

**MINUTES OF 24<sup>TH</sup> EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) MEETING HELD DURING 14<sup>TH</sup> TO 16<sup>TH</sup> JUNE 2017 IN BRAHMAPUTRA HALL, VAYU WING, THIRD FLOOR, MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE, INDIRA PARYAVARAN BHAWAN, ALIGANJ, JOARBAGH ROAD, NEW DELHI -110003.**

**24.1 Opening Remarks of the Chairman**

**24.2 Confirmation of the Minutes of the 23<sup>rd</sup> Meetings of the EAC (Industry-2) held during 3<sup>rd</sup> to 5<sup>th</sup> May 2017 at New Delhi.**

**24.2.1 Correction in the Minutes of EAC:**

**[A]. Proposed Revamp of Diesel Hydro De-Sulphurisation (DHDS) unit from 1.8 MMTPA to 2.34 MMTPA and BS-VI Fuel quality upgradation project (Revamp of DHDT unit, New FCC GDS unit and SRU Block for MS quality upgradation & increased BS-VI Diesel production) by M/s Chennai Petroleum Corporation Limited at Manali Village, Ambattur Taluk, Thiruvallur district, Tamil Nadu. [Proposal No: IA/TN/IND2/60940/2016, File No: J-11011/42/2016-IA II(I) and J-11011/190/2016-IA II(I)]-Correction in Minutes-reg**

The proposal for EC was considered in the 22<sup>nd</sup> Expert Appraisal Committee (Industry-2) meeting held during 17<sup>th</sup> -18<sup>th</sup> April 2017:

The PP has requested for correction in the Minutes of 22<sup>nd</sup> Expert Appraisal Committee (Industry-2) meeting as per the details below:

<b>S.No</b>	<b>As existing in MoM presently</b>	<b>Correction required as</b>	<b>Remarks</b>																																				
1	<p>The proposed products and capacities are <b>(Page 49, Section iv)</b></p> <table border="1"> <thead> <tr> <th>Units</th> <th>Existing</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>DHDS</td> <td>1.8 MMTPA</td> <td>2.34 MMTPA</td> </tr> <tr> <td>DHDT</td> <td>1.8 MMTPA</td> <td>2.4 MMTPA</td> </tr> <tr> <td>VGO treating in DHDS</td> <td>NIL</td> <td>0.5 MMTPA</td> </tr> <tr> <td>New FCC GDS Unit</td> <td>NIL</td> <td>0.6 MMTPA</td> </tr> <tr> <td>New SRU</td> <td>NIL</td> <td><b>200 D</b></td> </tr> </tbody> </table>	Units	Existing	Proposed	DHDS	1.8 MMTPA	2.34 MMTPA	DHDT	1.8 MMTPA	2.4 MMTPA	VGO treating in DHDS	NIL	0.5 MMTPA	New FCC GDS Unit	NIL	0.6 MMTPA	New SRU	NIL	<b>200 D</b>	<p>The proposed products and capacities are</p> <table border="1"> <thead> <tr> <th>Units</th> <th>Existing</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>DHDS</td> <td>1.8 MMTPA</td> <td>2.34 MMTPA</td> </tr> <tr> <td>DHDT</td> <td>1.8 MMTPA</td> <td>2.4 MMTPA</td> </tr> <tr> <td>VGO treating in DHDS</td> <td>NIL</td> <td>0.5 MMTPA</td> </tr> <tr> <td>New FCC GDS Unit</td> <td>NIL</td> <td>0.6 MMTPA</td> </tr> <tr> <td>New SRU</td> <td>NIL</td> <td><b>200 TPD</b></td> </tr> </tbody> </table>	Units	Existing	Proposed	DHDS	1.8 MMTPA	2.34 MMTPA	DHDT	1.8 MMTPA	2.4 MMTPA	VGO treating in DHDS	NIL	0.5 MMTPA	New FCC GDS Unit	NIL	0.6 MMTPA	New SRU	NIL	<b>200 TPD</b>	Page 13, EIA Report)
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2	<p>The project will be executed in existing land of the refinery. The total quantity of 12 MGD is required for the Post BS IV and BS VI unit, <b>additional water</b></p>	<p>The project will be executed in existing land of the refinery. The total quantity of 12 MGD is required for the Post BS IV and BS VI unit, <b>additional fresh</b></p>																																					

	<p><b>requirement is not envisaged</b>, as the utilities required for the Revamp condition are met from the available infrastructure. <b>(Page 49, Section v)</b></p>	<p><b>water requirement is not envisaged</b>, as the utilities required for the Revamp condition are met from the available infrastructure.</p>	
3	<p>PP has submitted the SO2 emission details measured from the existing unit and the details of additional SO2 emission from the proposed unit. Total SO2 emissions from the 48 locations studied is 17.41 T/Day and the proposed is <b>11 T/day</b>. <b>(Page 50, Section ii)</b></p>	<p>PP has submitted the SO2 emission details measured from the existing unit and the details of additional SO2 emission from the proposed unit. Total SO2 emissions from the 48 locations studied is 17.41 T/Day and the proposed is <b>less than 17.41 T/day</b>.</p>	<p>Page 24, EC Queries, Submitted on March 2017</p>
4	<p>PP has submitted the CSR (Corporate Social Responsibility) plan at 5% of the cost of project <b>(Page 50, Section vii)</b></p>	<p>PP has submitted <b>ESC (Enterprises Social Commitment)</b> plan for 18.35 Crores which will be spread over a period of 5 years.</p>	<p>Suggested by EAC members during 22<sup>nd</sup> EAC meeting on 18<sup>th</sup> April 2017 and Undertaking submitted by M/s CPCL to MoEF&amp;CC</p> <p>Mentioned in Page 238, EC Queries, Submitted on April 2017</p>
5	<p>As proposed Enterprises Social Commitment (ESC) shall be undertaken at the rate of 5% of the total cost of the project. <b>(Page 50, Section 6)</b></p>	<p>As proposed Enterprises Social Commitment (ESC) shall be undertaken at the rate of 5% of Rs. 367 Crores (i.e) 18.35 Crores.</p>	<p>It is mentioned in the 22<sup>nd</sup> EAC meeting on 18<sup>th</sup> April 2017 Mentioned in Page 238, EC Queries, Submitted on April 2017</p>

**EAC has deliberated on the proposal. EAC after deliberation has recommended the proposal for correction in the minutes of the EAC meeting as proposed by the PP.**

**[B]. Modernization of Bulk Drug Unit at Sy No. 52, 134, 138, 139, 140, 159, 160 to 168, 168/1, 183 & 184 of Chippada village and 1 to 4, 6, 45 & 46 and additional survey number 107, 158, 168, to 172 of Chippada and Annavaram Villages, Annavaram Taluka, Bheemunipatnam Mandal, Visakhapatnam District, Andhra Pradesh by M/s Divi's Laboratories Limited (Unit-2) [IA/AP/IND2/58641/2016, J-11011/316/2016-IA.II(I)]-Correction in Minutes-reg**

The proposal for EC was considered in the 23<sup>rd</sup> Expert Appraisal Committee (Industry-2) meeting held during 3-5<sup>th</sup> May, 2017.

The PP has requested for correction in the Minutes of 23<sup>rd</sup> Expert Appraisal Committee (Industry-2) meeting as per the details below:

S.No.	Details in the Minutes	Correction required as	Remarks
1	"The Sea Coast is at a distance of 10-20m from the project Site". <b>page no-39, point no. ix</b>	The Sea Coast is at a distance <b>of 1 km</b> from the project Site	FORM 1/EIA
2	The proposed project is for modernization/expansion of the existing unit by adding 108.59 Acres (43.94 Ha) of land to existing 387 Acres (156.6 ha) land for decongestion of the production area, ETP area, Storage area, etc. by shifting non production activities to new area. Total area after modernization is 495.59 acres (200.54 ha).  <b>(Para No. (xxi) )</b>	<b>The modernization of the project will be carried out in two phases.</b>  The proposed project is for modernization/expansion of the existing unit by adding 108.59 Acres (43.94 Ha) of land to existing 387 Acres (156.6 ha) land for decongestion of the production area, ETP area, Storage area, etc. by shifting non production activities to new area. <b>In Phase-1, works include construction of Production blocks &amp; ancillary works, Production related utilities and others in Phase-2.</b> Total area after modernization is 495.59 acres (200.54 ha).	EIA-Ch.No. 2 Page 2.7
3	The Non production facility are envisaged in extended areas are Modern ETP on elevated structure, 24-ton Coal fired boiler, coal and ash	<b>In Phase-1,</b> the Non production facility are envisaged in extended areas are Modern ETP on	EIA-Ch.No. 2 Page 2.7

	<p>storage, Waste Yard &amp; non-moving ware house (Engg&amp; Others), Fresh Water Reservoir, Treated Water disposal, all utilities for above like Air system for ETP, Water Treatment Plant, transformer, Fire Fighting system for hazardous storage, Coal sheds associated facilities etc with a Green Belt of around 30 acres</p> <p><b>(Para No. (xxii) )</b></p>	<p>elevated structure, 24-ton Coal fired boiler, coal and ash storage, Waste Yard &amp; non-moving ware house (Engg&amp; Others), Fresh Water Reservoir, Treated Water disposal, all utilities for above like Air system for ETP, Water Treatment Plant, transformer, Fire Fighting system for hazardous storage, Coal sheds associated facilities etc. <b>In Phase-2, production facilities including construction of Production blocks &amp; ancillary works, production related utilities and others</b> with a Green Belt of around 30 acres will be made.</p>	
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**EAC has deliberated on the proposal. EAC after deliberation has recommended the proposal for correction in the minutes of the EAC meeting, as proposed by the PP.**

