

**MINUTES OF 19<sup>th</sup> EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) MEETING  
HELD DURING 6<sup>th</sup> to 7<sup>th</sup> FEBRUARY, 2017**

**VENUE:** Brahmaputra Hall, Vayu Wing, First Floor, Ministry of Environment, Forests and Climate Change, Indira Paryavaran Bhawan Aliganj, Jorbagh Road, New Delhi - 110003.

**6<sup>th</sup> February, 2017 (Day 1)**

**19.1 Opening Remarks of the Chairman**

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

**(I). Debottlenecking and expansion of existing Petrochemical Complex' at Hazira, Dist. Surat, Gujarat by Reliance Industries Limited - Environmental Clearance**

The Member Secretary informed that the aforesaid project was recommended for EC in 16<sup>th</sup> EAC meeting held during 8<sup>th</sup> - 9<sup>th</sup> December, 2016. The PP vide letter dated 5<sup>th</sup> January, 2017 made a request seeking following corrections in the Minutes of the 16<sup>th</sup> EAC meeting:

<b>Sr. No.</b>	<b>Reference in MoM</b>	<b>Error</b>	<b>Request</b>	<b>Remarks</b>
1	Pg. No. 31, Sr. No. ix. Line No. 1-5	Additionally, PP informed the Committee that ambient air quality monitoring was carried out at 11 locations during summer 2013, post monsoon 2013 and winter 2013-2014 and submitted baseline data which indicates that ranges of concentrations of PM <sub>10</sub> (23 – 99 µg/m <sup>3</sup> ), PM <sub>2.5</sub> (10-72 µg/m <sup>3</sup> ), SO <sub>2</sub> (3-43 µg/m <sup>3</sup> ) and NOx (3-28.1 µg/m <sup>3</sup> ) respectively	<i>Additionally, PP informed the Committee that ambient air quality monitoring was carried out at 11 locations during summer 2013, post monsoon 2013, winter 2013-2014 &amp; summer 2014 and submitted baseline data which indicates that ranges of concentrations of PM<sub>10</sub> (23 – 99 µg/m<sup>3</sup>), PM<sub>2.5</sub> (10-72 µg/m<sup>3</sup>), SO<sub>2</sub> (3-43 µg/m<sup>3</sup>) and NOx (3-28.1 µg/m<sup>3</sup>) respectively</i>	<b><i>The ambient air quality was monitored for four seasons viz. summer 2013, post monsoon 2013, winter 2013-14 and summer 2014.</i></b>
2	Pg. No. 31, Sr. No. xii.	Fresh water requirement from surface water i.e. Singapore weir	<b><i>Additional fresh surface</i></b> water requirement for the proposed project will be 15,000 m <sup>3</sup> /day from	

Sr. No.	Reference in MoM	Error	Request	Remarks
		will be 15000 m <sup>3</sup> /day after expansion.	Singapore weir.	
3	Pg. No. 31, Sr. No. xiv., <b>Line No. 1-2</b>	Reliance industry has taken permission for withdrawal of 35 MGD water. Effluent generation will be increased from 56,604 m <sup>3</sup> /day to 61,287 m <sup>3</sup> /day after expansion.	Reliance Industries has taken permission for withdrawal of 35 MGD water. Effluent generation will be increased from 55,727m <sup>3</sup> /day to 61,287 m <sup>3</sup> /day after expansion.	
4	Pg. No. 31, Sr. No. xiv., <b>Line No. 8</b>	Treated effluent will be discharged into sea.	Treated effluent will be discharged <i>through the existing diffuser into Tapi estuary.</i>	
5	Pg. No. 32, Sr. No. i.	M/s Reliance Industry Ltd. shall comply with new standards/norms for Oil Refinery Industry notified under the Environment (Protection) Rules, 1986 vide G.S.R. 186(E) dated 18th March, 2008.	M/s Reliance Industries Ltd. shall comply with <i>the standards/norms for Petrochemicals (Basic &amp; Intermediates) Industry notified under the Environment (Protection) Rules, 1986 vide G.S.R. 820(E) dated 09<sup>th</sup> November 2012.</i>	
6	Pg. No. 32, Sr. No. ii., <b>Line No. 1</b>	Continuous on-line stack monitoring for SO <sub>2</sub> , NO <sub>x</sub> and CO of all the stacks shall be carried out.	Continuous on-line stack monitoring <i>for SO<sub>2</sub> and NO<sub>x</sub></i> of all the flue gas stacks shall be carried out.	
7	Pg. No. 32, Sr. No. iii.	ESP along within stack of adequate height shall be provided to pet coke/coal fired boiler. Limestone will be injected to pet coke/coal fired boiler to control SO <sub>2</sub> emission.	-	<i>This condition should be deleted as no petcoke/coal fired boilers are included in present proposal.</i>
8	Pg. No. 32, Sr. No. vi.	SO <sub>2</sub> emissions after expansion from the plant shall not	SO <sub>2</sub> emissions after expansion from the plant shall not exceed the	<i>The proposed project is Debottlenecking</i>

Sr. No.	Reference in MoM	Error	Request	Remarks
		exceed the standard limits of CPCB. The overall sulphur recovery efficiency of Sulphur recovery unit with tail gas treating shall not be less than 99.9%.( to be deleted)	standard limits of CPCB.	<i>and Expansion (DBN&amp;E) of existing petrochemical complex, and does not involve sulphur recovery and tail gas treatment process as in the case of oil refineries.</i>
9	Pg. No. 32, Sr. No. vii.	As proposed, record of sulphur balance shall be maintained at the Refinery as part of the environmental data on regular basis. The basic component of sulphur balance include sulphur input through feed (sulphur content in crude oil), sulphur output from Refinery through products, byproduct (elemental sulphur), atmospheric emissions etc.( to be deleted)	-	<i>This condition to be deleted, as the proposed project is DBN&amp;E of existing petrochemical complex, and is not a refinery project.</i>
10	Pg. No. 32, Sr. No. viii.	Flare gas recovery system shall be installed.		<i>This condition to be deleted, as the proposed project is DBN&amp;E of existing petrochemical complex, and is not a refinery project.</i>
11	Pg. No. 32, Sr. No. ix., <b>Line No. 1-2</b>	Ambient air quality monitoring stations, [PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>x</sub> , H <sub>2</sub> S, mercaptan, non-methane-HC and Benzene] shall be	Ambient air quality monitoring stations, [PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>x</sub> , non-methane-HC and Benzene] shall be set up in the complex in consultation with State	<i>H<sub>2</sub>S and mercaptans are not generated in petrochemicals plant.</i>

Sr. No.	Reference in MoM	Error	Request	Remarks
		set up in the complex in consultation with State Pollution Control Board, ...	Pollution Control Board,	
12	Pg. No. 33, Sr. No. xi.	National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21 <sup>st</sup> July, 2010 and amended time to time shall be complied by the unit.	National Emission Standards for <b><i>Petrochemicals (Basic &amp; Intermediates) Industry issued by the Ministry vide G.S.R. 820(E) dated 09<sup>th</sup> November 2012 and amended time to time shall be complied by the unit.</i></b>	<b><i>This is petrochemical complex not organic chemicals manufacturing plant.</i></b>
13	Pg. No. 33, Sr. No. xii.	Total water requirement Singanpore weir will be after expansion shall not exceed 15000 m <sup>3</sup> /day and prior permission shall be obtained from the competent authority.	The <b><i>additional total</i></b> water requirement for the proposed project shall not exceed 15000 m <sup>3</sup> /day. <b><i>The total water requirement after the proposed expansion shall not exceed 1,54,288 m<sup>3</sup>/day</i></b> and prior permission shall be obtained from the competent authority.	
14	Pg. No. 33, Sr. No. xiii., Line No. 6	Treated effluent will be discharged into the sea.	Treated effluent will be discharged <b><i>through the existing diffuser into Tapi estuary.</i></b>	
15	Pg. No. 33, Sr. No. xiv. <b>Line No. 1-3</b>	All the effluents after treatment shall be routed to a properly lined guard pond for equalization and final control. In the guard pond, automatic monitoring system for flow rate, pH and TOC shall be provided.	All the effluents after treatment shall be routed to a properly lined <b><i>storage</i></b> pond for equalization and final control. In the <b><i>storage</i></b> pond, automatic monitoring system for flow rate, pH and TOC shall be provided.	

Sr. No.	Reference in MoM	Error	Request	Remarks
16	Pg. No. 33, Sr. No. xvi.	Oily sludge shall be disposed off into Coker and balance oily sludge will be treated in the bioremediation facility. Annual Oily sludge generation and disposal data shall be submitted to the Ministry's Regional Office and CPCB.	-	<i>This condition to be deleted, as the proposed project is DBN&amp;E of existing petrochemical complex and not a refinery. No oily sludge is generated in petrochemical complex.</i>
17	Pg. No. 33, Sr. No. xviii., <b>Line No. 2-3</b>	Copy of authorization or membership of TSDF should be submitted to Ministry's Regional Office at Chandigarh.	Copy of authorization or membership of TSDF should be submitted to Ministry's Regional Office <b>at Bhopal.</b>	
18	Pg. No. 33, Sr. No. xix.	Proper oil spillage prevention management plan shall be prepared to avoid spillage/leakage of oil/petroleum products and ensure regular monitoring.	-	<i>This condition to be deleted, as the proposed project is DBN&amp;E of existing petrochemical complex and not a refinery. To be deleted.</i>
19	Pg. No. 34, Sr. No. xxii. <b>Line No. 1-3</b>	As proposed, green belt over 33 % of the total project area shall be developed around the 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.	<i>The existing green belt to be strengthened and increased by 20 Ha. PP shall explore and undertake shortfall, if any by plantation every year in the neighboring villages in consultation with local authorities to match greenbelt cover of 33%.</i>	

Sr. No.	Reference in MoM	Error	Request	Remarks
20	Pg. No. 34, Sr. No. xxv.	All the commitment made regarding issues raised during the public hearing/consultation meeting held on 14 <sup>th</sup> October, 2014 shall be satisfactorily implemented. Accordingly, provision of budget to be kept.	-	<i>To be deleted, as public hearing/consultation process was exempted by EAC, as the proposed project will be implemented within RIL complex, which is located within the notified industrial area.</i>
21	Pg. No. 34, Sr. No. xxvi., <b>Line No. 1-4</b>	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.	<i>At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Responsibility and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bhopal.</i>	<i>Public Hearing was exempted by EAC.</i>
22	Pg. No. 34, Sr. No. xxix.,	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be	-	<i>To be deleted as RIL will not establish labour colonies during the construction phase for the proposed project.</i>

Sr. No.	Reference in MoM	Error	Request	Remarks
		removed after the completion of the project.		
23	Pg. No. 27, Sr. No. iv	RIL HMD is now planning to Expand/ Debottlenecking some of the plants i.e. Cracker Plant, Ethylene ( C2), Propylene ( C3), C4 products (such as LPG, Butadiene, Butene1, MTBE/Isobutylene, Butanediol, HTPB etc.), C5 derivatives and resins( C5 HCR resin, 72% DCPD, 85% DCPD, etc.), C6-C8, C9 and C9 resins, Styrene, PBR, Polyester Plants (Polyester Staple Fiber + Chips, Partially Oriented Yarn, PET ), PP, PE, PVC etc. Once debottlenecked the complex will have increased production of certain products.	RIL HMD is now planning to Expand/ Debottlenecking some of the plants i.e. Cracker Plant, Ethylene ( C2), Propylene ( C3), C4 products (such as LPG, Butadiene, Butene1, MTBE/Isobutylene, Butanediol, HTPB etc.), C5 derivatives and resins( C5 HCR resin, 72% DCPD, 85% DCPD, etc.), C6-C8, C9 and C9 resins, Styrene, PBR, Polyester Plants (Polyester Staple Fiber + Chips, Partially Oriented Yarn + Chips, PET etc.), PP, PE, PVC etc. Once debottlenecked the complex will have increased production of certain products.	

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

**(II). Proposed Expansion & Modernization of Molasses based Distillery (from 10 KLPD to 100 KLPD) along with Co-generation Power Plant (3 MW) at Village Tapri, Tehsil & District- Saharanpur, Uttar Pradesh by Co-Operative Company Limited- Environmental Clearance**

The Member Secretary informed that the aforesaid project was recommended for EC in 17<sup>th</sup> EAC meeting held during 26-29<sup>th</sup> December, 2016. The PP vide letter dated 28<sup>th</sup> January, 2017 made a request seeking corrections in the Minutes of the 17<sup>th</sup> EAC meeting.

S. No.	Information as given in MOM	Correction sought
1	Point viii:  Total fresh water requirement (existing and proposed) after proposed expansion project will be 687 m <sup>3</sup> /day which will be sourced from Surface as well as Ground water but committee suggest to use only surface water in place of ground water. PP agree with it.	Total fresh water requirement (existing and proposed) after proposed expansion project will be 500 m <sup>3</sup> /day which will be sourced from Ground water (500 m <sup>3</sup> /day).
2	<b>Specific Condition no iii:</b> Fresh Water need daily for proposed unit shall not exceed 687 m <sup>3</sup> /day from surface water and prior permission should be obtained from the concerned authority. No ground water shall be used.	Existing Fresh water requirement from ground water source is 500 m <sup>3</sup> /day. No additional fresh water shall be used for proposed expansion.

The committee after deliberation accepted the aforesaid corrections and directed to modify the minutes of 17<sup>th</sup> EAC meeting accordingly.

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

The Member Secretary informed that the above proposal has been recommended for grant of TOR with public hearing during 17<sup>th</sup> EAC meeting held during 26<sup>th</sup> - 29<sup>th</sup> December, 2016. The Ministry has received a representation from project proponent of the above mentioned proposal through email dated 27.01.2017 stating that the actual investment made in entire machinery since the inception of the said project factory in September 1992 till date is around INR 1.1 cr only. The total cost is around INR 2.52 cr which includes the land (2.08 acres) cost that has appreciated the most. The actual project cost is only 1.1 Cr. The proposed project is an exclusive R & D project, improving one existing products & adding two new products. The “Dye Yellow/Methylene Yellow



N” is fully ‘Made in India’ product- made without using any imported raw material. The PP has further requested to exempt the public hearing considering the minimal project cost and unique proposition of our R&D product line. It will save their time in execution of the project.

The EAC noted the submissions made by the PP and accepted the request for exemption from Public Hearing under para 7 (ii) of the EIA Notification, 2006.

**19.3. Consideration of Proposals: (Environmental Clearance)**

19.3.1	<p><b>Implementation of BGR INDMAX project associated with BGR crude processing capacity enhancement from 2.35 to 2.7 MMTPA, DHDT capacity enhancement from 1.2 to 1.8 MMTPA, CRUMSQ revamp &amp; implementation of SDS unit by M/s IOCL-reg. Environment Clearance. [IA/AS/IND2/37437/2015; J-11011/48/2016-IA II (I)]</b></p> <p>The Project Proponent and the accredited Consultant M/s ABC Techno Labs India Pvt. Ltd., gave a detailed presentation on the salient features of the project and informed that:</p> <ul style="list-style-type: none"> <li>(i) The proposal is for Implementation of BGR INDMAX project associated with BGR crude processing capacity enhancement from 2.35 to 2.7 MMTPA, DHDT capacity enhancement from 1.2 to 1.8 MMTPA, CRUMSQ revamp &amp; implementation of SDS unit by M/s IOCL.</li> <li>(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 5<sup>th</sup> EAC meeting held during 25<sup>th</sup>-26<sup>th</sup> February, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter dated 19<sup>th</sup> April, 2016.</li> <li>(iii) All the Petroleum Refinery Plants are listed at S.N. 4(a) under Category ‘A’ and appraised at the Central level.</li> <li>(iv) Ministry has granted environmental clearance to M/s Bongalgaon Refinery &amp; Petrochemical Ltd. vide letter no. J-1011/9/2008-IA II (I) dated 2nd September 2008.</li> <li>(v) As per Form-1, it is reported that no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Following Reserve Forests, Rivers, Water bodies falls are at their respective distance: <ul style="list-style-type: none"> <li>• Nakkati Reserved Forest- 7.5km,</li> <li>• Kakoijana Reserved Forest- 9.5km,</li> <li>• Bhumeswar Reserved Forest- 7.8km</li> <li>• Nayachara Lake (Beel) -7.0km</li> <li>• Bhosamari Lake -9.2 km,</li> <li>• Paropota Lake -9.5 km,</li> <li>• Naodora Lake -9.2 km,</li> <li>• Kasorani Lake -9.2 km</li> <li>• River Aie -6.0 km,</li> <li>• River Tunia -4.0km</li> <li>• River Kujia -7.0 km</li> </ul> </li> <li>(vi) The capital cost of the project is Rs. 4185.4 Crores. After construction about 20 person will be employed for operation. Proposed expansion will be carried</li> </ul>
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out within the existing premises of 34,43,826 m<sup>2</sup> area, of which 40.7 % area will be earmarked for greenbelt development. Following are the list of existing and proposed facilities:

Unit	Installed Capacity (TMTPA)
<b>New/Revamped Units:</b>	
INDMAX	740
Prime-G+ (IGHDS)	312
DHDT (revamped)	1800
CRU (revamped)	200
SDS	59
NHT	235
SRU	80

Unit	Installed Capacity (TMTPA)
<b>Existing Units:</b>	
Crude Distillation, CDU-I	1,350
Crude Distillation, CDU-II	1,000
Delayed Coker, DCU-I	500
Delayed Coker, DCU-II	500
Coke Calcination, CCU	75
Catalytic Reformer, CRU	160
MSQ	429
Diesel Hydrotreater, DHDT	1,200
Hydrogen , HGU	25

- (vii) Ambient air quality monitoring was carried out at 6 locations during September- 2016 to November- 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (40 µg/m<sup>3</sup> to 90 µg/m<sup>3</sup>), PM<sub>2.5</sub> (20.0 to 50 µg/m<sup>3</sup>), SO<sub>2</sub> (4 to 10 µg/m<sup>3</sup>) and NO<sub>2</sub> (15 µg/m<sup>3</sup> to 43 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 7 µg/m<sup>3</sup>, 7 µg/m<sup>3</sup> and 3 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- (viii) Total water consumption will be 370 m<sup>3</sup>/hr, where 330 m<sup>3</sup>/hr was required daily and after the installation of INDMAX unit additional 40 m<sup>3</sup>/hr of fresh water will be required. The water demand will be met from the existing facility. No additional raw water will be required for CDU-II, DHDT, SDS & CRU-MSQ. The plant has installed a 400 m<sup>3</sup>/hr capacity Tertiary Treatment Plant. The treated effluent water will be reused as make up water for cooling tower and green belt development.

- (ix) Power requirement will be 4220 KW, which will be met from GTG and TG. Steam requirement will be 48 MT/hr additional details of air emission and its control are provided.
- (x) Spent catalyst will be sold to CPCB authorised/registered vendor. Oily Sludge generated from various units and ETP will be handed/given to M/s Balmer Lawrie for reprocessing/recycling.
- (xi) Public Hearing for the proposed project has been conducted by the Assam Pollution Control Board on 05.10.2016.

The EAC deliberated upon the issues raised during the public hearing. The concerns were raised regarding maintaining the pollution level standards etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report. The EAC also deliberated on the certified compliance report submitted by the RO, MoEFCC, Shillong and found that earlier EC dated 2<sup>nd</sup> September, 2008 for Indmax project cannot be initiated and the EC got expired. PP has again applied for EC for the Indmax project. Therefore as per the report of RO, MoEF&CC earlier EC (dated 2<sup>nd</sup> September, 2008) has become invalid and may be withdrawn by the ministry.

