--	60

ESPs have been installed in the existing coal fired boiler (18 TPH). Bagfilter has been installed in the existing coal fired boiler (12 TPH). Water requirement from irrigation department for the entire complex including distillery unit is 2134 m³/day and no additional water is required. Ethyl acetate effluent is biologically treated and recycled as make up water in cooling tower. Steam condensate are recycled as boiler feed water. The process effluent from the acetaldehyde plant is biologically treated and recycled as make up water in cooling tower. Acetic acid plant effluent which is known as dilute acetic acid is sold as by-product. Crotonaldehyde plant effluent is treated with urea and sulphuric acid to form dilute Crotonaldehyde Di Urea solution which is concentrated to get 10 % moisture. This mass is sent to CHWTSDf for incineration. Paraldehyde effluent is treated in biological treatment and recycled as make up water as cooling towers. Distillery effluent is treated in anaerobic digesters followed by RO and nano filter. The permeates is used as make up water in cooling towers. Rejects are treated on composting principles.

After detailed deliberation, The Committee sought present compliance status to the environmental condition.

The proposal is deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.

32.4.3 Integrated Sugar (5000TCD), Distillery (60 KLPD) and Cogeneration Power Plant (30MW)at Village Kapshi, Tehsil Phaltan, District Satara, Maharashtra by M/s Sharayu Agro Industries Ltd.(Formerly known as –LokmanyaSakharUdyog Ltd.),Pune –reg. TOR

The project authorities and their consultant gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken alongwith the draft Term of References for the preparation of EIA-EMP report. All molasses based distillery are listed at S.N. 5(g) (i) under category 'A' and appraised at Central level.

M/s Sharayu Agro Industries Ltd.(Formerly known as –LokmanyaSakharUdyog Ltd.),Pune has proposed for setting up of Integrated Sugar (5000TCD), Distillery (60 KLPD) and Cogeneration Power Plant (30MW) at Village Kapshi, Tehsil Phaltan, District Satara, Maharashtra. Total plot area is 76 acres. Cost of project is Rs. 323.7 Crore. Nearest water bodies are Mulikwadi tank (4 Km) and Nira Canal (12 Km). ESP will be provided to bagasse / coal fired boiler to control particulate emissions. Fresh water requirement for distillery unit is 432 m3/day. Fresh water requirement for sugar and cogen power plant will be 418 m3/day. Effluent generation from sugar unit will be 292.8 m3/day, which will be treated in the ETP. Spent wash from distillery will be treated in the biomethanation reactor. Treated spent wash will be concentrated in five multiple effect evaporator. Concentrates will be mixed with baggase/coal and burned in boiler furnace. Distillery will be operated for 270 days. No effluent will be discharged outside the plant premises.

After detailed deliberations, the Expert Appraisal Committee prescribed the following Standard and Additional TORs for preparation of EIA/EMP:

A. Standard TOR:

1. Executive summary of the project.
2. Justification of the project
3. Detailed break-up of the land area along with latest photograph of the area.
4. Present land use based on satellite imagery and details of land availability for the project along with supporting document.
5. Details of site and information related to environmental setting within 10 km radius of the project site.
6. Information regarding eco-sensitive areas such as national park/wildlife sanctuary/ biosphere reserves within 10 km radius of project area.
7. Total cost of the project along with total capital cost and recurring cost/annum for environmental pollution control measures.
8. A copy of lease deed or allotment letter, if land is already acquired.
9. List of existing distillery units in the study area along with their capacity and sourcing of raw material.

10. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc.
11. Details of proposed products along with manufacturing capacity.
12. Number of working days of the sugar unit, distillery unit and CPP.
13. Details of raw materials, its source with availability of all raw materials including cereal grains requirement in case of grain based distillery. If molasses based distillery, then give source and quantity available for molasses.
14. Manufacturing process details of Sugar , distillery and CPP along with process flow chart.
15. Sources and quantity of fuel (rice husk/bagasse/ coal etc.) for the boiler. Measures to take care of SO₂ emission. A copy of Memorandum of Understanding (MoU) signed with the coal suppliers should be submitted.
16. Storage facility for raw materials, prepared alcohol, fuels and fly ash.
17. Action plan for ambient air quality parameters as per NAAQES Standards for PM₁₀, PM_{2.5}, SO₂ and NO_x as per GSR 826(E) dated 16th November, 2009.
18. One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall and AAQ data (except monsoon) for PM₁₀, PM_{2.5}, SO₂, NO_x, CO and HC (methane & non methane) shall be collected. The monitoring stations should take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests. Data for water and noise monitoring should also be included.
19. Mathematical modelling for calculating the dispersion of air pollutants and ground level concentration along with emissions from the boiler's stack.
20. An action plan to control and monitor secondary fugitive emissions from all the sources.
21. An action plan prepared by SPCB to control and monitor secondary fugitive emissions from all the sources.
22. Details of boiler and its capacity. Details of the use of steam from the boiler.
23. Ground water quality around proposed spent wash storage lagoon and the project area.
24. Details of water requirement, water balance chart for existing unit as well as proposed expansion (as applicable). Measures for conservation water by recycling and reuse to minimize the fresh water requirement.
25. Source of water supply and permission of withdrawal of water from Competent Authority.
26. Proposed effluent treatment system for grain/molasses based distillery (spent wash and spent lees) along with utility wastewater including CPP/Co-gen Unit (wherever applicable) as well as domestic sewage and scheme for achieving zero discharge. Details of treatment of effluent generation from sugar unit.
27. Spent wash generation should not exceed 8 KL/KL of alcohol production. Details of the spent wash treatment for molasses based distillery based distillery.
28. Capacity for spent wash holding tank and action plan to control ground water pollution.
29. Layout for storage of bagasse/biomass/coal.
30. Capacity for spent wash holding tank and action plan to control ground water pollution.
31. Dryer shall be installed to dry DWGS.
32. Layout for storage of rice husk/biomass/coal.
33. Details of solid waste management including management of boiler ash.
34. Risk assessment for storage and handling of alcohol and mitigation measure due to fire and explosion and handling areas.
35. Alcohol storage and handling area fire fighting facility as per norms. Provision of Foam System for fire fighting to control fire from the alcohol storage tank.

36. Action plan for development of green belt over 33 % of the total project area 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.
37. List of flora and fauna in the study area.
38. Noise levels monitoring at five locations within the study area.
39. Detailed Environment management Plan (EMP) with specific reference to details of air pollution control system, water & wastewater management, monitoring frequency, responsibility and time bound implementation plan for mitigation measure should be provided.
40. EMP should also include the concept of waste-minimization, recycle/reuse/ recover techniques, Energy conservation, and natural resource conservation.
41. Action plan for rainwater harvesting measures at plant site should be included to harvest rainwater from the roof tops and storm water drains to recharge the ground water.
42. Details of occupational health surveillance programme.
43. Details of socio-economic welfare activities.
44. Transportation of raw materials and finished products for the project (proposed/expansion) in respect of existing traffic, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
45. Action plan for post-project environmental monitoring.
46. Corporate Environmental Responsibility
47. (a) Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
 (b) Does the Environmental Policy prescribe for standard operating process/procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA report.
 (c) What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
 (d) Does the company have a system of reporting of non-compliance / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.
48. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan should be prepared and incorporated.
49. Total capital cost and recurring cost/annum for environmental pollution control measures.

B. Additional TOR

50. 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.
51. Total project cost to be re-casted with component wise details. Accordingly, expenditure on pollution control measures to be incorporated.

The following general points shall be noted:

- i. All documents shall be properly indexed, page numbered.
- ii. Period/date of data collection shall be clearly indicated.
- iii. Authenticated English translation of all material provided in Regional languages.
- iv. The letter/application for EC shall quote the MOEF file No. and also attach a copy of the letter.

- v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
- vi. The final EIA-EMP report submitted to the Ministry must incorporate the issues in this letter. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report.
- vii. Certificate of Accreditation issued by the QCI to the environmental consultant shall be included.

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.

32.4.4 Proposed expansion of synthetic organic chemicals manufacturing facility at Birwadi village, Raigadh, Mahad, Maharashtra by M/s Vlnati Organics Limited . – reg TOR

PP informed that proposal was submitted in the Ministry as proposal is located within 5 Km of the eco-sensitive area i.e. Western Ghat. Study area has few ESA villages mentioned in WG directions issued by MoEF on 13.11.2013. Nearest village (Matwan) is 2.7 km to south. The said direction are issued under Section 5 of EPA, 1986. General conditions clause of EIA Notification amended on 25.06.2014 states that any project within 5 km of eco-sensitive area be treated as category 'A' project. However, the Committee noted that Western Ghat as Eco-Sensitive Area is yet to be notified. Therefore, the Committee recommended that project may now be considered as 'B' category and referred the matter to the State Authority for consideration of the project.

32.4.5 Additional Exploratory Drilling of 13 wells in KG Basin on-land PML acreages of East Godavari District, Andhra Pradesh by M/s ONGC- reg TOR

The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken alongwith the draft Term of References for the preparation of EIA-EMP report. 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.

M/s ONGC Ltd. has proposed for Additional Exploratory Drilling of 13 wells in KG Basin on-land PML acreages of East Godavari District, Andhra Pradesh . PP informed that following ECs have been obtained for drilling in the block:

- i) J-11011/178/2008 IA – II (I) dated 28th April, 2008.
- ii) J-11011/474/2010 IA II (I) dated 18th May, 2012.

iii) J-11011/68/2011-IA II (I) dated 14th June, 2013.

PP informed that twelve hydrocarbon bearing fields viz. Tatipaka, Pasarlapudi, Srikatapalli, Gopavaram, Mori, Kesavadasupalem, Adavipalem, Ponmanda, Mandapeta, Endamuru, Rangapuram and Bhimanapalli were established. Carpet 3 D seismic survey with improved imaging of the sub-surface has significantly changed the exploration scenario in the block, yielding discovery of Kothalanka, Geddanapalli, Vygreswaram and Mandapeta South oilfield.

Based on the Geological and Geophysical studies location are firmed up for exploratory drilling to probe new prospects and also to delineate the existing oil and gas pools of the established fields. It is expected that the proposed drilling activities will lead to the accretion of the hydrocarbon reserves which will augment the production of hydrocarbons in the present scenario of growing demand of oil and gas in the country. Cost of the project is Rs. 13 Crores. Drilling depth varies from 3000- 4000 m. Type of drilling fluid will be WBM/SOBM. It is reported that no eco-sentivie zone is located within 10 Km distance. Water requirement from tanker supply will be about 25 m³/day for each well. Wastewater will be collected in the HDPE lined pits and recycled and reused. Wastewater generation is 10 m³/day. Wastewater will be collected in the HDPE lined pits, treated, recycled and reused. The Committee exempted the project proposal from EIA report preparation/public hearing as per para 7 (ii) of EIA Notification, 2006.

The Committee, therefore, recommended the proposal as amendment of existing EC No. J-11011/474/2010-IA II(I) dated 18th May 2012, which was issued for 24 wells and has now recommended for amendment in the existing EC for additional 24 wells subject to compliance of specific conditions of existing EC.

32.4.6 Resin Manufacturing Unit at Survey No. 416/1 Paiki-3, Poglu- Piludra Crossing, NH. No.8 at Poglu, Tehsil Prantij, District Sabarkantha, Gujrat by M/s. Levin Décor LLP. – reg TOR

The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken alongwith the draft Term of References for the preparation of EIA-EMP report. All the synthetic organic chemicals industry (basic organic, chemicals, other, synthetic organic chemicals and chemical Intermediates) located outside the notified industrial area are listed at S.N. 5(f) under Category 'A' and appraised at the Central level.

M/s. Levin Décor LLP. has proposed for setting up of Resin Manufacturing Unit at Survey No. 416/1 Paiki-3, Poglu- Piludra Crossing, NH. No.8 at Poglu, Tehsil Prantij, District Sabarkantha, Gujrat. Total plot area is 12192 m² of which greenbelt will be developed in 4519 m². It is reported that no national park/ wildlife sanctuary/ reserve forest/ is located within 10 Km distance. River Sabarmati is flowing within 10 km distance. Cost of project is Rs. 1 Crore. Following products will be manufactured:

S.N.	Product	Quantity
1	Phenol Formaldehyde Resin	300 MTPM
2	Melamine Formaldehyde Resin	150 MTPM
3	Phenol Urea Formaldehyde Resin	100 MTPM
4	H P Decorative Laminated Sheets	2,00,000 Nos./Month

Bagfilter will be provided to Coal/biomass fired boiler. Total water requirement will be 32.5 m³/day of which fresh water requirement from ground water source will be 15.49 m³/day.

Effluent will be treated in ETP. ETP sludge will be sent to TSDF site. Used oil will be sent to authorized recyclers/re-processors.

After detailed deliberations, the Expert Appraisal Committee prescribed the following Standard and Additional TORs for preparation of EIA/EMP:

A. Standard TOR:

1. Executive summary of the project
2. Justification of the project.
3. Photographs of proposed plant site.
4. Promoters and their back ground.
5. Regulatory framework.
6. A map indicating location of the project and distance from severely polluted area
7. Project location and plant layout.
8. Infrastructure facilities including power sources.
9. Total cost of the project along with total capital cost and recurring cost/annum for environmental pollution control measures.
10. Project site location along with site map of 10 km area and site details providing various industries, surface water bodies, forests etc.
11. Present land use based on satellite imagery for the study area of 10 km radius. Details of land availability for the project along with supporting document.
12. Location of National Park/Wild life sanctuary/Reserve Forest within 10 km radius of the project.
13. Details of the total land and break-up of the land use for green belt and other uses.
14. List of products along with the production capacities.
15. Detailed list of raw materials required and source, mode of storage and transportation.
16. Manufacturing process details along with the chemical reactions and process flow chart.
17. Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall is necessary.
18. Ambient air quality monitoring at 6 locations within the study area of 5 km. aerial coverage from project site as per NAAQES notified on 16th September, 2009. Location of one AAQMS in downwind direction.
19. One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall and AAQ data (except monsoon) for PM₁₀, PM_{2.5}, SO₂, NO_x including VOCs shall be collected. The monitoring stations shall take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests. Data for water and noise monitoring shall also be included.
20. Air pollution control measures viz. Multi-cyclone and bag filter etc. shall be proposed for the effective control of gaseous emissions within permissible limits.
21. Control methanol emission from drying section.
22. Details of VOC monitoring system in the working zone environment, if any.
23. Name of all the solvents to be used in the process and details of solvent recovery system.
24. Design details of ETP, incinerator, boiler, scrubbers/bag filters etc.
25. Details of water and air pollution and its mitigation plan.
26. An action plan to control and monitor secondary fugitive emissions from all the sources.

27. Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. Air quality modelling for proposed plant.
28. Permission for the drawl of ground water from CGWA. Water balance chart including quantity of effluent generated recycled and reused and discharged.
29. Action plan for 'Zero' discharge of effluent shall be included.
30. Treatment of phenol in the effluent, if any.
31. Ground water quality monitoring minimum at 6 locations shall be carried out. Geological features and Geo-hydrological status of the study area and ecological status (Terrestrial and Aquatic).
32. The details of solid and hazardous wastes generation, storage, utilisation and disposal particularly related to the hazardous waste calorific value of hazardous waste and detailed characteristic of the hazardous waste. Action plan for the disposal of fly ash generated from boiler shall be included.
33. Precautions to be taken during storage and transportation of hazardous chemicals shall be clearly mentioned and incorporated.
34. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
35. List of hazardous chemicals (as per MSIHC rule) with toxicity levels.
36. A write up on "Safe Practice" followed for methanol handling, storage, transportation and unloading to be submitted.
37. A write up on "Treatment of workers affected by accidental spillage of chemicals".
38. Locating the plant in open area instead of covered to be reviewed in view of safety consideration.
39. An action plan to develop green belt in 33 % area
40. Action plan for rainwater harvesting measures at plant site shall be included to harvest rainwater from the roof tops and storm water drains to recharge the ground water.
41. Details of occupational health programme.
 - i. To which chemicals, workers are exposed directly or indirectly.
 - ii. Whether these chemicals are within Threshold Limit Values (TLV)/ Permissible Exposure Levels as per ACGIH recommendation.
 - iii. What measures company has taken to keep these chemicals within PEL/TLV.
 - iv. How the workers are evaluated concerning their exposure to chemicals during pre-placement and periodical medical monitoring.
 - v. What are onsite and offsite emergency plan during chemical disaster.
 - vi. Liver function tests (LFT) during pre-placement and periodical examination.
42. Details of occupational health surveillance programme.
43. Socio-economic development activities shall be in place.
44. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and incorporated.
45. Detailed Environment management Plan (EMP) with specific reference to details of air pollution control system, water & wastewater management, monitoring frequency, responsibility and time bound implementation plan for mitigation measure shall be provided.
46. EMP shall include the concept of waste-minimization, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.
47. Corporate Environmental Responsibility

- (a) Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
 - (b) Does the Environmental Policy prescribe for standard operating process/procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA report.
 - (c) What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
 - (d) Does the company have a system of reporting of non compliance / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report.
48. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof.

B. 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.

The following general points shall be noted:

- i. All documents shall be properly indexed, page numbered.
- ii. Period/date of data collection shall be clearly indicated.
- iii. Authenticated English translation of all material provided in Regional languages.
- iv. The letter/application for EC shall quote the MOEF file No. and also attach a copy of the letter.
- v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
- vi. The final EIA-EMP report submitted to the Ministry must incorporate the issues in this letter. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report.
- vii. Certificate of Accreditation issued by the QCI to the environmental consultant shall be included. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCI) /National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. 'Certificate of accreditation' issued by QCI to the environmental consultant should be included.

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.

32.4.7 Bulk Drug Manufacturing Unit at Kongavanipalem (V), Bhogapuram (M), Vijayanagaram District of Andhra Pradesh by M/s Divi's Laboratories Limited - reg. TOR

The PP did not attend the meeting. The committee recommended to consider the project as and when applied on line by the PP.

32.4.8 Bulk Drug Manufacturing Unit at Village Ontimamidi (Kona), MandalThondangi , District East Godavari, Andhra Pradesh by M/s Divi's Laboratories Unit (Unit Iii). –reg. TOR

The project authorities and their Consultant (M/s RamkyEnviro Engineers Ltd.) 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. All Synthetic Organic Chemicals Industry (Bulk Drugs & Intermediates) located outside the notified industrial area/estate are listed at S.N. 5(f) under category 'A' and appraised by Expert Appraisal Committee (I).