**[C]. Expansion of Sugar Unit (from 3500 TCD to 4900 TCD), Co-generation Power Plant up to 30 MW and Establishment of new 45 KLPD Molasses based Distillery at Tehsil Solapur South, District Solapur, Maharashtra by M/s Jaihind Sugar Pvt. Ltd. [F.No. J-11011/57/2014-IA.II (I) - reg.**

The Member Secretary informed the EAC that the Ministry vide letter of even no. dated 28<sup>th</sup> March, 2016, issued Environmental Clearance to the above mentioned project. Shri Mane Deshmukh G.B, Managing Director M/s Jaihind Sugar Pvt. Ltd. vide letter no. JHSPL/12/2017-18 dated 01.06.2017 requested this Ministry to make following corrections in the Environmental Clearance dated 28<sup>th</sup> March, 2016:

1. In para 2 of Environmental Clearance letter by typographical error the capacity expansion of Co-generation Power Plant is mentioned from 15.5 MW to 30 MW'; whereas, in actual the proposed expansion in Co-generation Power Plant is from 14.5 MW to 30 MW.
2. In General Condition no. xvi it is mentioned that the environment statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated shall be submitted to the U.P. Pollution Control Board; whereas, as per rule Environmenty statement need to be submitted to the concerned State Pollution Control Board i.e; Maharashtra Pollution Control Board.

The EAC after examining the request made by the proponent proponent and information mentioned in the EIA/EMP report accepted the corrections as proposed by the project proponent and recommended to the Ministry to issue necessary clarification/ corrigendum in this regard.

### 24.3 (Environmental Clearance)

24.3.1	<p><b>Ammonia-Urea Fertilizer Project ( Ammonia-2200 MTPD; Urea 3850 MTPD) at Tehsil Gorakhpur, District Gorakhpur, Uttar Pradesh by M/s Fertilizer Corporation of India Limited (FCIL) – reg EC [IA/UP/IND2/54269/2016, J-11011/166/2016- IA II(I)]</b></p> <p>The Project Proponent and the NABET accredited Consultant M/s. Projects &amp; Development India Ltd., made 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 Ammonia-Urea Fertilizer Project ( Ammonia-2200 MTPD; Urea 3850 MTPD) at Tehsil Gorakhpur, District Gorakhpur, Uttar Pradesh by M/s Fertilizer Corporation of India Limited (FCIL).</li> <li>ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 10<sup>th</sup> EAC meeting held on 11<sup>th</sup> July, 2016 and recommended Terms of References( TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/166/2016- IA II(I) dated 12.07.2016.</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. Existing land area 600 acres shall be used, no additional land will be used / acquired for proposed project. Industry will develop Greenbelt in an area of 33 % i.e., 130 acres out of 350 acres of area of the project.</li> <li>v. The estimated project cost is Rs. 5825.27 Crore environmental pollution control measures is Rs. 200 crore and the Recurring cost (operation and maintenance) will be about Rs. 5 crore per annum.</li> <li>vi. Total Employment will be 460 persons as direct and 2000 persons indirect during construction &amp; operation.</li> <li>vii. It is reported that no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Bangin PF is situated at a distance of 2.5 km and Hitilkonia RF is situated at a distance of 8.5 km from the project site.Rohin River is flowing at a distance of 3.2 km and Rapti River is flowing at a distance of 8 km from the project site respectively.</li> <li>viii. Ambient air quality monitoring was carried out at 8 locations during October, 2016 to December, 2016 and submitted base line data indicates that ranges of concentrations of PM10 (77 to 164 µg/m3), PM2.5 (38 to 88 µg/m3 ), SO2 (7.9 to 14.7 µg/m3) and NO2 (15.3 to 38.9 µg/m3) respectively. The resultant concentrations are within the National Ambient Air Quality Standards(NAAQS) except PM 10.</li> <li>ix. Total water requirement at present is 26400 m3/day of which pre-treated water</li> </ol>
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requirement of 20664m<sup>3</sup>/day @ 861 m<sup>3</sup>/Hr (5.36 m<sup>3</sup>/T of Urea) for the subject project and will be met from Chilwa Taal.

- x. Treated effluent of 150 m<sup>3</sup>/hr shall be treated through proposed Effluent Treatment Plant. Plant will be based on zero liquid discharge system.
- xi. Power requirement will be 23 MW and will be met from GTG (2x15 MW ISO rating). Proposed unit shall have 1(One) DG sets of 2000 KVA capacity and are used as standby during power failure. Stack (height- 8.5 m ) will be provided as per CPCB norms to the proposed DG sets of 2000 KVA which will be used as standby during power failure .
- xii. One no. of service boiler of capacity 85 TPH shall be installed for meeting the steam requirement at startup during operation service boiler will not operate. Natural gas will be used as boiler fuel.
- xiii. Urea shall be produced in the form of neem coated prilled Urea. Total requirement of neem oil has been envisaged to be 56.16 Kg/hr.
- xiv. Emission from GTG shall be reduced by installation of ultra low NOx burner and conc. of <1 µg/m<sup>3</sup> shall be added to GLC.
- xv. Spent catalyst shall be disposed off through registered recyclers. The used resin, active carbon and sand from water treatment plant (pretreatment, DM & Condensate polishing unit) will be disposed off as per the standard practices (or land-fill procedure). Bio-degradable waste generated from office, canteen & township shall be sent to composting yard for its use as manure in green development & maintenance.
- xvi. Public Hearing for the proposed project has been conducted by the U P Pollution Control Board on 24.04.2017.
- xvii. Following are the details of proposed products:

Details of the proposed production capacity

S. No.	Product	Capacity (MTPD)
1	Urea	2,200
2	Ammonia	3,850

**xviii. Following are the details of storage facilities:**

S. No.	Facility	Capacity
1	Ammonia Storage (Atm.)	(2x5000) MT
2	Silo	40000 MT
3	Empty Bag Storage	2.0 Million
4	Bagged Storage	1000 MT

5	Bagging Plant	(6+1) Slats of 60 MTPH each
<p>The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding restart the closed school and hospital, polluted water discharge and fly ash emission from the proposed plant, open new hospital and school, employment, emission of dangerous gases from the plant, steps are proposed for conservation of water, compensation for acquired land, control of dust from Urea Prill Tower, discharge from, health and pollution threat in surrounding areas and skill development programmes. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report. The EAC noted that base line data has been collected between October, 2016 to December, 2016. The EAC accepts the base line data submitted by the PP. The EAC also noted that PP did not present the GLC data on enquired the consultant replied that in the proposed project natural gas will be used and no significant emissions will be released except emissions from DG Set. The EAC under rated the performance of the consultant (M/s Projects &amp; Development India Ltd.) for not considering technical modeling data in the EIA/ EMP report.</p> <p>After detailed deliberations, the Committee based on the documents furnished and presentation made recommended the project for environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:</p> <ol style="list-style-type: none"> <li>(i) Adequate stack height shall be provided to DG sets.</li> <li>(ii) Scrubbers shall be provided to all emissions sources.</li> <li>(iii) Fresh water requirement shall not exceed 5.36 m<sup>3</sup>/ ton of Urea production. Fresh water shall be sourced only from Chilwa Tal.</li> <li>(iv) Plantation activity shall be carried out around the Chilwa Tal.</li> <li>(v) As proposed, no effluent from plant shall be discharged outside the plant premises and Zero discharge shall be adopted. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.</li> <li>(vi) Industry shall develop Greenbelt with 10 m width along the plant periphery with three layers of perennial native plant species. 33% of the total project cover area i.e., 130 acres out of 350 acres of area of the project, shall be developed as green area with plantation of native perennial trees.</li> <li>(vii) A plan shall be prepared and implemented for the conservation of Chilwa Taal giving special emphasis on protection of conservation of its natural recharge channels.</li> <li>(viii) All the commitments made during the Public Hearing/Public Consultation meeting held on 20.04.2017 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.</li> <li>(ix) At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Lucknow. Implementation of such program shall be ensured accordingly in a time bound manner within 5 years. The ESC plan will include following activities: <ol style="list-style-type: none"> <li>a. Setting up of a Multi Specialty Hospital with free of cost treatment for residents of local villages located within 5 km radius of the plant.</li> <li>b. Upgradation of existing school with modern education facilities.</li> <li>c. Planting of 5000 trees/year till 5 years in nearby villages in consultation with the local/forest dept. Survival rate of plants shall be reported to RO, MoEF&amp;CC in 6 monthly compliance report. Conservation Plan for shall be continue with.</li> <li>d. Safe drinking water facility with RO plant in villeges located with 3 km radius of the plant with maintenance cost.</li> </ol> </li> </ol>		