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

- i) All pollution control and monitoring equipments shall be installed, tested and interlocked with the process. SPCB shall grant 'Consent to Operate' after ensuring that all the mentioned pollution control equipments, construction of storm water drain, rain water harvesting structure, Greenbelt, uploading of compliance report on the website etc have been implemented.
- ii) Ambient air quality data shall be collected as per NAAEQS standards notified by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> September, 2009. The levels of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC and CO shall be monitored in the ambient air and emissions from the stacks and displayed at a convenient location near the main gate of the company and at important public places. The company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and the state Pollution Control Board (SPCB).
- iii) In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits stipulated by the SPCB.
- iv) The gaseous emissions from DG set shall be dispersed through adequate stack

	<p>height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.</p> <p>v) Total fresh water requirement from existing source shall not exceed 370 m<sup>3</sup>/hr and prior permission shall be obtained from the Competent Authority. No ground water shall be used without permission.</p> <p>vi) Wastewater shall be treated in ETP. The treated effluent water shall be reused as make up water for cooling tower and green belt development. No Effluent shall be discharged outside the plant premises.</p> <p>vii) Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.</p> <p>viii) Adequate odour management plan and its mitigation measure to be implemented on priority.</p> <p>ix) Regular VOC monitoring to be done at vulnerable points.</p> <p>x) The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.</p> <p>xi) Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&amp;CC. Outcome from the report to be implemented for conservation scheme.</p> <p>xii) Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.</p> <p>xiii) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps.</p> <p>xiv) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All Transportation of Hazardous Chemicals shall be <i>as per</i> the Motor Vehicle Act (MVA), 1989.</p> <p>xv) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.</p> <p>xvi) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</p> <p>xvii) At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.</p> <p>xviii) A regular Environment Manager, having post graduate qualification in environmental sciences/environmental engineering, to be appointed for looking after the environmental management practices in the plant.</p> <p>xix) As proposed, green belt over 33% shall be developed within plant premises</p>
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	<p>with at least 10 meter wide green belt(perennial trees) on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.</p>
19.3.2	<p><b>Proposed capacity enhancement in existing grain/molasses based distillery (120 KLPD to 144 KLPD) &amp; co-generation power plant (10 MW to 11 MW) by modernization &amp; efficiency improvement at village sandharshi, Rajpura, Patiala, Punjab by M/s NV Distilleries and Breweries Pvt. Ltd.- Environment Clearance [IA/PB/IND2/31450/2015, J-11011/261/2015-IA II (I)]</b></p> <p>The Project Proponent and the accredited Consultant M/s J M EnviroNet Pvt. Ltd., gave a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>i. The proposal is for Proposed capacity enhancement in existing grain/molasses based distillery (120 KLPD to 144 KLPD) &amp; co-generation power plant (10 MW to 11 MW) by modernization &amp; efficiency improvement at village sandharshi, Rajpura, Patiala, Punjab by M/s NV Distilleries and Breweries Pvt. Ltd.</li> <li>ii. The project proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) in its 3<sup>rd</sup> EAC meeting held during 18-19<sup>th</sup> January, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/261/2015-IA II (I); dated 5<sup>th</sup> March, 2016.</li> <li>iii. All grain based distilleries more 30 KLPD are listed at Sl.No. 5(g) (ii) and All Molasses based distilleries are listed at Sl.No. 5(g) (i) of Schedule of EIA Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>iv. Ministry has issued EC earlier vide letter no. J-11011/42/2008-IA II (I); dated 10<sup>th</sup> June, 2009 for proposed 120 KLPD grain/ molasses based distillery to M/s NV Distilleries and Breweries Pvt. Ltd.</li> <li>v. Total plant area is 26.22 ha (64.79 Acres), out of which 8.66 ha (21.38 Acres) i.e. 33% of the total plant area has already been developed under greenbelt / plantation.</li> <li>vi. The total Cost of the project for the expansion is Rs. 6 Crores. Capital cost for Environmental Protection Measures will be Rs. 2 Crores and Recurring Cost will be Rs. 0.5 Crores / annum. <ol style="list-style-type: none"> <li>i. The total raw material requirement after the proposed capacity enhancement by modernization &amp; efficiency improvement will be Grain (351 MTPD)/ Molasses (605 MTPD) which will be obtained through vendors by road.</li> <li>ii. It is reported that no national parks, wildlife sanctuaries, Reserve Forest (RF)/ Protected Forests (PF), Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Ghaggar River (Seasonal) is flowing at a distance of 3 km in SE direction from the project site.</li> <li>iii. Number of working days of the distillery unit will be 350 days/annum after</li> </ol> </li> </ol>

- proposed capacity enhancement.
- iv. Ambient air quality monitoring was carried out at 8 locations during October to March, 2016 and submitted baseline data indicates that ranges of concentrations of PM10 (58.1  $\mu\text{g}/\text{m}^3$  to 79.6  $\mu\text{g}/\text{m}^3$ ), PM2.5 (26.4  $\mu\text{g}/\text{m}^3$  to 42.5  $\mu\text{g}/\text{m}^3$ ), SO2 (5.5  $\mu\text{g}/\text{m}^3$  to 11.0  $\mu\text{g}/\text{m}^3$ ) and NO2 (13.7  $\mu\text{g}/\text{m}^3$  to 25.1  $\mu\text{g}/\text{m}^3$ ) respectively. AAQ modeling study are within the National Ambient Air Quality Standards (NAAQS).
  - v. Existing fresh water requirement is 1542 m<sup>3</sup>/day from ground water source. No additional fresh water will be required after proposed capacity enhancement. Grain Slops (Spent Wash) is being/will be taken through Centrifuge Decanters for separation of Suspended Solids separated as Wet Cake & will then be treated in MEE followed by dryer. During Molasses based operation spent wash from analyzer column bottom is being/ will be concentrated in integrated & stand alone MEE from initial 12% solid to 55% solid and transferred for complete incineration in a special boiler designed for spent wash. Distillery is being/will be based on Zero Effluent Discharge. No industrial waste water is being/will be discharged from the plant.
  - vi. The total power requirement for proposed capacity enhancement will be 4.0 MW which will be sourced from 11 MW Co-Generation Power Plant and D.G. Sets (for back-up).
  - vii. Existing unit has Incinerator boiler of 40 TPH with ESP and 72 m stack height. Fuel of incineration boiler is concentrated effluent with bagasse/coal. The capacity of boiler will remain unchanged. Thus, there will be no impact on air quality due to the proposed capacity enhancement. CO2 will be generated during fermentation process will be collected and sold to authorized vendor.
  - viii. DDGS will be ideally used as cattle feed. Yeast sludge is being / will be sent to the sludge drying beds or may be added to the Wet Cake. Ash from the boiler is being / will be give n to brick manufacturers.
  - ix. Public Hearing is exempted under Section 7 (ii) of EIA Notification, 2006.
  - x. PP has submitted the under taking to comply all commitments done during public hearing in 2009 and appreciation letter for commendable work from sarpanch of Kaboolpur village, Sandharsi village, Mardanpur village, Mirzapur village and Pipal Mangoli village vide letter dated 7.02.2017 before the EAC.
  - xi. List of existing and proposed products are as follows:

<b>Unit</b>	<b>Existing Capacity</b>	<b>Proposed Enhancement in Capacity</b>	<b>Total Capacity after enhancement</b>
Distillery (Rectified Spirit, Extra Neutral Alcohol, Ethanol, Country Liquor & IMFL)	120 KLPD	24 KLPD	144 KLPD

Malt Spirit Plant	5 KLPD	NIL	5 KLPD
Co-generation Power Plant	10 MW	1 MW	11 MW

The Committee deliberated on the certified compliance report dated 21.07.2015 and 13.07.2015 issued by the Regional Office (Northern Region), Chandigarh of MoEF&CC and found satisfactory.

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

- i) ESP shall be provided to the existing concentrated effluent with bagasse/coal fired Incinerator boiler of 40 TPH to control particulate emissions within permissible limit. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- ii) Existing fresh water requirement shall not increase from 1542 m<sup>3</sup>/day from ground water source after proposed capacity enhancement.
- iii) Grain Slops (Spent Wash) shall be taken through Centrifuge Decanters for separation of Suspended Solids separated as Wet Cake & will then be treated in MEE followed by dryer. During Molasses based operation spent wash from analyzer column bottom shall be concentrated in integrated & stand alone MEE from initial 12% solid to 55% solid and transferred for complete incineration in a special boiler designed for spent wash.
- iv) As proposed, no effluent from distillery shall be discharged outside the plant premises and Zero discharge shall be adopted. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- v) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- vi) Continuous online (24 x7) monitoring to be installed for flow measurement and measurement of pollutants within the treatment unit. Data to be uploaded on company's website and provided to the respective RO of MEF&CC, CPCB and SPCB.
- 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 and SPCB.
- viii) Bagasse storage shall be done in such a way that it does not get air borne or fly around due to wind.
- ix) Boiler ash from distillery as well as sugar plant shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air

	<p>borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash &amp; dust shall be avoided. Proper ash management for its end use to drawn and consent to be obtained accordingly.</p> <ul style="list-style-type: none"> <li>x) As proposed DDGS will be ideally used as cattle feed. Yeast sludge is being / will be sent to the sludge drying beds or may be added to the Wet Cake. Ash from the boiler is being / will be given to brick manufacturers.</li> <li>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.</li> <li>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.</li> <li>xiii) As proposed, green belt shall be developed within plant premises with at least 10 meter wide green belt of perennial trees on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.</li> <li>xiv) An Environment Cell will be set up with One environmental Manager having post graduate qualification in environmental sciences/ Environmental engineering.</li> <li>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. Implementation of such program shall be ensured accordingly in a time bound manner within 5 years.</li> </ul>
19.3.3	<p><b>Setting up of petrochemical based processing plant at Survey No. 27, Melavanjore, T.R. Pattinam, Karaikal, Puducherry UT by M/s Kem One Chemplast Private Limited–Environment Clearance [IA/PY/IND2/53469/2016, J-11011/139/2016- IA II(I)]</b></p> <p>The Project Proponent and the accredited Consultant M/s Kadam Environmental Consultants Pvt. Ltd., gave a detailed presentation on the salient features of the project and informed that:</p> <ul style="list-style-type: none"> <li>i. The proposal is for Setting up of petrochemical based processing plant at Survey No. 27, Melavanjore, T.R. Pattinam, Karaikal, Puducherry UT by M/s Kem One Chemplast Private Limited.</li> <li>ii. The project proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) in its 11<sup>th</sup> EAC meeting held during 20-21<sup>st</sup> July, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/139/2016-IA II (I); dated 23<sup>rd</sup> September, 2016.</li> <li>iii. All Petrochemical based processing (processes other than cracking &amp;) located inside the notified industrial area/estate are listed at S.N. 5(e) under category 'B' but due to applicability of general conditions as project location is near interstate</li> </ul>



	boundary, hence project is treated as 'A' and appraised by Expert Appraisal Committee (I).						
iv.	Total plot area is 24159.0 m <sup>2</sup> , out of which greenbelt will be developed on 7900.0 m <sup>2</sup> of land. Total Cost of project is Rs. 325 Crores.						
v.	Proposed project will provide employment to 100 persons.						
vi.	It is reported that no National Parks, Wildlife Sanctuaries, Tiger/ Elephant Reserves, Wildlife Corridors etc. falls within 10 km radius from the plant site. Bay of Bengal is situated at a distance of 1.89 km in East direction, Puravadayinar River is flowing at a distance of 0.4 km in North direction, Arasalar River is flowing at a distance of 7.28 km in North distance and T R Pattinam River is flowing at a distance of 4 km in North direction from the project site.						
vii.	Ambient air quality monitoring was carried out at 8 locations during June– August, 2016 and submitted baseline data indicates that ranges of concentrations of PM10 (60 µg/m <sup>3</sup> to 76 µg/m <sup>3</sup> ), PM2.5 (13 µg/m <sup>3</sup> to 19 µg/m <sup>3</sup> ), SO <sub>2</sub> (7.3 µg/m <sup>3</sup> to 9.4 µg/m <sup>3</sup> ) and NO <sub>2</sub> (18 µg/m <sup>3</sup> to 22.6 µg/m <sup>3</sup> ) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.38 µg/m <sup>3</sup> , 0.059 µg/m <sup>3</sup> and 0.18 µg/m <sup>3</sup> with respect to PM <sub>10</sub> , HCL and Cl <sub>2</sub> . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).						
viii.	The Power requirement is 2000 KVA and will be sourced from Puducherry Electricity Department (PED). PP informed that no boiler to be installed. D.G. set of 500 KVA will be used as standby. Process emission i.e. HCL and Chlorine will be absorbed by water and Chlorine will be scrubbed out by Alkaline scrubber. To control particulate matter, bag filter will be installed at various process operation of PVC and CPVC.						
ix.	Chlorine gas will be supplied through a pipeline from nearby plant of M/S. Chemplast Sanmar Limited.						
x.	Total fresh water requirement will be 503 m <sup>3</sup> /day and will be sourced from nearby desalination plant of M/S. Chemplast Sanmar Limited. Against which 201.5 m <sup>3</sup> /day, industrial wastewater will be generated and will be sent to M/S. Chemplast Sanmar Limited for further treatment. Domestic wastewater will be treated in the STP and after treatment it will be used for gardening.						
xi.	ETP sludge, CPVC Crusts and Fused UV lamps will be disposal at approved TSDF Site operated by Ramky at Gummidipondi, TN. Used /waste Oil will be sold to registered recycler.						
xii.	As per Corporate Social Responsibility Notification (Schedule VII, Company Act), the Company has earmarked 2.5% of total project cost i.e. 8.125 crores for undertaking the CSR activities. CSR activities shall be done in surrounding villages.						
xiii.	Public hearing is exempted as per para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006 for preparation of EIA/EMP Report, being site is located in the Notified industrial area.						
xiv.	PP has submitted the certified compliance report issued vide dated 5 <sup>th</sup> February, 2016 from regional office of MoEF&CC, Chennai.						
xv.	Following products will be manufactured:						
	<table border="1"> <thead> <tr> <th>S. No.</th> <th>Name of Product</th> <th>Quantity (MTPA )</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CPVC Resins</td> <td>22,000</td> </tr> </tbody> </table>	S. No.	Name of Product	Quantity (MTPA )	1	CPVC Resins	22,000
S. No.	Name of Product	Quantity (MTPA )					
1	CPVC Resins	22,000					

2	CPVC Compounds	27,000
<p>During presentation committee noted that as proposed project is depending on nearby plant of M/S. Chemplast Sanmar Limited for water, Chlorine and steam requirement. In this regard the Committee also deliberated on the certified compliance report dated 5<sup>th</sup> February, 2016 issued by the Regional Office, MoEF&amp;CC, Chennai and committee found certified compliance report satisfactory.</p> <p>After detailed deliberations the EAC recommended the proposal for grant of Environmental Clearance subject to following specific conditions and other general conditions.</p> <ol style="list-style-type: none"> <li>i. All pollution control and monitoring equipments shall be installed, tested and interlocked with the process. SPCB shall grant 'Consent to Operate' after ensuring that all the mentioned pollution control equipments, construction of storm water drain, rain water harvesting structure, Greenbelt, uploading of compliance report on the website etc have been implemented.</li> <li>ii. Process emission i.e. HCL and Chlorine shall be absorbed by water and Chlorine shall be scrubbed out by Alkaline scrubber. To control particulate matter, bag filter shall be installed at various process operation of PVC and CPVC.</li> <li>iii. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.</li> <li>iv. Ambient air quality data shall be collected as per NAAEQS standards notified by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> September, 2009. The levels of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC and CO shall be monitored in the ambient air and emissions from the stacks and displayed at a convenient location near the main gate of the company and at important public places. The company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and the State Pollution Control Board (MPCB).</li> <li>v. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.</li> <li>vi. Total water requirement from nearby desalination plant of M/S. Chemplast Sanmar Limited shall not exceed 503 m<sup>3</sup>/day and prior permission shall be obtained from the Competent Authority. No ground water shall be used without permission.</li> <li>vii. Industrial wastewater shall be sent to M/S. Chemplast Sanmar Limited for further treatment. Domestic wastewater shall be treated in the STP and after treatment it shall be used for gardening.</li> <li>viii. Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.</li> </ol>		

	<ul style="list-style-type: none"> <li>ix. Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.</li> <li>x. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps.</li> <li>xi. As proposed, ETP sludge, CPVC Crusts and Fused UV lamps will be disposal at approved TSDF Site operated by Ramky at Gummidipondi, TN. Used /waste Oil will be sold to registered recycler.</li> <li>xii. The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from MPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire fighting facilities in case of emergency.</li> <li>xiii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 <i>as</i> amended time to time. All Transportation of Hazardous Chemicals shall be <i>as per</i> the Motor Vehicle Act (MVA), 1989.</li> <li>xiv. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.</li> <li>xv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</li> <li>xvi. An Environment Cell will be set up with One Environmental Manager having post graduate qualification in environmental sciences/ Environmental engineering.</li> <li>xvii. At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.</li> <li>xviii. As proposed, green belt over 7900.0 m<sup>2</sup> shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.</li> </ul>
19.3.4	<p><b>Setting up of laminated sheets, P.F. Resin, M.F. Resin &amp; U.F. Resin at Survey No. 127, Village Devkaranna Muwada, Taluka Dahegam, District Gandhinagar, Gujarat by M/s Angel Industries- Environment Clearance [IA/GJ/IND2/33548/2015, J-11011/294/2015-IA II (I)]</b></p> <p>The project proponent and the accredited consultant M/s T.R. Associates, Ahmedabad made a detailed presentation on the proposal and informed that:</p> <ul style="list-style-type: none"> <li>i. The proposal is for Setting up of laminated sheets, P.F. Resin, M.F. Resin &amp; U.F. Resin at Survey No. 127, Village Devkaranna Muwada, Taluka Dahegam,</li> </ul>

District Gandhinagar, Gujarat by M/s Angel Industries.

- ii. All Synthetic Organic Chemicals Industry located outside the notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. The Terms of References (TORs) was awarded in the 4<sup>th</sup> Meeting of the Expert Appraisal Committee (Industry) held during 11<sup>th</sup>-12<sup>th</sup> February, 2016 for preparation of EIA-EMP report. Ministry has issued the TOR vide letter dated 31<sup>st</sup> March, 2016.
- iv. The total land area of proposed company is 13675 Sq. Mt. out of which 4515 Sq. mt. land will be used for greenbelt area development. The estimated cost of the Resin project is 1 Crore. Total budget allocation towards Environmental Management Facilities will be Rs. 39.55 lacs and recurring cost will be 30 Lacs per Annum. Total 150 persons (Laminated Sheet Plant – 140 & Resin Plant – 10) will be employed including skilled labours, unskilled labours and office staff.
- v. As per Form-1, it is reported that no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. A Reserve forest near Dev karan na Muvada is situated at a distance of 1.5 KM distance from the project site.
- vi. The PP proposed to manufacture following products:

Name of Proposed Products	Quantity
Phenol Formaldehyde Resin (P. F. Resin)	750 MT/Month
Melamine Formaldehyde Resin (M. F. Resin)	250 MT/Month
Urea Formaldehyde Resin (U. F. Resin)	100 MT/Month
Laminated Sheets	2,50,000Nos./Month

- vii. Total fresh water requirement for the proposed project will be 42.2 m<sup>3</sup>/day which will be fulfilled by borewell.
- viii. Industrial effluent will be treated in Effluent treatment plant followed by evaporator and condensate will be reused in RO-1. Domestic waste water will be disposed off into STP. Treated sewage will be reused for Green belt development 7 domestic uses. Plant will be based on Zero Liquid discharge.
- ix. Total power requirement for the proposed project will be about 250 KVA which will be sourced from Uttar Gujarat Vij Company Ltd. (UGVCL). In addition to this, unit will install one D. G. Set of 382 KVA as stand-by to the main source and the same will be utilized only in case of non-availability of power from PGVCL. One boiler of 4 TPH capacity and one Thermic Fluid Heater of 15 Lac Kcal/hr capacity will be installed. Briquettes will be used as fuel.

- x. Cyclone separator followed by Bag Filter and adequate stack height will be provided to boiler and Thermic Fluid Heater to control the flue gas emissions. Adequate stack height will be provided to DG set. Condenser will be provided to control the process emissions.
- xi. ETP waste will be disposed off at approved TSDF site, used oil will be reused within premises as a lubricant or sold to registered recycler, Edge cutting waste will be disposed to approved incineration facility, discarded plastic bags will be sold to authorized vendor and spent carbon will be disposed to approved incineration facility or will be sold to authorized vendor.
- xii. Public hearing has been conducted by Gujarat Pollution Control Board on 28<sup>th</sup> December, 2016.
- xiii. Ambient air quality monitoring was carried out at 8 locations during March 2016 to May 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (60.0 µg/m to 81.7 µg/m<sup>3</sup>), PM<sub>2.5</sub> (22.4 to 31.9 µg/m<sup>3</sup>), SO<sub>2</sub> (5.6 to 13.2 µg/m<sup>3</sup>) and NO<sub>2</sub> (12.2 µg/m<sup>3</sup> to 24.8 µg/m<sup>3</sup>) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1 µg/m<sup>3</sup>, 0.8 µg/m<sup>3</sup> and 1.0 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The EAC deliberated upon the issues raised during the public hearing. The concerns were raised regarding water pollution, employment, CSR activity, fire and safety etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report. EAC has noted that the AAQ concentrations are within the National Ambient Air Quality Standards. Briquets shall be used as fuel and coal shall not be used. PP is directed to ensure ZLD and to make facilities for air quality monitoring in monthly basis. PP shall install detectors for process emission detection.