M/s Divi's Laboratories Unit (Unit IV) has proposed for setting up of Bulk Drug Manufacturing Unit at Village Ontimamidi (Kona), Mandal Thondangi , District East Godavari, Andhra Pradesh. Plot area is 198 ha. of which area earmarked for greenbelt is 65.1 ha. Cost of project is Rs. 390 Crore. Project is located within 0.5 km from the sea. Kona forest is located within 0.5 km distance. Project attracts CRZ notification. It is reported that no area protected under international conventions, national or local legislation are located within 15 km distance. Following products will be manufactured:

S.N.	Product	Quantity (MTPA)
1	(+) N-Formyl Octa Base	450
2	Octamandalate Base	780
3	PMPA	780
4	CHEA (100%)	540
5	Atipadichloride	1210
6	2-(S) – Acetoxypropionyl chloride	135
7	4-CPPCA	50
8	3-HAP	330
9	Benzyladrinone HCl	560
10	2-Acetyl-6-methoxy naphthalene	5000
11	2-(n-Butyl)-4-Chloro-5-formyl imidazole	250
12	Beta-lonylidine ethyl triphenylphosphene bromide	400
13	C10-dialdehyde	150
14	1,2,3-TriO-Acetyl-5-deoxy-n-ribofuranose	50
15	Acetonide	132
16	1-Pentynol	84
17	Lycopene	30
18	Beta-Carotene	100
19	Cathaxanthin	10
20	Appocarotenal	50
21	Lutein	50
22	Asthaxanthin	60
23	ZL-Valine	150
24	DL-2,2-Dimethyl cyclopropane-1-carboxylic acid	30
25	Dimethylacetylene di carboxylate	60
26	N-Hydroxysuccinamide	
27	Iopamedal	300
28	Iohexol	300

29	Valsartan	100
30	AXN	100
31	Losartan (k)	100
32	Mesalamine	200
33	Orlistat	30
34	Allogliptin	10
35	Linagliptin	10
36	Saxagliptin	5
37	Merabegran	20
38	Safosobavir	10
39	Daltagravir	10
40	S-Nicotinprolacrylics	10
41	GSK 488062C (API)	1
42	GSK 2256098C (API)	1
43	ES-Omiprazole	5
44	Pentaprozole	20
45	Viladazone	2
46	Vildagliptin	75
47	GSK API	5
48	MK-3682	2
49	DTTA Salt	15
50	Ethyl ester	10
51	2,4-Thiazole methyl amine	50
52	5-[4-Methylbiphenyl-2yl]-2trityl-2Htetrazole	500
53	L-Valine methyl ester HCl	382
54	4-Bromomethylbiphenyl-2-carbonitrile	630
55	NOG	400
56	2,4,5-Trifluorophenylacetic acid	350
57	Triazole HCl	350
58	Ethyl-2-Isocyanato Acetate	10
59	1-Methyl-1h-Pyrazole-5-Boronic Acid	10
60	5-Amino-2-Methyl Benzene Sulfonamide	10
61	O-benzyl hydroxylamine hydrochloride	10
62	[(=/-)-trans-1,2-bis(,ethanesulfonyloxymethyl)cyclohexane	5
63	4-(1,2-benzisothiazole-3-yl)-piperazine	2
64	DL-Nicotine	10
65	P-Methyl –PyrrolidinoPropiophenoneHcl	10
66	2-Amino-6-Bromo Pyridine	10
67	6-Chloro Uracil	10
68	3-Phthalimido piperidine	10
69	Bocazidepiperdine	10
70	Chloroquinoxoline	10
71	8-Bromo-7-(but-2-ynyl)-3-methyl-1H Purine-2,6 (3H,7H)dione	10
72	3,5-DiO-benzoyl-2-deoxy-2-fluoro-2-C-methyl-D-robono-y-Lactone	25
73	6-r-2,26-Trimethyl-1,4-cyclo hexadione	15
74	Aminobutanol	20
75	Difluorobrnzyl amine	20
76	5-Amino-1-isopropyl-3-methyl pyrazole	5
77	2,5-dichloro-4-ido pyridine	5
78	Ranolazine	5

79	(2'R)-N-Benzoyl-2'-deoxy-2'-fluoro-2'-methylcytidine 3',5'-dibenzoate	25
80	2'-deoxy-2'-fluoro-2'-C-methyluridine	25
81	Butorphenol tartrate	20
82	4-Chloro-2-butanone	5
83	Boc-L-3-fluorophenyl alanone	0.5
84	2-Carboethoxy-3-cyano-5-methyl hexanoic acid ethyl ester	2
85	GSK 2357577A	0.5
86	5-(2-Phenyl ethyl)-2-(Propan-2-Y1)Benzene-1,3-diol	0.5

Total water requirement from APIIC water supply will be 6500 m³/day. Effluent generation will 5414 m³/day. PP informed that the effluents will be treated in a "Zero Liquid Discharge" system. The high TDS effluents will be sent to Stripper followed by MEE, AFTD. Low TDS effluent stream will be treated in biological treatment plant followed by Reverse Osmosis. The permeate from RO is reused in cooling towers, while the reject is sent to MEE. Power requirement will be 15000 KVA. Domestic wastewater will be treated in STP. Process residue will be sent for incineration/co-incineration in cement industries. ETP sludge/MEE salt/incineration ash will be sent to TSDF.

PP informed that the said industrial area is new and notified recently. Environmental clearance for the industrial area is yet to be obtained. Therefore, the Committee recommended that public hearing will be exempted after submission of the copy of environmental clearance for the industrial area/estate.

After detailed deliberations, the Expert Appraisal Committee prescribed the following standard and Additional TORs for preparation of EIA/EMP:

A. Standard TOR:

1. Executive summary of the project
2. Justification of the project.
3. Project location and plant layout.
4. Promoters and their back ground.
5. Regulatory framework
6. A map indicating location of the project and distance from severely polluted area
7. Infrastructure facilities including power sources.
8. Total cost of the project alongwith total capital cost and recurring cost/annum for environmental pollution control measures.
9. Project site location alongwith site map of 10 km area and site details providing various industries, surface water bodies, forests etc.
10. Present land use based on satellite imagery for the study area of 10 km radius.
11. Location of National Park/Wild life sanctuary/Reserve Forest within 10 km radius of the project.
12. Details of the total land and break-up of the land use for green belt and other uses.
13. List of products alongwith the production capacities.
14. Detailed list of raw material required and source, mode of storage and transportation.
15. Manufacturing process details alongwith the chemical reactions and process flow chart.
16. Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall is necessary.

17. Ambient air quality monitoring at 6 locations within the study area of 5 km., aerial coverage from project site as per NAAQES notified on 16th September, 2009. Location of one AAQMS in downwind direction.
18. One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall and AAQ data (except monsoon) for PM₁₀, PM_{2.5}, SO₂, NO_x including HC and VOCs should be collected. The monitoring stations should take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests. Data for water and noise monitoring should also be included.
19. Air pollution control measures specifically suggested by the Committee as Bagfilter to be installed for the effective control of gaseous emissions within permissible limits.
20. Name of all the solvents to be used in the process and details of solvent recovery system.
21. Design details of ETP, incinerator, boiler, scrubbers/bag filters etc.
22. Details of water and air pollution and its mitigation plan
23. Action plan to control ambient air quality as per NAAQES Standards notified by the Ministry on 16th September, 2009.
24. An action plan to control and monitor secondary fugitive emissions from all the sources.
25. Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. Air quality modelling for proposed plant.
26. Source and permission for the drawl of total 397.5 m³/day water from the competent authority. Water balance chart including quantity of effluent generated recycled and reused and discharged. Efforts shall be made to reduce ground water drawl.
27. Action plan for 'Zero' discharge of effluent should be included.
28. Ground water quality monitoring minimum at 6 locations should be carried out. Geological features and Geo-hydrological status of the study area and ecological status (Terrestrial and Aquatic).
29. The details of solid and hazardous wastes generation, storage, utilization and disposal particularly related to the hazardous waste calorific value of hazardous waste and detailed characteristic of the hazardous waste.
30. Action plan for the management of fly ash generated from boiler should be included. Tie-up or agreement with brick manufacturer to be provided.
31. Precautions to be taken during storage and transportation of hazardous chemicals should be clearly mentioned and incorporated.
32. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they will utilized all the organic solid waste generated.
33. A copy of 'Memorandum of Understanding' (MoU) signed with coal supplier for imported coal and brick manufacturers for management of fly ash.
34. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
35. Material Safety Data Sheet for all the Chemicals are being used/will be used. CAS No./RTECS No./DOT/UN etc to be mentioned against each chemicals.
36. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
37. Risk assessment for storage for chemicals/solvents. Action plan for handling & safety system.
38. An action plan to develop green belt in 33 % area. Layout plan for green belt shall be provided.
39. Action plan for rainwater harvesting measures at plant site shall be included to harvest rainwater from the roof tops and storm water drains to recharge the ground water.
40. Details of occupational health programme.
 - i) To which chemicals, workers are exposed directly or indirectly.

- ii) Whether these chemicals are within Threshold Limit Values (TLV)/ Permissible Exposure Levels as per ACGIH recommendation.
 - iii) What measures company have taken to keep these chemicals within PEL/TLV.
 - iv) How the workers are evaluated concerning their exposure to chemicals during pre-placement and periodical medical monitoring.
 - v) What are onsite and offsite emergency plan during chemical disaster.
 - vi) Liver function tests (LFT) during pre-placement and periodical examination.
 - vii) Details of occupational health surveillance programme.
41. Socio-economic development activities should be in place.
 42. Note on compliance to the recommendations mentioned in the CREP guidelines.
 43. Detailed Environment management Plan (EMP) with specific reference to details of air pollution control system, water & wastewater management, monitoring frequency, responsibility and time bound implementation plan for mitigation measure should be provided.
 44. EMP should include the concept of waste-minimization, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.
 45. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof.
 46. A tabular chart with index for point wise compliance of above TORs.

B. Additional TOR

1. Public hearing to be conducted by SPCB 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. CRZ clearance to be obtained

The following general points shall be noted:

- i. All documents shall be properly indexed, page numbered.
- ii. Period/date of data collection shall be clearly indicated.
- iii. Authenticated English translation of all material provided in Regional languages.
- iv. The letter/application for EC shall quote the MOEF file No. and also attach a copy of the letter.
- v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
- vi. The final EIA-EMP report submitted to the Ministry must incorporate the issues in this letter. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report.
- vii. Certificate of Accreditation issued by the QCI to the environmental consultant shall be included.

The Committee prescribed the above ToRs for preparation of EIA/EMP reports. The proponent should prepare EIA/EMP Report based on the above TORs and submit the same to the State Pollution Control Board for conducting public hearing/consultation. The EIA/EMP Report should be as per the generic structure given in Appendix-III of EIA Notification, 2006. The concerns raised alongwith the replies during the Public Hearing/ Consultation should be incorporated in the EIA/EMP Report and the final EIA/EMP submitted to the Ministry for obtaining environmental clearance.

32.4.9 Synthetic Organic Manufacturing Unit at SF No. 32/2 & 33/2(a), Plot No. A4/2 (Part B), SIPCOT Industrial Complex, Village Thervoykandigai, Taluk Gummidipoondi, District Thiruvallur, Tamil Nadu by M/s Jesons Industries Ltd.-reg TOR.

The project authorities and their Consultant (M/s Hubert EnviroCare System Pvt. Ltd.) 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. All Synthetic Organic Chemicals Industry (Bulk Drugs & Intermediates) located inside the notified industrial area/estate are listed at S.N. 5(f) under category 'B' and appraised by State level. However, due to applicability of General Condition for distance from interstate boundary of AP within 5 Km (i.e. 4.05 km), the project proposal is treated as Category 'A' project and appraised at Central level.

M/s Jesons Industries Ltd. has proposed for setting up of Synthetic Organic Manufacturing Unit at SF No. 32/2 & 33/2(a), Plot No. A4/2 (Part B), SIPCOT Industrial Complex, Village Thervoykandigai, Taluk Gummidipoondi, District Thiruvallur, Tamil Nadu. Plot area is 7.75 acres out of which area earmarked for greenbelt is 10632 m². Cost of project is Rs. 14 Crore. Waterbodies i.e. SenkaraiAmmaneri Lake (0.86 Km); ThervoyKandigai Lake (0.87 Km); Poovilambedu Pond (5.6 Km);Kakkavakkam Lake (6.5 Km); Arani River (8.2 Km) are located within 10 Km distance. Reserve Forests i.e. Thervoy RF (2.77 Km), PeriyaPuliyur RF (1.7 Km), Siruvadai Forest and Palem Range RF (7.8 Km) are located within 10 km distance. Following products will be manufactured :

S.N.	Products	Capacity
1	Synthetic Acrylic Polymer Emulsion	60 TPD (18000 TPA)
2	Industrial Synthetic Adhesives and Glues	8 TPD (2400TPA)
3	Thermosetting Acrylic Resins, Ethylene vinyl acetate Emulsions	30 TPD (9000TPA)
4	Polymer of Vinyl Acetate	12 TPD (3600 TPA)
5	Vinyl Copolymers	8 TPD (2400 TPA)
6	Water proofing compounds and Construction emulsions	5 TPD (6000 TPA)

Scrubber alongwith adequate stack height will be provided to control process emissions. MS activated carbon primary filter with standby arrangement followed by secondary and tail end SS ACF will be provided to control organic emission from production blocks. Water requirement from SIPCOT water supply will be 107 m³/day. Effluent generation will be 10 m³/day and treated in the ETP . Treated effluent will be recycled. ETP sludge will be sent to TSDF. Used oil will be sent to authorized recycler/re-processors. DG set (250 KVA) will be installed.

PP submitted the copy of environmental clearance letter no 21-51/2009-IA III dated 9th August, 2010 for the development of industrial park at SIPCOT, ThervoyKandigai, Thiruvallur. Therefore, the Committee exempted the public hearing.

After detailed deliberations, the Expert Appraisal Committee prescribed the following standard and Additional TORs for preparation of EIA/EMP:

A. Standard TOR:

1. Executive summary of the project
2. Justification of the project.
3. Project location and plant layout.
4. Promoters and their back ground.
5. Regulatory framework
6. A map indicating location of the project and distance from severely polluted area
7. Infrastructure facilities including power sources.
8. Total cost of the project alongwith total capital cost and recurring cost/annum for environmental pollution control measures.
9. Project site location alongwith site map of 10 km area and site details providing various industries, surface water bodies, forests etc.
10. Present land use based on satellite imagery for the study area of 10 km radius.
11. Location of National Park/Wild life sanctuary/Reserve Forest within 10 km radius of the project.
12. Details of the total land and break-up of the land use for green belt and other uses.
13. List of products alongwith the production capacities.
14. Detailed list of raw material required and source, mode of storage and transportation.
15. Manufacturing process details alongwith the chemical reactions and process flow chart.
16. Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall is necessary.
17. Ambient air quality monitoring at 6 locations within the study area of 5 km., aerial coverage from project site as per NAAQES notified on 16th September, 2009. Location of one AAQMS in downwind direction.
18. One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall and AAQ data (except monsoon) for PM₁₀, PM_{2.5}, SO₂, NO_x including HC and VOCs should be collected. The monitoring stations should take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests. Data for water and noise monitoring should also be included.
19. Air pollution control measures specifically suggested by the Committee as Bagfilter to be installed for the effective control of gaseous emissions within permissible limits.
20. Name of all the solvents to be used in the process and details of solvent recovery system.
21. Design details of ETP, incinerator, boiler, scrubbers/bag filters etc.
22. Details of water and air pollution and its mitigation plan
23. Action plan to control ambient air quality as per NAAQES Standards notified by the Ministry on 16th September, 2009.
24. An action plan to control and monitor secondary fugitive emissions from all the sources.
25. Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. Air quality modelling for proposed plant.
26. Source and permission for the drawl of total 397.5 m³/day water from the competent authority. Water balance chart including quantity of effluent generated recycled and reused and discharged. Efforts shall be made to reduce ground water drawl.
27. Action plan for 'Zero' discharge of effluent should be included.
28. Ground water quality monitoring minimum at 6 locations should be carried out. Geological features and Geo-hydrological status of the study area and ecological status (Terrestrial and Aquatic).
29. The details of solid and hazardous wastes generation, storage, utilization and disposal particularly related to the hazardous waste calorific value of hazardous waste and detailed characteristic of the hazardous waste.
30. Action plan for the management of fly ash generated from boiler should be included. Tie-up or agreement with brick manufacturer to be provided.

31. Precautions to be taken during storage and transportation of hazardous chemicals should be clearly mentioned and incorporated.
32. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they will utilize all the organic solid waste generated.
33. A copy of 'Memorandum of Understanding' (MoU) signed with coal supplier for imported coal and brick manufacturers for management of fly ash.
34. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
35. Material Safety Data Sheet for all the Chemicals are being used/will be used. CAS No./RTECS No./DOT/UN etc to be mentioned against each chemicals.
36. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
37. Risk assessment for storage for chemicals/solvents. Action plan for handling & safety system.
38. An action plan to develop green belt in 33 % area. Layout plan for green belt shall be provided.
39. Action plan for rainwater harvesting measures at plant site shall be included to harvest rainwater from the roof tops and storm water drains to recharge the ground water.
40. Details of occupational health programme.
 - i) To which chemicals, workers are exposed directly or indirectly.
 - ii) Whether these chemicals are within Threshold Limit Values (TLV)/ Permissible Exposure Levels as per ACGIH recommendation.
 - iii) What measures company have taken to keep these chemicals within PEL/TLV.
 - iv) How the workers are evaluated concerning their exposure to chemicals during pre-placement and periodical medical monitoring.
 - v) What are onsite and offsite emergency plan during chemical disaster.
 - vi) Liver function tests (LFT) during pre-placement and periodical examination.
 - vii) Details of occupational health surveillance programme.
41. Socio-economic development activities should be in place.
42. Note on compliance to the recommendations mentioned in the CREP guidelines.
43. Detailed Environment management Plan (EMP) with specific reference to details of air pollution control system, water & wastewater management, monitoring frequency, responsibility and time bound implementation plan for mitigation measure should be provided.
44. EMP should include the concept of waste-minimization, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.
45. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof.
46. A tabular chart with index for point wise compliance of above TORs.

B. Additional TOR

1. Public hearing is exempted as unit is located in the industrial area and environmental clearance is already granted to the industrial area.

The following general points shall be noted:

- i. All documents shall be properly indexed, page numbered.
- ii. Period/date of data collection shall be clearly indicated.
- iii. Authenticated English translation of all material provided in Regional languages.
- iv. The letter/application for EC shall quote the MOEF file No. and also attach a copy of the letter.

- v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
- vi. The final EIA-EMP report submitted to the Ministry must incorporate the issues in this letter. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report.
- vii. Certificate of Accreditation issued by the QCI to the environmental consultant shall be included.

The Committee prescribed the above ToRs for preparation of EIA/EMP reports. The proponent should prepare EIA/EMP Report based on the above TORs and submit the same to the Ministry for obtaining environmental clearance.

32.4.10 Development Drilling of 31 Wells and Establishment of Early Production System (one no.) at Nagayalanka in the Onland NELP-V Block KG-ONN-2003/1, Andhra Pradesh by M/s ONGC -reg TOR.

The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken alongwith the draft Term of References for the preparation of EIA-EMP report. 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.