	<ul style="list-style-type: none"> <li>(x) A regular environment manager having post graduate qualification in environmental sciences/ environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.</li> <li>(xi) Continuous online (24x7) 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>(xii) 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. The Ammonis storage will be limited to 2 days.</li> <li>(xiii) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</li> <li>(xiv) Storage of hazardous raw material shall not exceed more than 7 days.</li> <li>(xv) Urea dust shall be controlled by prescribed standard technique.</li> </ul>
24.3.2	<p><b>Ammonia-Urea Fertilizer Manufacturing Complex ( Ammonia-2200 MTPD; Urea 3850 MTPD) at FCIL Sindri at Teshsil Jharia-Cum-Jorapokhar-Cum Sindri, District Dhanbad, Jharkhand by M/s Fertilizer Corporation of India Limited (FCIL) – reg EC [IA/JH/IND2/54024/2016, J-11011/154/2016- IA II(I)].</b></p> <p>The Project Proponent and the NABET accredited Consultant M/s Projects &amp; Development India Ltd., made 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 Ammonia-Urea Fertilizer Manufacturing Complex ( Ammonia-2200 MTPD; Urea 3850 MTPD) at FCIL Sindri at Teshsil Jharia-Cum-Jorapokhar-Cum Sindri, District Dhanbad, Jharkhand by M/s Fertilizer Corporation of India Limited (FCIL).</li> <li>ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 10<sup>th</sup> EAC meeting held on 11<sup>th</sup> July, 2016 and recommended Terms of References( TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/154/2016- IA II(I) dated 12.07.2016.</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. Existing land area 750 acres shall be used, no additional land will be used / acquired for proposed project. Industry will develop Green-belt in an area of 33 % i.e., 150 acres out of 400 acres of area of the project.</li> <li>v. The estimated project cost is Rs. 5825.27 Crore environmental pollution control measures is Rs. 200 crore and the Recurring cost (operation and maintenance) will be about Rs. 5 crore per annum.</li> <li>vi. Total Employment will be 400 persons as direct and 1500 persons indirect during construction &amp; operation.</li> <li>vii. It is reported that no national parks, wildlife sanctuaries, Biosphere Reserves, Protected forest/ Reserved forest, Tiger/Elephant Reserves, and Wildlife Corridors etc. lies within 10 km distance. Damodar river is flowing at a distance of 2.0 Km.</li> <li>viii. Ambient air quality monitoring was carried out at 08 locations during October, 2016 to December, 2017 and submitted base line data indicates that ranges of concentrations of PM10 (73 to 104µg/m3), PM2.5 (32 to 59 µg/m3 ), SO2 (15.9 to 25.6 µg/m3) and NO2 (13.6 to 23.1 µg/m3) respectively. The resultant concentrations are within the National Ambient Air Quality Standards(NAAQS) except PM<sub>10</sub>.</li> <li>ix. Total water requirement at present is 26400 m3/day of which pre-treated water</li> </ul>



requirement of 20664m<sup>3</sup>/day @ 861 m<sup>3</sup>/Hr (5.36 m<sup>3</sup>/Ton of Urea) for the subject project and will be met from Damodar River.

- x. About 87 m<sup>3</sup> / hr waste water from plant will be generated. The effluent generated in Urea and Ammonia plants will be treated in the in-plant ETP. Zero Liquid Discharge (ZLD) concepts have been conceived for proposed fertilizer plant. The effluent generation from different plants shall be properly treated and reused / recycled.
- xi. Power requirement will be 23 MW and will be met from GTG (2x15 MW ISO rating). Proposed unit shall have 1(One) DG sets of 2000 KVA capacity and are used as standby during power failure. Stack of 8.5 m will be provided as per CPCB norms to the proposed DG sets of 2000 KVA, which will be used as standby during power failure.
- xii. NG will be available for the proposed project through GAIL's Jagdishpur Phulpur-Haldia pipeline.
- xiii. Urea shall be produced in the form of neem coated prilled Urea. Total requirement of neem oil has been envisaged to be 56.16 Kg/hr.
- xiv. NO<sub>x</sub> Emission shall be reduced by installation of low NO<sub>x</sub> burner and conc. Of <1 µg/m<sup>3</sup> of have been calculated for incremental GLC.
- xv. Spent catalyst shall be disposed off through registered recyclers. The used resin, active carbon and sand from water treatment plant (pretreatment, DM & Condensate polishing unit) will be disposed off as per the standard practices (or land-fill procedure). Bio-degradable waste generated from office, canteen & township shall be sent to composting yard for its use as manure in green development & maintenance.
- xvi. Public Hearing for the proposed project has been conducted by the Jharkhand State Pollution Control Board on 8.04.2017.
- xvii. Following are the details of proposed products:

Sl.No.	Products	Quantity(TPA)
1.	Ammonia (Intermediate product)	2200 MTPD / 726000 TPA
2.	Urea (Neem Coated)	3850 MTPD / 1270500 TPA

**xviii. Following are the details of storage facilities:**

S. No.	Facility	Capacity
1	Ammonia Storage (Atm.)	(2x5000) MT
2	Silo	40000 MT
3	Empty Bag Storage	2.0 Million
4	Bagged Storage	1000 MT
5	Bagging Plant	(6+1) Slats of 60 MTPH each

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding environmental risks, Rehabilitation, employment, emission standards, house to homeless, Medical facility, air & water pollution and irrigation facility. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report. The EAC noted that base line data has been collected between October, 2016 to December, 2016. The EAC accepts the base line data submitted by the PP. The EAC also noted that PP did not present the GLC data. On enquiry the consultant replied that in the proposed project natural gas will be used and no significant emissions will be released except emissions from DG Set. The EAC under rated the performance of the consultant (M/s Projects & Development India Ltd.) for not collecting the technical modeling data during EIA study.

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

- (i) Adequate stack height shall be provided to DG sets.
- (ii) Scrubbers shall be provided to all emissions sources.
- (iii) Fresh water requirement shall not exceed 5.36 m<sup>3</sup>/ ton of Urea production. Fresh water shall be sourced only from Damodar River.
- (iv) As proposed, no effluent from plant shall be discharged outside the plant premises and Zero discharge shall be adopted. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- (v) Industry shall develop Greenbelt with 10 m width along the plant periphery with three layers of perennial native plant species. 33% of the total project cover area i.e., 150 acres out of 400 acres of area of the project, shall be developed as green area with plantation of native perennial trees.
- (vi) All the commitments made during the Public Hearing/Public Consultation meeting held on 8.04.2017 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.
- (vii) At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Ranchi. Implementation of such program shall be ensured accordingly in a time bound manner within 5 years. The ESC plan will include following activities:
  - a. Setting up of a Multi Specialty Hospital with free of cost treatment for residents of local villages located within 5 km radius of the plant.
  - b. Upgradation of existing school with modern education facilities.
  - c. Planting of 5000 trees/year till 5 years in nearby villages in consultation with the local/forest dept. Survival rate of plants shall be reported to RO, MoEF&CC in 6 monthly compliance report. Conservation Plan for shall be continue with.
  - d. Safe drinking water facility with RO plant in villeges located with 3 km radius of the plant with maintenance cost.
- (viii) 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.
- (ix) Continuous online (24 x7) monitoring to be installed for flow measurement and

	<p>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.</p> <p>(x) 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>(xi) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</p> <p>(xii) Storage of hazardous raw material shall not exceed more than 7 days.</p> <p>(xiii) Urea dust shall be controlled by latest dust collection system/technique.</p>
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### **Reconsideration of EC**

24.3.3	<p><b>Setting-up a Grass Root Rajasthan Refinery cum Petrochemical complex Project (RRP) of 9 MMTPA at Pachpadra Tehsil, District Barmer, Rajasthan by M/s. Hindustan Petroleum Corporation Limited (HPCL)-reg reconsideration of EC [IA/RJ/IND/24706/2013, J-11011/87/2013-IA-II(I)].</b></p> <p>The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 34<sup>th</sup> meeting held during 17-19th February, 2015. The EAC decided to defer the proposal for want of additional information on following points:</p> <ol style="list-style-type: none"> <li>i. Details of project affected people. Action plan for rehabilitation and the livelihood for the affected people.</li> <li>ii. Hydro-Carbon levels to be monitored and checked.</li> <li>iii. Action plan to be submitted to achieve Zero effluent discharge. Characteristics of treated effluent including TDS level from RO rejects. Various stream to be defined for its reuse/recycle.</li> <li>iv. Action Plan for conservation of fresh water.</li> <li>v. Revised sulphur balance chart indicating sulphur in crude, products, emission and recovered sulphur.</li> <li>vi. Stack wise fuel to be used.</li> <li>vii. Traffic management plan</li> <li>viii. Unit wise details to achieve new standards for refinery.</li> <li>ix. Details about Species of tree to be planted and their long term survival.</li> <li>x. Action plan for Health and safety of the workers.</li> <li>xi. Process expert from project should attend the meeting for discussion.</li> <li>xii. Point wise reply /response of PP on the issues raised during public hearing</li> </ol> <p>In view of response received from the PP the proposal was again placed before the EAC in its 24<sup>th</sup> meeting held during 14<sup>th</sup> to 16<sup>th</sup> June, 2017; wherein the Project Proponent informed that:</p> <ol style="list-style-type: none"> <li>1. while the process of obtaining environmental clearance was in progress, Government of Rajasthan (GOR) who are also the equity partner in the project desired to re-review the project and the activities related to the project were required to be put on hold. Hence,</li> </ol>
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the information desired by EAC could not be furnished till the issues were sorted out with Govt. of Rajasthan (GOR). After a series of meeting and discussions between HPCL, Govt. of Rajasthan, and Ministry of Petroleum and Natural Gas (MOPNG), Government of India (GOI) at various levels on issues related to Refinery, common understanding was reached between HPCL, Govt. of Rajasthan and MoPNG, GoI in March, 2017.