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

#### **A. Specific Conditions**

- i) Cyclone separator followed by Bag Filter and adequate stack height shall be provided to boiler and Thermic Fluid Heater to control the flue gas emissions. Adequate stack height shall be provided to DG set. Condenser shall be provided to control the process emissions.
- ii) Chilled brine circulation system should be provided to condensate solvent vapors and reduce solvent losses. It should be ensured that solvent recovery should not be less than 95%.
- iii) Fugitive emissions in the work zone environment, product, raw materials storage area etc. should be regularly monitored. The emissions should conform to the limits stipulated by GPCB.
- iv) Total fresh water requirement from ground water source shall not exceed 42.2 m<sup>3</sup>/day and prior permission shall be obtained from the CGWA/SGWA.
- v) Industrial effluent shall be treated in Effluent treatment plant followed by

	<p>evaporator and condensate shall be reused in RO-1. Domestic waste water shall be disposed off into STP. Treated sewage will be reused for Green belt development 7 domestic uses.</p> <ul style="list-style-type: none"> <li>vi) 'Zero' effluent discharge shall be adopted and no effluent shall be discharged outside the premises.</li> <li>vii) Treated effluent should be passed through guard pond. Online pH meter, flow meter and TOC analyzer should be installed.</li> <li>viii) Briquettes shall be used as fuel for One boiler of 4 TPH capacity and one Thermic Fluid Heater of 15 Lac Kcal/hr capacity and coal shall not be used.</li> <li>ix) The Company should obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans boundary movement) Rules, 2008 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.</li> <li>x) As proposed, greenbelt in 4515 m<sup>2</sup> area should be developed in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Selection of plant species should be as per the CPCB guidelines.</li> <li>xi) An Environment Cell will be set up with one environmental Manager having post graduate qualification in environmental sciences/ Environmental engineering.</li> <li>xii) All the recommendations made in the risk assessment report should be satisfactorily implemented.</li> <li>xiii) Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.</li> <li>xiv) The unit shall have 24x7 air quality monitoring system. Necessary facilities for air quality monitoring in monthly basis shall be installed.</li> <li>xv) Detectors for process emission detection shall be installed.</li> <li>xvi) All the commitment made regarding issues raised during the Public Hearing/ consultation meeting held on 28<sup>th</sup> December, 2016 shall be satisfactorily implemented.</li> <li>xvii) At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.</li> </ul>
19.3.5	<p><b>Expansion of Active Pharmaceuticals Ingredients (APIs) and API Intermediates Manufacturing unit (637.6 TPA) Sy. nos. Parts of 878, 880, 891, 892, 893, 894, 895, 897, 898, 899, 900, 902, 903, 904 at Village Mekaguda, Mandal Kothur, District Mahaboobnagar, Telangana State by M/s. NATCO Pharma Limited- Environmental Clearance- [IA/TG/IND2/29060/2015, J-11011/181/2015-IA-II (I)</b></p> <p>The Project Proponent and the accredited Consultant M/s. KKB Envirocare consultants Pvt. Ltd., gave a detailed presentation on the salient features of the project and informed that:</p> <ul style="list-style-type: none"> <li>i. The proposal is for Expansion of Active Pharmaceuticals Ingredients (APIs) and API Intermediates Manufacturing unit (637.6 TPA) Sy. nos. Parts of 878, 880, 891, 892, 893, 894, 895, 897, 898, 899, 900, 902, 903, 904 at Village</li> </ul>

	<p>Mekaguda, Mandal Kothur, District Mahaboobnagar, Telangana State by M/s. NATCO Pharma Limited.</p> <p>ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 46<sup>th</sup> Reconstituted EAC meeting held during 20-21 August, 2015 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/228/2015-IA II (I); dated 13<sup>th</sup> October, 2015.</p> <p>iii. All Synthetic Organic Chemicals Industry located outside the notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).</p> <p>iv. Ministry has issued EC earlier vide letter no. J-11011/114/2004-IA II (I); dated 6<sup>th</sup> July, 2005 for Bulk Drug unit to M/s. NATCO Pharma Limited.</p> <p>v. Existing land area is 34.17 Ha, No additional land will be used for proposed expansion.</p> <p>vi. Industry is already developed Geenbelt in an area of 40 % i.e., 13.67 Ha out of 34.17 Ha of area of the project.</p> <p>vii. The estimated project cost is Rs.480.31 crores including existing investment of Rs.314.31 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.32 Crores and the Recurring cost (operation and maintenance) will be about Rs.27.55 Crores per annum.</p> <p>viii. Total Employment will be 1200 persons as direct &amp; 300 persons indirect after expansion. Industry proposes to allocate Rs.8 crores towards Corporate Social Responsibility.</p> <p>ix. It is reported that no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Mysura Kammadhanam R.F is situated at a distance of 5 km in SSW direction from the project site.</p> <p>x. Ambient air quality monitoring was carried out at 9 locations during October to December 2015 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (34-52µg/m<sup>3</sup>), PM<sub>2.5</sub> (15-28 µg/m<sup>3</sup>), SO<sub>2</sub> (9.0 µg/m<sup>3</sup> to 16.0 µg/m<sup>3</sup>) and NO<sub>2</sub> (10 µg/m<sup>3</sup> to 19 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.48 µg/m<sup>3</sup>, 23.5 µg/m<sup>3</sup> and 17.6 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, PM<sub>2.5</sub> and SO<sub>2</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).</p> <p>xi. Total water requirement is 1125 m<sup>3</sup>/day of which fresh water requirement of 763 m<sup>3</sup>/day and will be met from ground water and through tankers.</p> <p>xii. Treated effluent of 362 m<sup>3</sup>/day will be recycled in cooling tower make up. Effluent generated will be segregated into high TDS and high COD stream, Low TDS &amp; Low COD stream and Lean Effluent stream. High TDS and high COD stream will be sent to Stripper followed by Multiple Effect Evaporator (MEE), Agitated Thin Film Drier (ATFD), Biological and Reverse Osmosis Plant. The organic distillate from the stripper is sent to incinerator for thermal destruction and aqueous bottom is sent to 1st MEE followed by 1st ATFD. Condensate from MEE and ATFD are sent to Biological (secondary) treatment followed by tertiary treatment. Low TDS &amp; Low COD stream will be treated in ETP and clarifiers are sent to sludge drying beds / Decanter Centrifuge followed by paddle dryer to collect the dry sludge for disposal to TSDF. Plant will be based on Zero Liquid discharge system.</p>
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- xiii. Power requirement after expansion will be 7490 KVA (21260 HP) including existing 4990 KVA (13260 HP) and will be met from Telangana State power distribution corporation limited (TSPDCL). Existing unit has 6X1010 KVA DG sets, additionally 4x1000 KVA, 3x320 KVA & 1250 KVA DG sets are used as standby during power failure. Stack will be provided as per CPCB norms to the proposed DG sets of 4x1000 KVA, 3x320 KVA & 1250 KVA in addition to the existing DG sets of 6x1010 KVA which will be used as standby during power failure.
- xiv. Existing unit has 6 TPH coal fired boiler, 3TPH Furnace oil (standby), diesel fired 2 lakh K.Cal /hr Thermic Fluid Heater (TFH) and 2 TPH coal fired boiler. Under proposed expansion 4 & 10 TPH coal fired boilers & Diesel fired 1 lakh K.Cal/hr TFH will be installed. Multi cyclone separator and bag filter with a stack of height of 40 m & 30 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>) for Proposed 10 & 4 TPH coal fired boilers respectively. These are in addition to the existing 6 TPH coal fired boiler and another existing 3 TPH furnace oil fired boiler will be standby. Another existing 2 TPH coal fired boiler will be removed. Stack of 30 m will be installed to the proposed 1 lakh Kcal/hr Diesel fired TFH in addition to the existing 2 lakh Kcal/hr Diesel fired TFH.
- xv. Process emissions like HCl, SO<sub>2</sub>, NH<sub>3</sub>, Cl<sub>2</sub>, Diethyl amine, Monomethyl amine, HBr, CO<sub>2</sub> & CO vents from the reactor will be connected to dual scrubber with suitable chilled or room temperature liquid to scrub the emissions effectively. Scrubbed liquid will be sent to ETP for treatment or recovered as by-product.
- xvi. The organic residues and spent carbon will be disposed to TSDF/ cement units for use as alternate fuel either in the solid or liquid form as recommended by CPCB. Inorganic salts/Evaporation salts/ETP sludge will be sent to HWMP – TSDF. Hazardous / Solid waste will be segregated, detoxified and collected in the HDPE drums / bags and will be stored in the covered and raised platform with leachate collection system till its disposal before sending to authorized agencies. Boiler ash is sent to brick manufacturers.
- xvii. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 21<sup>st</sup> December, 2016.
- xviii. Following are the list of existing and proposed products:

**Existing Product list:**

SI. No	Products	Quantity(TPA)
1.	Naproxen Sodium	180
2	Diltiazem HCl	60
3	Sumatriptan Succinate	0.3
<b>Total Production (Total 3 products at a time)</b>		<b>240.3</b>

**Proposed Products and their Capacities for EC Expansion**

SI. No.	Product	Quantity (Kg/day)	Quantity (TPA)	Therapeutic Category / Intermediate to the product
<b>Group –A</b>				



1	Alendronate Sodium	100	36	Anti-osteoporotic Agent
2	Citalopram Hydrobromide	100	36	Antidepressant
3	Chloroquine Phosphate	170	61.2	Antimalarial Agent
4	Clozapine	100	36	Antipsychotic
5	Deferasirox	10	3.6	Chelating agent
6	ErlotinibHCl	35	12.6	Antineoplastic
7	Escitalopram Oxalate	17	6.12	Antidepressant
8	Geftinib	35	12.6	Antineoplastic
9	Glatiramer Acetate	7	2.52	Immuno suppressive
10	Ibandronate Sodium	35	12.6	Treatment of Osteoporosis
11	Imatinib Mesylate	70	25.2	Antineoplastic
12	Lapatinib Ditosylate Monohydrate	17	6.12	Antineoplastic
13	Macitentan	17	6.12	Antihypertensive
14	Ondansetron HCl Dihydrate	35	12.6	Antiemetic
15	Sertraline HCl	100	36	Antidepressant
16	Sofosbuvir	70	25.2	Antiviral
<b>Group –B</b>				
17	ACDMQ	70	25.2	Terazosin Intermediate
18	Armodafinil	17	6.12	Analeptic
19	Benzyloxy aniline HCl	70	25.2	Commercial Intermediate
20	Bosentan Monohydrate	35	12.6	Antihypertensive
21	Dimethyl Fumarate	170	61.2	Anti-Inflammatory
22	Lansoprazole	70	25.2	Antiulcer
23	Lanthanum Carbonate Dihydrate	70	25.2	Anti-hyperphosphatemia
24	L-Biopterin	4	1.44	Drug Intermediate
25	Ledipasvir	17	6.12	Hepatitis - C
26	Minodronic Acid Hydrate	17	6.12	Treatment of Osteoporosis
27	Omeprazole	100	36	Antiulcer
28	Pantoprazole Sodium Monohydrate	70	25.2	Antiulcer
29	Pazopanib Hydrochloride	35	12.6	Antineoplastic

30	Sorafenib Tosylate	35	12.6	Antineoplastic
31	Sumatriptan Succinate	17	6.12	Anti-migraine
<b>Group- C</b>				
32	(1S,2S,3R,5S)-Pinanedilol-b-(1-phenyl)-L-alanine-L-leucine boronate Hydrochloride	2	0.72	Bortezomib Intermediate
33	5-fluoro2-oxindole	5	1.8	Sunitinib Intermediate
34	Ambrisentan	4	1.44	Antihypertensive
35	Amifostine Trihydrate	4	1.44	Anti-Cancer
36	Anastrozole	4	1.44	Antineoplastic
37	Apixaban	4	1.44	Anticoagulant
38	Argatroban Monohydrate	2	0.72	Anticoagulant
39	BCC / NRC-2694-A	<b>35</b>	<b>12.6</b>	Anti-Cancer
40	[(2S)-2-[[4-Methyl-2-[[[(2S)-2-[(2-morpholinoacetyl) amino]-4-phenyl-butanoyl]amino]pentanoyl]amino]-3-phenyl-propanoic acid]	2	0.72	Carfilzomib Acid Intermediate
41	Dasatinib Monohydrate	<b>10</b>	<b>3.6</b>	Antineoplastic
42	Entecavir Monohydrate	2	0.72	Antiviral
43	Ethyl-4-[5-(Bis(2-Hydroxyethyl)amino)-1-Methyl-1H-benzo[d]imidazol-2-yl]Butanoate	<b>10</b>	<b>3.6</b>	Bendamustine Intermediate
44	[N-[3-Hydroxy-1,1-bis-Hydroxymethyl-3-(4-octyl-phenyl)-propyl]-acetamide]	4	1.44	Fingolimod Intermediate
45	Granisetron HCl	4	1.44	Antiemetic
46	Letrozole	4	1.44	Antineoplastic
47	Liraglutide Acetate	0.33	0.118	Antidiabetic
48	N-(2-(diethylamino)ethyl)-5-formyl-2,4-dimethyl-1H-pyrrole-3-carboxamide	<b>10</b>	<b>3.6</b>	Sunitinib Intermediate
49	Nilotinib Hydrochloride Hydrate	2	0.72	Antineoplastic
50	NRC/AN/019	4	1.44	Anti-Cancer
51	Plerixafor	0.33	0.118	Hematopoietic
52	Pomalidomide	4	1.44	Anti-neoplastic
53	Ponatinib	10	3.6	Anti-Leukemia
54	Regorafenib	7	2.52	Anti-angiogenic
55	Rizatriptan Benzoate	4	1.44	Antimigraine
56	Salmeterol Xinafoate	4	1.44	Bronchodilator
57	Sapropterin.2HCl	4	1.44	Phenylalanine

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58	Teriflunomide	4	1.44	Anti-multiple Sclerosis agent
59	Tigecycline	4	1.44	Antibiotic
60	1,1-Dimethylethyl(S)-4-formyl-2,2-dimethyl-3-oxazolidine-carboxylate (TRB / D-5)	4	1.44	Trabectdine Intermediate
61	Ethyl-2-bromo-2-(6-(methoxymethoxy)-7-methylbenzo [D][1,3]dioxol-4-yl)acetate (TRB / TMR)	4	1.44	Trabectdine Intermediate
62	(S)-1-Hydroxy-3-(3-hydroxy-4-methoxy-5-methylphenyl)propan-2-aminium chloride (TRB-5 / LT-VIII)	4	1.44	Trabectdine Intermediate
63	Tri Hexyphenidyl HCl	4	1.44	Antiparkinsonian
64	Zoledronic acid	2	0.72	Calcium regulator
65	Zolmitriptan	4	1.44	Antimigraine
66	Schiff's Base	<b>666.67</b>	<b>240</b>	Drug Intermediate
Subtotal [any 15 Products ( 5 from each group) on Campaign basis products out of 66 products]		1781.67	641.4	
<b>R&amp;D facility</b>				
1	R&D (Lab, Kilo & Pilot)	10	3.6	
<b>Total any 15 Products ( 5 from each group) on Campaign products out of total 66 products at any Point of time &amp; R&amp;D</b>		<b>1791.67</b>	<b>645</b>	

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding establishment of school, laying of roads, medical camps, Employment and development programme in future etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

The Committee deliberated on the certified compliance report dated 09.02.2016 issued by the Regional Office, Chennai of MoEF&CC and committee found that PP has not complied 4 conditions. PP has already submitted the action taken report on non complied points vide letter dated 07.09.2016 to RO, MoEF&CC. PP also clarified that as per existing EC permission was accorded for manufacturing of three products namely Naproxen Sodium (180 TPA), Diltiazem (60 TPA) and Sumatriptan Succinate (0.3 TPA), but presently, the unit is manufacturing more than 38 products with the consent issued from APPCB vide dated 23.06.2006 under change of product mix based on no pollution load. PP has also submitted the copy of ministry circular dated 14.12.2006, in

which it is mentioned that changes in the quantities or number of products may be allowed without prior Environmental clearance by the concerned state pollution control board provided such changes in quantities of products are in the same category and are within previously granted overall total limits. The Committee having satisfied with the submissions made by the PP and after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions:

- i) Multi cyclone separator and bag filter with a stack of height of 40 m & 30 m shall be installed for controlling the particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>) for proposed 10 & 4 TPH coal fired boilers respectively. Adequate stack height shall be provided to DG set.
- ii) Chilled brine circulation system should be provided to condensate solvent vapors and reduce solvent losses. It should be ensured that solvent recovery should not be less than 95%.
- iii) Process emissions like HCl, SO<sub>2</sub>, NH<sub>3</sub>, Cl<sub>2</sub>, Diethyl amine, Monomethyl amine, HBr, CO<sub>2</sub> & CO vents from the reactor shall be connected to dual scrubber with suitable chilled or room temperature liquid to scrub the emissions effectively. Scrubbed liquid will be sent to ETP for treatment or recovered as by-product.
- 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 SPCB.
- v) Total fresh water requirement from ground water and tankers source shall not exceed 763 m<sup>3</sup>/day and prior permission shall be obtained from the CGWA/SGWA.
- vi) Effluent shall be segregated into high TDS and high COD stream, Low TDS & Low COD stream and Lean Effluent stream. High TDS and high COD stream shall be sent to Stripper followed by Multiple Effect Evaporator (MEE), Agitated Thin Film Drier (ATFD), Biological and Reverse Osmosis Plant. The organic distillate from the stripper is sent to incinerator for thermal destruction and aqueous bottom is sent to 1st MEE followed by 1st ATFD. Condensate from MEE and ATFD are sent to Biological (secondary) treatment followed by tertiary treatment. Low TDS & Low COD stream shall be treated in ETP and clarifiers are sent to sludge drying beds / Decanter Centrifuge followed by paddle dryer to collect the dry sludge for disposal to TSDF.
- vii) 'Zero' effluent discharge shall be adopted and no effluent shall be discharged outside the premises.
- viii) Treated effluent should be passed through guard pond. Online pH meter, flow meter and TOC analyzer should be installed.
- 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 firefighting facilities in case of emergency.
- x) As proposed, 10 m wide greenbelt (perennial trees) in 40 % i.e., 13.67 Ha area should be developed in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Selection of plant species should be as per the CPCB guidelines.

	<ul style="list-style-type: none"> <li>xi) An Environment Cell will be set up with one environmental Manager having post graduate qualification in environmental sciences/ Environmental engineering.</li> <li>xii) All the recommendations made in the risk assessment report should be satisfactorily implemented.</li> <li>xiii) Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.</li> <li>xiv) The unit shall have 24x7 air quality monitoring system. Necessary facilities for air quality monitoring in monthly basis shall be installed.</li> <li>xv) Detectors for process emission detection shall be installed.</li> <li>xix. As proposed, the organic residues and spent carbon will be disposed to TSDF/ cement units for use as alternate fuel either in the solid or liquid form as recommended by CPCB. Inorganic salts/Evaporation salts/ETP sludge will be sent to HWMP – TSDF. Hazardous / Solid waste will be segregated, detoxified and collected in the HDPE drums / bags and will be stored in the covered and raised platform with leachate collection system till its disposal before sending to authorized agencies. Boiler ash is sent to brick manufacturers.</li> <li>xvi) All the commitment made regarding issues raised during the earlier Public Hearing/ consultation meeting held on 21<sup>st</sup> December, 2016 shall be satisfactorily implemented.</li> <li>xvii) 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.</li> </ul>
19.3.6	<p><b>Additional Exploratory Drilling of 15 wells in NELP - 1 Offshore Block KG-DWN-98/2, KG Basin, Andhra Pradesh by M/s ONGC- Environmental Clearance-IA/AP/IND2/34992/2015; J-11011/10/2016-IA II (I)</b></p> <p>The Project Proponent and the accredited Consultant M/s ONGC Ltd., gave a detailed presentation on the salient features of the project and informed that:</p> <ul style="list-style-type: none"> <li>(i) The proposal is for Additional Exploratory Drilling of 15 wells in NELP - 1 Offshore Block KG-DWN-98/2, KG Basin, Andhra Pradesh by M/s ONGC.</li> <li>(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 4<sup>th</sup> EAC meeting held during 11-12<sup>th</sup> February, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter dated 5<sup>th</sup> April, 2016.</li> <li>(iii) All the projects related to offshore and onshore Oil and Gas exploration, development and production are listed in para 1(b) of schedule of EIA Notification, 2006 covered under category ‘A’ and appraised at central level.</li> <li>(iv) The offshore block KG-DWN-98/2 with an area of 7294.6 sq.km. was initially awarded to Cairn Energy India Limited (CEIL) with 100 % PI in the 1st round of NELP bidding in April, 2000. Subsequently, south-eastern part of the block with an area of 2462 sq.km was relinquished in 2004. In March’ 2005, ONGC has acquired 90 % of PI and operatorship. From 28.08.2014 onwards ONGC</li> </ul>

has become 100% PI holder of the block. Total cost of the project will be Rs. 5750 crore. Total capital cost for environmental pollution control measures will be 2-3 crores.