M/s ONGC has proposed for development drilling of 31 Wells and Establishment of Early Production System (one no.) at Nagayalanka in the Onland NELP-V Block KG-ONN-2003/1, Andhra Pradesh. Total block area is 315 km². The cost of drilling is Rs. 6792 Crore. Cost of establishment of EPS is Rs. 12 Crore. Total project cost is Rs. Rs. 6804 Crore. Rs. 775 Lakhs are earmarked towards implementation of environmental management plan. Target depth of the well varies 4500 to 5000m. Following facilities at Nagayalanka EPS will be installed:

S.N.	Facilities	Qty.
1	HP Horizontal Separator	1 No.
2	16 ATM Vertical Separator	1 No.
3	6 ATM Vertical Separator	1 No
4	Heater Treater	1 No.
5	HP Filter Separator	1 No.
6	Fuel Gas Scrubber	1 No.

Details of Handling capacity and oil storage tanks:

S.N.	Storages	Capacity
1	Liquid (Oil and Water)	800 m ³ /day
2	Gas	5,00,000 SCMD
Crude Oil Storage Tanks		
3	Horizontal Tanks of 40 m ³ each	16 Nos.

Water requirement will be 25 m³/day. Diesel consumption will be in the range of 3-4KL/day during operation. Wastewater generation will be in the range of 10-12 m³/day. Treatment will be done and then recycling will be carried out. The development wells will initially undergo production testing and after the production potential is established, the wells will be connected to the installation in the Nagayalanka field. Water based drilling fluid will be used

till 450 m and thereafter Synthetic Oil based mud (SOBM) for the remaining section till the target depth. The quantity of drill cuttings generated will be around 300-350 m³ from each development well. The quantity of wastewater produced will be about 10-12 m³/day. Drill cuttings are disposed off by collecting in the impervious HDPE lined pits and covered with local top soil as per CPCB norms. SOBM drill cuttings are hauled off by the authorized service provider to a facility for further necessary treatment for removal of oil and subsequent bio-remediation as per statutory norms. Disposal for treated produced water/effluent will be carried out by Sub-surface injection through an effluent disposal well below a depth of 1000 m from the ground level. The treated effluent shall comply with the parameters with respect to suspended solids and oil/grease limit being 100 mg/l and 10 mg/l respectively.

After detailed deliberations, the Expert Appraisal Committee prescribed the following standard and Additional TORs for preparation of EIA/EMP:

A Standard TOR:

1. Executive summary of the project.
2. No. of exploratory wells for which environmental clearance is accorded and No. of new wells proposed during expansion. Status and No. of the wells which are completed and closed.
3. Project Description and Project Benefits;
4. Distance from coast line.
5. Commitment that no drilling would be carried within 1.0 Km of the coast.
6. Details of sensitive areas such as coral reef, marine water park, sanctuary and any other eco-sensitive area.
7. Details of land area, land use and status of land acquisitions for land for on-shore facilities. Approval for the forest land from the State/Central Govt. under Forest (Conservation) Act, 1980, if applicable (for any facilities on shore).
8. CRZ clearance as per CRZ Notification dated 6th January, 2011, and/or for facilities on-shore.
9. Climatology and meteorology including wind speed, wave and currents, rainfall etc.
10. Details of development wells drilling plan.
11. Details of facilities to be installed.
12. Base line data collection for surface water for one season leaving the monsoon season within 1 km for each Development wells, particularly in respect of oil content.
13. Actual source of water and 'Permission' for the drawl of water from the Competent Authority. Detailed water balance, waste water generation and discharge.
14. Noise abatement measures and measures to minimize disturbance due to light and visual intrusions in case coastally located.
15. Procedure for handling oily water discharges from deck washing, drainage systems, bilges etc.
16. Procedure for preventing spills and spill contingency plans.
17. Procedure for treatment and disposal of produced water.
18. Procedure for sewage treatment and disposal and also for kitchen waste disposal.
19. Procedure for handling solid waste and any waste segregation at source for organic, inorganic and industrial waste.
20. Storage of chemicals on site.
21. Commitment for the use of WBM and synthetic oil based mud in special case.
22. Risk assessment and mitigation measures including whether any independent reviews of well design, construction and proper cementing and casing practices have been followed.
23. Handling of spent oils.
24. Handling of oil from well test operations.
25. Mud make up and mud and cuttings disposal procedures.
26. H₂S emissions control plans, if required.

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

B. Additional TOR

Public hearing to be conducted by SPCB 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.

The following general points shall be noted:

- i. All documents shall be properly indexed, page numbered.
- ii. Period/date of data collection shall be clearly indicated.
- iii. Authenticated English translation of all material provided in Regional languages.
- iv. The letter/application for EC shall quote the MOEF file No. and also attach a copy of the letter.
- v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
- vi. The final EIA-EMP report submitted to the Ministry must incorporate the issues in this letter. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report.
- vii. Certificate of Accreditation issued by the QCI to the environmental consultant shall be included.

The Committee prescribed the above ToRs for preparation of EIA/EMP reports. The proponent should prepare EIA/EMP Report based on the above TORs and submit the same to the State Pollution Control Board for conducting public hearing/consultation. The EIA/EMP Report should be as per the generic structure given in Appendix-III of EIA Notification, 2006. The concerns raised alongwith the replies during the Public Hearing/ Consultation should be incorporated in the EIA/EMP Report and the final EIA/EMP submitted to the Ministry for obtaining environmental clearance.

Time: 5.00 PM

32.5 Any Other Items

32.5.1 Bentonite Sulphur and Zinc Fortified Bentonite Super Fertilizer Manufacturing Unit at Panipat, Haryana by M/s Deepak and Fertilizer and petrochemical Corporation Ltd. - Amendment in TOR

MoEF&CC vide letter no J-11011/326/2012-IA II (I) dated 22nd March, 2013 has issued TOR for preparation of EIA-EMP report for the above mentioned subject. Now PP vide letter no DEPCL/PRJ/BENSULF/MOEF/2014/01 dated 3rd November, 2011 has requested for exemption from the process of environmental clearance. PP has referred the 21st REAC (I) meeting held during 30th July, 2014 to 1st August, 2014 , wherein the Committee exempted the proposal of RCFL, Mumbai from the EC process for sulphur bentonite project. PP informed the process does not involve any chemical reaction of synthesis. Manufacturing process involved only blending of the chemical.

After detailed deliberation, the Committee recommended the aforesaid proposal for exemption from environmental clearance process.

32.5.2 Chemical Fertilizer manufacturing unit and Co-generation power plant (10 MW) at Greater Rann of Kachchh, near Hajipur, TalukaBhuj, district Kutchh, Gujarat by M/s Archean Chemical Industries Pvt. Ltd. – amendment of EC

MoEF vide letter no. J-11011/149/2010-IA –II dated 2nd September, 2011 has issued environmental clearance for the above mentioned project with following specific condition:

“All necessary precaution shall be taken for transportation of bromine, which is reported to be 12500 TPA. Bromine shall be transported in ISO tank only. Only trained drivers, who are well versed with transportation of hazardous chemicals shall be deployed for transportation of bromine. GPS shall be installed in all the trucks transporting bromine loaded ISO tank.”

Now, PP vide letter dated 18th September, 2014 has requested to allow to transport of liquid bromine in glass bottles. Therefore, the Committee recommended the amendment in the EC with following:

“For export, Bromine shall be transported in ISO tank only.”

32.5.3 Expansion of Fertilizer and Chemicals Unit Ammonia (2200 MTPD), Urea (4000 MTPD), Heat Recovery Steam Generator (HRSG, 100 TPH) and Captive Power Generation (18 MW) & Facilities CFG3 at P.O. Gadepan, District Kota, Rajasthan by M/s Chambal Fertilizers and Chemicals Ltd. (CFCL) F – reg. Extension of EC.

MoEF vide letter no. J-11011/664/2008-IA –II dated 22nd April, 2010 has issued environmental clearance for the above mentioned project. Further, MoEF&CC vide letter dated 10th June, 2011 has issued corrigendum.

PP vide letter dated 14th November, 2014 has informed the following activities related to project implementation were initiated/completed:

- i) During wait in period for new investment policy (NIP) for urea sector in 2010-11, pre-project activities like early engineering to prepare project cost estimates, issuance of invitation to bid to international bidders and preparation of detailed feasibility report were completed.
- ii) Site preparation was done by dismantling naptha tanks in March, 2012.

iii) By December, 2012, CFCL selected Toyo Engineering Corporation, Japan as lumpsum turnkey contractor through international competitive bidding.

In light of above reasons, the PP requested to extend the validity of Environmental clearance for a period of five years w.e.f. 22.04.2015.

After detailed deliberations, the committee recommended for the extension of validity of EC for a period of five years with effect from 22.04.2015.

21st January, 2015 (Day 2)

1st Session: Time: 10:00 AM

32.6 Environmental Clearance

32.6.1 Expansion of Synthetic Organic Chemicals Manufacturing Unit at Block No. 82/B, Sy. No. 106, 107, 114, 1677/1 & 1677/2 ECP Road, Post Karakhadi, Taluka Padra, District Vadodara, Gujarat by M/s Ami Life Sciences Pvt. Ltd.- reg. EC

The project proponent and their consultant (Envisafe Environment Consultants) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the 6th & 11th Meetings of the Expert Appraisal Committee (Industry) held during 5th - 7th March, 2013 and 26th-27th August, 2013 respectively for preparation of EIA-EMP report. All the Synthetic Organic Chemicals Manufacturing Unit located outside the notified industrial area are listed at S.N. 5(f) under Category 'A' and appraised at the Central level.

M/s Ami Life Sciences Pvt. Ltd. has proposed for expansion of Synthetic Organic Chemicals Manufacturing Unit (viz. Pharmaceutical Bulk Drugs & Drug Intermediates with the total production capacity 65.7 MTPM) at Block No. 82/B, Sy. No. 106, 107, 114, 1677/1 & 1677/2 ECP Road, Post Karakhadi, Taluka Padra, District Vadodara, Gujarat. Total plot area is 23760 m²(Existing 10270 m² and 13490 m²). Cost of project for expansion is Rs. 8.7046 Crore. It is reported that there is no protected area notified under the wildlife (protection) Act & Eco-sensitive area notified under Section 3 of the EP(A), 1986 within 10 Km distance. Mahisagar river is flowing at a distance of 4.25 Km. Following are the details of the existing and proposed product details.

Existing product details:

Sr. No.	Name of Product	Production Capacity
1	1- Acetyl Naphthalene	2.00
2	2- Acetyl Naphthalene	1.00
3	ItopideHCl	6.00
4	Loxapine Succinate	1.20
5	Amoxapine	0.30
6	Venlafaxine	6.00
7	ProgunitHCl	6.00
8	CB-2-L-Valine	6.00
9	Nateglinide	0.60

10	Quetiapine	0.60
11	Carbomazepin	24.00
12	OxaCarbomazepin	12.00
TOTAL		65.70

Product details after proposed expansion:

S.N.	Name of product	Capacity, TPM
1	Pure Rutin	30.00
2	Quercetin	20.00
3	Doxofylline	15.00
4	Troxaerutin	15.00
5	Ambroxol hydrochloride and its intermediate (2 Amino 3, 5-dibromo Benzaldehyde	5.00
6	Itopride hydrochloride	5.00
7	Febuxostat	3.00
8	Fexofenadine hydrochloride	3.00
9	N-Methyl-1-Naphthyl Methylamine HCl	3.00
10	Acebrophylline	3.00
11	Diacerein	3.00
12	Crude Diacerein	2.30
13	Iron polymaltose	2.00
14	Choline Fenofibrate	2.00
15	Tranexamic acid	2.00
16	Flavoxate hydrochloride & Intermediate (3-Methylflavone-8-Carboxylic Acid	2.00
17	S-Metoprolol Succinate	2.00
18	Betahistine Dihydrochloride	2.00
19	Xanthinol Nicotinate	1.00
20	Fenofibrate	1.00
21	Pamabrom	1.00
22	Venlafexine hydrochloride	1.00
23	Tadalafil	1.00
24	Tapentadol hydrochloride	1.00
25	Linezolid	1.00
26	Eslocarbazepine Acetate	1.00
27	Sevelamer carbonate	1.00
28	Sevelamer hydrochloride	1.00
29	Desmethyl Venlafexine Succinate Monohydrate	0.50
30	Alpha Lipoic Acid	0.50
31	L-Methylfolate	0.50
32	Dapoxetine Hydrochloride	0.25
33	Tauroursodeoxycholic Acid	0.20
34	Indapamide	0.10
35	Azilsartan medoxomil potassium salt	0.10
36	Proguanil Hydrochloride	0.10
37	Olopatadine hydrochloride	00.5
TOTAL		131.60
DETAILS OF BY-PRODUCTS		
1	Potassium Acetate Solution	7.00
2	Sodium Bromide Solution	26.00
3	Hydro Bromide Solution	45.00
4	Acetic Acid & Hydro bromide Solution	5.00

TOTAL	83.00
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Additionally, the PP informed the Committee that ambient air quality monitoring was carried out at 6 locations during March-June, 2013 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (29 µg/m³ to 178 µg/m³), PM_{2.5} (12 µg/m³ to 72 µg/m³), SO₂ (less than 4 µg/m³ to 32 µg/m³) and NOx (<1.6 µg/m³ to 42 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.336 µg/m³, 0.74 µg/m³ and 0.638 µg/m³ with respect to PM₁₀, SO₂ and NOx. The resultant concentrations are within the National Ambient Quality Monitoring Standards (NAAQM). Multi-cyclone separator will be provided to proposed additional coal/biomass fired boiler, the Committee suggested them to install bagfilter to control particulate emissions. Two stage scrubber will be provided to control process emissions viz. HCl and SO₂. Dust collector followed by two stage ventury scrubber have been provided to incinerator. Water requirement from ground water source will be increased from 34.53 m³/day to 181 m³/day after expansion. Effluent generation will be increased from 9.35 m³/day to 79.5 m³/day after expansion. Highly concentrated effluent will be sent to captive incinerator for incineration. Remaining effluent (70 m³/day) will be treated in the ETP comprising primary, secondary and tertiary treatment. Treated effluent will be sent to CETP for further treatment. ETP sludge, inorganic residue and incineration ash will be sent to TSDF. Spent carbon, organic residue will be sent to incinerator. Poly aluminium Chloride and spent sulphuric acid will be sold to authorized end users. Spent mixed solvent will be reused after distillation within the premises.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Gujarat Pollution Control Board on 1st October, 2014. The issues were raised regarding EMS, local employment, air pollution control, source of water supply, air pollution, greenbelt etc. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

PP has submitted the copy of compliance status letter no. PC/CCA-VRD-257(5)/ID-22811/301212 dated 15th January, 2015 of unit from Gujarat Pollution Control Board. GPCB has recommended for their proposed expansion project. Certified compliance report dated 7th November, 2014 by the Ministry's Regional Office is submitted. The Committee deliberated upon the certified compliance report. There are 11 complied points, 14 partly complied points and 5 non complied points. Regarding non compliance it was reported that PA has started production of proposed expansion after obtaining NOC from GPCB. This is in contravention to the condition. Therefore, the project proposal involves violation of the Environment (Protection) Act, 1986 or Environment Impact Assessment (EIA) Notification, 2006 and will be considered as per Ministry's O. M no. J-11013/41/2006-IA II (I) dated 12th December, 2012 and 27th June, 2013. The Committee desired to submit the revised water balance.

The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website. The response of the PP will be discussed internally without calling project proponent.

32.6.2 Expansion of Industrial Chemicals at Village Behra, Tehsil DeraBassi, Bhra-Gulabpur Road, District Mohali, Punjab by M/s Punjab Acids-Chem Pvt. Ltd.-reg EC

The project proponent and their consultant (Vardan Envirnnet) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the 6th Meeting of the Expert Appraisal Committee (Industry) held during 5th -7th March, 2013 for preparation of EIA-EMP report. All the Synthetic Organic Chemicals Manufacturing Unit

located outside the notified industrial area are listed at S.N. 5(f) under Category 'A' and appraised at the Central level.

M/s Punjab Acids Private Limited has proposed to expand their manufacturing of chemicals unit at Village Behra, Near PM; Post Office Rampur, SainiaDerabassi, District Mohali, Punjab. Total plot is 40468.6 m² of which 35 % area is earmarked for greenbelt. Cost of project is rs. 44.26 crore. No Forest land is involved. It is reported that no National Park, Wildlife Sanctuary is located within 10 km radius of the project site. Dangri Nadi is about 6 Km in Haryana State & Ghaggar Nadi is located at about 8 Km distance. State boundary Haryana is at 2 km distance. Following are the details of the existing and proposed product details.

Sl. No.	Product	Capacity (Tons per Annum)		
		Existing	Proposed	After Expansion
1.	Sulfuric Acid	75	125	200
2.	Alum	200	Nil	200
3.	Oleum	Nil	70	70
4.	Di-Methyl Sulphate	Nil	30	30
5.	Sodium Bi-sulphite	Nil	30	30
6.	Sulfamic Acid	Nil	30	30
7.	Liquid SO ₃	Nil	30	30

Additionally, the PP informed the Committee that ambient air quality monitoring was carried out at 6 locations during March-May, 2013 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (6.3 µg/m³ to 86 µg/m³), PM_{2.5} (37.3 µg/m³ to 46.3 µg/m³), SO₂ (4.0 µg/m³ to 5.6 µg/m³) and NO_x (16.9 µg/m³ to 21.9 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.091 µg/m³ with respect to PM₁₀. The resultant concentrations are within the National Ambient Quality Monitoring Standards (NAAQM). Multi-cyclone will be provided to coal fired boiler. The Committee suggested them to install bagfilter instead of multi-cyclone for better efficiency. Alkali scrubber will be installed in the Sulphuric Acid/Alum Plant. Water requirement from ground water source will be increased from 60 m³/day to 245 m³/day after expansion. PP informed that there will be no discharge from industrial process. Boiler blow down and domestic sewage will be treated in the STP. Treated effluent will be reused for irrigation/horticulture purpose. No effluent will be discharged outside the plant premises. Ash from boiler will be used for landfill of low laying area. Sulphur sludge and catalyst dust will be sent to TSDF site. Waste oil will be sent to authorized recyclers.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Punjab Pollution Control Board on 15th January, 2014. The issues were raised regarding local employment, bad road, safety measures, diseases in the Villages, ground water quality etc. in response PP informed that the industry will provide state of art technology pollution control device to contain water pollution and air pollution. PP also committed that the pollution control device in the existing industry will be operated properly and effectively. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

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

- i) Multi-cyclone followed by bag filter should be provided to the agro waste/coal fired boiler to control particulate emissions within permissible limit. The gaseous emissions should be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- ii) Sulphuric acid plant shall be based on DCDA. Process emissions viz. SO₂, SO₃ and Acid Mist from the Sulphuric Acid Plant shall be controlled by selection of proper catalyst, mist eliminators, scrubbing system to meet the Standards prescribed by MoEF&CC/CPCB.
- iii) Total fresh water requirement from ground water source should not exceed 245 m³/day and prior permission should be obtained from the CGWA/SGWA.
- iv) Explore the possibility to send the sulphure sludge to Single super phosphate plant as filler. Explore the possibility to send the spent catalyst to recycler for extraction.
- v) Industrial effluent from blow down of boiler & cooling tower, scrubbed liquid, regeneration unit and plant washing shall be treated in ETP followed by RO. Treated effluent shall be recycled/reused within the plant premises. Sewage shall be treated in the STP. Water quality of treated effluent shall meet the norms prescribed by CPCB/SPCB. 'Zero' effluent discharge should be adopted and no effluent will be discharged outside the 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 and amended as on date for management of Hazardous wastes and prior permission from SPCB should be obtained for disposal of solid / hazardous waste in the TSDF. Measures should be taken for fire-fighting facilities in case of emergency.
- vii) Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing alongwith the storm water. Direct exposure of workers to fly ash & dust should be avoided.
- viii) As proposed, greenbelt over 35 % 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 to the public during the Public Hearing/Public Consultation meeting held on 15th January, 2014 should be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Chandigarh.
- x) At least 2.5% of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Chandigarh. Implementation of such program should be ensured accordingly in a time bound manner.