2. In view of change in Project parameters like Rajasthan crude availability, changes in economic parameters, up gradation in fuels quality to BS-VI specification etc, as compared to earlier DFR, it was desired to review the configuration and update the findings. Accordingly, DFR was revalidated by Engineers India Ltd. (EIL) in March, 2017 with revised configuration, revised crude mix and change in other project parameters like prices, exchange rate etc.
3. Basis above, HPCL, and GOR now wish to go ahead with the project with the revised configuration and crude mix. A revised MOU to that effect has been signed between HPCL and GOR on April 18, 2017.
4. The major emission and effluent details as per revised DFR in comparison to earlier DFR is provided as Annexure-III and same are in within the same limit as per our previous application.
5. The project has importance for the overall economic development of State of Rajasthan and the country as a whole. An early environment clearance for the project will be great help in expediting the project.
6. It is proposed to undertake EIA/RRA study based on revised DFR inputs immediately and risk mitigation measures shall be included in the revised EIA/RRA report. The same will be furnished to MOEFCC at the earliest.
7. In view of the aforementioned, the PP requested your kind consideration for the following;
  - Waiver from reapplication for TOR.
  - Waiver for repeating baseline data collection and public hearing process.
  - Consideration of earlier application for Environment Clearance of the project based on the replies to the queries raised by EAC and the revised EIA/RRA which is being taken up on immediate basis and will be submitted in next 3 months.
  - Permissions to start the construction of boundary wall, site office, construction water pipeline and construction power facilities at the project site in the meantime.
8. A comparison of financials parameters of Revised DFR (Year 2017) and Previous DFR (Year 2013) and is given below:

<b>Case</b>	<b>Revised DFR (2017) (Case T1D-D-C)</b>	<b>Previous DFR (2013) Case 4B</b>
<b>Crude Mix</b>	<b>Year 1-8:</b> 1.5 MMTPA Rajasthan Crude + 7.5 MMTPA Arab Mix crude	4.5 MMTPA Rajasthan Crude + 4.5 MMTPA Arab Mix crude
	<b>Year 9 onwards:</b> 9.0 MMTPA Arab Mix crude	

<b>Major Configuration</b>	VGOHDT + FCC + Coker with Coke to power generation	ARDS + RFCC + LDPE + PP
<b>Total Cost ( crore)</b>	<b>43, 129</b>	<b>37, 229</b>

The EAC noted the facts provided by the project Proponent and observed that the EIA/EMP report for pre-revised proposal was submitted within the validity of TOR recommended by this Committee. Public hearing has been conducted as per provisions of the EIA Notification, 2006. No change is proposed in project site and capacity of the proposed plant. The changes are proposed only in the crude mix quality.

**After detailed deliberation the Committee suggested the PP to submit the revised EIA/EMP report characterising the environmental risk due to proposed change in crude mix. The EAC was also of the view that EIA Notification, 2006 permits for fencing of project cover area but no other construction is allowed before obtaining of prior environmental clearance.**

24.3.4

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

The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 21<sup>st</sup> meeting held during 27<sup>th</sup>-29<sup>th</sup> March, 2017 and the Committee sought following additional information:

- i. Revised layout plan to be submitted.
- ii. Latest order issued from Hon'ble High Court w.r.t. Accreditation of environmental Consultant to be submitted.

Now PP has submitted the revised layout plan and latest order issued from Hon'ble Highcourt w.r.t. Accreditation of environmental Consultant. During presentation PP informed that being already established factory, it is difficult to maintain adequate green belt in existing premises. For this purpose, PP wants to merge two adjoining own plots i.e. A-1/322/12 & 24. PP confirms that this new plot will be used only for green belt development and storage facility (Warehouse). Due to merger of new plots, the total plot area will be 20,568 m<sup>2</sup>. The EAC accept the request made by the PP regarding addition of land and suggested that no processing shall be done in additional land.

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

- (i) Fresh water requirement shall not exceed 546.8 m<sup>3</sup>/day from GIDC supply and prior permission should be obtained from the concerned authority.
- (ii) As proposed, no effluent from plant shall be discharged outside the plant premises and Zero discharge shall be adopted.
- (iii) Adequate stack height shall be provided to DG sets.
- (iv) Scrubbers shall be provided to all emissions sources.

	<ul style="list-style-type: none"> <li>(v) 10 m wide green belt consisting three layers of native perennial plant species around periphery of the plant shall be provided. Industry shall also develop 33 % of area of the project as green area.</li> <li>(vi) 5000 trees shall be planted in 5 years in 3 nearby villages with the consultation of the villagers. Survival rate of plants shall be reported to RO, MoEF&amp;CC in 6 monthly compliance report.</li> <li>(vii) 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. The following activities may be undertaken under ESC plan: <ul style="list-style-type: none"> <li>a. Safe drinking water facility with RO plant in identified 3 nearby villages. The maintenance cost of RO plant will be borne by the project proponent.</li> <li>b. Solar/LED lights shall be provided on the streets of the identified villages.</li> </ul> </li> <li>(viii) A regular environment manager having post graduate qualification in environmental sciences/ environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.</li> <li>(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&amp;CC, CPCB and SPCB.</li> <li>(x) 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>(xi) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</li> <li>(xii) All safety norms shall be followed in warehouse facility.</li> <li>(xiii) The by-products which fall under the purview of the Hazardous Waste Rules, be handled as per the provisions of the said Rules and necessary permissions shall be obtained under the said rules.</li> </ul>
24.3.5	<p><b>Expansion of Intermediate Bulk Drug Manufacturing Unit of M/s Emmennar Pharma Pvt. Ltd. at Survey Nos.334 &amp; 335, Turkhal Khanpur Village Hatnoora Mandal Medak District Andhra Pradesh-reconsideration of EC Reg. [IA/TG/IND2/53477/2013, J-11011/23/2014-IA.II(I)]</b></p> <p>The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 21<sup>st</sup> meeting held during 27<sup>th</sup>-29<sup>th</sup> March, 2017, wherein the EAC has noted that the issues came out during the public hearing are serious and desired to have a field visit by the EAC sub-committee. The EAC also desired that the PP shall comply with the direction issued by SPCB in CFO/CTO to the existing unit and submit a report in this regard.</p>

As per recommendations of the Expert Appraisal Committee (Industry-2) in its 21<sup>st</sup> meeting held during 27<sup>th</sup>-29<sup>th</sup> March, 2017, Expert member Prof. Y V Rami Reddy was to visit the project site to assess the serious issues came out during the public hearing.

Site visit was conducted by the Prof. Y V Rami Reddy on 2<sup>nd</sup> May, 2017. During site visit expert member has verified the issues raised in the public hearing of the above said industry submitted for Environmental Clearance. After visiting the Site and consulting the employees (technical, skilled, unskilled and other workers) I submit that,

1. The industry is having ZLD (Zero Liquid Discharge) and no liquid is going outside the industry.
2. Sufficient scrubbers are arranged to avoid the smell and no significance smell coming neither inside nor outside the industry.
3. The inorganic salts from the ETP of the industry are sending regularly to the hazardous waste management system, Ramkeey, Hyderabad.
4. The organic residue is sending regularly to the cement industries for incineration.
5. Proper measures have taken to maintain Effluent Treatment Plant.(ETP)
6. Sufficient green belt is there in the industry.
7. The industry has provided RO system in a single village and needed to provide RO systems in villages.
8. The industry should maintain rain water harvesting pits to improve the ground water level.
9. Local employees are there in the industry however more preference should be given to the local people while expansion.

During presentation the EAC noted that site visit was conducted by Prof. Y V Rami Reddy (Expert member) on 2<sup>nd</sup> May, 2017 and EAC agreed with the findings of the site visit. The EAC observed that the PP has submitted the Consent to Operate issued by the Telangana State Pollution Board vide letter no. TSPCB/ZO/RCP/SRD/393/W&A/2017 dated 27.04.2017.

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

- (i) Fresh water requirement shall not exceed 142.5 m<sup>3</sup>/day from ground water source and prior permission shall be obtained from the CGWA/SGWA.
- (ii) As proposed, no effluent from plant shall be discharged outside the plant premises and Zero discharge shall be adopted.
- (iii) Adequate stack height shall be provided to DG sets.
- (iv) Scrubbers shall be provided to all emissions sources.

	<p>(v) Industry shall develop Green-belt in an area of 33 % of area of the project. 10 m wide green belt around periphery of the plant shall be provided.</p> <p>(vi) 5000 trees shall be planted in 5 years in 3 nearby villages with the consultation of the villagers. Survival rate of plants shall be reported to RO, MoEF&amp;CC in 6 monthly compliance report.</p> <p>(vii) In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling &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 SPCB.</p> <p>(viii) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2016 and amended as on date for management of Hazardous wastes. Measures shall be taken for fire fighting facilities in case of emergency.</p> <p>(ix) 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. Besides, to provide fresh water to the nearby villagers, Five R.O. plants shall be provided in 5 nearby villages.</p> <p>(x) Rain water harvesting pits shall be constructed in nearby villages.</p> <p>(xi) A regular environment manager having post graduate qualification in environmental sciences/ environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.</p> <p>(xii) 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.</p> <p>(xiii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.</p> <p>(xiv) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</p> <p>(xv) All safety norms shall be followed in warehouse facility.</p> <p>(xvi) The by-products which fall under the purview of the Hazardous Waste Rules,</p>
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be handled as per the provisions of the said Rules and necessary permissions shall be obtained under the said rules.