- (v) It is reported that the project location is offshore and no coral reef and bio reserves has been indicated as per Form-1.
- (vi) Ambient air quality monitoring has not carried out due to project is a offshore project.
- (vii) All proposed well are to be drilled with water based mud only. However, in case of specific down hole problem, low toxic synthetic oil based mud (SOBM) having aromatically less than 1% will be used. Thoroughly washed drill cuttings will be discharged to sea with proper dilution @ 50 bbls/hr intermittently as per GSR.546 (E) dated 30<sup>th</sup> August, 2005 guidelines. Unused SOBM mud will be collected and reused/ sent to base
- (viii) The power requirement of the drilling rig will be met by using 4 nos. of Diesel Generator sets of 1430 kVA capacity with a diesel consumption of about 8-12 Kl / day. The exhaust stacks of the DG sets are likely to vent off the emissions at the height of approximately 30 m above mean sea level.
- (ix) The daily water consumption will be 30 m<sup>3</sup> /d will be used and will be supplied through Offshore Supply Vessels. Sanitary water is passed through sewage treatment plant on board and discharged to sea after treatment and meeting the requirement of standards i.e Residual chlorine 1 ppm.
- (x) During drilling, approximately 300-500 m<sup>3</sup> of wet drill cuttings are expected to be generated for one well depending on the target depth of the well. The rock cuttings and fragments of shale, sand and silt associated with the return drilling fluid during well drilling will be separated using shale shakers and other solids removal equipment like de-sander and de-silter. The recovered mud will be reused while the separated solids will be discharged to sea after proper washing and dilution as per GSR 546(E) 2005. Residual waste mud if remained will be discharged into sea after proper dilution as per guidelines.
- (xi) Public hearing is exempted due to off-shore site location. \

**Proposed Drilling Locations area as follows:**

Block Name : KG-DWN-98/2							
Sl. No	Location Name	LATITUDE (N)			LONGITUDE (E)		
		DEG	MIN	SEC	DEG	MIN	SEC
1	NL-1	16	30	32.38558	82	29	05.52770

2	NL-2	16	29	02.97346	82	26	29.93295
3	NL-3	16	27	14.51786	82	25	42.99103
4	NL-4	16	26	06.59689	82	29	04.12510
5	NL-5	16	23	29.16276	82	26	49.17617
6	NL-6	16	20	39.10709	82	23	56.91012
7	NL-7	16	18	56.16032	82	19	53.16866
8	NL-8	16	18	38.53651	82	27	24.93832
9	NL-9	16	16	25.92776	82	19	12.99422
10	NL-10	16	06	45.51680	82	09	57.95780
11	NL-11	16	08	21.36101	82	14	00.90386
12	NL-12	16	12	58.65660	82	28	32.92137
13	NL-13	15	56	50.15941	82	10	44.14081
14	NL-14	15	45	10.85196	82	07	25.09721
15	NL-15	15	45	21.65834	82	18	07.49849

The Committee deliberated on the certified compliance report issued by the Regional Office of MoEF&CC vide F. NO. EP/12.1/301& 2011-12/8/AP date of monitoring was 29<sup>th</sup> October, 2013 and committee found certified compliance report satisfactory.

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

- i) Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, CH<sub>4</sub>, HC, Non-methane HC etc.

	<ul style="list-style-type: none"> <li>ii) Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.</li> <li>iii) Approach road shall be made pucca to minimize generation of suspended dust.</li> <li>iv) The company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosure shall be provided to DG sets and proper stack height shall be provided as per CPCB guidelines.</li> <li>v) Total water requirement from Offshore Supply Vessels shall not exceed 30 m<sup>3</sup>/well and prior permission shall be obtained from the concerned authority.</li> <li>vi) Water based mud shall be used in drilling.</li> <li>vii) Washed drill cuttings shall be discharged to sea with proper dilution @ 50 bbls/hr intermittently as per GSR.546 (E) dated 30<sup>th</sup> August, 2005 guidelines. Unused SOBM mud will be collected and reused/ sent to base.</li> <li>viii) Sanitary water shall be passed through sewage treatment plant on board and discharged to sea after treatment and meeting the requirement of standards i.e Residual chlorine 1 ppm.</li> <li>ix) The rock cuttings and fragments of shale, sand and silt associated with the return drilling fluid during well drilling will be separated using shale shakers and other solids removal equipment like de-sander and de-silter. The recovered mud will be reused while the separated solids will be discharged to sea after proper washing and dilution as per the rule. Residual waste mud if remained will be discharged into sea after proper dilution as per guidelines.</li> <li>x) Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology.</li> <li>xi) The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.</li> <li>xii) The company shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self containing breathing apparatus.</li> <li>xiii) Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.</li> <li>xiv) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in</li> </ul>
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	<p>a time bound manner.</p> <p>xv) Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.</p> <p>xvi) Company shall have own Environment Management Cell having qualified persons with proper background.</p>
19.3.7	<p><b>Enhancement of Phosphoric Acid production (from 700 MTPD to 1000 MTPD) P<sub>2</sub>O<sub>5</sub> and other auxiliary facilities within the existing Fertilizer Complex, Sriharipuram, Vishakhapatnam district, Andhra Pradesh by M/s Coromandel International Limited (Formerly M/s Coromandel Fertilizer Limited)-Environmental Clearance-[IA/AP/IND2/49286/2016; J-11011/51/2016- IA II(I)]</b></p> <p>The Project Proponent and the accredited Consultant M/s Cholamandalam MS Risk Services Limited., gave a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>i. The proposal is for Enhancement of Phosphoric Acid production (from 700 MTPD to 1000 MTPD) P<sub>2</sub>O<sub>5</sub> and other auxiliary facilities within the existing Fertilizer Complex, Sriharipuram, Vishakhapatnam district, Andhra Pradesh by M/s Coromandel International Limited (Formerly M/s Coromandel Fertilizer Limited).</li> <li>ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 6<sup>th</sup> and 9<sup>th</sup> EAC meeting held during 30<sup>th</sup> March to 02<sup>nd</sup> April, 2016 and 27-28<sup>th</sup> June, 2016 respectively and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter dated 1<sup>st</sup> November, 2016.</li> <li>iii. All Chemical Fertilizer units are listed at S.N. 5(a) under category ‘A’ and appraised at Central level.</li> <li>iv. The project was issued environmental clearances by the Ministry, vide letter no. J-11011/388/2006-IA-II (I) dated 18<sup>th</sup> May 2007, J-11011/314/2007-IA-II(I) dated 31<sup>st</sup> August 2007 and J-11011/548/2008-IA-II (I) dated 10<sup>th</sup> June 2009.</li> <li>v. It is reported that no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Bay of Bengal is situated at a distance of 5.0 km from the project site. Narava Reserved Forest is located at 6.5 km, Yerrakonda Reserved Forest is located at 9 km and Kailasakonda Forest is located at 5 km from the plant boundary.</li> <li>vi. Existing land area is Total plot area is 438 Acres, of which 145 acres is developed as greenbelt. Total cost of the project is Rs. 225 Crore. The estimated cost of various environmental management programs in the proposed project is Rs. 26.42 Cr which is around 12% of proposed project cost. About 32000 employees will work under the project.</li> <li>vii. In order to achieve consented production of 3900 MTPD NP/NPK production, the facility intends to adopt the following modifications and upgrades in the upstream of the complex fertilize manufacturing units: <ul style="list-style-type: none"> <li>• Enhancing Phosphoric acid plant production capacity from 700 MTPD</li> </ul> </li> </ol>

	<p>to 1000 MTPD P<sub>2</sub>O<sub>5</sub> including evaporation section and fluorine recovery unit.</p> <ul style="list-style-type: none"> <li>• De-bottlenecking the existing sulphuric acid plant-1 from 1400 MTPD to 1700 MTPD,</li> <li>• De-bottlenecking the existing sulphuric acid plant -2 from 300MTPD to 400MTPD,</li> <li>• Installing a 40MTPH coal fired boiler to meet the additional steam required for the increased evaporation capacity.</li> <li>• Installing a 5 MW back pressure turbine in order to maximize the efficiency of steam utilization.</li> <li>• Installing of storage facility for a capacity of 20000 MT (P<sub>2</sub>O<sub>5</sub> solution) for phosphoric acid.</li> <li>• Installation of 400 MTPD evaporation system for phosphoric acid including fluorine recovery system.</li> </ul> <p>viii. Ambient air quality monitoring was carried out at 8 locations during (4<sup>th</sup> April, 2016 to 14<sup>th</sup> July, 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (62 µg/m<sup>3</sup> to 87 µg/m<sup>3</sup>), PM<sub>2.5</sub> (30 µg/m<sup>3</sup> to 43 µg/m<sup>3</sup>), SO<sub>2</sub> (11 µg/m<sup>3</sup> to 15 µg/m<sup>3</sup>) and NO<sub>2</sub> (15 µg/m<sup>3</sup> to 23 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.7 µg/m<sup>3</sup>, 28.2 µg/m<sup>3</sup> and 8.3 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).</p> <p>ix. Power requirement will be increased from 14 MW to 20 MW. The facility has contracted grid power of 12 MW, 5 MW from APGPCL and in-house steam turbine capacity of 5MW. The net available power for the existing operation is in the order of 22 MW. Hence the available power is adequate to meet the total requirement of 20 MW post enhancement.</p> <p>x. Imported coal fired boiler of 40 TPH will be installed with ESP and 56 m stack height. Due to installation of proposed FBC boiler and keeping the existing two LSHS fired boilers on stand-by mode, the SO<sub>2</sub> emissions from steam generating units will be reduced from the current levels of about 3400 Kg/day to as low as 1188 Kg/day during the post project scenario. Hence the overall SO<sub>2</sub> emissions from the plant will be reduced from the current consented value of about 5000 Kg/day to 3150 Kg/day during the post project scenario.</p> <p>xi. Fresh water requirement will be increased from 8700 m<sup>3</sup>/day to 12000 m<sup>3</sup>/day, which will be sourced from Greater Vishakhapatnam Municipal Corporation (GVMC). Sea water consumption will be increased from 63000 m<sup>3</sup>/day to 84600 m<sup>3</sup>/day.</p> <p>xii. The fertilizer complex is having a full-fledged Effluent Treatment Plant of capacity 75 m<sup>3</sup> /hr (1800 m<sup>3</sup> /day) comprising neutralization system, equalization tank, clariflocculators, reactors, buffer tank and filter press. The total effluent generation during the post up-gradation project scenario will be reduced due to adoption of clean process technologies. Hence the existing ETP will be adequate to meet the future needs. The total treated wastewater discharge into the existing industrial drain has been maintained less than 1800 m<sup>3</sup>/day as against the consented and permitted discharge quantity of 7890m<sup>3</sup>/day. Similarly the treated waste water discharge into the industrial drain will be limited to 1800m<sup>3</sup>/day during the post project operations.</p> <p>xiii. Domestic Effluent will be treated in a dedicated sewage treatment plant which</p>
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is under construction. The treated water will be used for green belt and gardening purposes.

- xiv. Public Hearing for the proposed project has been conducted by the A P Pollution control board 8<sup>th</sup> December, 2016.
- xv. PP has submitted the certified compliance report issued by RO, MoEF&CC vide F .No. EP/12.1/562&659/AP. Monitoring was done on 27.5.2015 by RO, MoEF&CC.

The EAC deliberated upon the issues raised during the public hearing. The concerns were raised regarding pollution, CSR fund distribution, Employment, odour problem and Disaster response/ Risk assessment etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

The Committee deliberated on the certified compliance report issued by the Regional Office, Chennai of MoEF&CC vide f. no. EP/12.1/562 and 659/AP dated 01.09.2015 (site visit date: 27.05.2015) and found that there are few partially complied and not complied points raised, though they are not so ecologically sensitive. During presentation PP made commitment to comply with all the conditions. The EAC also noted that PP did not submit the Certified compliance report w.r.t. EC letter no. J-11011/548/2008-IA-II (I) dated 10<sup>th</sup> June 2009. The PP in this regard informed the Committee that EC dated 10<sup>th</sup> June 2009 has not commissioned and project was dropped. So, the question of having compliance report for the same does not arise.

The Committee after detailed deliberations recommended the project for grant of Environmental Clearance with following specific conditions along with other general environmental conditions:

- i. Green Belt of 10 M wide (Perennial trees) to be developed in three sides of plant periphery totaling 145 acre area.
- ii. The surface water requirement to be limited to 1650 m<sup>3</sup>/day.
- iii. No ground water shall be used.
- iv. Post enhancement, the SO<sub>2</sub> emissions from Sulphuric acid plant-1 and sulphuric acid plant-2 shall be maintained at 1kg/MT and 0.65 kg/MT.
- v. Imported coal fired boiler of 40 TPH will be installed with ESP and 56 m stack height.
- vi. The gaseous emissions (SO<sub>2</sub>, NO<sub>x</sub>, NH<sub>3</sub>, 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.
- vii. In Urea Plant, particulate emissions shall not exceed 50 mg/Nm<sup>3</sup>. Monitoring of Prilling Tower shall be carried out as per CPCB guidelines.
- viii. Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> September, 2009. The

	<p>levels of PM<sub>10</sub> (Urea dust), SO<sub>2</sub>, NO<sub>x</sub>, 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 concerned State Pollution Control Board (SPCB).</p> <p>ix. 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.</p> <p>x. Risk assessment plan to be prepared and implemented.</p> <p>xi. 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 &amp; 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 concerned SPCB.</p> <p>xii. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.</p> <p>xiii. The company shall construct the garland drain all around the project site to prevent runoff of any chemicals containing waste into the nearby water bodies. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.</p> <p>xiv. 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.</p> <p>xv. Spent catalysts and used oil shall be sold to authorized recyclers/re-processors only. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 <i>as</i> amended time to time. All Transportation of Hazardous Chemicals shall be <i>as per</i> the Motor Vehicle Act (MVA), 1989.</p> <p>xvi. The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP).</p> <p>xvii. All the commitments made during the Public Hearing/Public Consultation meeting held on 8<sup>th</sup> December, 2016 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.</p> <p>xviii. Remote operated valve placed on NH<sub>3</sub> line to avoid leakage/equipment check shall be performed to ensure that remote operated valve (ROV) is all time is functional.</p> <p>xix. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner.</p> <p>xx. Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.</p>
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	<p>xxi. Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.</p> <p>xxii. An Environment Cell will be set up and a regular environmental manager having PG qualification in environmental sciences/environmental engineering to be appointed for looking after the environmental management practices in the plant.</p>
19.3.8	<p><b>Synthetic Organic Manufacturing Unit at Sy. No. 32, Tupakulagudem Village, Tallapudi Mandal, West Godavari District, Andhra Pradesh by M/s. Vensar Laboratories Private Ltd.- Environmental Clearance-- [J-11011/368/2014 - IA II (I); IA/AP/IND2/60135/2014]</b></p> <p>The project proponent and the accredited consultant M/s Rightsource Industrial Solutions Pvt. Ltd., made a detailed presentation on the proposal and informed that:</p> <ol style="list-style-type: none"> <li>i. The proposal is for Synthetic Organic Manufacturing Unit at Sy. No. 32, Tupakulagudem Village, Tallapudi Mandal, West Godavari District, Andhra Pradesh by M/s. Vensar Laboratories Private Ltd.</li> <li>ii. All Synthetic Organic Chemicals Industry located outside the notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>iii. The Terms of References (TORs) was awarded in the 30<sup>th</sup> Meeting of the Reconstituted Expert Appraisal Committee (Industry) held during 22-23<sup>rd</sup> December, 2014 for preparation of EIA-EMP report. Ministry has issued the TOR vide letter dated 10<sup>th</sup> March, 2015.</li> <li>iv. Ministry has issued amendment in TOR vide letter dated 8<sup>th</sup> September, 2016 for exemption in public hearing under para 7 (ii) of EIA Notification, 2006. As Public hearing was conducted earlier on 28.05.2009.</li> <li>v. The total land area of proposed company is 11.8 acres. The industry proposed to develop greenbelt on all sides of the industry in an area of 2.45 Acres. The proposed project cost is about Rs. 6.00 Crores. The unit has proposed for 100.0 Lakhs as capital cost and 19.0 Lakhs as recurring cost for environment pollution control measures. Constructional activities will generate employment to about 50 workers.</li> <li>vi. As per Form-1, it is reported that no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River Godavari is flowing at a distance of 7.8 km in East direction. Following environmental sensitivity involved: <ul style="list-style-type: none"> <li>• Fairly dense jungle near Gopavaram - 1.2(WNW)</li> <li>• Dense Mixed jungle near Hukumpet - 4.8 KMs (NNW)</li> <li>• Mixed jungle near Rajampalem - 5.1KMs (NNW)</li> <li>• Vinjaram R.F. -9.1 KMs(NNW)</li> <li>• Karakapadu RF – 9.4 KMs (NW)</li> <li>• Polavaram RF- 9.6 (N)</li> </ul> </li> </ol>

vii. The PP proposed to manufacture following products:

**LIST OF PROPOSED PRODUCTS AND CAPACITIES**

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

**LIST OF BY- PRODUCTS AND QUANTITIES**

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

viii. Ambient air quality monitoring was carried out at 8 locations during March, 2016 and submitted baseline data indicates that ranges of concentrations of PM10 (48.80 µg/m to 68.50 µg/m<sup>3</sup>), PM2.5 (16.90 to 35.14 µg/m<sup>3</sup>), SO<sub>2</sub> (5.50 to 14.20 µg/m<sup>3</sup>) and NO<sub>2</sub> (16.50 µg/m<sup>3</sup> to 23.11 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.76 µg/m<sup>3</sup>, 1.70 µg/m<sup>3</sup> and 2.28 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

ix. Total Water consumption of 79.71 m<sup>3</sup>/day an amount of 21.24 m<sup>3</sup>/day of water will be recovered by the ZLD system and reused, Hence, Total fresh water requirement is 58.47 m<sup>3</sup>/day and will be met from Ground Water.

Against which 19.35 m<sup>3</sup>/day wastewater will be generated. Wastewater will be segregated in High TDS and Low TDS streams. HTDS Effluent sent to MEE system and Condensate to ETP. LTDS effluents treated in ETP-RO Rejects to ME system and RO permeate to reuse, Condensate from MEE to reuse and MEE residue to AFTD. Domestic wastewater will be sent to Septic tank followed by soak pit. Plant will be based on Zero Liquid discharge.

- x. Total power requirement for the proposed project will be about 300 KVA which will be sourced from APSPDCL. In addition to this, unit will install one D. G. Set of 250 KVA and will be attached with 10 m stack height. Coal/Agro waste fired boiler of 6 TPH capacity will be installed. Cyclone separator followed by Bag Filter and 30 m stack height will be provided to boiler.
- xi. Agro waste / Coal fired Thermo pack Boiler of 2,00,000 K. Cal /hr capacity will be installed with 9 m stack height. Committee suggest to PP to use Cyclone separator followed by Bag Filter to control emissions from Thermo pack Boiler. PP agreed. Cooling Towers of 1000TR capacity will be installed.
- xii. Hydrogen chloride will be scrubbed by using chilled water media and Hydrogen Bromide will be scrubbed by using C. S. Lye solution.
- xiii. Organic waste, Spent carbon and solvent distillation residue will be sent to Cement Industries. MEE Salts and ETP Sludge will be sent to TSDF. Ash from boiler & Thermo pack boiler will be sent to registered Brick Manufacturers. Used Oils and Detoxified Containers will be sent to SPCB Authorized Agencies for Reprocessing/Recycling.
- xiv. Public hearing is exempted under para 7 (ii) of EIA Notification, 2006.