32.6.3 Bulk Drugs Manufacturing Unit at Survey no. 243/B, 244, 245/P, Ahmedabad Mehsana Highway, Mandali Crossroad, Mandali-382 732, District Mehsana, Gujarat by M/s Shanku's Chem-Sciences Pvt. Ltd.- reg. EC.

The project proponent and their consultant (Aqua air Environmental Engineers Pvt. Ltd. Stay order no. SCA/4979/2012 dated 24/1/2013) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the 6th Meeting of the Expert Appraisal Committee (Industry) held during 5th to 7th March, 2013 for preparation of EIA-EMP report. All Synthetic Organic Chemicals Industry (Bulk Drugs & Intermediates) located outside the notified industrial area/estate are listed at S.N. 5(f) under category 'A' and appraised at Central level.

M/s Shanku's Chem-Sciences Private Limited has proposed for setting up of Bulk Drugs Manufacturing Unit at Survey no. 243/B, 244, 245/P, Ahmedabad-Mehsana Highway, Mandali Crossroad, Mandali-382 732, Dist. Mehsana, Gujarat. Total plot area is 45310 m² of which 13650 m² area is earmarked for greenbelt. Cost of project Rs. 10 Crore. It is reported that no National Park, Wildlife Sanctuary/Reserve Forest is located within 10 km radius of the project site. Following are the details of the existing and proposed product details.

Sr. No.	Name of Product	Existing quantity (MTPM)	Proposed quantity (MTPM)	Total (MTPM)
Existing				
1.	Di Calcium Phosphate	250	--	250
Proposed				
2.	2,6-dimethyl-5-methoxycarbonyl-4-(3-nitrophenyl)-1,4-dihydropyridine-3-carboxylic acid	--	180	180
3.	(Z)-1-Phenyl-2-(phthlamidomethyl)-N,N-diethylcyclopropanecarboxamide	--		
4.	CIS(+)-1-PHENYL-3- OXABICYCLO [3.1.0] HEXANE-2-one	--		
5.	Milnacipran and its intermediate	--		
6.	(S)-2-[4-(3-fluorobenzyloxy) benzyl amino] propanamide	--		
7.	Safinamide and its intermediate	--		
8.	N-[2-(7-methoxynaphthalen-1-yl)-ethanamine	--		
9.	7-Methoxy-1-Naphthyl Acetonitrile	--		
10.	Agomelatine and its intermediate	--		
11.	Lacosamide and its intermediate	--		
12.	(R)-N-benzyl-2-t-butoxycarbonylamino-3-methoxy propanamide	--		
13.	Cyclopropyl methyl chloride	---		
14.	2-(chloromethyl)-4-methoxy-3,5-dimethylpyridine hydrochloride	--		
15.	2,2-Azobis [2-methyl-N-{2-hydroxyethyl} propionamide]	--		
16.	N-Amino Azabicyclo octane Hcl	--		
17.	3 Ethyl 4-methyl 2-oxo pyrroline	---		
18.	Diazabicyclo[4.3.0]nonane	--		

Sr. No.	Name of Product	Existing quantity (MTPM)	Proposed quantity (MTPM)	Total (MTPM)
19.	TrimethylsilylTriflate	--		
20.	Ciprofloxacin Hydrochloride and its intermediate	--		
21.	Q Acid intermediate of Ciprofloxacin Hydrochloride	--		
22.	Lansoprazole and its intermediate	--		
23.	Fenofibrate and its intermediate	--		
24.	Omeprazole and its intermediate	--		
25.	Rabeprazole and its intermediate	--		
26.	Atorvastatin and its intermediate	--		
27.	Olanzapine and its intermediate	--		
28.	Valsartan and its intermediate	--		
29.	Venlafaxine and its intermediate	--		
30.	Losartan Potassium and its intermediate	--		
31.	Rosiglitazone and its intermediate	--		
32.	Pioglitazone and its intermediate	--		
33.	Irbesartan and its intermediate	--		
34.	Sertraline and its intermediate	--		
35.	Aripiprazole and its intermediate	--		
36.	Sildenafil and its intermediate	--		
37.	Telmisartan and its intermediate	--		
38.	Olmesartan and its intermediate	--		
39.	Citrizine Di HCl and its intermediate	--		
40.	Nebivolol and its intermediate	--		
41.	Glibenclamide and its intermediate	--		
42.	Ropinirole and its intermediate	---		
43.	Fluconazole and its intermediate	--		
44.	Loratadine and its intermediate	--		
45.	Erythromycin Stearate /Estolate I.P.	--		
46.	Clarithromycin	--		
47.	Carvedilol and its intermediate	--		
48.	Celecoxib and its intermediate	--		
49.	Desloratadine and its intermediate	--		
50.	Meloxicam and its intermediate	--		
51.	R & D	0.5		
Total		250.5	180	430.5

Additionally, the PP informed the Committee that ambient air quality monitoring was carried out at 7 locations during March-May, 2014 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (41.2 µg/m³ to 61.5 µg/m³), PM_{2.5} (21.4µg/m³ to 54.8 µg/m³), SO₂ (12.2 µg/m³ to 18.8 ug/m³) and NO_x (15.7 µg/m³ to 21.6 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.628 µg/m³, 0.3942 µg/m³ and 1.0986 µg/m³ with respect to PM, SO₂ and NO_x. The resultant concentrations are within the National Ambient Quality Monitoring Standards (NAAQM). Cyclone separator followed by bagfilter will be provided to biomass fired boiler to control particulate emissions. Scrubber will be

provided to control process emissions viz. HCl. Water requirement will be increased from 21 m³/day to 124 m³/day after expansion. Industrial effluent generation will be increased from 2.5 m³/day to 112.5 m³/day after expansion. Source of fresh water is ground water. Industrial wastewater will be segregated into High TDS/COD and Low TDS/COD effluent streams. High TDS/COD effluent stream will be treated through steam stripper followed by multiple effect evaporator (MEE). Low TDS effluent stream will be treated in ETP followed by RO. No effluent will be discharged outside the plant premises. The Committee suggested them to treat domestic effluent in the STP. ETP sludge and MEE salt will be sent to TSDF. Process organic residue, solvent residue and spent carbon will be sent to cement industries. Used oil will be sent to authorized recycler/re-processors. Process sludge from DCP will be sold to Fertilizer Industries/agriculture. CNG/Briquettes/Diesel will be used as fuel. DG set (250 KVA) will be used as standby arrangement.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Gujarat Pollution Control Board on 5th September, 2014. The issues raised were regarding pollution control, local employment, industrial training, greenbelt etc. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

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

- i. Multi-cyclone followed by bag filter shall be provided to the biomass 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. Scrubber shall be provided to control process emissions. The scrubbing media shall be sent to effluent treatment plant (ETP) for treatment. Efficiency of scrubber shall be monitored regularly and maintained properly. At no time, the emission levels shall go beyond the prescribed standards.
- iii. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits imposed by SPCB. Odour management plan shall be implemented.
- iv. Total fresh water requirement from ground water source shall not exceed 124 m³/day and prior permission shall be obtained from the CGWA/SGWA.
- v. Trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP and then passed through RO system. Condensate and recover water will be recycled/reused within factory premises. 'Zero' effluent discharge shall be adopted and no effluent will be discharged outside the premises.
- vi. All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- vii. As proposed, process organic residue and spent carbon shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.

- viii. The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from SPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire-fighting facilities in case of emergency.
- ix. Fly ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust shall be avoided.
- x. Solvent management shall be as follows :
- Reactor shall be connected to chilled brine condenser system
 - Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery
 - Solvents shall be stored in a separate space specified with all safety measures.
 - Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - Entire plant where solvents are used shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
- xi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xii. All the issues raised during the Public Hearing/consultation meeting held on 5th September, 2014 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.
- xiii. At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues 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.
- xiv. As proposed, green belt over 33 % of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.

32.6.4 Molasses based Distillery Unit (60 KLPD) along with Cogeneration Power Plant (2.0 MW) at Village Jangraupul Tehsil Pilibhit District U.P. by M/s L H Sugar Factories Ltd. -reg EC

The project proponent and their consultant (J M Environet Pvt. Ltd.) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the 16th Meeting of the Expert Appraisal Committee (Industry) held during 20th-21st February

2014 for preparation of EIA-EMP report. All molasses based distillery are listed at S.N. 5(g) (i) under category 'A' and appraised at Central level.

M/s L H Sugar Factories Ltd. has proposed for setting up of Molasses based Distillery Unit (60 KLPD) along with Cogeneration Power Plant (2.0 MW) at Village Janraulipul, Tehsil & District Pilibhit U.P. Total plot area is 29.0 acres of which greenbelt will be developed in 9.5 acres. Devha Nadi and River Apsarya are flowing within 10 km distance. It is reported that no national parks/reserved forests/protected forest/wildlife sanctuaries/biosphere reserves are located within 10 km distance. Distillery will be operated for 270 days per annum. Cost of project is Rs. 61.0 crores. Rs. 12.5 Crore and Rs. 1.2 Crore are earmarked towards capital cost and recurring cost per annum for pollution control measures.

Additionally, the PP informed the Committee that ambient air quality monitoring was carried out at 8 locations during March-May, 2014 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (58.9 µg/m³ to 89.1 µg/m³), PM_{2.5} (26.2 µg/m³ to 43.9 µg/m³), SO₂ (6.6 µg/m³ to 10.9 µg/m³) and NO₂ (15.1 µg/m³ to 22.8 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.78 µg/m³ with respect to PM. The resultant concentrations are within the National Ambient Quality Monitoring Standards (NAAQM). ESP will be provided biomass/gas fired boiler to control particulate emissions. Fresh water requirement from ground water source will be 597 m³/day. Spent wash will be sent for anaerobic treatment & thus production of useful biogas (used as fuel in boiler) followed by concentration in MEE. Concentrated spent wash will be mixed with press mud generated from sugar unit for manufacturing organic manure. Spent lees from distillation column and process condensate will be recycled. Wastewater will be treated in ETP. Treated effluent will be used for greenbelt development. No effluent will be discharged outside the plant premises and 'Zero' effluent discharge concept will be followed. The bio-compost manure production will be 25200 MTPA. Ash from boiler will be sold to brick manufactures or biocomposted with press mud. Yeast sludge, digester sludge & boiler ash mixed with press mud & finally disposed as bio-manure.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Andhra Pradesh Pollution Control Board on 19th September, 2014. The issues raised were regarding impact on surrounding village, anticipated pollution, measures to control water pollution, impact on drain/river etc. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

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

- i) Bag filter along with stack of adequate height shall be provided to biomass/biogas fired boiler to control particulate emission within 50mg/Nm³.
- ii) Total fresh water requirement from ground water source for sugar unit shall not exceed 597 m³/day and for distillery and cogeneration unit and prior permission shall be obtained from the CGWA/SGWA.
- iii) Spent wash generation from molasses based distillery shall not exceed 8 KI/KI of alcohol. The spent wash from molasses based distillery shall be evaporated in MEE and concentrated spent wash will be Concentrated spent wash will be

mixed with press mud generated from sugar unit for manufacturing organic manure to achieve 'Zero' discharge. Evaporator Condensate shall be treated and recycled/reused in process. No effluent shall be discharged outside the premises and 'Zero' discharge shall be maintained.

- iv) Spent wash shall be stored in impervious pucca 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 and co-generation power plant 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) 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 UPPCB.
- viii) Bagasse/biomass storage shall be done in such a way that it does not get air borne or fly around due to wind.
- ix) Boiler ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing alongwith the storm water. Direct exposure of workers to fly ash & dust shall be avoided. Bagasse ash and coal ash shall be stored separately.
- x) 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.
- xi) 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.
- xii) 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.
- xiii) As proposed, green belt over 33 % of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.

- xiv) All the commitments made during the Public Hearing/Public Consultation meeting held on 19th September, 2014 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 (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.

32.6.5 Expansion of Phenol Formaldehyde Resin, Melamine Formaldehyde Resin Plant at Survey No. 340, Village Bhimasar and Sy. No 16/1, Village Varsana, Taluka Anjar, District Kachchh, Gujarat by M/s Purbanchal Laminates Pvt. Ltd.-reg EC

The project proponent and their consultant (M/s T R Associates, Stay order no. C/SCA/1782/2013 dated 9/12/2013) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of Reference (TORs) awarded during the 3rd Meeting of the Expert Appraisal Committee (Industry) held during 3rd to 5th December, 2012 for preparation of EIA-EMP report. All the synthetic organic chemicals industry (basic organic, chemicals, other, synthetic organic chemicals and chemical Intermediates) located outside the notified industrial area are listed at S.N. 5(f) under Category 'A' and appraised at the Central level.

M/s Purbanchal Laminates Pvt. Ltd. has proposed for expansion of Phenol Formaldehyde Resin, Melamine Formaldehyde Resin Plant at Survey No. 340, Village Bhimasar and Sy. No 16/1, Village Varsana, Taluka Anjar, District Kachchh, Gujarat. Total plot area is 32375 m² of which greenbelt will be developed in 10673 m². It is reported that no national park/ wildlife sanctuary/ reserve forest/ is located within 10 Km distance. Cost of project is Rs. 24.75 Crore for phase-1 and Rs. 6.43 Crore for phase-2. Following products will be manufactured:

S.N.	Product (Resin)	Existing Capacity (MTPM)	Proposed Capacity (MTPM)	Total Capacity (MTPM)
Phase – I				
1	Phenol Formaldehyde	180	360	540
2	Melamine Formaldehyde	75	150	225
Phase – II				
1	Phenol Formaldehyde	Proposed Capacity		Total Capacity
		100		100
2	Urea Formaldehyde	10		10

Additionally, the PP informed the Committee that ambient air quality monitoring was carried out at 7 locations during February, 2013-April, 2013 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (48 µg/m³ to 76.6 µg/m³), PM_{2.5} (25.7 µg/m³ to 55.9 µg/m³), SO_x (7.6 µg/m³ to 17.5 µg/m³) and NO_x (8.1 µg/m³ to 24.9 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.7781 µg/m³, 0.05 µg/m³ and 0.026

µg/m³ with respect to SPM, SO₂ and NO_x. The resultant concentrations are within the NAAQS. Bagfilter will be provided to coal fired boiler & Thermic fluid heater to control particulate emissions. DG set (180 KVA) will be installed. Scrubber will be provided to Dryer to control methanol. Total water requirement is 80.26 m³/day, of which fresh water requirement from ground water source will be 53.0 m³/day. Remaining water requirement will be met from treated effluent and condensate. Industrial effluent generation will be 7.5 m³/day. Industrial effluent will be treated in ETP with photo fenton oxidation process method followed by evaporator. Condensate from evaporator will be recycled/reused in process. No effluent will be discharged outside the plant premises. ETP sludge will be sent to TSDF. Resin waste will be sent to common incineration facility. Used oil/spent oil will be sent to registered recyclers. Fly ash will be sent to brick manufacturers.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Gujarat Pollution Control Board on 16th September, 2014. The issues were raised regarding CSR, cost, education, health, wastewater management etc. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

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

- i) Regular monitoring of Volatile Organic Compounds (VOCs) should be carried out.
- ii) Bag filter along with stack of adequate height should be installed to coal fired boiler & Thermic fluid heater to control particulate emissions.
- iii) Fugitive emissions in the work zone environment, product, raw materials storage area etc. should be regularly monitored.
- iv) Wet scrubber should be provided to control process emissions. Methanol should be recovered from the process area.
- v) Total fresh water requirement from ground water source should not exceed 53.0 m³/day and prior permission should be obtained from the CGWA/SGWA.
- vi) Industrial effluent will be treated in ETP based on photo fenton process followed by evaporation to achieve zero discharge. Water quality of treated effluent shall meet the norms prescribed by CPCB/SPCB.
- vii) The company should obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from GPCB should be obtained for disposal of solid / hazardous waste in the TSDF. Measures should be taken for fire fighting facilities in case of emergency.
- viii) Green belt over 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) Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
- x) All the commitments made to the public during the Public Hearing/Public Consultation meeting held on 16th September, 2014 should be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhopal.
- xi) At least 2.5 % of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program should be ensured accordingly in a time bound manner.

32.6.6 Bulk Drug Manufacturing Unit at Plot No.126 to 129, Raichur Growth Centre, Village Chiksugaur, District Raichur, Karnataka by M/s Raichur Laboratories Pvt. Ltd - reg. EC

The project proponent and their consultant (Rightsource Industrial Solutions Pvt. Ltd.) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the 6th Meeting of the Expert Appraisal Committee (Industry) held during 5th to 7th March, 2013 for preparation of EIA-EMP report. All Synthetic Organic Chemicals Industry (Bulk Drugs & Intermediates) located inside the notified industrial area/estate are listed at S.N. 5(f) under category 'B' and appraised at Central level. However, due to applicability of General Condition of interstate boundary, the proposal is treated as Category 'A' project and appraised at Central level.