#### 24.4 Terms of Reference (TOR)

24.4.1	<p><b>Expansion and introduction of new products in synthetic organic chemical Industry capacity of 510.76 MT/M (Existing 100.58 MT/M + Proposed 410.17958 MT/M) and products having capacity of 3356 MT/M at S.No.:9-24, Wasarang 34-36, Chinchwali, and Khopoli Dist:Raigad, Maharashtra by M/s Innovassynth Technologies (I)Ltd. (ITIL)-site visit report [IA/MH/IND2/61782/2017, IA-J-11011/20/2017-IA-II(I)].</b></p> <p>The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 20<sup>th</sup> meeting held during 27<sup>th</sup>-28<sup>th</sup> February, 2017 and the EAC deferred the proposal as the existing factory is almost on the neck of the river, a subcommittee should visit site to study the implications on river arising out the proposed expansion by project proponent.</p> <p>As per recommendations of the Expert Appraisal Committee (Industry-2) in its 20<sup>th</sup> meeting held during 27<sup>th</sup> to 28<sup>th</sup> February 2017, a Sub-committee comprising of Dr J P Gupta, Chairman and Dr Saurabh Upadhyay, Scientist 'B', MoEF&amp;CC was to visit the project site to study the implications on river by arising out the proposed expansion by project proponent and assess the existing environmental scenario</p> <p>Site visit was conducted by the Sub-committee on 22.05.2017 and the following officials were present:</p> <p>(A) From M/s Innovassynth Technologies (I) Ltd. (ITIL)</p> <ol style="list-style-type: none"><li>1. Mr. Raghuvver A., Chief Financial Officer, M/s Innovassynth Technologies (I) Ltd.</li><li>2. Dr. B Sahu, CEO &amp; President, M/s Innovassynth Technologies (I) Ltd.</li><li>3. Dr. B K Kulkarni, Head, R&amp;D and Pilot Plant</li><li>4. Shri Anand Apte, EIA Consultant, M/s Goldfinch Engineering Systems Pvt. Ltd.</li><li>5. Shri Kailash Nath Sharma, EIA Cordinator, M/s Goldfinch Engineering Systems Pvt. Ltd.</li></ol> <p>At the outset, M/s Innovassynth Technologies (I) Ltd. (ITIL) briefed the Sub-Committee about the production facilities at Innovassynth Technologies Complex which consist existing synthetic organic chemical Plant. Proposed Expansion will be made in the existing plant premises. After presentation the Sub-Committee visited the following plant area.</p> <ol style="list-style-type: none"><li>(i) Patal Ganga river corridor adjacent to plant boundary</li><li>(ii) Greenbelt area in plant</li><li>(iii) Hazardous raw material storage area</li><li>(iv) Process area</li><li>(v) Effluent treatment plant</li></ol> <p>After visit to these area, following observations are accordingly made:</p> <p><b>(i) Patal Ganga river corridor adjacent to plant boundary:</b></p> <p>The sub committee observed that the distance between Patalganga river and plant</p>
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boundary is varies between 5 m to 20 m. The length of corridor is approximately 350 m. The speed of river water was found high on enquired found that this is due to elevation. The plant incharge has informed that this plant site is located here since last 60 years and till date there is no such flood take place. The PP also informed that irrigation department has not carried out the study of red line and blue line. The sub-committee suggested to use the corridor for plantation only and PP has submitted the revised layout plan. On enquired about waste water management PP informed that this plant is a Zero liquid discharge plant. **(Photos at Annexure I)**

**(ii) Greenbelt area in plant:**

During visit PP informed that inside the plant premises there are around 15000 no of trees. The sub committee has observed that green belt inside the plant is in good condition. PP also confirms that Green belt already developed in an area of 80808 m<sup>2</sup> out of total area i.e. 244872 m<sup>2</sup>. The sub-committee observed that trees inside the plant are found quite healthy as not much deposition of dust upon leaves. The committee suggested the PP to not cut any tree during expansion activity.

**(iii) Hazardous raw material storage area:**

The main hazardous/ toxic raw material is Cyanuric chloride. At present the company stores this raw this raw material in a concrete building on racks. The committee suggested to not store this raw material inside the plant. PP agreed. PP need to submit the plan for storing the hazardous raw materials.

**(iv) Process area/ manufacturing area:**

Foul smell observed in process area. The Sub committee has also observed that PP is using old technology i.e. manual feeding of toxic raw material in place of automatic charged system. Corrosion observed on the upper covering layer of the reactors. Housekeeping is not found good. PP should work on this. The sub committee also observed that detectors should be installed in processing area.

**(v) Effluent treatment plant:**

PP informed that fresh water requirement will be increased from 573 m<sup>3</sup>/day to 696 m<sup>3</sup>/day which will be met from Patalganga river. Wastewater will be treated in ETP followed by MEE. No effluent will be discharged outside the plant premises. The plant is based on ZLD. The subcommittee visited the ETP and found foul smell. The sub-committee suggested to use closed system to avoid foul smell.

(vi) The sub-committee observed that PP is doing expansion from 100.5765 MT/M to 510.76 MT/M which is a very big expansion the subcommittee suggested to decrease the production if possible. As per the suggestion the PP has decreased the production quantity of expansion. Accordingly now the expansion will be carried out from 100.5765 MT/M to 350 MT/M. The revised list of products are as follows:

Sr. No	NAME OF PRODUCT	Existing Qty (MT/M)	Existing Product to be deleted (MT/M)	Existing Product to be Reduced (MT/M)	Existing Product to be Increased (MT/M)	Total Product Qty MT/M

1	<b>4-Fluoro Isoquinoline</b>	0.0084	--	0.0034	--	0.0050
2	<b>Isosulfan Blue (2,5-Disulfophenyl Isomer)</b>	0.0084	--	--	0.0016	0.0100
3	<b>(Diethoxy methyl)-2-Ethoxy benzene</b>	0.0840	0.0840	--	--	0.0000
4	<b>2,4-Dimethoxy Aniline</b>	0.1670	0.1670	--	--	0.0000
5	<b>2,6-Dimethyl phenyl isothiocyanate</b>	0.1670	0.1670	--	--	0.0000
6	<b>Benzoic acid,4-(4-Propyl-1-piperazinyl)</b>	0.1670	0.1670	--	--	0.0000
7	<b>2-(4-Morpholinyl)-8-Phenyl-[4H-1] -benzopyran-4-one</b>	0.0084	--	--	--	0.0084
8	<b>9,10-Dihydro-10[2,3di(hydroxycarboxyl)propyl]-9-oxa-10-phosphaphenanthrene-10-oxide(DDP)</b>	0.0420	0.0420	--	--	0.0000
9	<b>Cyclopropyl Methyl Bromide (CMB)</b>	0.0840	--	--	0.916	1.0000
10	<b>5'-ODMT-NiBu-deoxyguanosine-3'-(2-cyano ethyl N,N diisopropylamino) Phosphoramidite (dG Amidite)</b>	0.0420	0.0420	--	--	0.0000
11	<b>5'-ODMT-NBZ-deoxyadenosine-3'-(2-cyano ethyl N,N diisopropylamino) Phosphoramidite (dA Amidite)</b>	0.0420	0.0420	--	--	0.0000
12	<b>5'-ODMT-NBZ-deoxycytidine-3'-(2-cyano ethyl N,N diisopropylamino) Phosphoramidite (dC Amidite)</b>	0.0420	0.0420	--	--	0.0000
13	<b>5'-ODMT-NBZ-deoxythymidine-3'-(2-cyano ethyl N,N diisopropylamino) Phosphoramidite (dmt- T)</b>	0.0420	0.0420	--	--	0.0000
14	<b>3'-Amino-5' OH Thymidine (Amino – T)</b>	0.0084	--	0.0079	--	0.0005
15	<b>Bis (n-butylcyclopentadienyl) Zirconium dichloride</b>	0.0420	0.0420	--	--	0.0000
16	<b>rac-Ethylene-bis(indenyl)Zirconium</b>	0.0420	0.0420	--	--	0.0000