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

- (i) Cyclone separator followed by Bag Filter and adequate stack height shall be provided to Coal/Agro waste fired boiler of 6 TPH capacity and Thermic Fluid Heater of 2,00,000 K. Cal /hr capacity to control the flue gas emissions. Adequate stack height shall be provided to DG set.
- (ii) Chilled brine circulation system should be provided to condensate solvent vapors and reduce solvent losses. It should be ensured that solvent recovery should not be less than 95%.
- (iii) Hydrogen chloride shall be scrubbed by using chilled water media and Hydrogen Bromide shall be scrubbed by using C. S. Lye solution.
- (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) Total fresh water requirement from ground water source shall not exceed 58.47 m<sup>3</sup>/day and prior permission shall be obtained from the CGWA/SGWA.
- (vi) Wastewater generation shall not exceed 19.35 m<sup>3</sup>/day. Wastewater shall be segregated in High TDS and Low TDS streams. HTDS Effluent shall be sent to MEE system and Condensate to ETP. LTDS effluents shall be treated in ETP-RO Rejects to MEE system and RO permeate to reuse, Condensate from MEE to reuse and MEE residue to AFTD. Domestic wastewater shall be sent to Septic tank followed by soak pit.

	<ul style="list-style-type: none"> <li>(vii) 'Zero' effluent discharge shall be adopted and no effluent shall be discharged outside the premises.</li> <li>(viii) Treated effluent should be passed through guard pond. Online pH meter, flow meter and TOC analyzer should be installed.</li> <li>(ix) The Company should obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans boundary movement) Rules, 2008 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 firefighting facilities in case of emergency.</li> <li>(x) As proposed, 10 m wide greenbelt in 33 % area should be developed in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Selection of plant species should be as per the CPCB guidelines.</li> <li>(xi) An Environment Cell will be set up with one environmental Manager having post graduate qualification in environmental sciences/ Environmental engineering.</li> <li>(xii) All the recommendations made in the risk assessment report should be satisfactorily implemented.</li> <li>(xiii) Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.</li> <li>(xiv) The unit shall have 24x7 air quality monitoring system. Necessary facilities for air quality monitoring in monthly basis shall be installed.</li> <li>(xv) Detectors for process emission detection shall be installed.</li> <li>(xvi) As proposed, Organic waste, Spent carbon and solvent distillation residue will be sent to Cement Industries. MEE Salts and ETP Sludge will be sent to TSDF. Ash from boiler &amp; Thermo pack boiler will be sent to registered Brick Manufacturers. Used Oils and Detoxified Containers will be sent to SPCB Authorized Agencies for Reprocessing/Recycling.</li> <li>(xvii) All the commitment made regarding issues raised during the earlier Public Hearing/ consultation meeting held on 28.05.2009 shall be satisfactorily implemented.</li> <li>(xviii) 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.</li> </ul>
19.3.9	<p><b>Expansion from 4500 TCD to 7500 TCD of existing sugar plant with 36 MW Cogeneration unit and establishment of 60 KLPD distillery with installation of incineration boiler to generate 3 MW power at Sy No 413 &amp; 443 , Hirenandi Village, Gokak Taluk, Belgaum district, Karnataka by M/s Soubhagya Laxmi Sugars Ltd.- Environmental Clearance-[IA/KA/IND2/31793/2015; J-11011/269/2015-IA II (I)]</b></p> <p>PP did not attend the meeting. The EAC decided to defer the proposal.</p>
19.3.10	<p><b>Setting up of 45 KLPD (RA/ AA/ ENA) Molasses/ grain based distillery and 2 MW Co-generation unit at village P.O. Majhulia, Tehsil Majhula, District West Champaran, Bihar by M/s Majhulia Sugar Industries Pvt. Ltd.- Environmental Clearance-[IA/BR/IND2/50479/2016; J-11011/153/2016- IA II(I)]</b></p>



The project proponent and the accredited consultant M/s Vardan Environet Pvt. Ltd., made a detailed presentation on the proposal and informed that:

- i. The proposal is for Setting up of 45 KLPD (RA/ AA/ ENA) Molasses/ grain based distillery and 2 MW Co-generation unit at village P.O. Majhulia, Tehsil Majhula, District West Champaran, Bihar by M/s Majhulia Sugar Industries Pvt. Ltd.
- ii. All molasses based distilleries are listed at Sl.No. 5(g) (i) of Schedule of EIA Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. The Terms of References (TORs) was awarded in the 9<sup>th</sup> Meeting of the Expert Appraisal Committee (Industry-2) held during 27-28<sup>th</sup> June, 2016 for preparation of EIA-EMP report. Ministry has issued the TOR vide letter dated 2<sup>nd</sup> August, 2016.
- iv. Total plot area is 40468 m<sup>2</sup> (10 acres), of which 14176.14 m<sup>2</sup> (35 %) will be developed as green belt. Total Cost for the project is Rs. 97 Crores, out of which cost earmarked for EMP will be Rs. 8 crore and Recurring Cost will be Rs. 1.5 crore/ annum. About 82 peoples will be employed under this expansion project.
- v. No forest area/ National Park/ Sanctuary exists within 10km radius of the study area.
- vi. The number of working days of the unit will be 330 days/annum.
- vii. Molasses will be used as raw material. Molasses will be sourced from own Sugar mill and transportation by tankers/Pipeline. Grains (Broken Rice/Maize/Sorghum/Bajra/Wheat) will be met from nearby market through trucks.
- viii. Ambient air quality monitoring was carried out at 8 locations during March 2016 to May 2016 and October 2016 to December 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (54.9 µg/m<sup>3</sup> and 94.3 µg/m<sup>3</sup>), PM<sub>2.5</sub> (29.8 µg/m<sup>3</sup> to 54.3 µg/m<sup>3</sup>), SO<sub>2</sub> (6.8 µg/m<sup>3</sup> to 16.5 µg/m<sup>3</sup>) and NO<sub>2</sub> (15.6 µg/m<sup>3</sup> to 48.6 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.670 µg/m<sup>3</sup>, 1.010 µg/m<sup>3</sup> and 0.840 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- ix. Total Water Requirement on Molasses based is 450 KL/day and Water Requirement on Grain based is 360 KL/day and will be met by the ground water.
- x. During molasses based operation Spent wash will be treated in MEE (Multiple Effect Evaporator), then the semisolid waste from MEE (Multiple Effect Evaporator) will be sent in specially designed boiler for incineration. Condensate will be treated in condensate polishing unit and will used as water in cooling tower. A duly lined lagoon of 30 days capacity shall be provided.
- xi. During Grain based operation the DWGA (Distillers Wet Grains Soluble) dryer will be installed to dry the Semi- Solid waste. Condensate will be treated in condensate polishing unit and will used as make-up water in cooling tower. A duly lined lagoon of 7 days capacity will be provided.
- xii. Total power requirement is 1040 KW which will be sourced from own CPP. One D.G. sets of 600 KVA with adequate stack height will be installed for the power

backup. Bagasse/rice husk/coal fired boiler of 20 TPH will be installed and ESP will be installed with adequate stack height to control particulate pollution.

xiii. Boiler ash collected from ESP is also rich in potassium and can be disposed of as blending in NPK fertilizer. The other solid wastes expected from the unit are containers, empty drums which are returned to the product seller or sold to authorize buyers after detoxification. In the Grain operation the Semi-Solid will be dried and sold to farmer for Cattle Feed.

xiv. Public Hearing for the proposed project was conducted on 12<sup>th</sup> January, 2017 by Bihar Pollution Control Board.

The EAC deliberated upon the issues raised during the public hearing. The concerns were raised regarding wastewater management, Air pollution mitigation measures and benefits from the plants etc. The EAC noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

During presentation committee noted that the fresh water requirements is seems to be high and suggested to PP to use fresh water @ 8 KL/KL i.e. 360 m<sup>3</sup>/day. PP agreed with this suggestion.

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

#### **A. Specific Conditions**

- i) ESP shall be provided to the Bagasse/rice husk/coal fired boiler of 20 TPH to control particulate emissions within permissible limit. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- ii) Total fresh water requirement shall not exceed 350 m<sup>3</sup>/day project from ground water and prior permission should be obtained from the CGWA/SGWA. PP shall ensure rainwater harvesting and shall install piezometer for water recharge monitoring.
- iii) Spent wash generation from molasses based distillery shall not exceed 8 Kl/Kl of alcohol. The spent wash from molasses based distillery shall be treated in MEE (Multiple Effect Evaporator), then the semisolid waste from MEE (Multiple Effect Evaporator) will be sent in specially designed boiler for incineration. Condensate will be treated in condensate polishing unit and will used as water in cooling tower. During Grain based operation the DWGA (Distillers Wet Grains Soluble) dryer will be installed to dry the Semi- Solid waste. Condensate will be treated in condensate polishing unit and will used as make-up water in cooling tower. A duly lined lagoon of 7 days capacity will be provided.
- iv) As proposed, no effluent from distillery shall be discharged outside the plant premises and **Zero Liquid Discharge shall be adopted**. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- v) Spent wash shall be stored in impervious RCC lagoons with proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution.

	<ul style="list-style-type: none"> <li data-bbox="306 188 1468 264">vi) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.</li> <li data-bbox="306 273 1468 421">vii) Continuous online (24 x7) monitoring to be installed for flow measurement and measurement of pollutants within the treatment unit. Data to be uploaded on company's website and provided to the respective RO of MEF&amp;CC, CPCB and SPCB.</li> <li data-bbox="306 430 1468 698">viii) Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area and compost yard shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and this Ministry. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and total dissolved solids shall be monitored. Sampling and trend analysis monitoring must be made on monthly basis and report submitted to the Ministry's Regional Office and SPCB.</li> <li data-bbox="306 707 1468 784">ix) Bagasse storage shall be done in such a way that it does not get air borne or fly around due to wind.</li> <li data-bbox="306 792 1468 1025">x) Boiler ash from distillery as well as sugar plant shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash &amp; dust shall be avoided. Proper ash management for its end use to drawn and consent to be obtained accordingly.</li> <li data-bbox="306 1034 1468 1146">xi) Fire fighting system shall be as per the norms and cover all areas where alcohol is produced, handled and stored. Provision of foam system for fire fighting shall be made to control fire from the alcohol storage tank. DMP shall be implemented.</li> <li data-bbox="306 1155 1468 1303">xii) Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre shall be strengthened and the regular medical test records of each employee shall be maintained separately.</li> <li data-bbox="306 1312 1468 1460">xiii) Dedicated parking facility for loading and unloading of materials shall be provided in the factory premises. Unit shall develop and implement good traffic management system for their incoming and outgoing vehicles to avoid congestion on the public road.</li> <li data-bbox="306 1469 1468 1662">xiv) As proposed, green belt shall be developed in 14176.14 m<sup>2</sup> (35 %) area within plant premises with at least 10 meter wide green belt (perennial trees) on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO. PP shall plant at least 1000 perennial trees.</li> <li data-bbox="306 1671 1468 1796">xv) An Environment Cell will be set up with One Environmental Manager having post graduate qualification in environmental sciences/ Environmental engineering.</li> <li data-bbox="306 1805 1468 1917">xvi) All the commitments made during the Public Hearing/Public Consultation meeting held on 12<sup>th</sup> January, 2017 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.</li> <li data-bbox="306 1926 1468 2013">xvii) At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise</li> </ul>
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	details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.																
19.3.11	<p><b>Expansion and installation of incinerator to their existing refrigerant gas &amp; fluorospecialty chemicals (from 22,320 MTPA to 46,800 MTPA) at Survey No. 16/3, 26, 27, Village Ranjitnagar, Taluka Ghoghamba, District Panchmahal, Gujarat by M/s Gujarat Fluorochemicals Limited- reg.EC IA/GJ/IND2/38613/2016; J-11011/31/2016-IA II (I)</b></p> <p>The Project Proponent and the accredited Consultant M/s Anand Environmental Consultants Pvt. Ltd., gave a detailed presentation on the salient features of the project and informed that:</p> <ul style="list-style-type: none"> <li>(i) The proposal is for expansion and installation of incinerator to their existing refrigerant gas &amp; fluorospecialty chemicals (from 22,320 MTPA to 46,800 MTPA) at Survey No. 16/3, 26, 27, Village Ranjitnagar, Taluka Ghoghamba, District Panchmahal, Gujarat by M/s Gujarat Fluorochemicals Limited.</li> <li>(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 8<sup>th</sup> EAC meeting held during 26<sup>th</sup>-27<sup>th</sup> May, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter dated 15<sup>th</sup> July, 2016.</li> <li>(iii) All Synthetic Organic Chemicals (Synthetic organic chemicals and chemical intermediates) 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).</li> <li>(iv) MoEF&amp;CC has issued an EC vide letter no. J-11011/356/2007- IA II (I) dated 14.08.2009 for the Expansion of refrigerant gas plant (16,000 MTPA to 25,000 MTPA).</li> <li>(v) As per Form I, no National Parks, Wildlife Sanctuaries, Tiger/ Elephant Reserves, Wildlife Corridors etc. falls within 10 km radius from the plant site. While a Pavagadh Archeological Park World Heritage is situated at 8.5 km distance for the project site.</li> <li>(vi) Proposed expansion will be carried out within the existing premises of 2,05,803 m<sup>2</sup> area, of which, the area earmarked for greenbelt is 87,545 m<sup>2</sup>. Cost of proposed expansion is Rs. 100 Crores. The proposed expansion project has an employment potential of 170. The proposal is submitted due to the commitment of India to Montreal Protocol for phasing out HCFC-22 gases.</li> <li>(vii) Following are the list of existing and proposed products:</li> </ul> <table border="1" data-bbox="316 1765 1465 1993"> <thead> <tr> <th rowspan="2">Sr. No.</th> <th rowspan="2">Name of Product</th> <th colspan="3">Production Capacity (MT/Annun)</th> </tr> <tr> <th>Existing</th> <th>Additional</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Monochloro Difluoro Methane (HCFC-22)</td> <td>18,000</td> <td>0</td> <td>18,000</td> </tr> </tbody> </table>				Sr. No.	Name of Product	Production Capacity (MT/Annun)			Existing	Additional	Total	1	Monochloro Difluoro Methane (HCFC-22)	18,000	0	18,000
Sr. No.	Name of Product	Production Capacity (MT/Annun)															
		Existing	Additional	Total													
1	Monochloro Difluoro Methane (HCFC-22)	18,000	0	18,000													

2	Difluoromethane (HFC-32)	500	8,500	9,000
3	Ethyl difluoroacetate (EDFA)	600	600	1,200
4	Bromo Trifluoromethane (BTFM)	400	0	400
5	4-(Heptafluoroisopropyl)-2-methyl aniline/ 2- Bromo Heptafluoro Propane	400	200	600
6	2,5-Dichloro-4-Hexafluoropropoxy aniline	300	0	300
7	Ethyl difluoroaceto acetate (EDFAA)	600	0	600
8	Chloro difluoro ethane (R-142)	50	450	500
9	Ethyl tetrafluoroethyl ether (ETFEE)	150	4,850	5,000
10	Penta Fluoro Phenol	120	380	500
11	4-Chloro-2-Trifluoro Acetyl Aniline	1,200	300	1,500
12	Difluoro acetic acid	0	400	400
13	Difluoro acetone	0	500	500
14	Difluoro ethyl amine	0	500	500
15	Penta fluoro benzoic acid	0	500	500
16	Tetra fluoro benzyl alcohol	0	500	500
17	Trifluoroacetic acid (TFA) & its derivatives	0	5,000	5,000
18	2,6-Dichloro-4-trifluoromethyl aniline (DCTFMA)	0	500	500
19	2-Bromo-5-Fluorobenzotrifluoride	0	500	500
20	2,3-Dichloro-5-Trifluoromethyl Pyridine	0	500	500
21	Difluoromethane sulfonyl chloride (DFMSC)	0	300	300
<b>TOTAL</b>		<b>22,320</b>	<b>24,480</b>	<b>46,800</b>

(viii) Ambient air quality monitoring was carried out at 8 locations during September- 2016 to November- 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (65 µg/m<sup>3</sup> to 74 µg/m<sup>3</sup>), PM<sub>2.5</sub> (18 µg/m<sup>3</sup> to 28 µg/m<sup>3</sup>), SO<sub>2</sub> (12 µg/m<sup>3</sup> to 24 µg/m<sup>3</sup>) and NO<sub>2</sub> (17 µg/m<sup>3</sup> to 24 µg/m<sup>3</sup>) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 7 µg/m<sup>3</sup>, 7 µg/m<sup>3</sup> and 3 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>.

The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

- (ix) Existing water requirement is 555 m<sup>3</sup>/day. The total fresh water requirement for the proposed expansion activity will be 220 m<sup>3</sup>/day, Out of which 20 m<sup>3</sup>/day will be used for domestic purpose and 200 m<sup>3</sup>/day will be used for industrial activities. The required water will be obtained through Narmada Nigam Water Supply/ Bore well located within the premises. Committee suggested to use only surface water. PP agreed.
- (x) Industrial wastewater generation will be increased from 20 to 36 m<sup>3</sup>/day, which will be treated in ETP followed by MEE, SEE, Psychometric evaporator and spray drier. Domestic waste water will be treated in STP and treated effluent will be used for gardening within plant premises.
- (xi) This is Zero Liquid Discharge unit. No wastewater will be discharged from the site to surrounding area.
- (xii) The existing unit has a 24 TPD coal fired boiler and a stand by boiler attached to Multicyclone Dust Collector followed by Bag filter to control air emission and connected to 33 m stack height. Existing unit is also using Re-liquefied Natural Gas (RLNG) of capacity 27,116.80 Sm<sup>3</sup>/day and proposed additional 3,000 Sm<sup>3</sup>/day.
- (xiii) DG sets 4 in nos. having capacities 1500 KVA, 1500 KVA, 125KVA and 62.5 KVA will be used as standby in case of failure of power supply. The total power requirement is 6500 KW and will be met from Madhya Gujarat Vij Company Limited (MGVCL) and Captive Power Plant. Water scrubber and Caustic scrubber will be provided to control process emission.
- (xiv) Oily cotton waste will be disposed by incineration at common hazardous waste incineration facility. Spent Catalyst, Dessicants (Alumina/ Molecular sieve), Discarded Asbestos roof sheet, Resin and ETP Sludge will be sent to TSDF site. Used oil will be sold to registered re-refiners. Discarded Containers will be sold to authorized recyclers. Organic Residue will be incinerated at common hazardous waste incineration facility/ CHWIF. Ash from Boiler will be sold to Cement Industries/ registered brick manufacturing unit.
- (xv) CSR plan is prepared for expenditure of 5% of project cost.
- (xvi) Public Hearing for the proposed project has been conducted by the Gujarat Pollution Control Board 20.01.2017.