M/s Raichur Laboratories Pvt. Ltd. have proposed for setting up of Bulk Drug Manufacturing Unit at Plot No. 126 to 129, Raichur growth centre, Village Chiksugaur, District Raichur, Karnataka. Total plot area is 16193 m². Out of which greenbelt will be developed in 7402.85 m². Cost of project is Rs. 10.63 crore. No forest land is involved. Krishna river is flowing at distance of 8.2 Km and Konad Hall is located at a distance 1.3 Km. Following products will be manufactured:

S.N.	Product	Application	Production (Kg/Month)
1	Meropenem	Anti-Biotic	1000.00
2	Biapenem	Anti-Biotic	300.00
3	Feropenem	Anti-Biotic	1000.00
4	Imipenem	Anti-Biotic	1000.00
5	Dorepenem	Anti-Biotic	1000.00
6	Candesartan	Anti hypertension	500.00
7	Celecoxib	Anti-inflammatory	5000.00
8	Clopidogrel Bisulfate	Anti platelet	3000.00
9	Ketaconazole	Anti fungal	2000.00
10	Levo cetirizine dihydrochloride	Anti histamine	500.00
11	Levetiracetam	Anti Convulsant	3000.00
12	Pantoprazole Magnesium	Proton Pump Inhibitor	1000.00

13	Phenylephrine Hydrochloride	Anti tussive-Decongestant	3000.00
14	Prasugrel Hydrochloride	Anti platelet	500.00
15	Quetiapine Hemifumatrate	Anti psychotic	1000.00
16	Rabeprazole Sodium	Anti-ulcerative	1000.00
17	Solifenacin Succinate	Anti cholinergic	500.00
18	Tamsulosin Hydrochloride	Anti-adrenergic	1000.00
19	Telmisartan	Anti hypertensive	2000.00
20	Bortezomib	Anti neoplastic	50.00
21	Trimebutine Maleate	Anti spasmodic	500.00
22	Cabergoline	Dopamine receptor agonist	500.00
23	MycophenolateMofetil	Immuno Suppressant	500.00
24	Raloxifene Hydrochloride	Selective estrogen receptor modulator	1000.00
25	Febuxostat	Xanthine Oxidase Inhibitor	500.00
Note: we manufacture any 10 products at a point of Time and Maximum Production Capacity is 22 MT/month			

Ambient air quality monitoring has been carried out at 8 locations during November, 2013- January, 2014 and the data submitted indicated: PM₁₀(40.10 to 59.1 µg/m³), PM_{2.5} (8.20 to 19.9 µg/m³), SO₂ (8.2 to 12.1 µg/m³) and NO_x (12.1 to 16.5 µg/m³). PP informed that value of CO in the ambient air may be read as mg/m³ instead of ug/m³. AAQ study for point source emissions indicates that the maximum incremental GLCs would be 1.9 µg/m³, 5.4µg/m³and 7.3 µg/m³ with respect to PM₁₀, SO₂ and NO_x respectively. Bagfilter will be provided to coal fired boiler to control particulate emissions. Adequate scrubbing system will be provided to the process vents to control process emissions viz. HCl, SO₂ and NH₃. Total water requirement will be 121.75 m³/day out of which fresh water from KIADB will be 78.04 m³/day and remaining water requirement will be met from recycled water. Industrial wastewater will be segregated into High TDS/COD and Low TDS/COD effluent streams. High TDS/COD effluent stream will be treated through steam stripper followed by multiple effect evaporator (MEE) and agitated thin film drier (ATFD). Low TDS/COD effluent stream will be treated in effluent treatment plant (ETP) comprising primary, secondary and tertiary treatment. No effluent will be discharged outside the premises and 'Zero' effluent discharge concept will be adopted. Inorganic & evaporation salt and ETP sludge will be sent to Treatment Storage Disposal Facility (TSDF) for hazardous waste. DG set (250 KVA + 380 KVA) will be installed.

Public hearing was exempted as per Section 7 (i), III Stage (3), Para (i) (b) of EIA Notification, 2006.

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

- i. Multi-cyclone followed by bag filter shall be provided to the coal 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. Scrubber shall be provided to control process emissions. The scrubbing media shall be sent to effluent treatment plant (ETP) for treatment. Efficiency of scrubber shall be monitored regularly and maintained properly. At no time, the emission levels shall go beyond the prescribed standards.
- iii. Total fresh water requirement from ground water source shall not exceed 78.04 m³/day and prior permission shall be obtained from the CGWA/SGWA.
- iv. Trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP and then passed through RO system. Condensate and recover water will be recycled/reused within factory premises. 'Zero' effluent discharge shall be adopted and no effluent will be discharged outside the premises.
- v. All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- vi. As proposed, process organic residue and spent carbon shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.
- vii. The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from SPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire-fighting facilities in case of emergency.
- viii. Fly ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust shall be avoided.
- ix. Solvent management shall be as follows :
 - Reactor shall be connected to chilled brine condenser system
 - Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery
 - Solvents shall be stored in a separate space specified with all safety measures.
 - Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - Entire plant where solvents are used shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
- x. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xi. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bangalore. Implementation of such program shall be ensured accordingly in a time bound manner.

- xii. As proposed, green belt over 33 % of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.

32.6.7 Bulk Drugs manufacturing unit (50000 MTPM) at Survey No: 291, 293 & 296, kuthotapally Village, Amangal Mandal, Mahabubnagar District, Telangana State by M/s VSR Life Sciences Pvt. Ltd.-reg. EC

The project proponent and their consultant (Rightsource Industrial Solutions Pvt. Ltd.) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the 11th Meeting of the Expert Appraisal Committee (Industry) held during 26th to 27th August, 2013 for preparation of EIA-EMP report. All Synthetic Organic Chemicals Industry (Bulk Drugs & Intermediates) located outside the notified industrial area/estate are listed at S.N. 5(f) under category 'A' and appraised at Central level.

V.S.R. Life Science Private Ltd have proposed for setting up of Bulk Drugs & Intermediate (50.00 MTPM) Manufacturing Unit at Survey Nos. 291,293 &296, Village Akuthotapally, Mandal Amangal, District Mahabubnagar, Andhra Pradesh. Cost of the project is Rs. 15.28 Crore. Total area of the site is 42086 sq.m.(10.40 Acres) of which greenbelt will be developed in 16469.00 sq.m. Reserve Forests i.e. Mudivenu RF (5.77 km), Ramnuthal RF (6.35 Km), Amangal RF (4.12 Km) and Cherukuru (9.10 Km) are located within 10 km distance. Water bodies i.e. Amangal Cheruvu (7.3 Km) and SettipalliCheruvu (3.6 Km) are located within 10 Km distance. Following products will be manufactured:

S.N	Name of the Product	Quantity (in MTPM)	Quantity (in MTPD)
1	Ciproflaxacin Hydrochloride	10.00	0.33
2	Enrofloxacin	5.00	0.16
3	Lamivudine	4.00	0.13
4	Metformin Hydrochloride	16.00	0.53
5	Sertraline Hydrochloride	2.00	0.06
6	Itraconazole	2.00	0.06
7	Rabeprazole sodium	3.00	0.10
8	Lansoprazole	3.00	0.10
9	Lopinavir	3.00	0.10
10	Montelukast Sodium	2.00	0.06
	Total	50.00	1.66

instead of $\mu\text{g}/\text{m}^3$. AAQ study for point source emissions indicates that the maximum incremental GLCs would be $1.3 \mu\text{g}/\text{m}^3$, $3.4 \mu\text{g}/\text{m}^3$ and $4.3 \mu\text{g}/\text{m}^3$ with respect to PM_{10} , SO_2 and NO_x respectively. Bagfilter will be provided to coal fired boiler. Scrubber will be provided to control process emissions.

Total water requirement will be $100 \text{ m}^3/\text{day}$ out of which fresh water from ground water source will be $79.47 \text{ m}^3/\text{day}$ and remaining water requirement will be met from recycled water. Industrial wastewater will be segregated into High TDS/COD and Low TDS/COD effluent streams. High TDS/COD effluent stream will be treated through steam stripper followed by multiple effect evaporator (MEE) and agitated thin film drier (ATFD). Low TDS/COD effluent stream will be treated in effluent treatment plant (ETP) comprising

primary, secondary and tertiary treatment. No effluent will be discharged outside the premises and 'Zero' effluent discharge concept will be adopted. Inorganic & evaporation salt and ETP sludge will be sent to Treatment Storage Disposal Facility (TSDF) for hazardous waste. DG set (250 KVA + 380 KVA) will be installed.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Andhra Pradesh Pollution Control Board on 16th July, 2014. It was reported that about 300 people from Akuthotapally and the surrounding villages gathered on the road in near proximity to the venue of EC. they prevent the officials on the road from entering the venue, which is in near proximity to the proposed site. Most of the people opposed the project. People strongly objected the said project because operation may contaminate the water courses and affect public health, farm lands, mango fields. The Committee suggested them to submit a copy of latest No Objection Certificate from Panchayat.

The proposal was deferred till the desired information is submitted. Thereafter, the proposal will be considered internally by the Committee. The above information shall be provided with the uploading of minutes on the website.

32.6.8 Exploratory Drilling of 10 Wells in NELP-VI, Onshore Block CY-ONN-2004/2 in Ariyalur District, Tamil Nadu by M/s ONGC.– reg. EC

The Committee suggested them to submit Action Taken Report to the non compliance of environmental conditions stipulated in the existing environmental clearance as pointed by the Regional Office, MoEF&CC.

The proposal was deferred till the desired information is submitted. Thereafter, the proposal will be considered internally by the Committee. The above information shall be provided with the uploading of minutes on the website.

Reconsideration for Environmental Clearance

32.6.9 Agrochemical manufacturing unit (4000MTPA) at plot no. z- 12/1 (SEZ-part-1), survey no. 402/p, 407/p, 486/p, 487/p, 488, 489, 489, 490, 491, 492/p, Dheh SEZ, Bharuch, Gujarat by M/s Indofil Industries Ltd. - reg. EC.

The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 21st meeting held during 30th July, 2014 –1st August, 2014 for grant of Environmental Clearance. As per the minutes of the meeting, the Committee had sought the the certified compliance report of environmental condition stipulated in the ECs granted to group company. PP has submitted a copy of the letter dated 24.12.2014 issued by the Regional Office, MoEF&CC clarifying that "Certification of Compliance" may not be required from this office as per Ministry OM dated 30.05.2012. After deliberation, the Committee was of the view that compliance report submitted by the project proponent was not in detail. Therefore, the Committee desired that PP may explain status of existing unit alongwith environmental statements in the next meeting.

32.6.10 Grain based Distillery (100 KLPD) alongwith CPP (5 MW) at village Hiranwali, Tehsil & District, Fazilika, Punjab by M/s Savera Beverages Pvt. Ltd. - reg EC

The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 24th meeting held during 29th – 31st September, 2014 for grant of Environmental Clearance. As per the minutes of the meeting, the Committee had sought the following information:

- 1 Resubmission of one month data for air quality monitoring w.r.t PM₁₀, PM_{2.5}, SO₂ and NO_x.
- 2 English version of water permission for usage of canal water.
- 3 Water balance to be rechecked and reduce upto 10 KL per KL of alcohol production.

Project proponent vide letter no. SBPL/2014/1032 dated 20th November, 2014 has submitted the above mentioned information.

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

- i. Distillery unit shall be based on Grain based only and no Molasses based distillery unit shall be operated. The unit will use bagasse if available.
- ii. Bag filter alongwith stack of adequate height shall be provided to husk/coal fired boiler to control particulate emission within 50mg/Nm³.
- iii. Pucca approach road to project site shall be constructed prior to commencing construction activity of the main distillery so as to avoid fugitive emissions.
- iv. Total fresh water requirement from canal water (Kmalwala minor) shall not exceed 1000 m³/day for distillery and cogeneration unit and prior permission shall be obtained from the Competent Authority. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- v. Spent wash generation shall not exceed 6 KI/KI of alcohol. Spent wash shall be treated through decanter and concentrated in multi-effect evaporator (MEE) to form DWGS. DWGS will be sent to dryer to form DDGS. The spentlees and condensate will be treated in UASBR followed by aerobic treatment and sand filtration /charcoal filtration. Treated effluent will be used for make up water of cooling towers and water quality of treated effluent shall meet the norms prescribed by CPCB/SPCB and recycle/reuse.
- vi. No effluent from distillery and co-generation power plant shall be discharged outside the premises and Zero discharge shall be adopted.
- vii. Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area 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.
- viii. No storage of wet cake shall be done at site. An additional dryer shall be installed so that at any time wet cake is not sold then wet cake shall be converted into dry cake by operating additional dryer.

- ix. Coal storage shall be done in such a way that it does not get air borne or fly around due to wind.
- x. Fly ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust shall be avoided.
- xi. 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.
- xii. Dedicated parking facility for loading and unloading of material 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.
- xiii. As proposed, green belt over 33 % of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xiv. All the commitment made regarding issues raised during the Public Hearing/consultation meeting held on 14.12.2013 shall be satisfactorily implemented.
- xv. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise social responsibility based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Chandigarh. Implementation of such program shall be ensured accordingly in a time bound manner.

Lunch Break: 1:30 to 2:00 PM

2nd Session: Time: 2:00 PM

32.7 Terms of Reference (TOR)

32.7.1 Proposed Integrated Sugar unit(5000 TCD), 35 MW Co- generation Plant and Distillery (65 KLPD) at village Kallapur, Tehsil Badami, district Bagalkot, Karnataka by M/s. M R N Cane Power India Ltd. – reg. TOR

The project authorities and their consultant(Ultra Tech, Environmental Consultancy & Laboratory, Thane) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken alongwith the draft Term of References for the preparation of EIA-EMP report. All molasses based distillery are listed at S.N. 5(g) (i) under category 'A' and appraised at Central level.

M/s. M R N Cane Power India Ltd. has proposed for setting up of Proposed Integrated Sugar unit (5000 TCD), 35 MW Co- generation Plant and Distillery (65 KLPD) at village Kallapur, Tehsil Badami, district Bagalkot, Karnataka. It is reported that no tropical forest/ biosphere reserve/national park/ wildlife sanctuary /coral formation are located within 10 Km distance. Malaprabhariveris flowing at a distance of 7 km towards south.

Plot area is 233 acres. of which greenbelt will be developed in 81 acres. Cost of project is Rs. 401 Crore. Rs. 25.61 Crore and Rs. 6 crore have been earmarked towards EMP & pollution control facilities and CSR activities .Annual working days for sugar is 240 days and co-gen power plant& distillery is 330 days. ESP alongwith stack of adequate height will be provided to bagasse fired boiler (150 TPH). Distillery unit will be attached with 16T/hr of bagasse fired boiler which will be connected to bag filter/ESP with chimney of 45 m height. Two DG sets (1000 KVA and 500 KVA) will be installed and connected to chimney of adequate height.

Fresh water requirement in co-gen sugar plant will be 820 m³/day and in distillery unit is 650 m³/day. The fresh water will be sourced from the river Malaprabha . Effluent from sugar unit, co-gen, distillery and other auxiliary units will be treated in the ETP comprising of anaerobic digestion followed by aeration system. Treated effluent will be reused /recycled within factory premises. The spent wash from molasses based distillery will be concentrated in MEE and mixed with bagasses and burnt as fuel in boiler. Condensate water is treated in condensate water ETP and resued as cooling water make up. Bagasse ash will be sent to soil conditioner. Press mud will be composted alongwith spent wash and given to farmer as soil nutrients. Boiler ash will be composted alongwith press mud. ETP sludge will be sent for composting.

After detailed deliberations, the Expert Appraisal Committee prescribed the following Standard and Additional TORs for preparation of EIA/EMP:

A. Standard TOR:

1. Executive summary of the project.
2. Justification of the project
3. Detailed break-up of the land area along with latest photograph of the area.
4. Present land use based on satellite imagery and details of land availability for the project along with supporting document.
5. Details of site and information related to environmental setting within 10 km radius of the project site.
6. Information regarding eco-sensitive areas such as national park/wildlife sanctuary/ biosphere reserves within 10 km radius of project area.
7. Total cost of the project along with total capital cost and recurring cost/annum for environmental pollution control measures.
8. A copy of lease deed or allotment letter, if land is already acquired.
9. List of existing distillery units in the study area along with their capacity and sourcing of raw material.
10. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc.
11. Details of proposed products along with manufacturing capacity.
12. Number of working days of the sugar unit, distillery unit and CPP.
13. Details of raw materials, its source with availability of all raw materials including cereal grains requirement in case of grain based distillery. If molasses based distillery, then give source and quantity available for molasses.

14. Manufacturing process details of Sugar , distillery and CPP along with process flow chart.
15. Sources and quantity of fuel (rice husk/bagasse/ coal etc.) for the boiler. Measures to take care of SO₂ emission. A copy of Memorandum of Understanding (MoU) signed with the coal suppliers should be submitted.
16. Storage facility for raw materials, prepared alcohol, fuels and fly ash.
17. Action plan for ambient air quality parameters as per NAAQES Standards for PM₁₀, PM_{2.5}, SO₂ and NO_x as per GSR 826(E) dated 16th November, 2009.
18. One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall and AAQ data (except monsoon) for PM₁₀, PM_{2.5}, SO₂, NO_x, CO and HC (methane & non methane) shall be collected. The monitoring stations should take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests. Data for water and noise monitoring should also be included.
19. Mathematical modelling for calculating the dispersion of air pollutants and ground level concentration along with emissions from the boiler's stack.
20. An action plan to control and monitor secondary fugitive emissions from all the sources.
21. An action plan prepared by SPCB to control and monitor secondary fugitive emissions from all the sources.
22. Details of boiler and its capacity. Details of the use of steam from the boiler.
23. Ground water quality around proposed spent wash storage lagoon and the project area.
24. Details of water requirement, water balance chart for existing unit as well as proposed expansion (as applicable). Measures for conservation water by recycling and reuse to minimize the fresh water requirement.
25. Source of water supply and permission of withdrawal of water from Competent Authority.
26. Proposed effluent treatment system for grain/molasses based distillery (spent wash and spent lees) along with utility wastewater including CPP/Co-gen Unit (wherever applicable) as well as domestic sewage and scheme for achieving zero discharge. Details of treatment of effluent generation from sugar unit.
27. Spent wash generation should not exceed 8 KL/KL of alcohol production. Details of the spent wash treatment for molasses based distillery based distillery.
28. Capacity for spent wash holding tank and action plan to control ground water pollution.
29. Layout for storage of bagasse/biomass/coal.
30. Capacity for spent wash holding tank and action plan to control ground water pollution.
31. Dryer shall be installed to dry DWGS.
32. Layout for storage of rice husk/biomass/coal.
33. Details of solid waste management including management of boiler ash.
34. Risk assessment for storage and handling of alcohol and mitigation measure due to fire and explosion and handling areas.
35. Alcohol storage and handling area fire fighting facility as per norms. Provision of Foam System for fire fighting to control fire from the alcohol storage tank.
36. Action plan for development of green belt over 33 % of the total project area 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.
37. List of flora and fauna in the study area.
38. Noise levels monitoring at five locations within the study area.
39. Detailed Environment management Plan (EMP) with specific reference to details of air pollution control system, water & wastewater management, monitoring frequency, responsibility and time bound implementation plan for mitigation measure should be provided.

40. EMP should also include the concept of waste-minimization, recycle/reuse/ recover techniques, Energy conservation, and natural resource conservation.
41. Action plan for rainwater harvesting measures at plant site should be included to harvest rainwater from the roof tops and storm water drains to recharge the ground water.
42. Details of occupational health surveillance programme.
43. Details of socio-economic welfare activities.
44. Transportation of raw materials and finished products for the project (proposed/expansion) in respect of existing traffic, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
45. Action plan for post-project environmental monitoring.
46. Corporate Environmental Responsibility
47. (a) Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
 (b) Does the Environmental Policy prescribe for standard operating process/procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA report.
 (c) What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
 (d) Does the company have a system of reporting of non-compliance / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.
48. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan should be prepared and incorporated.
49. Total capital cost and recurring cost/annum for environmental pollution control measures.

B. 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. Action plan to be submitted for recycle and reuse of water so as to minimize the use of fresh water and permission to be obtained for drawl of water from the river

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.