	<b>dichloride</b>					
17	<b>Substituted Triazine Derivative</b>	50.0000	--	--	25.00	75.0000
18	<b>Ethyl 2-Methyl-4-Pentenoate (EMPE)</b>	0.0833	--	0.0750	--	0.0083
19	<b>Ethyl-4-Pentenoate</b>	0.0833	--	0.0750	--	0.0083
20	<b>Norcamphor</b>	0.0166	--	--	--	0.0166
21	<b>5-Bromo-Indole</b>	0.3330	--	0.3030	--	0.0300
22	<b>4-Pentenoic Acid</b>	0.8333	--	--	1.1667	2.0000
23	<b>Methyl Tiglate</b>	0.0166	--	--	--	0.0166
24	<b>Ethyl-2-Methyl 3-4-Pentadienoate (EMPD)</b>	0.5000	--	0.4990	--	0.0010
25	<b>3-3 Dimethyl Cyclohexanone (DMCH)</b>	0.0833	--	--	0.9167	1.0000
26	<b>2-6 Diamino-9-(b-D-Ribo) Purine (DAP)</b>	0.0500	--	0.0450	--	0.0050
27	<b>DMT-MOET(4,4'-dimethoxy trityl)-(methoxyethyl-thymidine)</b>	0.0833	0.0833	--	--	0.000
28	<b>N-Bz-DMTMOEC (N-Benzoyl-(4,4'-dimethoxytrityl)(methoxy ethyl)-cytidine</b>	0.0833	--	--	--	0.0833
29	<b>N-Bz-DMT-Dc (N-Benzoyl-(4,4'-Dimethoxytrityl)-dooxy cytidine</b>	0.0833	0.0833	--	--	0.000
30	<b>N-Benzoyl – 3 – Tritylamino 5 Phosphoramidite 2 – deoxy Adenosine (dA)</b>	0.0040	--	0.0035	--	0.0005
31	<b>3 – Tritylamino 5 – Phosphoramidite N-Bz-Dc</b>	0.0040	--	0.0035	--	0.0005
32	<b>N – Isobutyryl – 3- Tritylamino 5 – Phosphoramidite 2 – deoxy Guanosine (dG)</b>	0.0040	--	0.0035	--	0.0005
33	<b>3 – Tritylamino 5 – Phosphoramidite Thymidine (dT)</b>	0.0040	--	0.0035	--	0.0005
34	<b>4-Methyl –2-Thiomethyl Pyrimidine</b>	0.4170	--	0.3770	--	0.0400

35	<b>4-Hydroxy isoleucine</b>	3.3330	--	3.2330	--	0.1000
36	<b>4-HEXYL RESORCINOL</b>	0.4160	--	--	1.584	2.0000
37	<b>N<sup>2</sup> Phenyl Acetyl Guanosine</b>	0.0416	--	0.0376	--	0.0040
38	<b>5' – ODMT, 2' – O – Cpep, 6N – Pivaloyl Adenosine</b>	0.0080	--	0.0070	--	0.0010
39	<b>5' – ODMT, 2' – O – Cpep, N<sup>2</sup> – Ph – Ac - Guanosine</b>	0.0080	--	0.0070	--	0.0010
40	<b>5' – ODMT, 2' – O – Cpep, 4 – N – Bz Cytidine</b>	0.0080	--	0.0070	--	0.0010
41	<b>5' – ODMT, 2' – O – Cpep, Uridine</b>	0.0080	--	0.0070	--	0.0010
42	<b>p-Nitro Phenyl Phosphate – Disodium Salt Hexahydrate</b>	0.0833	--	--	0.1167	0.2000
43	<b>p-Nitro Phenyl Phosphate – Ditriss Salt</b>	0.0833	--	0.0733	--	0.0100
44	<b>5'-ODMT-2'MOE-T[5'-0 (4,4'-DIMETHOXY TRITYL) – 2'-0-(2-METHOXYETHYL) – THYMIDINE]</b>	0.0580	--	--	0.942	1.0000
45	<b>N – BZ – 5' – ODMT – 2' – MOE – 5 – Me – C 5'-0 (4,4'- DIMETHOXY TRITYL)–2'- 0-(2-METHOXYETHYL) N<sup>4</sup> –BENZOYL–5-METHYL- CYTIDINE</b>	0.0300	--	--	0.97	1.0000
46	<b>2' – FLUORO CYTIDINE 5'- 0-{4,4'-DIMETHOXY TRITYL)N<sup>4</sup>-ACETYL- 2'FLUORO CYTIDINE-3'- [C2-CYANOETHYL)-(N,N- DI ISOPROPYL)]- PHOSPHORAMIDITE</b>	0.0020	0.0020	--	--	0.000
47	<b>2' – FU AMIDITE 5'-0-(4,4'- DIMETHOXY TRITYL)-2'- FLUORO URIDINE-3'-[(2- CYANOETHYL)-(N,N-DI ISOPROPYL)]- PHOSPHORAMIDITE</b>	0.0020	--	--	--	0.0020
48	<b>5'-DMT-2'-OTBDMS-RNA PHOSPHORAMIDE AND DERIVATIVES</b>	0.0042	--	--	0.3958	0.4000
49	<b>EURO-5031 BLS DICYCLO PENTADIENEZERCONIUM DICHORIDE</b>	0.0420	0.0420	--	--	0.000

50	<b>2 CYANOPHENOL</b>	0.1670	0.1670	--	--	0.000
51	<b>CALONE [7-METHYL-3,4-DIHYDRO-2H-1,5-BENZO DIOXEPIN-3-1</b>	0.0084	0.0084	--	--	0.000
52	<b>SODIUM BETA GLYCERO PHOSPHATE</b>	1.6600	--	0.6600	--	1.0000
53	<b>7-BROMO 1HEPTENE</b>	0.2200	--	--	3.78	4.0000
54	<b>2,2 BIS [(2INDENYL)BIPHENYL]ZI CRONIUM(IV) CHLORIDE</b>	0.0100	--	--	0.04	0.0500
55	<b>L-METHIONINE SULFOXIME</b>	0.0100	--	--	--	0.0100
56	<b>4,4'--DIMETHOXYTRITYL CHLORIDE (DMT-CL)</b>	0.1500	--	--	0.85	1.0000
57	<b>AD-Lactone</b>	0.3000	0.3000	--	--	0
58	<b>1-CYANO CYCLOBUTANE-1,2-DICARBOXYLIC ACID DIMETHYL EASTER / TRANSDIACID</b>	0.2000	--	--	0.2	0.4000
59	<b>5'-DMT-C-ETHYL N-PROTECTED NUCLEOSIDES AND PHOSPHORAMIDITES</b>	0.0100	0.0100	--	--	0
60	<b>5'-DMT-C-ETHYL N-PROTECTED NUCLEOSIDE AND PHOSPHORAMIDITE</b>	0.0100	--	--	0.0204	0.0304
61	<b>NAP SUGAR</b>	0.0500	--	--	0.95	1.0000
62	<b>ENA -PROTECTED NUCLEOSIDE &amp; PHOSPHORAMIDITE</b>	0.0100	--	0.0090	--	0.0010
63	<b>E-TETRACETATE</b>	0.0500	--	--	0.15	0.2000
64	<b>TAC PROTECTED NECLEEOSIDE &amp; PHOSPHORAMIDITE</b>	0.0100	--	--	0.04	0.0500
65	<b>5'-DMT-2'-MOE PROTECTED NUCLEOSIDE &amp; PHOSPHORAMIDITE</b>	0.0200	--	--	0.38	0.4000
66	<b>5'-DMT-2'-O-METHYL PROTECTED NUCLEOSIDE &amp; PHOSPHORAMIDITIES</b>	0.0100	--	--	0.19	0.2000

67	<b>ALLOFURANOSE SUGAR</b>	0.0100	--	--	--	0.0100
68	<b>TINUVIN -400</b>	27.865	--	--	72.1352	100.000
69	<b>N-Methyl 4 chloro piperridine HCL</b>	1.0000	1.0000	--	--	0.00
70	<b>Syringaldehyde</b>	2.0000	2.0000	--	--	0.00
71	<b>Indoline</b>	2.0000	2.0000	--	--	0.00
72	<b>2 methyl Sulphonyl 4,6 Dimethoxy Pyrimidine</b>	3.0000	3.0000	--	--	0.00
73	<b>O- Methyl Isoorea Hemisulphat6e</b>	2.0000	2.0000	--	--	0.00
74	<b>Beta-Methyl Acid (BMA)</b>	2.0000	2.0000	--	--	0.00
	<b>Total</b>	<b>100.5765</b>	<b>13.5750</b>	<b>5.4402</b>	<b>110.7451</b>	<b>192.3134</b>
<b>New Products to be added</b>						
75	<b>P-Anisyl Propanal</b>	0.0000	0.000	0.000	0.000	4.000
76	<b>ANETHOL</b>	0.0000	0.000	0.000	0.000	30.00
77	<b>5'-ODMT-DEOXYNUCLEOSIDES, PHOSPHORAMIDITES AND SUCCINATE SALTS</b>	0.0000	0.000	0.000	0.000	0.200
78	<b>DMT-LNA-NUCLEOSIDES &amp; PHOSPHORAMIDITES</b>	0.0000	0.000	0.000	0.000	0.100
79	<b>GALNAC ACYCLIC SUCCINATE</b>	0.0000	0.000	0.000	0.000	0.0028
80	<b>NOOTKATONE</b>	0.0000	0.000	0.000	0.000	0.4000
81	<b>4-AMINOBENZONITRILE</b>	0.0000	0.000	0.000	0.000	0.1660
82	<b>Diethyl L-(+) tartrate</b>	0.0000	0.000	0.000	0.000	0.1660
83	<b>DL -LACTIDE</b>	0.0000	0.000	0.000	0.000	0.0083
84	<b>DIETHYLAMINO MALONATE HCl</b>	0.0000	0.000	0.000	0.000	0.2500
85	<b>ACRYLAMIDE PURIFIED</b>	0.0000	0.000	0.000	0.000	0.4000
86	<b>ETHYLENEDIAMINETETR AACETIC ACID METAL CHELATE SALTS</b>	0.0000	0.000	0.000	0.000	0.0030
87	<b>SODIUM SELENITE PENTAHYDRATE</b>	0.0000	0.000	0.000	0.000	0.0030
88	<b>2,4Dihydroxy Benzophenone</b>	0.0000	0.000	0.000	0.000	89.237