The EAC deliberated upon the issues raised during the public hearing. The concerns were raised regarding water and air pollution, Employment, ground water contamination etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

The EAC also deliberated on the certified compliance report submitted by the RO, MoEFCC, Bhopal and found satisfactory. The Committee after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions:

	<p>i) Water scrubber and Caustic scrubber will be provided to control process emission. 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.</p> <p>ii) 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 &amp; conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored and records maintained. The emissions shall conform to the limits stipulated by the SPCB.</p> <p>iii) A proper Leak Detection and Repair (LDAR) Program for industry shall be prepared and implemented as per CPCB guidelines. Focus shall be given for prevention of fugitive emissions for which preventive maintenance of pumps, valves, pipelines are required. Proper maintenance of mechanical seals of pumps and valves shall be given. A preventive maintenance schedule for each unit shall be prepared and adhered to.</p> <p>iv) Company shall take all the measures in order to protect the machineries and equipment from ageing.</p> <p>v) Continuous monitoring system for chlorine, HCl, HF as well as VOCs shall be installed at all important places/areas. Effective measures shall be taken immediately, when monitoring results indicate above the permissible limits. Alarm for chlorine leakage if any in the liquid chlorine storage area is provided along with automatic start of the scrubbing system.</p> <p>vi) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.</p> <p>vii) Total water requirement from Narmada Nigam Water Supply shall not exceed 775 m<sup>3</sup>/day and prior permission should be obtained from the concerned authority.</p> <p>viii) Industrial wastewater generation shall be treated in ETP followed by MEE, SEE, Psychometric evaporator and spray drier. Domestic waste water shall be treated in STP and treated effluent will be used for gardening within plant premises.</p> <p>ix) 'Zero' effluent discharge shall be adopted and no effluent shall be discharged outside the premises.</p> <p>x) Process effluent/any wastewater shall not be allowed to mix with storm water.</p>
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	<p>Storm water drain shall be passed through guard pond.</p> <p>xi) Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps.</p> <p>xii) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from 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. Membership of TSDF for hazardous waste disposal shall be obtained.</p> <p>xiii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 11989 <i>as</i> amended in October, 1994 and January, 2000. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.</p> <p>xiv) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.</p> <p>xv) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</p> <p>xvi) All the recommendations made in the risk assessment report should be satisfactorily implemented.</p> <p>xvii) As proposed, green belt over 87,545 m<sup>2</sup> of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.</p> <p>xviii) A regular environment manager having post graduate qualification in environmental sciences/ environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.</p> <p>xix) All the commitments made during the Public Hearing/Public Consultation meeting held on 20.01.2017 shall be satisfactorily implemented and adequate budget provision shall be made accordingly. Company shall carry out CSR activity in nearby Villages namely Rajitnagar, Jitpura, Nathkuva, Kankodakoi and Arad. Activities should include provide potable water facility etc.</p> <p>xx) 2.5 % of the total cost of project Cost shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Chennai. Implementation.</p>
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	xxi) 1000 trees/year shall be planted till 5 years and protected in nearby villages. The survival rate of the plants, authenticated by the DFO concerned, to be submitted in 6 monthly compliance report to the regional office.
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### **Reconsideration of EC**

19.3.12	<p><b>Proposed Bulk LPG Storage &amp; Bottling Facility at B37/pt to B43/pt, B50/pt, B51/pt, C30 to 41 etc. SIPCOT Industrial Growth Centre, Gangaikondan village, Tirunelveli Taluk&amp; District Tamil Nadu by M/s INDIAN OIL CORPORATION LIMITED (IOCL)-Environmental Clearance [IA/TN/IND2/40795/2015, J-11011/129/2015-IA-II(I)]</b></p> <p>The Member Secretary informed that the proposal has been considered in 16<sup>th</sup> EAC meeting held during 8<sup>th</sup> – 9<sup>th</sup> December, 2016; wherein it was noted that the proposal for Environmental clearance was considered in 4th EAC meeting held during 11-12th February, 2016. After deliberation, the Committee noted that project is being considered as per the NGT direction in response of application filed by the applicant. Further, it was noted that project involves violation under the provision of E(P), Act, 1986 and EIA Notification, 2006. The matter will be dealt as per the prevailing laws for dealing such cases. Since, the project is also required to obtain NBWL clearance, the proposal was deferred till the aforesaid information is submitted.</p> <p>During 16th EAC meeting after examination of the aforesaid facts it was recommended that the Ministry may take a view regarding consideration of the proposal by the EAC for grant of environmental clearance.</p> <p>The recommendations of the EAC are being processed.</p>
19.3.13	<p><b>Development of Jharia CBM Block, Jharkhand by M/s ONGC [IA/JH/IND/57123/2013; J-11011/106/2013- IA II (I)]</b></p> <p>The Member Secretary informed the EAC that the proposal was earlier considered in the 13<sup>th</sup> meeting of the EAC (Industry-2) held during 26-27<sup>th</sup> September, 2016. The Committee deliberated on the certified compliance letter dated 14.12.2015 issued by the MoEF&amp;CC Regional Office at Ranchi. Following observations were made:</p> <ol style="list-style-type: none"> <li>i) It was stated that well JH#1, JH#1A, JH# 2, JH#3, JH#4, was drilled on the basis of consent from Jharkhand Pollution Control Board which are not a part of Environment Clearance.</li> <li>ii) Date of spudding of Drilling of wells JH#5 and JH#6 were 12.07.2006 and 25.02.2007 respectively which was before the grant of environment clearance i.e 11.07.2007.</li> <li>iii) The compliance status of stipulated environment clearance conditions and the monitored data is to be uploaded on the company's website. It requires immediate attention.</li> </ol> <p>The EAC sought following additional information from the PP:</p> <ol style="list-style-type: none"> <li>(i) action taken report on the above mentioned non-compliance points</li> <li>(ii) and to reanalyse the groundwater and surface water for drinking water</li> </ol>

parameter including DO, BOD, COD.

In this regard, the PP made a detailed presentation on the proposal and additional information sought by the EAC, and informed the following:

- i. The Wells JH#1, JH#2, JH#3 and JH#4 were drilled from 1997 to 1999. In this duration EC was not required for the project cost less than 50 crore. The well no. JH#1A was drilled in 2011 which is part of exploration phase, for which EC was obtained from MoEF&CC.
- ii. The investment in the block is less than Rs. 50 crore., the formal EC is not required as per the EIA notification, 1994. An intimation letter in this regard was sent to MoEF vide letter dated 31.01.2006.
- iii. Application No. 3008 were submitted to JSPCB for granting NOC for drilling of CBM wells. No communication was made by JSPCB regarding NOC of application no. 2008.
- iv. PP also informed that as per the rule if Government is not able to convey its decision/ communication within 120 days of application, the application shall be deemed to have been approved by the government.
- v. PP has submitted the ground water and surface water reanalysis report.

The PP vide letter dated 15.01.2017 has submitted the above information.

The EAC after critical examination of the information provided by the PP recommended the project for grant of environmental clearance subject to compliance of following specific conditions along with other general environmental conditions:

- (i) Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, CH<sub>4</sub>, HC, Non-methane HC etc.
- (ii) Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.
- (iii) Approach road shall be made pucca to minimize generation of suspended dust.
- (iv) The company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosure shall be provided to DG sets and proper stack height shall be provided as per CPCB guidelines.
- (v) Total water requirement from tankers from nearby testing well/ or bore well at site shall not exceed 800 m<sup>3</sup>/ well and prior permission shall be obtained from the Concerned authority.
- (vi) The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- (vii) Water based mud shall be used in drilling.

- (viii) Disposal of drill cuttings and drilling mud will be in specially designed pit with HDPE lining and is topped with native soil. Other hazardous waste like empty bags, cotton waste, gloves etc are transported to TSDF site. Whereas, POL/chemical containers and spent oil are recycled through authorized vendors.
- (ix) No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies.
- (x) The total quantity of Produced Water (385 m<sup>3</sup>/day) shall be treated through Pre-treatment system which will remove Suspended Solids (SS) to less than 10 mg/l. The treatment system shall consist of Pressure Sand Filters, Activated Carbon Filters, Micron Cartridge Filters to remove sediment and Suspended Solids at various stages. After Pre-treatment, the water shall be passed through Multi-stage RO system (Low Pressure and High Pressure) to bring the TDS level of the treated water below 2100 mg/l. High pressure pumps will boost the pressure of the water and then fed to the RO System. RO permeate shall be collected in permeate storage pits from where it can be transferred to end use or for discharge. Total quantity of 308 m<sup>3</sup> will be treated water with TDS levels below 2100 mg/l. The RO reject of 77 m<sup>3</sup> (20% of 385 m<sup>3</sup>) having TDS of about 29,000 mg/l will be generated after Multi-stage RO Treatment. ONGC will consider following two options for disposal of RO rejects.
- (xi) Drill cuttings generated shall be collected and separated using a solid control system and temporarily stored on-site in HDPE lined pits. These cuttings will be disposed onsite in an impervious pit (10m X 10m X 1.25m) provided with HDPE liners in conformance to the CPCB guidelines. Drilling and wash wastewater generated will also be stored at an onsite HDPE lined pit.
- (xii) Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/ soak pit.
- (xiii) Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- (xiv) The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- (xv) The company shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self containing breathing apparatus.
- (xvi) Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.

	<p>(xvii) All the commitments made to the public during public hearing/public consultation meeting held on 31st August 2015 and 4th September 2015 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.</p> <p>(xviii) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing Issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.</p> <p>(xix) Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.</p> <p>(xx) Company shall have own Environment Management Cell having qualified persons with proper background (at least one Environmental Manager having post graduate qualification in Environmental Sciences/Environmental Engineering).</p>																																								
19.3.14	<p><b>Development Drilling of 15 wells in East Godavari district, A.P. by M/s ONGC-Environmental Clearance-EC.[IA/AP/IND2/33668/2015; J-11011/296/2015-IA II (I)]</b></p> <p>The Member Secretary informed the EAC that the proposal was earlier considered in the 12<sup>th</sup> meeting of the EAC (Industry-2) held during 23-24<sup>th</sup> August, 2016. The EAC has sought following additional information from the PP:</p> <ol style="list-style-type: none"> <li>i. Coordinate of wells to be given with nearby village locations/habitats</li> <li>ii. Detailed development plan to drawn w.r.t existing and proposed wells along with group gathering station.</li> </ol> <p>The PP submitted the following additional information sought by the EAC, and informed that:</p> <ol style="list-style-type: none"> <li>i. Coordinate of wells are as follows:</li> </ol> <table border="1" data-bbox="316 1444 1449 2038"> <thead> <tr> <th>S. NO.</th> <th>Well</th> <th>Latitude</th> <th>Longitude</th> <th>Installation to be connected to</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>MDDF</td> <td>16°48'14.76"N</td> <td>81°54'06.04" E</td> <td>Mandapeta GCS</td> </tr> <tr> <td>2</td> <td>MDDH</td> <td>16°47'07.86"N</td> <td>81°56'18.94" E</td> <td>Mandapeta GCS</td> </tr> <tr> <td>3</td> <td>MDDI</td> <td>16°48'14.76"N</td> <td>81°54'06.04" E</td> <td>Mandapeta GCS</td> </tr> <tr> <td>4</td> <td>MDDA</td> <td>16°46'51.13" N</td> <td>81°55'30.45" E</td> <td>Mandapeta GCS</td> </tr> <tr> <td>5</td> <td>MDDQ</td> <td>16°47'55.49"N</td> <td>81°53'04.96" E</td> <td>Mandapeta GCS</td> </tr> <tr> <td>6</td> <td>MDDR</td> <td>16°47'55.49"N</td> <td>81°53'04.96" E</td> <td>Mandapeta GCS</td> </tr> <tr> <td>7</td> <td>MDDS</td> <td>16°47'55.49"N</td> <td>81°53'04.96" E</td> <td>Mandapeta GCS</td> </tr> </tbody> </table>	S. NO.	Well	Latitude	Longitude	Installation to be connected to	1	MDDF	16°48'14.76"N	81°54'06.04" E	Mandapeta GCS	2	MDDH	16°47'07.86"N	81°56'18.94" E	Mandapeta GCS	3	MDDI	16°48'14.76"N	81°54'06.04" E	Mandapeta GCS	4	MDDA	16°46'51.13" N	81°55'30.45" E	Mandapeta GCS	5	MDDQ	16°47'55.49"N	81°53'04.96" E	Mandapeta GCS	6	MDDR	16°47'55.49"N	81°53'04.96" E	Mandapeta GCS	7	MDDS	16°47'55.49"N	81°53'04.96" E	Mandapeta GCS
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			E	GCS
8	MDDO	16°48'05.00" N	81°54'01.50" E	Mandapeta GCS
9	KVDZ	16°20'32.80"N	81°47'27.77" E	Mori GCS
10	KWDV	16°23'31.07"N	81°55'10.03" E	Kesanapalli West GGS
11	KWDX	16°23'31.07"N	81°55'10.03" E	Kesanapalli West GGS
12	KWDZ	16°23'52.90"N	81°56'15.00" E	Kesanapalli West GGS
13	KWEA	16°24'23.38"N	81°56'49.48" E	Kesanapalli West GGS
14	KWEC	16°23'47.64"N	81°55'19.60" E	Kesanapalli West GGS
15	VGDA	16°37'49.54"N	81°56'16.96"E	NA

PP has also submitted the development plan for Mandapeta GCS, Mori GCS and Kesanapalli West GGS.

- Development plan for Mandapeta:

Name of the Installation	Quantities of Oil & Gas as per Consent	Present Production of Oil & Gas	Expected Production of Oil & Gas from proposed wells	Max Daily Discharge in KLD (Process) as per Consent	Present Daily Discharge in KLD(Process)	Expected Daily Discharge from proposed wells in KLD (Process)
Mandapeta GCS	4.16 Lakh Cu.M/D	Gas 2LCu.M/D	2LCu.M/D	37	14	Nil

- Development plan for Mori GCS:

Name of the Installation	Quantities of Oil & Gas as per Consent	Present Production of Oil & Gas	Expected Production of Oil & Gas from proposed wells	Max Daily Discharge in KLD (Process) as per Consent	Present Daily Discharge in KLD(Process)	Expected Daily Discharge from proposed wells in KLD (Process)
Mori GCs	Gas 3.0 Lakh Cu.M/D	Gas 2.5 LCu.M/D	0.25 LCu.M/D	41	35	Nil

• Development plan for Kesanapalli West GGS :

Name of the Installation	Quantities of Oil & Gas as per Consent	Present Production of Oil & Gas	Expected Production of Oil & Gas from proposed wells	Max Daily Discharge in KLD (Process) as per Consent	Present Daily Discharge in KLD(Process)	Expected Daily Discharge from proposed wells in KLD (Process)
Kesanapalli West GGS	Gas 2.69 Lakh cum/D Oil 530 Cu.M/D	Gas 1.35 LCu.M/D Oil 400 Cu.M/D	1.2 LCu.M/D 100 Cu.M/D	600	500	Nil

During presentation the PP informed that they have proposed to drop 7 Nos. wells of Kammapalem as the recent reassessment study of Hydrocarbon prospects indicated that further field development is not feasible.

Public hearing was conducted by Andhra Pradesh Pollution Control board on 16.01.2015. The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding impact of project in future, effect on crop and health, CSR plan etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

The EAC also deliberated on the certified compliance report submitted by the RO, MoEFCC, Chennai vide dated 05.10.2015 and found there are few partial and not complied points raised. During presentation PP informed that now they have complied all conditions, EAC accept the declaration and found satisfactory.

The EAC after critical examination of the information provided by the PP recommended the project for grant of environmental clearance subject to compliance of following specific conditions along with other general environmental conditions:

- (i) Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, CH<sub>4</sub>, HC, Non-methane HC etc.
- (ii) Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.
- (iii) Approach road shall be made pucca to minimize generation of suspended dust.
- (iv) The company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosure shall be provided to DG sets and proper stack height shall be provided as per CPCB guidelines.

	<p>(v) Total water requirement from underground at site shall not exceed 25 m<sup>3</sup>/day/ well and prior permission shall be obtained from the CGWA/SGWA.</p> <p>(vi) The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.</p> <p>(vii) Total wastewater generation shall be around 15 m<sup>3</sup>/day. Water Based drilling mud shall be used.</p> <p>(viii) Drill cuttings separated from drilling fluid shall be adequately washed and temporarily stored and disposed in an impervious pit lined by HDPE. Disposal of drilling wash water will be achieved through necessary treatment through onsite Effluent Treatment Plant (ETP).</p> <p>(ix) As proposed, Waste oil/spent oil/waste batteries will be sold to registered recyclers/re-processors.</p> <p>(x) No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies.</p> <p>(xi) Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/ soak pit.</p> <p>(xii) Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.</p> <p>(xiii) The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.</p> <p>(xiv) The company shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self containing breathing apparatus.</p> <p>(xv) Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.</p> <p>(xvi) All the commitments made to the public during public hearing/public consultation meeting held on 16.01.2015 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.</p> <p>(xvii) At least 5 % of the total cost of the project shall be earmarked towards the</p>
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	<p>Enterprise Social Commitment based on Public Hearing Issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.</p> <p>(xviii) Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.</p>
19.3.15	<p><b>Expansion of Existing Distillery (from 60 KLPD to 150 KLPD) at Village Alaganchi, Taluka Nanjangud, District Mysore, Karnataka by M/s Bannari Amman Sugars Limited [J-11011/71/2013-IA II(I); IA/KA/IND2/54195/2013]</b></p> <p>The Member Secretary informed that EAC that the proposal was earlier considered in the 11<sup>th</sup> meeting of the EAC (Industry-2) held during 20-21<sup>st</sup> July, 2016. The EAC has sought following additional information from the PP:</p> <ol style="list-style-type: none"> <li>i. CO level in the ambient air to be rechecked as baseline data.</li> <li>ii. Water balance chart of the existing sugar unit to be furnished.</li> <li>iii. Commitment to be provided for installing RCC tank for spent wash storage.</li> <li>iv. Ground water quality analysis to be conducted from the all existing piezometer wells.</li> <li>v. Issues raised during public hearing and commitments made by the project proponent in the form of tabular chart with financial budget for complying with the commitments made.</li> <li>vi. Detailed Plan to be redrawn upto 5% of project cost out of the issues emerged from public consultation.</li> </ol> <p>Now, the PP has submitted the following additional information sought by the EAC, and informed the following:</p> <ol style="list-style-type: none"> <li>i. PP has rechecked and submitted the CO level in the ambient air.</li> <li>ii. PP has submitted the complete existing and proposed water balance of Sugar, Co-gen and distillery units which is as follows: <p style="margin-left: 40px;">Existing fresh water requirement is 4215 m3/day (928 m3/day for Sugar unit, 2688 3/day for Co-gen unit and 599 m3/day for distillery unit). Proposed fresh water requirement for distillery unit will be 751 m3/day. Committee noted that PP is using fresh water more than 8 KL/KL. EAC restrict the fresh water requirement with 8KL/KL. As per the above Total fresh requirement will be 4816 m3/day (928 m3/day for sugar unit, 2688 m3/day for Co-gen unit and 1200 m3/day for distillery unit).</p> </li> <li>iii. PP agreed to store spent wash in RCC tanks.</li> <li>iv. PP has checked and submitted the ground water quality analysis from the all existing piezometer wells.</li> <li>v. PP has submitted the public hearing issues and commitments made by the project proponent in tabular chart with financial budget for complying with the commitments made.</li> <li>vi. PP has submitted the detailed CSR Plan @ 5% of project cost out of the issues</li> </ol>



emerged from public consultation.

During presentation PP informed that Spent Wash generation will be 1200 m<sup>3</sup>/day instead of 997 m<sup>3</sup>/day.

The EAC also deliberated on the certified compliance report submitted by the RO, MoEFCC, Banaglore and found that RO has raised 3 non compliance points. Against which PP has submitted the action taken report (ATR) on those non compliance points. EAC found the ATR satisfactory.