32.7.2 Proposed expansion in existing plant for manufacturing of 160 KLPD of grain/molasses based distillery plant at Sy. Nos. 103 & 162/2A Gandepally Village, Kanchikacherla Mandal, Krishna District, Andhra Pradesh by M/s. Sentini Bioproducts Private Limited Unit-II. – reg. TOR

The project authorities and their consultant(M/s Pioneer Enviro) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken alongwith the draft Term of References for the preparation of EIA-EMP report. All molasses based distillery are listed at S.N. 5(g) (i) under category 'A' and appraised at Central level.

M/s. SentiniBioproducts Private Limited Unit-II has proposed for expansion in existing plant for manufacturing of 160 KLPD of grain/molasses based distillery plant at Sy. Nos. 103 & 162/2A Gandepally Village, Kanchikacherla Mandal, Krishna District, Andhra Pradesh.

The industry has already obtained Environmental clearance for manufacturing of grain based distillery unit (125 KLD- rectified spirit/extra neutral alcohol/ethanol) vide this Ministry's letter no. 11011/308/2006-IA II (I) dated 5th January, 2007. As reported, there is no National Park/Wildlife sanctuary/Tiger Reserve/Elephant Corridor, Reserve Forest/Protected area within 10 km radius of plant site. Muniyeru river, Wira river and Nagarjunasagar left bank canal are flowing at distance of 1.9 km, 1.8 km and 0.9 km from the project site. Total 160 KLPD of rectified spirit/ENA/Ethanol/Industrial alcohol/Potable alcohol will be manufactured and bye product of 8 KLPD grain impure spirit with Denature spirit will be produced. Grain shall be purchased from the local market as raw material and molasses from the sugar mills. Spentwash generation shall be restricted to 6 KL/KL of RS when grain are used as raw material and 8KL/KL of R.S when molasses used as feed stock.

Total land available for unit –II operation is 30.58 acres. Total cost of project is 300 crore. Total fresh water requirement for the unit II is about 1600 KLD for process, which will be sourced from the river Muniyeru and prior permission is yet to be obtained. Maximum spent wash generation from the grain process is 950 KLD. Spent wash will be centrifuged in decanter to from wet cake with 30% solids. The thin slop will be treated in MEE to concentrate solids and taken to dryer along with wet cake from decanter to concentrate solid to 90% and this DDGS will be sold as cattle feed.

Spentwash from the molasses based process will be 1280 KLD. Therein spentwash will be concentrated to 60% solids in MEE and then incinerated in 60 TPH boiler. It is zero liquid discharge based unit. Boiler ash has been proposed to send to brick manufacturing unit. Waste oil be sent to approved vendor of recyclers.

After detailed deliberations, the Expert Appraisal Committee prescribed the following Standard and additional TORs for preparation of EIA/EMP:

A. Standard TOR:

1. Executive summary of the project.
2. Justification of the project
3. Detailed break-up of the land area along with latest photograph of the area.
4. Present land use based on satellite imagery and details of land availability for the project along with supporting document.
5. Details of site and information related to environmental setting within 10 km radius of the project site.
6. Information regarding eco-sensitive areas such as national park/wildlife sanctuary/ biosphere reserves within 10 km radius of project area.
7. Total cost of the project along with total capital cost and recurring cost/annum for environmental pollution control measures.
8. A copy of lease deed or allotment letter, if land is already acquired.

9. List of existing distillery units in the study area along with their capacity and sourcing of raw material.
10. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc.
11. Details of proposed products along with manufacturing capacity.
12. Number of working days of the sugar unit, distillery unit and CPP.
13. Details of raw materials, its source with availability of all raw materials including cereal grains requirement in case of grain based distillery. If molasses based distillery, then give source and quantity available for molasses.
14. Manufacturing process details of Sugar , distillery and CPP along with process flow chart.
15. Sources and quantity of fuel (rice husk/bagasse/ coal etc.) for the boiler. Measures to take care of SO₂ emission. A copy of Memorandum of Understanding (MoU) signed with the coal suppliers should be submitted.
16. Storage facility for raw materials, prepared alcohol, fuels and fly ash.
17. Action plan for ambient air quality parameters as per NAAQES Standards for PM₁₀, PM_{2.5}, SO₂ and NO_x as per GSR 826(E) dated 16th November, 2009.
18. One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall and AAQ data (except monsoon) for PM₁₀, PM_{2.5}, SO₂, NO_x, CO and HC (methane & non methane) shall be collected. The monitoring stations should take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests. Data for water and noise monitoring should also be included.
19. Mathematical modelling for calculating the dispersion of air pollutants and ground level concentration along with emissions from the boiler's stack.
20. An action plan to control and monitor secondary fugitive emissions from all the sources.
21. An action plan prepared by SPCB to control and monitor secondary fugitive emissions from all the sources.
22. Details of boiler and its capacity. Details of the use of steam from the boiler.
23. Ground water quality around proposed spent wash storage lagoon and the project area.
24. Details of water requirement, water balance chart for existing unit as well as proposed expansion (as applicable). Measures for conservation water by recycling and reuse to minimize the fresh water requirement.
25. Source of water supply and permission of withdrawal of water from Competent Authority.
26. Proposed effluent treatment system for grain/molasses based distillery (spent wash and spent lees) along with utility wastewater including CPP/Co-gen Unit (wherever applicable) as well as domestic sewage and scheme for achieving zero discharge. Details of treatment of effluent generation from sugar unit.
27. Spent wash generation should not exceed 8 KL/KL of alcohol production. Details of the spent wash treatment for molasses based distillery based distillery.
28. Capacity for spent wash holding tank and action plan to control ground water pollution.
29. Layout for storage of bagasse/biomass/coal.
30. Capacity for spent wash holding tank and action plan to control ground water pollution.

31. Dryer shall be installed to dry DWGS.
32. Layout for storage of rice husk/biomass/coal.
33. Details of solid waste management including management of boiler ash.
34. Risk assessment for storage and handling of alcohol and mitigation measure due to fire and explosion and handling areas.
35. Alcohol storage and handling area fire fighting facility as per norms. Provision of Foam System for fire fighting to control fire from the alcohol storage tank.
36. Action plan for development of green belt over 33 % of the total project area 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.
37. List of flora and fauna in the study area.
38. Noise levels monitoring at five locations within the study area.
39. Detailed Environment management Plan (EMP) with specific reference to details of air pollution control system, water & wastewater management, monitoring frequency, responsibility and time bound implementation plan for mitigation measure should be provided.
40. EMP should also include the concept of waste-minimization, recycle/reuse/ recover techniques, Energy conservation, and natural resource conservation.
41. Action plan for rainwater harvesting measures at plant site should be included to harvest rainwater from the roof tops and storm water drains to recharge the ground water.
42. Details of occupational health surveillance programme.
43. Details of socio-economic welfare activities.
44. Transportation of raw materials and finished products for the project (proposed/expansion) in respect of existing traffic, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
45. Action plan for post-project environmental monitoring.
46. Corporate Environmental Responsibility
 - (a) Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
 - (b) Does the Environmental Policy prescribe for standard operating process/procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA report.
 - (c) What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
 - (d) Does the company have a system of reporting of non-compliance / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.
47. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan should be prepared and incorporated.
48. Total capital cost and recurring cost/annum for environmental pollution control measures.

B. Additional TOR

1. A separate chapter on status of compliance of Environmental Conditions granted by Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA-EMP report.
2. 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.
3. Action plan to be submitted for recycle and reuse of water to minimize the use of fresh water and permission to be obtained for drawl of water from the river

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.

32.7.3 Expansion of Mumbai Refinery from 7.5 MMTPA to 9.5 MMTPA at BD Patil Marg, Mahul, Mumbai, Maharashtra by M/s HPCL – reg TOR.

The project authorities 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 report. All the Petroleum Refinery Plants are listed at S.N. 4(a) under Category 'A' and appraised at the Central level.

M/s HPCL has proposed for expansion of 7.5 MMTPA to 9.5 MMTPA at BD Patil Marg, Mahul, Mumbai, Maharashtra. Existing Refinery include the two crude distillation units and three vacuum distillation units in the Primary processing units. FCCU block, DHDS/DHDT blocks, MS block, LOBS in the secondary processing facilities and captive power plant, associated utilities & offsite. Expansion of refinery covers the followings;

- Enhancing crude refining capacity by utilizing spare capacity of secondary processing unit.
- Integration of facilities for optimization of energy & resource conservation
- Production of MS meeting Euro V/VI norms
- Improve refinery margin

Total project cost of proposed expansion is 3223.43 crores. Land requirement for expansion is 13.15 acres. Water requirement is 112 m³/hr. Effluent shall be treated in existing treatment plant.. About 300 m³/5 years (spent catalyst from New HGU) will be generated as hazardous waste.

Proposed refinery includes debottlenecking of existing FR CDU for enhancing crude capacity. Installation of new single VDU at FR for energy optimization. Revamp of MS Block unit with capability to produce Euro-V MS. Modification in DHDT for VGO hydro treating. Installation of New HGU for hydrogen balance

After deliberation, the Committee observed that industry has already obtained environmental clearance in the year 2009 for setting up Diesel Hydro treating facilities in the existing complex. Besides, refinery is operating with crude oil processing facility. However, during presentation all these facilities are not properly depicted in layout plan to assess proposed expansion. Therefore, the Committee (EAC) was of the view that a site visit of subcommittee may be undertaken for consideration of TOR.

32.7.4 Proposed Expansion of Manufacturing Facility of Polymers based on Vinyl acetate monomer & Poly vinyl alcohol and adhesives based on vinyl acetate & Polyvinyl at Plot No. 58, MIDC Mahad, Village Birwadi, District Raigad, Maharashtra by M/s Pidilite Industries Ltd. F. No.– reg TOR.

PP informed that proposal was submitted in the Ministry as proposal is located within 5 Km of the eco-sensitive area i.e. Western Ghat. Study area has few ESA villages mentioned in WG directions issued by MoEF on 13.11.2013. Nearest village (Matwan) is 2.7 km to south. The said direction are issued under Section 5 of EPA, 1986. General conditions clause of EIA Notification amended on 25.06.2014 states that any project within 5 km of eco-sensitive area be treated as category ‘A’ project. However, the Committee noted that Western Ghat as Eco-Sensitive Area is yet to be notified. Therefore, the Committee recommended that project may now be considered as ‘B’ category and referred the matter to the State Authority for consideration of the project.

32.7.5 Expansion for manufacturing of Viscous Filament rayon (25000 TPA to 30000 TPA), P.B. no 22, Murbad Road, village Shahad, Tehsil Ulhasnagar, district Thane, Maharashtra by M/s Century Textiles and Industries Ltd. - reg TOR.

The project proponent and their consultant 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. Manmade fibres (Rayon) is listed at S.N. 5(d) under category ‘A’ and appraised at Central Level.

M/s Century Textiles and Industries Ltd. has proposed for Expansion for manufacturing of Viscous Filament rayon (25000 TPA to 30000 TPA), P.B. no 22, Murbad Road, village Shahad, Tehsil Ulhasnagar, district Thane, Maharashtra. As reported, no National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger/Elephant reserve, Protected forests and other environmental sensitivity exist within 10 km radius. River Ulhas is flowing about 1.2 km from the project site. Following products will be manufactured;

Sl. No.	Product Name	Existing Quantity(MT/A).	Proposed Quantity	Total MT/A
1	Viscose Filament Rayon Yarn	25000	5000	30,000
2	(By-Product) Anhydrous Sodium Sulphate	16272		19,350

Total cost of project is 125 crore, of which Rs. 7.0 crore is earmarked for Environmental Protection measures. Total existing plot area is 37500 m². No additional land will be acquired for proposed expansion. Boiler is connected with Electrostatic Precipitator and emission from sulphuric acid plant is control through alkali and scrubber

Fresh water requirement will be increased from 15500 m³/day to 19550 m³/day after expansion. Power requirement will increase from 24.6 MW to 26.6 MW. Effluent generation will be 10 m³/day and treated in ETP. It is reported that treated effluent from the ETP is disposed off in the saline zone of Ulhas river/creek. Existing capacity of ETP is 16000 m³/day. Existing CTO for discharge from factory is 13000 m³/day, however, no quantity for existing discharge is reported by the industry. ETP sludge, Sulphur waste and spent catalyst will be sent to TSDF site. Waste oil and used oil will be sent to the Authorized recycler.

After detailed deliberations, the Expert Appraisal Committee prescribed the following Standard and Additional TORs for preparation of EIA/EMP:

1. Executive summary of the project
2. Photographs of the existing and proposed plant area.
3. Compliance to the conditions stipulated in the Environmental Clearance / NOC granted by the SPCB.
4. A certified copy of the report of the status of compliance of the conditions stipulated in the environmental clearance and Consent to Operate for the ongoing / existing operation of the project by the Regional Office of the Ministry of Environment and Forests and SPCB.
5. Recent monitoring report from SPCB, which shall include data on AAQ, water quality, solid waste etc. shall be submitted.
6. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, compliance to the notice(s)
7. A line diagram/flow sheet for the process and EMP
8. A site location map on Indian map of 1:10, 00,000 scale followed by 1:50,000/1:25,000 scale on an A3/A2 sheet with at least next 10 Kms of terrains i.e. circle of 10 kms and further 10 kms on A3/A2 sheets with proper longitude/latitude/heights with min. 100/200 m. contours should be included. 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site.
9. Location of national parks / wildlife sanctuary / reserve forests within 10 km. radius should specifically be mentioned. A map showing land use / land cover, reserved forests, wildlife sanctuaries, national parks, tiger reserve etc. in 10 km of the project site.
10. Project site layout plan to scale using AutoCAD showing raw materials, fly ash and other storage plans, bore well or water storage, aquifers (within 1 km.) dumping, waste disposal, green areas, water bodies, rivers/drainage passing through the project site should be included.
11. Details and classification of total land (identified and acquired) should be included.
12. Proposal should be submitted to the Ministry for environment clearance only after acquiring total land. Necessary documents indicating acquisition of land should be included.
13. A note on pulp washing system capable of handling wood pulp should be included.
14. Manufacturing process details for the existing and proposed plant should be included. Chapter on Pulping & Bleaching should include: no black liquor spillage

in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery should include : no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln

15. Permission and approval for the use of forest land and recommendations of the State Forest Department regarding impact of proposed expansion on the surrounding reserve forests, if applicable, should be included.
16. A list of industries containing name and type in 10 km radius shall be incorporated.
17. List of raw material required and source along with mode of transportation should be included. All the trucks for raw material and finished product transportation must be "Environmentally Compliant".
18. Studies for slurry, sludge material and solid waste generated should also be included, if the raw materials used has trace elements and a management plan.
19. Possibility of installation of WHRB will be explored and details included
20. Mass balance for the raw material and products should be included.
21. Energy balance data for all the components including proposed power plant should be incorporated.
22. Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be collected.
23. Sources of secondary emissions, its control and monitoring as per the CPCB guidelines should be included. A full chapter on fugitive emissions and control technologies should be provided.
24. An action plan to control and monitor secondary fugitive emissions from all the sources as per the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008.
25. A write up on use of high calorific hazardous wastes from all the sources in kiln and commitment regarding use of hazardous waste should be included.
26. Ambient air quality at 8 locations within the study area of 10 km., aerial coverage from project site with one AAQMS in downwind direction should be carried out.
27. The suspended particulate matter present in the ambient air must be analyzed for the presence of poly-aromatic hydrocarbons (PAH), i.e. Benzene soluble fraction. Chemical characterization of RSPM and incorporating of RSPM data.
28. Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features.
29. Air quality modeling for all the plants proposed including mine for specific pollutants needs to be done. APCS for the control of emissions within 50 mg/Nm³ should be included. Cumulative impacts of steel plant and Captive Power Plant on the ambient air quality shall be assessed.
30. Action plan for ambient air quality parameters as per NAAQES Standards for PM₁₀, PM_{2.5}, SO₂ and NO_x as per GSR 826(E) dated 16th November, 2009.
31. One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall and AAQ data (except monsoon) for PM₁₀, PM_{2.5}, SO₂, NO_x, CO and HC (methane & non methane) shall be collected. The monitoring stations should take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests. Data for water and noise monitoring should also be included.
32. Impact of the transport of the raw materials and end products on the surrounding environment should be assessed and provided.

33. One season data for gaseous emissions other than monsoon season is necessary.
34. Presence of aquifer(s) within 1 km of the project boundaries and management plan for recharging the aquifer should be included.
35. Source of surface/ground water level, site (GPS), cation, anion (Ion Chromatograph), metal trace element (as above) chemical analysis for water to be used along with a Piper and Piper Duro-V diagram. If surface water is used from river, rainfall, discharge rate, quantity, drainage and distance from project site should also be included.
36. Ground water analysis with bore well data, litho-logs, drawdown and recovery tests to quantify the area and volume of aquifer and its management.
37. Ground water modelling showing the pathways of the pollutants should be included
38. Column leachate study for all types of stockpiles or waste disposal sites, at 20 °C-50 °C should be conducted and included.
39. Action plan for rainwater harvesting measures at plant site should be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water.
40. Permission for the drawl of water from the concerned authority and water balance data including quantity of effluent generated, recycled and reused and discharged is to be provided. Methods adopted/to be adopted for the water conservation should be included.
41. A note on the impact of drawl of water and discharge of effluent into the nearby River during lean season.
42. Surface water quality of nearby River (60 m upstream and downstream) and other surface drains at eight locations must be ascertained.
43. If the site is within 10 km radius of any major river, Flood Hazard Zonation Mapping is required at 1:5000 to 1:10,000 scale indicating the peak and lean river discharge as well as flood occurrence frequency.
44. A note on treatment of wastewater from different plants, recycle and reuse for different purposes should be included.
45. Provision of traps and treatment plants are to be made, if water is getting mixed with oil, grease and cleaning agents.
46. If the water is mixed with solid particulates, proposal for sediment pond before further transport should be included. The sediment pond capacity should be 100 times the transport capacity.
47. The pathways for pollution via seepages, evaporation, residual remains are to be studied for surface water (drainage, rivers, ponds, lakes), sub-surface and ground water with a monitoring and management plans.
48. Ground water monitoring minimum at 8 locations and near solid waste dump zone, Geological features and Geo-hydrological status of the study area are essential as also. Ecological status (Terrestrial and Aquatic) is vital.
49. Action plan for solid/hazardous waste generation, storage, utilization and disposal. A note on the treatment, storage and disposal of all type of solid waste should be included. End use of solid waste and its composition should be covered.
50. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
51. Action plan for the green belt development plan in 33 % area should be included. The green belt should be around the project boundary and a scheme for greening of the travelling roads should also be incorporated. All rooftops/terraces should have some green cover.
52. A scheme for rainwater harvesting has to be put in place. Incorporation of water harvesting plan for the project is necessary, if source of water is bore well. Efforts should be made to make use of rain water harvested. If needed, capacity of the

- reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement should be met from other sources.
53. Detailed description of the flora and fauna (terrestrial and aquatic) should be given with special reference to rare, endemic and endangered species.
 54. Action plan for the green belt development plan in 33 % area should be included. The green belt should be around the project boundary and a scheme for greening of the travelling roads should also be incorporated. All rooftops/terraces should have some green cover.
 55. Detailed description of the flora and fauna (terrestrial and aquatic) should be given with special reference to rare, endemic and endangered species.
 56. Disaster Management Plan including risk assessment & damage control needs to be addressed and included. Landslide hazard map and mitigation plan, Earthquake history and management plan should be submitted.
 57. Occupational health:
 - a. Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
 - b. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of abovementioned parameters as per age, sex, duration of exposure and department wise.
 - c. Annual report of health status of workers with special reference to Occupational Health and Safety.
 - d. Action plan for the implementation of OHS standards as per OSHAS/USEPA.
 - e. Plan and fund allocation to ensure the occupational health & safety of all contract and sub-contract workers.
 58. Corporate Environment Policy
 - i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
 - ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
 - iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
 - iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.
 59. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan should be prepared and incorporated.
 60. A note on identification and implementation of Carbon Credit project should be included.
 61. Total capital cost and recurring cost/annum for environmental pollution control measures.