89	Peonile	0.0000	0.000	0.000	0.000	19.000
90	R&D Products (Intermediate chemicals)	0.0000	0.000	0.000	0.000	0.4000
91	4,5-Dichloro phthalic acid	0.0000	0.000	0.000	0.000	0.0083
92	4-Tert-butylphenoxyAceticAcid	0.0000	0.000	0.000	0.000	1.0000
93	6-Bromo-Iso-indolin-1-one	0.0000	0.000	0.000	0.000	0.0083
94	Trans aconiticAcid	0.0000	0.000	0.000	0.000	0.0083
95	2,2 BIS [(2-INDENYL)BIPHENYL]ZIRCONIUM(IV) CHLORIDE ON SILICA SUPPORT	0.0000	0.000	0.000	0.000	2.500
96	N,N-Dimethylbenzamide (DMBA)	0.0000	0.000	0.000	0.000	1.0000
97	4-(methylamino)pentan-2-ol dibenzoate (AB)	0.0000	0.000	0.000	0.000	1.0000
98	9,9-bis(methoxymethyl)fluorene (FLU)	0.0000	0.000	0.000	0.000	1.0000
99	2-AminoBenzonitrile	0.0000	0.000	0.000	0.000	1.0000
100	GAFL-158	0.0000	0.000	0.000	0.000	5.0000
101	3,5-Bis(2-Cyanoprop-2-yl)benzyl bromide Anastrozole intermediate	0.0000	0.000	0.000	0.000	0.0083
102	3,5-Bis(2-Cyanoprop-2-yl)Toluene Anastrozole intermediate	0.0000	0.000	0.000	0.000	0.0083
103	2,2'-Azobis(2-methylpropionamidine)dihydrochloride	0.0000	0.000	0.000	0.000	0.0100
104	CMPT	0.0000	0.000	0.000	0.000	0.0400
105	CMIMT	0.0000	0.000	0.000	0.000	0.0400
106	MTSCNE	0.0000	0.000	0.000	0.000	0.1000
107	ONT-7-D & ONT-7-L	0.0000	0.000	0.000	0.000	0.1000
108	UNA Phosphoramidites & Derivatives	0.0000	0.000	0.000	0.000	0.0400
109	Morpholino Phosphoramidites & Derivatives	0.0000	0.000	0.000	0.000	0.1000



110	Chiral Phosphoramidites & Derivatives	0.0000	0.000	0.000	0.000	0.1000
111	5'-ODMT-2' OMe NiBu-Guanosine O6 CE	0.0000	0.000	0.000	0.000	0.0840
112	Bis TAc dG	0.0000	0.000	0.000	0.000	0.0840
113	5'-ODMT-NiBu-deoxycytidine	0.0000	0.000	0.000	0.000	0.0500
114	5'-Biotin Phosphoramidite	0.0000	0.000	0.000	0.000	0.0010
115	5-Iodo dC	0.0000	0.000	0.000	0.000	0.0008
116	2'-Fluoro-GiBu-3'-CEPA	0.0000	0.000	0.000	0.000	0.0008
117	5'-ODMT-N6-Bz-2'-Fluoro Adenosine-3'-OCEPA	0.0000	0.000	0.000	0.000	0.0008
118	5'ODMT-NiBu-dG (O6 CE)	0.0000	0.000	0.000	0.000	0.0500
119	Ethyl-2,2-difluoropropionate	0.0000	0.000	0.000	0.000	0.0416
<b>Total</b>						<b>157.6866</b>

<b>Grand Total</b>	<b>350.0000</b>
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**LIST OF BY-PRODUCTS**

Sr. No.	By-Products	EARLIER			REVISED		
		Existing	Proposed	Total	Existin g	Proposed	Total
		(TPM)	(TPM)	(TPM)	(TPM)	(TPM)	(TPM )
1	Hydrochloric Acid 30%	43.00	664.50	707.50	43.00	464.50	507.50
2	Sulphuric Acid 66%	85.00	165.00	250.00	85.00	100.00	185.00
3	Mixed Solvents	133.50	665.00	798.50	133.50	426.50	560.00
4	Aqueous Aluminium Chloride	303.00	1297.00	1600.00	303.00	897.00	1200.00
	<b>TOTAL</b>	<b>564.50</b>	<b>2791.50</b>	<b>3356.00</b>	<b>564.50</b>	<b>1888.00</b>	<b>2453.00</b>

vii. PP informed that Existing unit has one briquette fired boiler of 6 TPH and one Furnace oil fired boiler of 6 TPH. Additionally one briquette fired boiler of 10 TPH will be used. The sub committee suggested to not use furnace fired boiler. PP informed that FO boiler runs only for 2-3 days in a year as a backup and as

advised we will stop it completely in future. The sub committee also suggested for using Multi cyclone separator followed by Bagfilter with adequate stack height to control the particulate emission.

#### Recommendations

The committee was of the opinion that although the unit has adequate environment management system in place the following shall be implemented to further strengthen the system.

- Creation of buffer zone, with tree plantation, of at least 10 meter wide between plant boundary and adjacent bank of the river. List of tree species to be planted in buffer zone shall be prepared as per CPCB guidelines and after consultation with forest department.
- Proper river conservation plan in view of proximity of the plant to the river, with commitment regarding no disturbance in natural flowing of the river.
- A ETP efficiency study shall be carried out & its recommendations shall be implemented.
- The green belt shall be enhanced with proper development plan.
- Multi cyclone separator followed by Bagfilter shall be used in boilers with adequate stack height to control the particulate emission.
- Adequate Scrubbers shall be used to control the process emission.
- Cutting of trees shall be avoided during expansion activity.
- Automatic charged system shall be used for hazardous raw material feeding.
- Noise monitoring shall be carried out on a weekly basis all around the periphery of the unit & records maintained
- Proper risk management system shall be followed to avoid accidents.
- Gas Detectors should be installed in processing area.
- Rain harvesting system shall be used for ground water recharge.
- Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system should be used.

The above recommendations were discussed in the EAC (Industry-2) meeting and the Committee prescribed the following Additional TOR in addition to standard TOR (refer Ministry's website) for preparation of EIA-EMP report:

#### **A. Additional TOR**

- i) Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- ii) Creation of buffer zone, with tree plantation between plant boundary and adjacent bank of the river. List of tree species to be planted in buffer zone shall be prepared as per CPCB guidelines and after consultation with forest department.
- iii) Proper river conservation plan in view of proximity of the plant to the river, with commitment regarding no disturbance in natural flowing of the river.
- iv) Flood forecasting and mitigation plan to be submitted.
- v) Impact to be assessed adequately towards nearby reserved forest area.
- vi) Layout plan to accommodate peripheral green belt of 10 m width shall be submitted.
- vii) The green belt needs to be enhanced with proper development plan.
- viii) VCM & VOCs shall be monitored in the ambient air along with the other AAQ parameters & records maintained.

	<p>ix) ESR paln for 5 years @ 2.5 % to be submitted.</p> <p>It was recommended that ‘TOR’ with Public Consultation prescribed by the Expert Appraisal Committee (Industry-2) 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.</p>
24.4.2	<p><b>Expansion of existing pigments manufacturing activity with addition of new products from 100 MT/month to 1400 MT/month at Survey No. 85/B, ECP Canal Road, At &amp; P: Karakhadi, Tal: Padra, Dist: Vadodara, Gujarat by M/s. Choksi Colours Pvt. Ltd., Unit-II.- TOR reg. [IA/GJ/IND2/63891/2017, IA-J-11011/179/2017-IA-II(I)]</b></p> <p>The Project Proponent and the accredited Consultant M/s. San Envirotech Pvt. Ltd., Ahmedabad, made 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 expansion of existing pigments manufacturing activity with addition of new products from 100 MT/month to 1400 MT/month at Survey No. 85/B, ECP Canal Road, At &amp; P: Karakhadi, Tal: Padra, Dist: Vadodara, Gujarat by M/s. Choksi Colours Pvt. Ltd., Unit-II.</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 is appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>iii. Unit was established before Publication of EIA Notification, 2006 and it is a small scale unit, hence earlier EC for existing unit was not applicable.</li> <li>iv. Existing land area is 17165 m<sup>2</sup>; No additional land will be used for proposed expansion.</li> <li>v. Industry will develop Greenbelt in an area of 33% i.e., 5665 m<sup>2</sup> out of 17165 m<sup>2</sup> of area of the project.</li> <li>vi. Existing cost of the project is Rs. 14.0 crore. Estimated cost for the proposed expansion is Rs. 28.0 crore. Out of which Rs. 2.75 crores will be used for Environmental Management System and Recurring cost (operation and maintenance) will be about Rs. 1.5 crore per annum.</li> <li>vii. Total existing Employment is 35 persons as direct &amp; additional 65 persons will be employed as direct employment after expansion. Industry proposes to allocate Rs. 70.00 lakhs of 2.5 % towards Corporate Social Responsibility.</li> <li>viii. No National Parks, Wildlife Sanctuaries, Biosphere reserves, Tiger/Elephant reserves, wildlife corridors etc. lies within the 10 km radius of the project site. River Mahi is flowing at a distance a distance of 4.24 km.</li> <li>ix. Total water requirement is 1537.0 m<sup>3</sup>/day of which fresh water requirement of 479.0 m<sup>3</sup>/day and will be met from bore well.</li> <li>x. The industrial wastewater generation after proposed expansion will be @1075 m<sup>3</sup>/day and is segregated into two different streams. The concentrated wastewater @965 m<sup>3</sup>/day having high COD/high TDS is send to primary treatment in ETP and passing through RO and RO reject will be evaporated in MEE/ATFD and unit achieve zero liquid discharge. The other diluted stream @110.0 m<sup>3</sup>/day is treated in the in-house ETP and treated effluent pass through RO and reject @22 m<sup>3</sup>/day will be disposed to CETP-EICL, Umraya for further treatment after confirming the CETP inlet norms. permeate around 88 m<sup>3</sup>/day will be reuse.</li> <li>xi. Power requirement after expansion will be 1100 KVA including existing 350 KVA will be made from MG VCL. Existing unit has one DG set of 300 kVA capacity, additionally no D.G. Set will be installed and D G Set use as standby during power failure. Stack (height 9 meters) is provided as per CPCB norms.</li> <li>xii. Existing unit has 1 no. of LDO/agro waste fired (105/250 MT/month) boiler of 2 TPH, 1 Thermic fluid heater of 6.5 lacks kcal/hr., one LDO/agro waste fired (20/50 MT/month) Hot Air</li> </ol>