The EAC after critical examination of the information provided by the PP recommended the project for grant of environmental clearance subject to compliance of following specific conditions along with other general environmental conditions:

- (i) Bag filter shall be provided to additional coal/bagasse/ concentrated spent wash fired boiler to control particulate emission within permissible limit. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (ii) Total fresh water requirement shall not exceed 4816 m<sup>3</sup>/day (928 m<sup>3</sup>/day for sugar unit, 2688 m<sup>3</sup>/day for Co-gen unit and 1200 m<sup>3</sup>/day for distillery unit) from River Kaveri. Permission should be obtained from the concerned authority. No ground water shall be used.
- (iii) Spent wash generation will be 1200 m<sup>3</sup>/day after expansion. Spent wash shall be concentrated in the multiple effect evaporator. Concentrated Spent Wash (CSW) and vapor condensate water will be generated from the evaporator. CSW is utilized as fuel in the boiler. Vapor condensate water is further treated in ETP consisting of bioprocess and RO. RO rejects will be bio-composted with press mud.
- (iv) Domestic waste water shall be sent to septic tank followed by soak pit.
- (v) Miscellaneous Effluent shall be treated in ETP consisting of bio process. It is further treated (polishing) in RO unit and then recycled for use as cooling water make and other plant needs.
- (vi) 'Zero' effluent discharge shall be adopted and no effluent shall be discharged outside the premises.
- (vii) As proposed, Yeast sludge separated from the clarifier will be used in Bio composting using sugar industry press mud. Boiler ash will be used in Bio composting and also supplied to farmers for use as soil conditioner and soil nutrient.
- (viii) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (ix) Continuous online (24 x7) monitoring to be installed for flow measurement and measurement of pollutants within the treatment unit. Data to be uploaded on company's website and provided to the respective RO of MEF&CC, CPCB and SPCB.
- (x) Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area and compost yard shall be set up. Sampling

	<p>and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and this Ministry. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and total dissolved solids shall be monitored. Sampling and trend analysis monitoring must be made on monthly basis and report submitted to the Ministry's Regional Office and SPCB.</p> <p>(xi) Bagasse storage shall be done in such a way that it does not get air borne or fly around due to wind.</p> <p>(xii) Boiler ash from distillery as well as sugar plant shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash &amp; dust shall be avoided. Proper ash management for its end use to drawn and consent to be obtained accordingly.</p> <p>(xiii) Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre shall be strengthened and the regular medical test records of each employee shall be maintained separately.</p> <p>(xiv) Dedicated parking facility for loading and unloading of materials shall be provided in the factory premises. Unit shall develop and implement good traffic management system for their incoming and outgoing vehicles to avoid congestion on the public road.</p> <p>(xv) As proposed, green belt shall be developed in 6.82 ha area in plant premises with at least 10 meter wide green belt of perennial trees on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.</p> <p>(xvi) An Environment Cell will be set up with one environmental Manager having post graduate qualification in environmental sciences/ Environmental engineering.</p> <p>(xvii) As proposed, 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner within 5 years.</p> <p>(xix) All the commitments made to the public during public hearing/public consultation meeting held on 26<sup>th</sup> February, 2015 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.</p>
19.3.16	<p><b>Expansion of resins at block no. 1834/P1 &amp; P2, Chikhli Vandsa Road, Opposite Khodiyar Quarry, Taluka Chikhali, District Navasari, Gujarat by M/s Windson Chemical Pvt. Ltd. [J-11011/103/2014-IA II (I); IA/GJ/IND2/27574/2014]</b></p> <p>The Member Secretary informed the EAC that the proposal was earlier considered in the 13<sup>th</sup> meeting of the EAC (Industry-2) held during 26<sup>th</sup>-27<sup>th</sup> September, 2016. Wherein, the Committee noted that information supplied regarding hazardous waste management display board and CSR is not conforming to the requirements and PP did not implement properly. Therefore, it was decided to take the view of the Regional Office on the Action</p>

	<p>Taken Report furnished by the PP on non complied points. The PP has submitted the action taken report to RO, MoEF&amp;CC vide letter dated 13.01.2017.</p> <p>Now, the EAC noted that PP did not submit the adequate information w.r.t non complied points raised by the RO, MoEF&amp;CC. EAC recommended to the ministry to take up the matter with the Regional office.</p> <p>The EAC after critical examination deferred the proposal to submit the above mentioned adequate information.</p>
19.3.17	<p><b>Proposed Capacity expansion (2400 MT/Annum to 10360 MT/Annum) for manufacturing of Synthetic Organic Chemicals at Plot No. 2405, C- 1/2407/1 &amp; 2407/3, GIDC, Sarigam, Valsad, Gujarat by M/s Mac Industry - Environment Clearance – [F. No. J-11011/312/2013 IA II I]</b></p> <p>PP did not attend the meeting. The EAC decided to defer the proposal.</p>
19.3.18	<p><b>Proposal of expansion of Oil Terminal at Jasidih Industrial area, Jasidih, Deoghar, Jharkhand by M/s IOCL. – Environmental Clearance- [IA/JH/IND2/56677/2015; J-11011/143/2014-1A II (I)]</b></p> <p>The Member Secretary informed the EAC that the proposal was earlier considered in the 14<sup>th</sup> meeting of the EAC (Industry-2) held during 26-27<sup>th</sup> October, 2016. The EAC sought following additional information from the PP:</p> <ol style="list-style-type: none"> <li>i. Certified compliance report of the existing EC duly inspected by MoEF&amp;CC's respective Regional Office</li> <li>ii. Item-wise detailed plan with time schedule w.r.t. ESR activities for 2.5% of project cost.</li> </ol> <p>Now, the PP has submitted the additional information sought by the EAC, and informed the following:</p> <p>The PP submitted the Certified compliance report issued vide dated 19.01.2017 from RO, MoEF&amp;CC, Ranchi. The EAC deliberated on the certified compliance report submitted by the RO, MoEF&amp;CC, Bangalore and found that RO has raised 14 non compliance points (8 specific conditions and 6 general conditions). Against which PP need to submit Action Taken Report on non compliance points to the regional office immediately. EAC was of the view that Certified compliance report is not satisfactory.</p> <p>After critical examination EAC deferred the proposal for want of Action Taken Report duly certified from RO, MoEF&amp;CC.</p>

**7<sup>th</sup> February, 2017 (Day 2)**

**19.4 Any Other**

19.4.1	<p><b>Proposed expansion of pesticide (from 5595 MTPA to 17378.17 MTPA) at plot No. 903,923, GIDC Estate, Vapi, Gujarat by M/s Aarti Industries Ltd.- Amendment in EC J-11011/47/2015-IA-II(I), IA/GJ/IND2/60777/2016]</b></p> <p>Ministry had issued EC vide letter No. J-11011/47/2015-IA-II(I) dated 28<sup>th</sup> October, 2016 for expansion of pesticide (from 5595 MTPA to 17378.17 MTPA) at plot No. 903,923, GIDC Estate, Vapi, Gujarat.</p> <p>Now the PP has requested for the following corrections/ amendments:</p> <table border="1" data-bbox="328 555 1485 1151"> <thead> <tr> <th>S. No.</th> <th>As per EC letter</th> <th>May be read as</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Plot no. 903, 923</td> <td>Plot no. 902, 923</td> </tr> <tr> <td>2</td> <td>Manufacturing of Pesticides products.</td> <td>Manufacturing of Dye/Dye Pesticides intermediates &amp; Pesticides products.</td> </tr> <tr> <td>3</td> <td>Proposed production capacity . MT/MONTH.</td> <td>Proposed production capacity MT/YEAR</td> </tr> <tr> <td>4</td> <td>water scrubber followed by alkali scrubber is mentioned for process emission stack.</td> <td>Water Scrubber followed by Alkali Scrubber will be provided to Reactor of 2-Bromo 4Flouro Acetanilide/ Di Chloro Bromo Benzene, Chlorinator and Dizo vessels One Water scrubber will be provided to emission stack of SFD Dryer .</td> </tr> </tbody> </table> <p>After confirming the above mentioned facts with the EIA report uploaded on the Ministry's website, the committee recommended for the above mentioned corrections/ amendments in the existing EC.</p>	S. No.	As per EC letter	May be read as	1	Plot no. 903, 923	Plot no. 902, 923	2	Manufacturing of Pesticides products.	Manufacturing of Dye/Dye Pesticides intermediates & Pesticides products.	3	Proposed production capacity . MT/MONTH.	Proposed production capacity MT/YEAR	4	water scrubber followed by alkali scrubber is mentioned for process emission stack.	Water Scrubber followed by Alkali Scrubber will be provided to Reactor of 2-Bromo 4Flouro Acetanilide/ Di Chloro Bromo Benzene, Chlorinator and Dizo vessels One Water scrubber will be provided to emission stack of SFD Dryer .
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19.4.2	<p><b>Active Pharmaceutical Ingredients (APIs) manufacturing Unit at Sy. No. 194 A Village Baswapur Tehsil Bhongir District Yadadri District (Formerly Nalgonda District) State Telangana by M/s. Padmasri GMP Pharma Pvt. Ltd- Extension of validity of EC- [IA/TG/IND2/60918/2008, J-11011/639/2007/-IA II(I)]</b></p> <p>The project proponent did not attend the meeting.</p>															
19.4.3	<p><b>Expansion of Specialty Fine Chemicals (from 420 MTPM to 1300 MTPM) at Plot No.408, 409, Phase-II, GIDC Estate, Vapi, District Valsad, Gujarat by M/s Ganesh Polychem Ltd. – Amendment in EC- {J-11011/184/2015-IA-II(I), IA/GJ/IND2/28178/2014]</b></p> <p>Ministry had issued EC vide letter No. J-11011/184/2015-IA-II(I) dated 28<sup>th</sup> October, 2016 for Expansion of Specialty Fine Chemicals (from 420 MTPM to 1300 MTPM) at Plot No.408, 409, Phase-II, GIDC Estate, Vapi, District Valsad, Gujarat to M/s Ganesh Polychem Ltd.</p> <p>Now the PP has requested for the following corrections/ amendments:</p>															

S. No.	As per EC letter	May be read as
1	Proposed expansion quantity of byproduct (dilute sulphuric acid) is 14824 MT/M.	Proposed expansion quantity of byproduct (dilute sulphuric acid) is 1235.29 MT/M.
2	Proposed flue gas emission stacks is Single boiler stack.	Proposed flue gas emission stacks is one for boiler and two for DG set.
3	Bag filter + spray dryer scrubber use for SO <sub>3</sub> storage tank, SO <sub>3</sub> + DMS dry tank, Main Reactor.	Venturi scrubber is mentioned for process emission stack of SO <sub>3</sub> storage tank, SO <sub>3</sub> + DMS dry tank, Main Reactor.
4	Proposed recycled/ treated water is 126 KL/day.	Proposed recycled/ treated water is 162.6 KL/day.

After confirming the above mentioned facts with the EIA report uploaded on the Ministry's website, the committee recommended for the above mentioned corrections/ amendments in the existing EC.

**19.4.4 Expansion of Bulk Drug Manufacturing Unit at Plot No. 322/4, 40 Shed Area, GIDC Estate in Vapi, Distt-Valsad, Gujrat by M/s Amoli Organics Pvt. Limited. –Extension of validity- [IA/GJ/IND2/61012/2008, J-11011/719/2008-IA II (I)]**

Ministry had issued Environmental Clearance to M/s Amoli Organics Pvt. Limited., vide letter No. J-11011/719/2008-IA II (I) dated 30<sup>th</sup> January, 2009 for Expansion of Bulk Drug Manufacturing Unit at Plot No. 322/4, 40 Shed Area, GIDC Estate in Vapi, Distt-Valsad, Gujrat.

PP has applied through online for extension of validity of Environmental Clearance on 10.12.2016 and informed that due to Vapi Industrial estate was declared as critically polluted area they could not get the CTE from SPCB and not started any activity related to expansion project. Now the Vapi is out of critically polluted area but the EC got expired. Now PP has requested to grant extension in validity of EC.

During presentation the committee noted that EC was expired on 30<sup>th</sup> January, 2014 and PP has applied on 10.12.2016 i.e. after the expiry of EC. Committee suggested the PP to apply for fresh TOR.

After deliberation, the Committee not recommended for extension of validity of exiting EC.

**19.4.5 Synthetic Organic Chemical Manufacturing Unit at SY. NO. 297 (Part), JAGDEVPUR VILLAGE AND MANDAL, SIDDIPET DISTRICT, TELANGANA by M/s Elite Pharmaceuticals Pvt. Ltd.-Amendment in Environmental Clearance- [IA/TG/IND2/61115/2015, J-11011/156/2013-IA II (I)].**

Ministry had issued Environmental Clearance to M/s Elite Pharmaceuticals Pvt. Ltd., vide letter No. J-11011/156/2013-IA II (I) dated 15<sup>th</sup> May, 2015 for Synthetic Organic

Chemical Manufacturing Unit at SY. NO. 297 (Part), Jagdevpur village and Mandal, Siddipet District, Telangana.

During presentation PP informed that present proposal is for amendment in EC as mentioned below:

S. No	Description	As Per EC	Amendment required
1	Coal Fired Boilers	1 x 3 TPH	1 x 5 TPH
		1 x 2 TPH	1 x 3 TPH*
	<b>Total in Operation</b>	<b>5 TPH</b>	<b>5 TPH</b>

2	Land Area and Survey no.s	Sy. No. 297 (Part) Site area: 6.5 acres Greenery: 2.5 acres	Sy. No. 286 (Part) and 297 (Part) Site area: 8 acres Greenery: 2.75 acres
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*Note:*

1. No change in steam consumption
2. 1 x 3 TPH Boiler will be kept as standby
3. At any point of time maximum steam consumption will be 5 TPH

PP also informed that there will be no change in overall steam usage and the proponent wants to provide a backup boiler to meet emergency requirement in case of maintenance. There is no increase in production capacity, no change in product profile, resources usage, emissions and effluent quantity.

After deliberation, the Committee accepted the amendment proposed at sr. No. 1 above (boiler capacity and numbers); however EAC was not agreed about addition of land.

19.4.6

**Proposed Synthetic Organic Chemical at SY. NO. 286, 289 (Part) AND 297 (Part), JAGDEVPUR VILLAGE AND MANDAL, SIDDIPET DISTRICT, TELANGANA by M/s Kosher Pharmaceuticals Pvt. Ltd. - Amendment in EC reg. [IA/TG/IND2/61117/2014, J-11011/173/2012-IA II (I)]**

Ministry had issued Environmental Clearance to M/s Kosher Pharmaceuticals Pvt. Ltd., vide letter No. J-11011/173/2012-IA II (I) dated 18<sup>th</sup> September, 2014 for Synthetic Organic Chemical at SY. NO. 286, 289 (Part) AND 297 (Part), Jagdevpur village and Mandal, Siddipet District, Telangana.

During presentation PP informed that present proposal is for amendment in EC as

mentioned below:

S. No	Description	As Per EC	Amendment required
1	Coal Fired Boilers	1 x 3 TPH	1 x 5 TPH
		1 x 2 TPH	1 x 3 TPH*
	<b>Total in Operation</b>	<b>5 TPH</b>	<b>5 TPH</b>

1. No change in steam consumption
2. 1 x 3 TPH Boiler will be kept as standby
3. At any point of time maximum steam consumption will be 5 TPH

PP also informed that there will be no change in overall steam usage and the proponent wants to provide a backup boiler to meet emergency requirement in case of maintenance. There is no increase in production capacity, no change in product profile, resources usage, emissions and effluent quantity.

After deliberation, the Committee accepted the amendment proposed.

19.4.7

**Expansion plant of Epoxidized Soya bean oil (Epoxy plasticizer) at our existing plant located at Plot. No. 57/D/A, 1st phase, Industrial estate, GIDC Vapi 396 195. Di: Valsad. Gujarat. By M/s Makwell Organics Pvt.Limited.-Extension of validity reg. [IA/GJ/IND2/61232/2008, J-11011/746/2008-IA II (I)]**

Ministry had issued Environmental Clearance to M/s Makwell Organics Pvt.Limited., vide letter No. J-11011/746/2008-IA II (I) dated 30<sup>th</sup> January, 2009 for Expansion plant of Epoxidized Soya bean oil (Epoxy plasticizer) at our existing plant located at Plot. No. 57/D/A, 1st phase, Industrial estate, GIDC Vapi 396 195. Di: Valsad. Gujarat.

PP has applied through online for extension of validity of Environmental Clearance on 23.12.2016 and informed that due to Vapi Industrial estate was declared as critically polluted area they could not get the CTE from SPCB and not started any activity related to expansion project. Now the Vapi is out of critically polluted area but the EC got expired. Now PP has requested to grant extension in validity of EC.

During presentation the committee noted that EC was expired on 30<sup>th</sup> January, 2014 and PP has applied on 23.12.2016 i.e. after the expiry of EC. Committee suggest to PP to apply for fresh TOR.

After deliberation, the Committee not recommended for extension of validity of exiting EC.

19.4.8

**Expansion plant of Chlorinated paraffin wax & sulpha chlorinated paraffin wax at our existing plant located at Plot. No. 57/D/B, 1st phase, Industrial estate, GIDC Vapi**

	<p><b>396 195. Di: Valsad. Gujarat by M/s Makwell plastisizers Pvt Limited-Extension of validity reg. [IA/GJ/IND2/61242/2009, J-11011/86/2009-IA II (I)]</b></p> <p>Ministry had issued Environmental Clearance to M/s Makwell plastisizers Pvt Limited., vide letter No. J-11011/86/2009-IA II (I) dated 9<sup>th</sup> April, 2009 for Expansion plant of Chlorinated paraffin wax &amp; sulpha chlorinated paraffin wax at our existing plant located at Plot. No. 57/D/B, 1st phase, Industrial estate, GIDC Vapi 396 195. Di: Valsad. Gujarat.</p> <p>PP has applied through online for extension of validity of Environmental Clearance on 23.12.2016 and informed that due to Vapi Industrial estate was declared as critically polluted area they could not get the CTE from SPCB and not started any activity related to expansion project. Now the Vapi is out of critically polluted area but the EC got expired. Now PP has requested to grant extension in validity of EC.</p> <p>During presentation the committee noted that EC was expired on 9<sup>th</sup> April, 2014 and PP has applied on 23.12.2016 i.e. after the expiry of EC. Committee suggested the PP to apply for fresh TOR.</p> <p>After deliberation, the Committee not recommended for extension of validity of exiting EC.</p>
19.4.9	<p><b>BULK DRUG AND BULK DRUG INTERMEDIATES MANUFACTURING UNIT of M/s. KARUNESH REMEDIES Plot No. 417/2, Phase-II, GIDC Industrial Estate, Panoli-394 116, Tal: Ankleshwar, Dist: Bharuch, Gujarat -Extension of validity reg.[IA/GJ/IND2/61255/2008, J-11011/811/2007-IA II (I)]</b></p> <p>The project proponent did not attend the meeting.</p>
19.4.10	<p><b>Expansion of DYES &amp; DYE INTERMEDIATES unit (60 MTPM to 2355 MT/month and coal based power plant: 5 MW/month at Survey No 637, Nr. KALAMSAR VILLAGE, KHAMBHAT, ANAND, GUJARAT by M/S. ROHAN DYES &amp; INTERMEDIATES UNIT-I (Former Unit: Cambay Chem Limited) -Extension of validity of Environmental Clearance-[IA/GJ/IND2/61260/2010, J-11011/467/2008-IA II]</b></p> <p>Ministry had issued Environmental Clearance to M/s Cambay Chem Limited., vide letter No. J-11011/467/2008-IA II (I) dated 4<sup>th</sup> October, 2010 for Expansion of Dyes &amp; Dye Intermediates unit (60 MTPM to 2355 MT/month and coal based power plant: 5 MW/month at Survey No 637, Nr. Kalamsar village, khambhat, Anand, Gujarat.</p> <p>PP has applied through online for extension of validity of Environmental Clearance on 23.12.2016 and informed that due to Financial problem we could not get the CCA and CTE for all products but Now we are in good financial condition and we want to apply for all other products mentioned in Environmental Clearance. But looking to the time period required for receipt of llie CCA and CTE amendment for all other products menlioned in EC we are requesting yoLl that extend the Envil'onmental Clearance (EC) lor further live years up to 9" October 2020.</p> <p>During presentation the committee noted that as per Ministry's Notification dated</p>



	<p>29.04.2015 validity of EC has been increased from 5 to 7 years and PP has applied within validity period of EC. The EC is valid till 3<sup>rd</sup> October, 2017. Committee also noted that Ministry had issued EC to M/s Cambay Chem Limited but PP has applied for extension of validity of Environmental Clearance in the name of M/s. Rohan dyes &amp; intermediates unit-I. PP need to apply for name change.</p> <p>After deliberation, the Committee recommended for extension of validity of exiting EC upto 03.10.2020.</p>																				
19.4.11	<p><b>Expansion of Sugar unit from 2500 to 5000 TCD and Cogeneration plant from 13 MW to 19.70 MW at village Kundal, Tal- Palus, Sangli by M/s Kranti Sahkari Sakhar Karkhana Ltd.-Correction in Environmental Clearance- [IA/MH/IND2/59457/2016, J 11011/222/2012 IA II (I)</b></p> <p>Ministry had issued Environmental Clearance to by M/s Kranti Sahkari Sakhar Karkhana Ltd., vide letter No. J-11011/222/2012-IA II (I) dated 22<sup>nd</sup> March, 2016 for Expansion of Sugar unit from 2500 to 5000 TCD and Cogeneration plant from 13 MW to 19.70 MW at village Kundal, Tal- Palus, Sangli.</p> <table border="1"> <thead> <tr> <th>S. No</th> <th>Description</th> <th>As Per EC</th> <th>Amendment required</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>On Page No. 1,2<sup>nd</sup> para, it is written that</td> <td>M/s Kranti Sahkari Sakhar Karkhana Ltd.</td> <td>M/s Krantiagrani Dr. G. D. Bapu Lad Sahkari Sakhar Karkhana Ltd.</td> </tr> <tr> <td>2</td> <td><b>On page No. 1, 3<sup>rd</sup> para</b> it is written that</td> <td>Spent wash generation will be 476 m3/day. Effluent from sugar unit and Cogeneration will be treated in the effluent treatment Plant (ETP). Treated effluent will be recycled/reused for cooling tower make up, boiler feed water, process water.</td> <td>Effluent from sugar unit and Cogeneration will be 626 m3/day and treated in the effluent treatment Plant (ETP). Treated effluent will be used on land for irrigation or gardening.</td> </tr> <tr> <td></td> <td><b>On page No. 3<sup>rd</sup>, 9<sup>th</sup> para</b> it is written that</td> <td>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.</td> <td>Fire fighting system shall be as per the norms and cover all areas where bagasse is produced, handled and stored. Provision of foam system for fire fighting shall be made to control fire from the bagasse storage area.</td> </tr> <tr> <td></td> <td><b>On page No. 3<sup>rd</sup>, 9<sup>th</sup> para</b> it is written that</td> <td>Risk Assessment should be carried to assess the fire and explosion risk due to storage of alcohol and report submitted to the</td> <td>Risk Assessment should be carried to assess the fire and explosion risk due to storage of bagasse and report submitted to the Ministry and</td> </tr> </tbody> </table>	S. No	Description	As Per EC	Amendment required	1	On Page No. 1,2 <sup>nd</sup> para, it is written that	M/s Kranti Sahkari Sakhar Karkhana Ltd.	M/s Krantiagrani Dr. G. D. Bapu Lad Sahkari Sakhar Karkhana Ltd.	2	<b>On page No. 1, 3<sup>rd</sup> para</b> it is written that	Spent wash generation will be 476 m3/day. Effluent from sugar unit and Cogeneration will be treated in the effluent treatment Plant (ETP). Treated effluent will be recycled/reused for cooling tower make up, boiler feed water, process water.	Effluent from sugar unit and Cogeneration will be 626 m3/day and treated in the effluent treatment Plant (ETP). Treated effluent will be used on land for irrigation or gardening.		<b>On page No. 3<sup>rd</sup>, 9<sup>th</sup> para</b> it is written that	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.	Fire fighting system shall be as per the norms and cover all areas where bagasse is produced, handled and stored. Provision of foam system for fire fighting shall be made to control fire from the bagasse storage area.		<b>On page No. 3<sup>rd</sup>, 9<sup>th</sup> para</b> it is written that	Risk Assessment should be carried to assess the fire and explosion risk due to storage of alcohol and report submitted to the	Risk Assessment should be carried to assess the fire and explosion risk due to storage of bagasse and report submitted to the Ministry and
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		Ministry and its Regional Office at Nagpur within six months.	its Regional Office at Nagpur within six months.
	<b>On page No. 5<sup>th</sup>, 9<sup>th</sup> para</b> it is written that	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated shall be submitted to the UP Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Bhopal Regional Offices of MoEF by e-mail.	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated shall be submitted to the Maharashtra Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Nagpur Regional Offices of MoEF by e-mail.