62. Public hearing issues raised and commitments made by the project proponent on the same should be included separately in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
63. Any litigation pending against the project and / or any direction / order passed by any Court of Law against the project, if so, details thereof.

B. Additional TOR

1. A separate chapter on status of compliance of Environmental Conditions granted by Centre/state, if any, to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA-EMP report.
2. 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.
3. Action Plan for reduction of freshwater requirement for the existing as well as proposed expansion
4. Plan/Possibility to be explored for discharge of treated wastewater into the sea rather into the river.
5. Suitability of existing ETP for the proposed expansion.
6. Development of guard pond for bioassay test before discharge of effluent into the water body.

It was decided that 'TORs' 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 Karnataka Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

32.7.6 Expansion of refinery capacity from 7.5 MMTPA to 7.8 MMTPA of Bharat Oman Refineries Limited (BORL) at Bina, MP considering an increase in annual operating days from 333 days to 345 days and maintaining the same daily processing rate – reg TOR.

EC was granted to M/s BPRL on 28th November, 2014 for expansion of refinery (from 6 MMTPA to 7.5 MMTPA). Now, PP has requested for marginally enhancement of the crude refining capacity from 7.5 MMTPA to 7.8 MMTPA by increasing the annual operating days from 333 to 345 days without any change in the daily processing rate considering increased reliability of refinery operations. PP informed the following:

- a) No additional cost beyond Rs. 2500 Crore
- b) No additional water requirement.
- c) No additional land is required.
- d) No additional power required.
- e) No change in SO₂ emission load i.e. 29.25 TPD.

The Committee exempted the project proposal from EIA report preparation/public hearing as per para 7 (ii) of EIA Notification, 2006. The Committee, therefore, recommended for amendment in the existing EC for augmentation of refinery capacity from 7.5 MMTPA to 7.8 MMTPA. However, specific conditions will remain same.

32.7.7 Proposed 60 KLPD molasses based distillery with 3 MW co-generation power plant at village Jandheri, Tehsil Shahbad, district Kurushetra, Haryana by M/s Shahabad Cooperative Sugar Mills Ltd. - reg. TOR .

The project authorities and their consultant (M/s VardanEvniorNet) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken alongwith the draft Term of References for the preparation of EIA-EMP report. All molasses based distillery are listed at S.N. 5(g) (i) under category 'A' and appraised at Central level.

M/s Shahabad Cooperative Sugar Mills Ltd. has proposed Proposed 60 KLPD molasses based distillery with 3 MW co-generation power plant at village Jandheri, Tehsil Shahbad, district Kurushetra, Haryana. Following products will be manufactured;

- Rectified Spirit : 19400 KLPA
- Impure Spirit : 400 KLPA
- Absolute alcohol : 18236 KPPA

It is reported that no national park/eco-sensitive area/wildlife sanctuary is located within 10 km distance. No litigation is pending against the project. Nearest river is Markanda, which is flowing at a distance of 2.6 km from the project site. Total plot area is 20.837 acres. M/s Shabad Cooperative Sugar Mill Ltd is already in operation in the existing plot. Total Cost of project is Rs. 61.70 Crore. About 110 persons shall be employed for the project. The company has proposed to develop 33% Green Belt of the existing plot. Total power requirement of Ethanol unit will be 1780 KW. Two 750 KVA DG set sets re proposed; one is as standby. 3 MW Cogeneration plant is proposed to be installed along with ethanol plant. The surplus power will be supplied to Haryana Govt.

The Committee suggested to install Bag filter to 20 TPH Boiler. Fresh water requirement will be 950 m³/day, which shall be sourced from the groundwater. About 540 m³/day of spent wash will be generated. Spent wash will be treated through bio-methanation process. Treated spent wash will be evaporated in MEE. Concentrate will be mixed with bagasse to incinerate in the incineration boiler. Spent lees, condensate and other streams-blow down/floor washing will passed through condensate polishing unit and recycle to cooling tower /process/ garden. No effluent will be allowed to discharge outside the premises and the plant shall be based on zero liquid discharge

After detailed deliberations, the Expert Appraisal Committee prescribed the following Standard and Additional TORs for preparation of EIA/EMP:

A. Standard TOR

1. Executive summary of the project.
2. Detailed breakup of the land area along with latest photograph of the area.
3. Present land use based on satellite imagery.

4. Details of site and information related to environmental setting within 10 km radius of the project site.
5. Information regarding eco-sensitive area such as national park / wildlife sanctuary / biosphere reserves within 10 km radius of project area.
6. Permission from the State Forest Department regarding the impact of the proposed plant on the surrounding reserve forest.
7. List of existing distillery units in the study area alongwith their capacity.
8. Number of working days of the distillery unit.
9. Total cost of the project along with total capital cost and recurring cost/annum for environmental pollution control measures.
10. Manufacturing process details of distillery plant alongwith process flow chart.
11. Details of raw materials and source of raw material molasses, bagasse etc.
12. Sources and quantity of fuel (coal etc.) for the boiler. Measures to take care of SO₂ emission. A copy of Memorandum of Understanding (MoU) signed with the coal suppliers should be submitted, in case coal is used.
13. Action plan prepared by the SPCB to control ambient air quality as per NAAQES Standards for PM₁₀, PM_{2.5}, SO₂ and NO_x as per GSR 826(E) dated 16th November, 2009.
14. One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall and AAQ data (except monsoon) for PM₁₀, PM_{2.5}, SO₂, NO_x and HC (methane & non methane) should be collected. The monitoring stations should take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests. Data for water and noise monitoring should also be included.
15. Mathematical modeling for calculating the dispersion of air pollutants and ground level concentration along with emissions from the boiler.
16. An action plan to control and monitor secondary fugitive emissions from all the sources.
17. Details of boiler and its capacity. Details of the use of steam from the boiler.
18. Ground water quality around existing /proposed spent wash storage lagoon and the project area.
19. Details of water requirement, water balance chart for Molasses based Distillery. Measures for conservation water by recycling and reuse to minimize the fresh water requirement.
20. Water requirement should not exceed 10 KI/KI of alcohol for distillery and prior 'permission' for the drawl of total fresh water. Details of source of water supply.
21. Hydro-geological study of the area for availability of ground water.
22. Spentwash generation from molasses based should not exceed 8KI/KI of alcohol production.
23. Proposed effluent treatment system for molasses based distillery (spent wash and spent lees) and scheme for achieving 'zero' discharge.
24. Lagoon capacity for sugar unit and spent wash as well measures to be taken to control ground water contamination.
25. Details of solid waste management including management of boiler ash. Submit Ash management plan. MoU with cement plant for the use of fly ash.
26. Land available for bio-composting. Details of lining to be provided in the compost yard.
27. Green belt development as per the CPCB guidelines.
28. List of flora and fauna in the study area.
29. Noise levels monitoring at five locations within the study area.
30. Detailed Environment management Plan (EMP) with specific reference to details of air pollution control system, water & wastewater management, monitoring frequency, responsibility and time bound implementation plan for mitigation measure should be provided.

31. EMP should also include the concept of waste-minimization, recycle/reuse/ recover techniques, Energy conservation, and natural resource conservation.
32. Details of bagasse storage. Details of press mud requirement.
33. Risk assessment for storage and handling of alcohol and mitigation measure due to fire and explosion and handling areas.
34. Alcohol storage and handling area and its fire fighting facility as per norms.
35. Action plan for rainwater harvesting measures at plant site should be included to harvest rainwater from the roof tops and storm water drains to recharge the ground water.
36. Details of occupational health programme.
 - i) To which chemicals, workers are exposed directly or indirectly.
 - ii) Whether these chemicals are within Threshold Limit Values (TLV)/ Permissible Exposure Levels as per ACGIH recommendation.
 - iii) What measures company have taken to keep these chemicals within PEL/TLV.
 - iv) How the workers are evaluated concerning their exposure to chemicals during pre-placement and periodical medical monitoring.
 - v) What are onsite and offsite emergency plan during chemical disaster.
 - vi) Liver function tests (LFT) during pre-placement and periodical examination.
 - vii) Details of occupational health surveillance programme.
37. Details of socio-economic welfare activities to be provided.
38. Traffic study of the area for the proposed projects in respect of existing traffic, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
39. Action plan for post-project environmental monitoring.

40. Corporate Environmental Responsibility

- (a) Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- (b) Does the Environmental Policy prescribe for standard operating process/procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA report.
- (c) What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
- (d) Does the company have a system of reporting of non compliance / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.
41. Any litigation pending against the project and /or any direction /order passed by any Court of Law against the project, if so, details thereof.
42. Public hearing issues raised and commitments made by the project proponent on the same should be included separately in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
43. A tabular chart with index for point-wise compliance of above TORs.

B. 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. Permission to be obtained for withdrawal of water from concerned Authority.

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.

32.7.8 Proposed Expansion of Bulk Drug Intermediate industry located at Sy.No. 353, Domadugu Village, Bonthapally IDA, Jinnaram Mandal of Medak District (DT), Telangana State by M/s. Symed Labs Limited (Unit –I) reg. TOR .

The project authorities and their Consultant (M/s Rightsource Industrial Solutions Pvt. Ltd.) 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. All Synthetic Organic Chemicals Industry (Bulk Drugs & Intermediates) located outside the notified industrial area/estate are listed at S.N. 5(f) under category 'A' and appraised by Expert Appraisal Committee (I).

The industrial area is notified by the Industries & Commerce Dept., govt. of Andhra Pradesh by GO No. 120 dated 22/10/2013. However, the industrial area does not obtain Environmental clearance.

M/s. Symed Labs Limited (Unit –I Expansion of Bulk Drug Intermediate industry located at Sy.No. 353, Domadugu Village, Bonthapally IDA, Jinnaram Mandal of Medak District (DT), Telangana State. The existing unit has been established having its CFE vide no. 24588/PCB/W/99-1291 in July 1999. At that time, environmental clearance did not require by the industry.

Plot area is 13207.88 m² of which greenbelt will be developed in 4622.75 m² (>33%). Cost of project is Rs. 5.00 Crores. It is reported that no areas protected under international conventions, national or local legislation for their ecological landscape, cultural or other related value are located within 10 km distance. Reserved forests namely Wailal RF, Kazipalli, Jinnawaram, Kistaipalli, Dundigal, Bonthpali, Nawabpet are located within the distance of 10 kms. Water bodies such as RajanalaCheruvu, Ran Cheruvu, KottaCheruvuv, MallamaCheruvu, GajulapalliCheruvu, DarmiCheruvu, Mari Kunta, DevuniCheruvu and NallaKunta are located within 10 Km distance. Details of existing and proposed products to be manufactured are as given below:

Sl. No.	Name of Product	Existing product (Kg/ Month)	Quantity In Kg/Month
	Niacinamide	2.0	
	Glycerol Guicolite	1.0	
1	Carvediol		2000.00
2	Fluconasole		2000.00

3	Itopride Hydrochloride		5000.00
4	Ketrolactromethamine		4000.00
5	LevosulprideDihydrochloride		1000.00
6	Levosulpride		500.00
7	Linezolid		5000.00
8	Mosapride Citrate Dihydrate		200.00
9	Pregabalin		5000.00
10	Thalidomide		50.00
11	Tizanidine Hydrochloride		50.00
12	Topiramate		500.00
	Total		23000.00

The industry proposes to manufacture any 6 products at any given point of time.

Water requirement of 167.24 m³/day shall be sourced from Groundwater. Against this 45.77 m³/day of wastewater will be generated. Effluent will be treated in ETP and no wastewater will be discharged outside the premises. Zero Liquid discharge will be maintained. Two coal fired boiler of 3TPH and 2TPH will be installed and DG sets of 500 KVA and 320 KVA will be installed to meet the power requirements. Process emission such as ammonia and hydrogen chloride shall be scrubbed by using chilled water media. Industrial wastewater will be segregated into High TDS/COD and Low TDS/COD effluent streams. High TDS/COD effluent stream will be treated through steam stripper followed by multiple effect evaporator (MEE) and agitated thin film drier (ATFD). Low TDS effluent stream will be treated in ETP. The evaporation salts and ETP sludge will be sent to TSDF. Organic residue, spent carbon and Distillation residue will be sent to cement plant. Waste oil and used batteries from the DG sets are sent to authorize recyclers. Fly ash will be sent to brick manufacturers.

After detailed deliberations, the Expert Appraisal Committee prescribed the following Standard and additional TORs for preparation of EIA/EMP:

A. Standard TOR:

1. Executive summary of the project
2. Justification of the project.
3. Promoters and their back ground.
4. Regulatory framework.
5. Environment clearance for the existing unit issued by the Ministry (reasons, if not obtained), Consent to Operate and Authorization accorded by the SPCB.
6. Copy of NOC/Consent to Establish for the existing unit.
7. Compliance to the conditions stipulated in the NOC granted by the SPCB.
8. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, compliance to the notice(s).
9. Data for the stack emissions, fugitive emissions; water requirement and water balance chart; wastewater generation, treated effluent quality, re-utilization and disposal of solid/hazardous waste for the existing unit.
10. A map indicating location of the project and distance from severely polluted area.
11. Project location and plant layout.
12. Infrastructure facilities including power sources.
13. Total cost of the project alongwith total capital cost and recurring cost/annum for environmental pollution control measures.
14. Project site location alongwith site map of 10 km area and site details providing various industries, surface water bodies, forests etc.

15. Present land use based on satellite imagery for the study area of 10 km radius. Details of land availability for the project alongwith supporting document.
16. Location of National Park/Wild life sanctuary/Reserve forest within 10 km radius of the project.
17. Permission from the State Forest Department regarding the impact of the proposed plant on the surrounding reserve forests.
18. Details of the total land and break-up of the land use for green belt and other uses.
19. List of products alongwith the production capacities.
20. Detailed list of raw material required and source, mode of storage.
21. Manufacturing process details alongwith the chemical reactions and process flow chart.
22. Action plan for the transportation of raw material and products.
23. Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall is necessary.
24. Ambient air quality monitoring at 6 locations within the study area of 5 km., aerial coverage from project site as per NAAQES notified on 16th September, 2009. Location of one AAQMS in downwind direction.
25. One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall and AAQ data (except monsoon) for PM_{2.5}, PM₁₀, SO₂, NO_x, CO, NH₃ including VOCs shall be collected. The monitoring stations shall take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests. Data for water and noise monitoring shall also be included.
26. Details of water and air pollution and its mitigation plan
27. Air pollution control measures proposed for the effective control of gaseous/process emissions within permissible limits.
28. An action plan prepared by SPCB to control and monitor secondary fugitive emissions from all the sources.
29. Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. Air quality modelling for proposed plant.
30. Name of all the solvents to be used in the process and details of solvent recovery system.
31. Design details of ETP, incinerator, if any alongwith boiler, scrubbers/bag filters etc.
32. Action plan to control ambient air quality as per NAAQS Standards notified by the Ministry on 16th September, 2009.
33. Source and permission from Competent Authority for the drawl of water. Water balance chart including quantity of effluent generated recycled and reused and effluent discharge.
34. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the standard.
35. Zero discharge effluent concepts to be adopted.
36. Ground water quality monitoring minimum at 6 locations shall be carried out. Geological features and Geo-hydrological status of the study area and ecological status (Terrestrial and Aquatic).
37. The details of solid and hazardous wastes generation, storage, utilization and disposal particularly related to the hazardous waste calorific value of hazardous waste and detailed characteristic of the hazardous waste. Action plan for the disposal of fly ash generated from boiler shall be included.
38. Material Safety Data Sheet for all the Chemicals are being used/will be used.
39. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
40. Risk assessment for storage for chemicals/solvents. Action plan for handling & safety system.
41. An action plan to develop green belt in 33 % area. Layout plan for green belt shall be provided.

42. Action plan for rainwater harvesting measures at plant site shall be included to harvest rainwater from the roof tops and storm water drains to recharge the ground water.
43. Details of occupational health programme.
 - a) To which chemicals, workers are exposed directly or indirectly.
 - b) Whether these chemicals are within Threshold Limit Values (TLV)/ Permissible Exposure Levels as per ACGIH recommendation.
 - c) What measures company have taken to keep these chemicals within PEL/TLV.
 - d) How the workers are evaluated concerning their exposure to chemicals during pre-placement and periodical medical monitoring.
 - e) What are onsite and offsite emergency plan during chemical disaster.
 - f) Liver function tests (LFT) during pre-placement and periodical examination.
 - g) Details of occupational health surveillance programme.
44. Socio-economic development activities shall be in place.
45. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan should be prepared and incorporated.
46. Note on compliance to the recommendations mentioned in the CREP guidelines.
47. Detailed Environment management Plan (EMP) with specific reference to details of air pollution control system, water & wastewater management, monitoring frequency, responsibility and time bound implementation plan for mitigation measure shall be provided.
48. EMP shall include the concept of waste-minimization, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.
49. Total capital cost and recurring cost/annum for environmental pollution control measures.
- 50. Corporate Environmental Responsibility**
 - (a) Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
 - (b) Does the Environmental Policy prescribe for standard operating process/procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA report.
 - (c) What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
 - (d) Does the company have a system of reporting of non-compliance / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.
51. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof.

B. Additional TOR

1. A separate chapter on status of compliance of Environmental Conditions granted by State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA-EMP report.
2. 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.

3. Recommendation of State Pollution Control Board for proposed expansion.

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.

32.7.9 Proposed Expansion (capacity 77 TPM) of Bulk Drug Intermediate manufacturing unit at Sy No: 10, village Gaddapotharam , Mandal Jinnaram , district Medak , Telangana State by M/s. Virupaksha Organics Limited (Unit –I) - reg. TOR

The project authorities and their Consultant (M/s Rightsource Industrial Solutions Pvt. Ltd.) 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. All Synthetic Organic Chemicals Industry (Bulk Drugs & Intermediates) located outside the notified industrial area/estate are listed at S.N. 5(f) under category ‘A’ and appraised by Expert Appraisal Committee (I).

The industrial area is notified by the Industries & Commerce Dept., govt. of Andhra Pradesh by GO No. 120 dated 22/10/2013. However, the industrial area does not obtain Environmental clearance.