During presentation committee noted that PP has submitted the documents related to name change.

After deliberation, the Committee recommended for name change from M/s Kranti Sahkari Sakhar Karkhana Ltd., to M/s Krantiagrani Dr. G. D. Babu Lad Sahkari Sakhar Karkhana Ltd. and above said corrections / amendments in existing EC with the following additional conditions:

- i. Continuous online (24 x7) monitoring to be installed for flow measurement and measurement of pollutants within the treatment unit. Data to be uploaded on company's website and provided to the respective RO of MEF&CC and SPCB. As proposed, process area shall be monitored through WEB Camera.

19.4.12

**Active Pharmaceutical Ingredients (APIs) and intermediates manufacturing Unit by M/s. Prasananthee Laboratories Pvt. Ltd.- Validity Extension of EC [IA/TG/IND2/60822/2007; J-11011/523/2007-IA II(I)]**

Ministry had issued Environmental Clearance to by M/s. Prasananthee Laboratories Pvt. Ltd., vide letter No. J-11011/523/2007-IA II (I) dated 26<sup>th</sup> December, 2007 for Active Pharmaceutical Ingredients (APIs) and intermediates manufacturing Unit at 303, Varnika Arcade, B-88, Madhura Nagar, Andhra Pradesh.

During presentation PP informed that their case for validity Extension of EC had already considered in 3<sup>rd</sup> REAC meeting held during 3<sup>rd</sup>-5<sup>th</sup> December, 2012 wherein committee recommended the project proposal to extend the validity of environmental clearance for another 5 years.

	<p>After deliberation, the Committee has checked the minutes of 3<sup>rd</sup> REAC meeting held during 3<sup>rd</sup>-5<sup>th</sup> December, 2012 and recommended to the Ministry to process the recommendations of the EAC for extension of validity of existing EC upto 25<sup>th</sup> December, 2017.</p>																																							
19.4.13	<p><b>M/s. Welspun Syntex Ltd.- Transfer of the existing EC [IA/DN/IND2/60538/2009; J-11011/148/2009-IA-II(I)]</b></p> <p>The project proponent did not attend the meeting.</p>																																							
19.4.14	<p><b>Proposed 45 KLPD molasses based distillery cum ethanol plant at Village Kachirayapalayam, Taluka Chinnasalem, District Villupuram, Tamilnadu by M/s Kallakurichi-II Cooperative Sugar Mills Ltd.- Amendment in EC-[IA/TN/IND2/60456/2016; J-11011/202/2015-IAII(I)]</b></p> <p>Ministry had issued Environmental Clearance to by M/s Kallakurichi-II Cooperative Sugar Mills Ltd., vide letter No. J-11011/202/2015-IA II (I) dated 20<sup>th</sup> October, 2016 for Proposed 45 KLPD molasses based distillery cum ethanol plant at Village Kachirayapalayam, Taluka Chinnasalem, District Villupuram, Tamilnadu.</p> <p>During presentation PP informed that present proposal is for amendment in EC as mentioned below:</p> <p>Following are Project configurations as per <b>EC letter</b> issued:-</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Product</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ENA</td> <td>45 KLPD</td> </tr> <tr> <td>2</td> <td>Impure Spirit</td> <td>2.25 KLPD</td> </tr> <tr> <td colspan="3"><b>By Product</b></td> </tr> <tr> <td>1</td> <td>Bio compost</td> <td>41.93 MTD</td> </tr> <tr> <td>2</td> <td>Bio gas</td> <td>14040 M<sup>3</sup></td> </tr> </tbody> </table> <p>Following are Project configurations as per <b>Amendment sought</b>:-</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Product</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>1</td> <td><b>Fuel Ethanol ( 99.8% v/v) OR Extra Neutral Alcohol ( 96% v/v)/Rectified Spirit</b></td> <td>45 KLPD</td> </tr> <tr> <td>2</td> <td>Impure Spirit</td> <td>2.25 KLPD</td> </tr> <tr> <td colspan="3"><b>By Product</b></td> </tr> <tr> <td>1</td> <td>Bio compost</td> <td>41.93 MTD</td> </tr> <tr> <td>2</td> <td>Bio gas</td> <td>14040 M<sup>3</sup></td> </tr> <tr> <td>3</td> <td><b>Electric Power</b></td> <td><b>1MW Cogen Plant</b></td> </tr> </tbody> </table> <p>After confirming the above mentioned facts with the EIA report uploaded on the Ministry's website, the committee recommended for the above mentioned corrections/ amendments in the existing EC.</p>	S. No.	Product	Quantity	1	ENA	45 KLPD	2	Impure Spirit	2.25 KLPD	<b>By Product</b>			1	Bio compost	41.93 MTD	2	Bio gas	14040 M <sup>3</sup>	S. No.	Product	Quantity	1	<b>Fuel Ethanol ( 99.8% v/v) OR Extra Neutral Alcohol ( 96% v/v)/Rectified Spirit</b>	45 KLPD	2	Impure Spirit	2.25 KLPD	<b>By Product</b>			1	Bio compost	41.93 MTD	2	Bio gas	14040 M <sup>3</sup>	3	<b>Electric Power</b>	<b>1MW Cogen Plant</b>
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19.4.15	<b>Proposed Exploratory Drilling for Oil and Gas by M/s ONGC- reg validity Extension</b>																																							

	<p><b>of EC [IA/AS/IND/4741/2008; J-11011/396/2008-IA.II(I)]</b></p> <p>The project proponent did not attend the meeting.</p>
19.4.16	<p><b>Exploratory Drilling for Oil &amp; Gas at North Assam Shelf Block in Geleki-Namti Area by M/s ONGC- reg validity Extension of EC [IA/AS/IND/5924/2007; J-11011/623/2007-IA.II(I)]</b></p> <p>The project proponent did not attend the meeting.</p>
19.4.17	<p><b>Augmentation of Hydrocarbon Production (2 lakh to 3 lakh bopd) in RJ-ON-90/01 Block of M/s. Cairn India Ltd. located in districts Barmer and Jalore, Rajasthan-reg Amendment/ correction in EC [IA/RJ/IND2/31789/2014; J-11011/80/2013 – IA II (I)]</b></p> <p>PP informed that proposal was already considered and granted Amendment vide letter dated 26<sup>th</sup> April 2016.</p>
19.4.18	<p><b>7500 TCD Sugar Plant with 120 KLD Molasses and Grain Based Distillery Unit and 40 MW Co-generation Power Plant by M/s NSL KRISHNAVENI SUGARS LIMITED-reg Amendment in EC- [IA/AP/IND/21336/1910; J-11011/193/2007-IA.II(I)]</b></p> <p>Ministry had issued Environmental Clearance to by M/s NSL Krishnaveni Sugars Limited., vide letter No. J-11011/193/2007-IA II (I) dated 17<sup>th</sup> September, 2007 for 7500 TCD Sugar Plant with 120 KLD Molasses and Grain Based Distillery Unit and 40 MW Co-generation Power Plant at Ramkrishnapur, Pullareddy Kunta, Mahaboobnagar, Andhra Pradesh.</p> <p>During presentation PP informed that they have commissioned the plant and operating for 60 KLPD in place of 120 KLPD. The PP requested for the following amendments in the existing EC:</p> <ol style="list-style-type: none"> <li>1. Permission to operate molasses/grain based distillery for 330 days in a year</li> <li>2. Request for permission to change spent wash treatment technology with molasses as feed stock</li> </ol> <p>Now PP has proposed to treat the spent wash from the distillery as following:</p> <p><u>During Monsoon period:</u> The spent wash will be treated in Multiple Effect Evaporators followed by Incineration.</p> <p><u>During Non-Monsoon period:</u> The 480 KLD spent wash will be treated either with</p> <ol style="list-style-type: none"> <li>i. MEE followed by Incineration</li> <li>or</li> <li>ii. Biomethanisation followed concentration in MEE followed by Bio-composting using Filter cake from the sugar plant in the same premises</li> </ol>

	<p>PP also confirmed that at any given point of time the distillery will be operated either with molasses or grains. Hence there will not be any change in production capacity, water consumption, wastewater generation, pollution load, solid waste generation due to increase in number of operating days with grain as feed stock.</p> <p>During presentation committee noted that PP has submitted the grain availability in Mahaboobnagar district.</p> <p>After deliberation, the Committee recommended for above mentioned amendments in existing EC with the following additional conditions:</p> <ul style="list-style-type: none"> <li>i) Distillery shall operate for 330 days either with grain/ molasses.</li> <li>ii) Spent wash treatment method shall be as per amendment granted vide letter dated 27<sup>th</sup> March, 2012.</li> <li>iii) At any time composting shall not be allowed during monsoon period.</li> <li>iv) Company shall develop the annual spent wash treatment schedule</li> <li>v) 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 Dissolve Solids shall be monitored and report submitted to the Ministry's Regional Office and SPCB.</li> <li>vi) Biocomposting yard shall be established as per norms.</li> <li>vii) Company shall plant 1000 plants/ year for 5 year and shall submit their survival rate with 6 monthly report to Ministry's Regional Office and SPCB.</li> </ul>
19.4.19	<p><b>Bulk drug unit &amp; intermediate unit at village Toremavu, Taluk Nanjangud, Dist Mysore, Karnataka by M/s Arvee Synthesis Private Limited- Amendment in EC-[IA/KA/IND2/61525/2009; J-11011/1157/2007-IA-II(I)]</b></p> <p>Ministry had issued Environmental Clearance to by M/s Arvee Synthesis Private Limited., vide letter No. J-11011/1157/2007-IA II (I) dated 29<sup>th</sup> April, 2009 for Bulk drug unit &amp; intermediate unit at village Toremavu, Taluk Nanjangud, Dist Mysore, Karnataka.</p> <p>During presentation PP has submitted the copy of sale deed from M/s Arvee Synthesis Private Limited, copy of business transfer agreement and certified true copy of the board resolution passed by the share holders in board of directors meeting.</p> <p>Now PP is requesting to transfer EC from M/s Arvee Synthesis Private Limited to M/s Sequent Scientific Limited.</p> <p>After deliberation, the Committee recommended for transfer of EC from M/s Arvee Synthesis Private Limited to M/s Sequent Scientific Limited.</p>
19.4.20	<p><b>Proposed pesticide manufacturing unit (200 Kg/month) at Village Taloja, Taluka Panel, District Raigad, Maharashtra by M/s Pest Control (India) Pvt. Ltd.- Reconsideration of TOR- [ J-11011/95/2016-IA-II(I)]</b></p> <p>Proposal was considered in 8<sup>th</sup> EAC meeting held during 26-27<sup>th</sup> May, 2016,</p>

wherein the Committee noted that the company has been manufacturing total 18 products since 1996, out of which 17 products are covered under formulation type. However, one of the products namely methyl Bromide is also manufactured with the capacity of 4 MTPM and which is not formulation type. Therefore, Committee concluded that though the formulation does not attract EIA notification 1994 but manufacturing of Methyl Bromide covers the provisions of EIA Notification, 1994 and 2006 and requires prior Environmental Clearance. As Industry is manufacturing this product since its establishment therefore it is a case of violation and action shall be taken under the provisions of Environment (Protection) Act, 1986.

Ministry had issued show cause notice to M/s Pest Control (India) Pvt. Ltd., vide letter no. J-11011/95/2016-IA-II(I) dated 23<sup>rd</sup> September, 2016. PP has submitted vide letter dated 19.10.2016 the clarification w.r.t. show cause notice issued by the Ministry. Now the violation issue has been resolved in the Ministry.

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

- (i) M/s Pest Control (India) Pvt. Ltd. has proposed pesticide manufacturing unit (200 Kg/month) at Village Taloja, Taluka Panvel, District Raigad, Maharashtra.
  - (ii) All Pesticides based industry are listed at S.N. 5(b) under category 'A' and appraised by Expert Appraisal Committee (I).
  - (iii) It is reported that no national park, wildlife sanctuary, Biosphere reserve lies within 10 Km radius of project site. A Reserved forest is situated at a distance of 10.5 km and Panvel Creek & surrounding wetlands is situated at a distance of 1.8 km away from the project site.
  - (iv) Company was established in the year 1996 and permission was granted by Maharashtra Industrial Development Corporation vide letter no. Taloja38/39-1887/96 dated 03.12.1996 in favour of M/s Pest Control (India) Ltd.
  - (v) Existing plot area is 5500 m<sup>2</sup>, area earmarked for greenbelt development will be 939.2.
  - (vi) Total power requirement will be 100 KVA which will be sourced from MSEDCL. One DG sets of 82.5 KW capacity shall be installed as backup support in case of power failure. Furnace oil fired boiler of 500 kg/hr capacity will be used and 30 m stack height will be provided. Alkali scrubber will be provided to control gaseous emissions from manufacturing process.
  - (vii) Existing water requirement is 33.4 m<sup>3</sup>/day which will be sourced from MIDC. Domestic Waste water will be treated in the existing ETP. Septic tank overflow line is connected to aeration tank (proposed) of Effluent Treatment Plant.
  - (i) Total manpower requirement is 50.
- The proposed products and quantities for expansion are as below:

Sr. No.	Product	Existing (MT/month)	Proposed (MT/month)	Total (MT/month)
1	Bromadiolone Technical	(R & D)	0.2	0.2

	tOTAL	(R & D)	0.2	0.2
	<b>Formulations</b>			
1	Methyl bromide	4	-	-
2	Pyrethrum Lindane Formulations	15	-	-
3	Monocrotophos Formulations	15	-	-
4	DDVP Formulations	15	--	--
5	Cypermethrin Formulations	15	-	-
6	Bromadiolone Formulations	15	-	-
7	Fenvalerate Formulations	15	-	-
8	Deltamethrin+ Allethrin Formulations	15	-	-
9	Endosulfan Formulations	15	-	-
10	Fipronil Formulations	15	-	-
11	Propoxure Formulations	15	-	-
12	Etoxiide C	10.67	-	-
13	Ethylene Oxide- Pure*	3.63	-	3.63
14	Imidacloprid Formulations	15	-	-
15	Malathion Formulations	15	-	-
16	Chlorpyriphos Formulations	15	-	-
17	Pyrethrum- Malathion Formulation	15	-	--
18	Deltamethrin Formulations	15	-	-
	Total	243.5		3.63

\* The Formulation would be discontinued for all the other products except for ethylene Oxide-Pure(formulation) of capacity 3.63 MT/M.

The committee after detailed deliberations recommended the proposal for grant of following specific TOR along with generic TOR as available on the Ministry website for preparation of EIA-EMP report:

- (i) Public hearing is exempted as per para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006 for preparation of EIA/EMP Report, being site is located in the Notified industrial area.
- (ii) 10 m wide greenbelt around the periphery to be developed.
- (iii) Zero Liquid discharge plan to be submitted.
- (iv) Year wise CSR plan @ 2.5 % for 5 years to be submitted.
- (v) Industrial wastewater treatment scheme to be submitted.

It was recommended that 'TOR without Public Hearing prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted as per para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006 for preparation of EIA/EMP Report, being site is located in the Notified industrial area.

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**List of the Expert Members attended the Expert Appraisal Committee (EAC) Industry-2 meeting**

Sr. No.	Name and Address	
1.	<b><u>Dr. J. P. Gupta</u></b> A- 1/2 Panchsheel Enclave, New Delhi- 110070 E-mail: <a href="mailto:jpglobalconsultinggroup@gmail.com">jpglobalconsultinggroup@gmail.com</a>	Chairman
2.	<b><u>Dr. Ajay Gairola</u></b> 123 Thomsan Marg IIT, Roorkee campus E-mail: <a href="mailto:garryfce@iitr.ernet.in">garryfce@iitr.ernet.in</a>	Member
3.	<b><u>Prof. (Dr.) H.R. V Reddy</u></b> Director of Research, Karnataka Veterinary Animal & Fisheries Sciences University, College of Fisheries Campus, Kankanady, Mangalore- 575002 E-mail: <a href="mailto:hvrreddy@yahoo.co.in">hvrreddy@yahoo.co.in</a> , <a href="mailto:drkvafsu@gmail.com">drkvafsu@gmail.com</a>	Member
4.	<b><u>Ms. Saloni Goel</u></b> <u>B-701,CSI Towers, Vipin Khand, Gomti Nagar, Lucknow-226010</u> E-mail <a href="mailto:sgoel.eac@gmail.com">sgoel.eac@gmail.com</a>	Member
5.	<b><u>Shri Suhas RamchandraPharande</u></b> Ajinkyatara, Kala Nagar, Gangapur Road, Nashik- 422002 E-mail: <a href="mailto:s_pharande@yahoo.com">s_pharande@yahoo.com</a>	Member
6.	<b><u>Shri Sanjay Bist</u></b> Scientist- D Indian Meteorological Department, Mausam Bhawan, Lodhi Road, New Delhi- 110003 E-mail: <a href="mailto:sanjay.bist@imd.gov.in">sanjay.bist@imd.gov.in</a>	Member
7.	<b><u>Sh. Paritosh Kumar</u></b> Additional Director, Central Pollution Control Board, New Delhi  Email: <a href="mailto:45pkumar@gmail.com">45pkumar@gmail.com</a>	Member
8.	<b><u>Shri Yogendra Pal Singh</u></b> Room No. 236, Vayu Wing, 2 <sup>nd</sup> Floor, Ministry of Environment, Forest & Climate Change, Jor Bagh Road, New Delhi-110003 E-mail: <a href="mailto:yogendra78@nic.in">yogendra78@nic.in</a> Tele-fax : 01124685365	Member Secretary