M/s. Virupaksha Organics Limited (Unit –I) Proposed Expansion (324 TPA to 924 TPA) of Bulk Drug Intermediate manufacturing unit at Sy No: 10, village Gaddapotharam , Mandal Jinnaram , district Medak , Telangana State. The existing unit has been established in the year 1990 having its CFE vid no. 190/PCB/89/90 dated 23/04/1990. At that time, environmental clearance did not require by the industry. Plot area is 13605.37 m² of which greenbelt will be developed in 4489.72 m²(33%). Cost of project is Rs. 10.00 Crores. It is reported that no areas protected under international conventions, national or local legislation for their ecological landscape, cultural or other related value are located within 10 km distance. Reserved forests Wailal RF, Kistaipally RF, Kazipally RF, Dundigal RF, Borampet RF, Suraram RF, Kottaguda RF, Water bodies such as PeddaCheruvu, AkkammaCheruvu, PrishabCheruvu, are located within 10 Km distance. Details of existing and proposed products to be manufactured are as given below:

Following products will be manufactured:

Sl. No.	Product Name	Quantity in Kg/Month	Quantity in Kg/Day
1	Cinnarizine	3000.00	100.00
2	Cyanodiol base	3000.00	100.00
3	Dextromethorphan Hydropromide	5000.00	166.67
4	Esitalopram Oxalate	1000.00	33.33
5	Hydrochloride (BCN)	5000.00	166.67
6	Fexofenadine hydrochloride (MAC)	5000.00	166.67
7	Fluconazole	5000.00	166.67
8	Tramadol Hydrochloride (MBA)	25000.00	833.33
9	Tramadol Hydrochloride (MCA)	25000.00	833.33
	TOTAL	77000.00	2566.67

Water requirement of 155.26 m³/day shall be sourced from Groundwater. Against this 90.65 m³/day of wastewater will be generated. Effluent will be treated in ETP and no wastewater will be discharged outside the premises. Zero Liquid discharge will be maintained. Two coal fired boiler of 2TPH and 4TPH will be installed and DG sets of 500 KVA and 380 KVA will be stationed to meet the power requirements. Process emission such as ammonia and hydrogen chloride shall be scrubbed by using chilled water media.

Industrial wastewater will be segregated into High TDS/COD and Low TDS/COD effluent streams. High TDS/COD effluent stream will be treated through steam stripper followed by multiple effect evaporator (MEE) and agitated thin film drier (ATFD). Low TDS effluent stream will be treated in ETP. The evaporation salts and ETP sludge will be sent to TSDF. Organic residue, spent carbon and Distillation residue will be sent to cement plant. Waste oil and used batteries from the DG sets are sent to authorized recyclers. Fly ash will be sent to brick manufacturers.

After detailed deliberations, the Expert Appraisal Committee prescribed the following Standard and additional TORs for preparation of EIA/EMP:

A. Standard TOR:

1. Executive summary of the project
2. Justification of the project.
3. Promoters and their background.
4. Regulatory framework.
5. Environment clearance for the existing unit issued by the Ministry (reasons, if not obtained), Consent to Operate and Authorization accorded by the SPCB.
6. Copy of NOC/Consent to Establish for the existing unit.
7. Compliance to the conditions stipulated in the NOC granted by the SPCB.
8. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, compliance to the notice(s).
9. Data for the stack emissions, fugitive emissions; water requirement and water balance chart; wastewater generation, treated effluent quality, re-utilization and disposal of solid/hazardous waste for the existing unit.
10. A map indicating location of the project and distance from severely polluted area.
11. Project location and plant layout.
12. Infrastructure facilities including power sources.
13. Total cost of the project alongwith total capital cost and recurring cost/annum for environmental pollution control measures.
14. Project site location alongwith site map of 10 km area and site details providing various industries, surface water bodies, forests etc.
15. Present land use based on satellite imagery for the study area of 10 km radius. Details of land availability for the project alongwith supporting document.
16. Location of National Park/Wild life sanctuary/Reserve forest within 10 km radius of the project.
17. Permission from the State Forest Department regarding the impact of the proposed plant on the surrounding reserve forests.
18. Details of the total land and break-up of the land use for green belt and other uses.
19. List of products alongwith the production capacities.

20. Detailed list of raw material required and source, mode of storage.
21. Manufacturing process details alongwith the chemical reactions and process flow chart.
22. Action plan for the transportation of raw material and products.
23. Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall is necessary.
24. Ambient air quality monitoring at 6 locations within the study area of 5 km., aerial coverage from project site as per NAAQES notified on 16th September, 2009. Location of one AAQMS in downwind direction.
25. One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall and AAQ data (except monsoon) for PM_{2.5}, PM₁₀, SO₂, NO_x, CO, NH₃ including VOCs shall be collected. The monitoring stations shall take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests. Data for water and noise monitoring shall also be included.
26. Details of water and air pollution and its mitigation plan
27. Air pollution control measures proposed for the effective control of gaseous/process emissions within permissible limits.
28. An action plan prepared by SPCB to control and monitor secondary fugitive emissions from all the sources.
29. Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. Air quality modelling for proposed plant.
30. Name of all the solvents to be used in the process and details of solvent recovery system.
31. Design details of ETP, incinerator, if any alongwith boiler, scrubbers/bag filters etc.
32. Action plan to control ambient air quality as per NAAQS Standards notified by the Ministry on 16th September, 2009.
33. Source and permission from Competent Authority for the drawl of water. Water balance chart including quantity of effluent generated recycled and reused and effluent discharge.
34. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the standard.
35. Zero discharge effluent concepts to be adopted.
36. Ground water quality monitoring minimum at 6 locations shall be carried out. Geological features and Geo-hydrological status of the study area and ecological status (Terrestrial and Aquatic).
37. The details of solid and hazardous wastes generation, storage, utilization and disposal particularly related to the hazardous waste calorific value of hazardous waste and detailed characteristic of the hazardous waste. Action plan for the disposal of fly ash generated from boiler shall be included.
38. Material Safety Data Sheet for all the Chemicals are being used/will be used.
39. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
40. Risk assessment for storage for chemicals/solvents. Action plan for handling & safety system.
41. An action plan to develop green belt in 33 % area. Layout plan for green belt shall be provided.

42. Action plan for rainwater harvesting measures at plant site shall be included to harvest rainwater from the roof tops and storm water drains to recharge the ground water.
43. Details of occupational health programme.
 - a. To which chemicals, workers are exposed directly or indirectly.
 - b. Whether these chemicals are within Threshold Limit Values (TLV)/ Permissible Exposure Levels as per ACGIH recommendation.
 - c. What measures company have taken to keep these chemicals within PEL/TLV.
 - d. How the workers are evaluated concerning their exposure to chemicals during pre-placement and periodical medical monitoring.
 - e. What are onsite and offsite emergency plan during chemical disaster.
 - f. Liver function tests (LFT) during pre-placement and periodical examination.
 - g. Details of occupational health surveillance programme.
44. Socio-economic development activities shall be in place.
45. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan should be prepared and incorporated.
46. Note on compliance to the recommendations mentioned in the CREP guidelines.
47. Detailed Environment management Plan (EMP) with specific reference to details of air pollution control system, water & wastewater management, monitoring frequency, responsibility and time bound implementation plan for mitigation measure shall be provided.
48. EMP shall include the concept of waste-minimization, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.
49. Total capital cost and recurring cost/annum for environmental pollution control measures.
- 50. Corporate Environmental Responsibility**
 - a. (a) Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
 - b. (b) Does the Environmental Policy prescribe for standard operating process/procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA report.
 - c. (c) What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
 - d. (d) Does the company have a system of reporting of non-compliance / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.
51. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof.

B. Additional TOR

1. A separate chapter on status of compliance of Environmental Conditions granted by State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a

- certified report by RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA-EMP report.
2. 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.
 3. Recommendation of State Pollution Control Board for proposed expansion.

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.

32.7.10 Expansion of Bulk Drug & Intermediates (capacity 237.6 TPA to 1548.0 TPA) at. Sy. No. 42, Ali Nagar, Village Gaddapotharam , Mandal Jinnaram , District Medak, Telangana by M/s. Sigachi Laboratories – reg. TOR

The project authorities and their Consultant (M/sProdhviEnviotech (P) Ltd., Hyderabad) gave detailed presentation on 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. All Synthetic Organic Chemicals Industry (Bulk Drugs & Intermediates) located outside the notified industrial area/estate are listed at S.N. 5(f) under category 'A' and appraised by Expert Appraisal Committee (I). As such there is no SEAC/SEIAA, Telangana at the time of presentation.

M/s. Sigachi Laboratories has proposed for Expansion of Bulk Drug & Intermediates (capacity 237.6 TPA to 1548.0 TPA) at. Sy. No. 42, Ali Nagar, Village Gaddapotharam , Mandal Jinnaram , District Medak, Telangana. The MEF&CC accorded Environmental Clearance to the existing unit vide letter no. J- 11011/73/2005-IA II (I) dated 1st July 2005.

There are no national parks or sanctuaries within 10 km radius of the site. As reported, there are 19 Reserve Forests within 10 km radius, of which nearest one is Dundigal RF located at distance of 0.4 km.

As reported, out of total available area of 24888.19 m² , the area proposed for expansion is 2314.82 m². Green belt to be developed in 8246.84 m² of area. Existing cost of the plant is Rs. 1.66 crore and the proposed cost of expansion is Rs. 5.1 crore. Cost of environmental infrastructure is proposed to be Rs. 2.16 crore. The water requirement shall increase from 39.8 m³/day to 126.85 m³/day, which will be sourced through privately supplied tankers. Wastewater generation will increase from 12.3 m³/day to 92.37 m³/day. Wastewater will be treated in ETP together with RO and MEE for recycling and reuse of wastewater. A water tank is also located at distance of 0.8 km.

Manufacturing capacity is presented as follows;

Sl.No.	Name of the Products	Capacity (TPA)
	Existing	
1	Ampicillin	72.0
2	Amoxycillin	36.0
3	Cephalexin	14.4

4	Cefadroxil	14.40
5	6 APA	72.0
6	7 ADCA	28.80 TPA
	Total	237.6
	<u>Proposed</u>	
1	Omeprazole	360.0
2	Lansoprazole	156.0
3	Rabeprazole Sodium	168.0
4	Esomeprazole Magnesium Trihydrate	60.0
5	Pantoprazole Sodium	24.0
6	3,5 – Dimethyl-4-nitropyridine-N-oxide (Omeprazole Intermediate)	360.0
7	2,3- Dimethyl-4-nitropyridine-N-oxide (Lansoprazole Intermediate)	420.0
Total		1548.0

Bag filter will be provided to 6TPH coal fired boiler to control particulate emissions, SO₂ and NO_x. DG set of capacity 320KVA will be installed with Acoustic arrangement. Fugitive emission from the process reactor will be scrubbed. Forecedevoperation salt/MEE salt and Inorganic salt will be sent to TSDF, Dundigal. The stripper distillate, process residue and solvent residue are sent to cement plants for co-incineration. Waste oil and used batteries from the DG sets are sent to authorize recyclers. The sludge from effluent treatment plant is sent to TSDF. Ash generated from coal fired boilers sent to brick manufacturers. The other solid wastes expected from the unit are containers, empty drums which are returned to the product seller or sold to authorized buyers after detoxification.

After detailed deliberations, the Expert Appraisal Committee prescribed the following standard and additional TORs for preparation of EIA/EMP:

A. Standard TORs

1. Executive summary of the project
2. Justification of the project.
3. Project location and plant layout.
4. Promoters and their back ground.
5. Regulatory framework
6. A map indicating location of the project and distance from severely polluted area
7. Infrastructure facilities including power sources.
8. Total cost of the project alongwith total capital cost and recurring cost/annum for environmental pollution control measures.
9. Project site location alongwith site map of 10 km area and site details providing various industries, surface water bodies, forests etc.
10. Present land use based on satellite imagery for the study area of 10 km radius.
11. Location of National Park/Wild life sanctuary/Reserve Forest within 10 km radius of the project.
12. Details of the total land and break-up of the land use for green belt and other uses.
13. List of products alongwith the production capacities.
14. Detailed list of raw material required and source, mode of storage and transportation.

15. Manufacturing process details alongwith the chemical reactions and process flow chart.
16. Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall is necessary.
17. Ambient air quality monitoring at 6 locations within the study area of 5 km., aerial coverage from project site as per NAAQES notified on 16th September, 2009. Location of one AAQMS in downwind direction.
18. One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall and AAQ data (except monsoon) for PM₁₀, SO₂, NO_x including HC and VOCs should be collected. The monitoring stations should take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests. Data for water and noise monitoring should also be included.
19. Air pollution control measures proposed for the effective control of gaseous emissions within permissible limits.
20. Name of all the solvents to be used in the process and details of solvent recovery system.
21. Design details of ETP, incinerator, boiler, scrubbers/bag filters etc.
22. Details of water and air pollution and its mitigation plan
23. Action plan to control ambient air quality as per NAAQES Standards notified by the Ministry on 16th September, 2009.
24. An action plan to control and monitor secondary fugitive emissions from all the sources.
25. Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. Air quality modelling for proposed plant.
26. Source and permission for the drawl of total 75.3 m³/day water from the competent authority. Water balance chart including quantity of effluent generated recycled and reused and discharged. Efforts shall be made to reduce ground water drawl.
27. Action plan for 'Zero' discharge of effluent should be included.
28. Ground water quality monitoring minimum at 6 locations should be carried out. Geological features and Geo-hydrological status of the study area and ecological status (Terrestrial and Aquatic).
29. The details of solid and hazardous wastes generation, storage, utilization and disposal particularly related to the hazardous waste calorific value of hazardous waste and detailed characteristic of the hazardous waste.
30. Action plan for the management of fly ash generated from boiler should be included. Tie-up or agreement with brick manufacturer to be provided.
31. Precautions to be taken during storage and transportation of hazardous chemicals should be clearly mentioned and incorporated.
32. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they will utilized all the organic solid waste generated.
33. A copy of 'Memorandum of Understanding' (MoU) signed with coal supplier for imported coal and brick manufacturers for management of fly ash.
34. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
35. Material Safety Data Sheet for all the Chemicals are being used/will be used. CAS No./RTECS No./DOT/UN etc to be mentioned against each chemicals.
36. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
37. Risk assessment for storage for chemicals/solvents. Action plan for handling & safety system.
38. An action plan to develop green belt in 54% area. Layout plan for green belt shall be provided.

39. Action plan for rainwater harvesting measures at plant site shall be included to harvest rainwater from the roof tops and storm water drains to recharge the ground water.
40. Details of occupational health programme.
 - i. To which chemicals, workers are exposed directly or indirectly.
 - ii. Whether these chemicals are within Threshold Limit Values (TLV)/ Permissible Exposure Levels as per ACGIH recommendation.
 - iii. What measures company have taken to keep these chemicals within PEL/TLV.
 - iv. How the workers are evaluated concerning their exposure to chemicals during pre-placement and periodical medical monitoring.
 - v. What are onsite and offsite emergency plan during chemical disaster.
 - vi. Liver function tests (LFT) during pre-placement and periodical examination.
 - vii. Details of occupational health surveillance programme.
41. Socio-economic development activities should be in place.
42. Note on compliance to the recommendations mentioned in the CREP guidelines.
43. Detailed Environment management Plan (EMP) with specific reference to details of air pollution control system, water & wastewater management, monitoring frequency, responsibility and time bound implementation plan for mitigation measure should be provided.
44. EMP should include the concept of waste-minimization, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.
45. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof.
46. A tabular chart with index for point wise compliance of above TORs.

B. Additional TOR

1. Public hearing to be conducted by SPCB 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. A separate chapter on status of compliance of Environmental Conditions granted by Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA-EMP report.
3. Recommendation of SPCB to provided

The Committee prescribed the above ToRs for preparation of EIA/EMP reports. The proponent should prepare EIA/EMP Report based on the above TORs and submit the same to the Telangana Pollution Control Board for conducting public hearing/consultation. The EIA/EMP Report should be as per the generic structure given in Appendix-III of EIA Notification, 2006. The concerns raised alongwith the replies during the Public Hearing/ Consultation should be incorporated in the EIA/EMP Report and the final EIA/EMP submitted to the Ministry for obtaining environmental clearance.

32.8 Any Other

32.8.1 Establishment of 240 KLPD Distillery Unit, 240 KLPD Ethanol, 10000 TCD Sugar and 30 MW Bagasse based Cogeneration Power Plant of M/s Shree Renuka Sugars Ltd at Nadur Village, Mangalwedha Taluka of Solapur District, Maharashtra J-11011/493/2006-IAII(I)(Extension of validity of EC and change of name).

EC was granted vide MoEF&CC's letter no J-11011/493/2006 IA II (I) dated 22nd December, 2008. MoEF's vide letter dated 8th September, 2014 has recommended the extension of validity of EC by a period of one year w.e.f. 22.12.2013. Now, PP vide letter dated 16.12.2014 has requested for further extension of validity of environmental clearance.

PP submitted phase wise plan to complete the project, which is as given below:

Phase	Sugar (TCD)	Co-gen (MW)	Alcohol (KLPD)
1 st	4000-4500	10	65
2 nd	7500	30	130
3 rd	10000	30	240

Present status is complete & in service for upto 4500 TCD sugar, 10 MW power and distillery (65 KLPD). He informed that full capacity of sugar & co-gen and 130 KLPD distillery will be achieved by December, 2016 and balance capacity of 110 KLPD of distillery by December, 2018.

Therefore, the Committee recommended the extension of validity of EC for another four years w.e.f. 22.12.2014.

32.8.2 Proposed 150 KLPD Molasses Based Distillery & 6 MW Co-generation Project at MIDC Tembhurni Village, Taluka Madha District Solapur in Maharashtra by M/s Khandoba Distilleries Ltd – J-11011/773/2007-IAII(I) – reg. extension of EC

The above proposal was considered in the EAC meeting held during 10-11th June, 2013 and the Committee recommended the grant of extension for one year in the validity period of EC. Further, the same was not communicated until 23.04.2014. Therefore, the Ministry has referred to the EAC for further extension of EC validity by two years.

After detailed deliberation, the Committee felt that extension of validity for another two years is not adequate as one year is already lapsed. Therefore, the Committee recommended the extension of validity of EC for another three years w.e.f. 16.01.2014.

**LIST OF PARTICIPANTS OF EAC (Industry) IN 32nd MEETING OF EAC (INDUSTRY) HELD
ON 20-21st January, 2015**

S.N.	Name	Designation	Attendance
1	Shri M. Raman	Chairman	A
2	Shri R.K. Garg	Vice-Chairman Acting Chairman	P
3	Prof. R.C. Gupta	Member	A
4	Dr. Prem Shankar Dubey	Member	P
5	Dr. R.M. Mathur	Member	P
6	Dr. S. K. Dave	Member	P
7	Dr. B. Sengupta	Member	P
8	Shri Rajat Roy Choudhary	Member	A
9	Dr. S.D. Attri	Member	A
10.	Dr. Antony Gnanamuthu	Member	A
11.	Prof. C. S. Dubey	Member	P
12.	Shri Niranjana Raghunath Raje	Member	P
MOEF Representatives			
13.	Shri Lalit Bokolia	Additional Director & MS Industry-(2)	P
14.	Shri A.N.Singh	Joint Director	P