Generator of 3.0 lacks kcal/hr. and after proposed expansion, 1 no. coal/agro waste fired boiler of 5 TPH, 1 Thermic fluid heater of 15.0 lacks kcal/hr., one Coal/agro waste fired (250 MT/month) Hot Air Generator of 20.0 lacks kcal/hr. will be installed. Multi cyclone, dust collector-bag filter with a stack height of 30 m will be provided for controlling the particulate emissions.

xiii. In existing unit, one process stack is attached to process vessel of CPC Blue; Two stage water Scrubber and 10 meter stack height is provided to control the emission. After expansion, process emission will be from process vessel CPC blue, Chlorination & dumping vessel of CPC Green and Process vessel of Alpha blue, Two Stage Water Scrubber Followed by alkali scrubber and adequate stack height will be provided Particulate matter will be generated from the proposed Spin Flash Dryer unit (1&2, 3&4). Bag filter with 11 meters chimney will be provided.

Sr. No.	Stack attached to	Stack Height (m)	Fuel	Fuel consumption rate	APC measures	Probable emission
<b>Existing Flue Gas stacks</b>						
1.	Steam Boiler 2 ton/Hr.	30	LDO/ Agro waste	105/250 MT/month	Multi Cyclone, Dust Collector	PM<150 mg/Nm <sup>3</sup> SO <sub>2</sub> <100 ppm NO <sub>x</sub> <50 ppm
2.	Thermic Fluid Heater (6.5 Lakhs Kcal/Hr.)					
3.	Hot Air Generator (3.0 Lakhs Kcal/Hr.)	30	LDO/ Agro waste	20/50 MT/month	Cyclone Dust Collector	
4.	D. G. Set (300 kVA)	9	HSD	75 Lit/hr.	-	
<b>Existing Process Gas stacks</b>						
1.	Process Vessel CPC Blue	10	-	-	Two stage water Scrubber	NH <sub>3</sub> <175 mg/Nm <sup>3</sup>
<b>Proposed Flue Gas stacks</b>						
1.	Steam Boiler 5.0 ton/Hr.	30	Coal/ Agro waste	510 MT/month	Multi Cyclone, Dust Collector	PM<150 mg/Nm <sup>3</sup> SO <sub>2</sub> <100 ppm NO <sub>x</sub> <50 ppm
2.	Thermic Fluid Heater (15.0 Lakhs Kcal/Hr.)			215 MT/month		
3.	Hot Air Generator (20.0 Lakhs Kcal/Hr.)	30	Coal/ Agro waste	285 MT/month	Multi Cyclone, Dust Collector	
<b>Proposed Process Gas stacks</b>						
1.	Process Vessel CPC Blue	21	-	-	Two stage water Scrubber	NH <sub>3</sub> <175 mg/Nm <sup>3</sup>
2.	Chlorination & Dumping Vessel of CPC Green	21	-	-	Two Stage Water Scrubber Followed by alkali scrubber	HCl<20 mg/Nm <sup>3</sup> Cl <sub>2</sub> <10 mg/Nm <sup>3</sup>
3.	Process vessel of Alpha blue	11	-	-	Alkali Scrubber	SO <sub>2</sub> <40 mg/Nm <sup>3</sup>
4.	Spin Flash Dryer – 1&2	11	-	-	Bag Filter	SPM<150 mg/Nm <sup>3</sup>

5.	Spin Flash Dryer – 3&4	11	-	-	Bag Filter	SPM<150 mg/Nm <sup>3</sup>
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**xiv. Details of Solid waste/Hazardous waste generation and its management is as follows:**

Sr. No.	Type of Waste	Category as per HWM Rules 2016	Quantity			Disposal facility
			Existing	Proposed	Total	
1.	ETP Sludge	35.3	80 MT/month	150 MT/month	230 MT/month	Disposal at TSDF site approved by GPCB.
2.	Salt from MEE		0.0	140 MT/month	140 MT/month	Disposal at TSDF site approved by GPCB.
3.	Discarded containers/ barrels/ liners	33.1	Drum: 250 Nos./ month Liner:0.33 MT/month	Drum: 1000 Nos./ month Liner:5 MT/month	Drum: 1250 Nos./ month Liner: 5.33 MT/month	Being used for packing of ETP sludge in case of excess it will be sold to approved recycler or traders.
4.	Used Lubricating Oil	5.1	0.085 Kl/year	0.915 Kl/year	1.0 Kl/year	It will be sold to approve recycler With CPCB.
5.	Inorganic acid (H <sub>2</sub> SO <sub>4</sub> )	Sch. II B(15)	0.0	2100 MT/month	2100 MT/month	Collection, storage and captive use.
6.	Inorganic acid (HCl)	Sch. II B(15)	0.0	70 MT/month	70 MT/month	Collection, storage, treatment, transportation & disposal by selling to actual users.
7.	Sodium Hypo Chlorite Solution	Sch. II B(15)	0.0	90 MT/month	90 MT/month	Collection, storage, treatment, transportation & disposal by selling to actual users.
8.	Halogenated compounds (Aluminum Chloride)	Sch. II B(15)	00	800 MT/month	800 MT/month	Collection, storage, sale to actual users.

**xv. Following are the list of existing and proposed products:**

Sr. No.	List of Products	Existing capacity in MT/ Month	Proposed addition in MT/ Month	Total Capacity in MT/ Month
1.	CPC Blue Crude	100	500	600
2.	Pigment Alpha Blue	00	200	200

3.	Pigment Beta Blue	00	250	250
4.	Activated Crude Blue	00	250	250
5.	Pigment Green – 7	00	100	100
<b>Total</b>		<b>100</b>	<b>1300</b>	<b>1400</b>
<b>By Products</b>				
1	Ammonium Sulphate	37.290	-37.290	0.0
2	HCl (20%)	0.0	70.0	70.0
3	Sodium Hypochlorite solution (12%)	0.0	90.0	90.0
4	Aluminum Chloride (20%)	0.0	800	800

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

**A. Additional TOR**

- i. Public Consultation shall be done as per provisions of the EIA Notification, 2006.
- ii. A plan for installation of Zero Liquid Discharge System to be submitted.
- iii. Commitment to use Briquettes/ Low Sulphur (0.5%) coal as boiler fuel.
- iv. Layout Plan earmarking space for 10 m peripheral green belt with perennial trees to be submitted. 33 % area of the total project cover area will be developed as green area with perennial tree plantation.
- v. CGWA permission for withdrawal of ground water to be submitted.
- vi. Certified Compliance Report from concerned Regional Office of the Ministry for existing EC, if any.

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

24.4.3 **Proposed expansion at existing premises for Intermediates and Chemicals at Plot No. 220/A, GIDC Industrial Estate Panoli, Dist.: Bharuch, Gujarat by M/s. Cyclo Pharma Chem- reg. TOR .[IA/GJ/IND2/64087/2017 , IA-J-11011/194/2017-IA-II(I)]**

The Project Proponent made a detailed presentation on the salient features of the project and informed that:

- i. The proposal is for proposed expansion at existing premises for Intermediates and Chemicals by M/s.Cyclo Pharma Chem. and located at Plot No. 220/A, G.I.D.C Industrial Estate, Panoli, Tal.: Ankleshwar, Dist. Bharuch, Gujarat.
- ii. All synthetic organic chemicals industry located in a notified industrial area/estate are listed at S.N. 5(f) under category 'B'. However, due to applicability of general condition i.e. Critically polluted areas as notified by the Central Pollution Control Board is situated within 5 km from the project site, the project is considered as category 'A' and appraised at Central level by Expert Appraisal Committee.
- iii. Existing unit is operating prior 2006. Existing land area is 2200 m<sup>2</sup>. No additional land will be used for proposed expansion. Out of which green belt will be developed in 19 % area. The estimated project cost is Rs 330 Lakh. Total Employment will be 15 persons as direct & 10

- persons indirect after expansion.
- iv. It is reported that as per form-1 NO national parks, wildlife sanctuaries, Biosphere, Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River/ Water body Narmada river is flowing at a distance a distance of 12.20 Km in North direction.
  - v. Total water requirement is 33.5 m<sup>3</sup>/day of which fresh water requirement will be 27.5 m<sup>3</sup>/day and will be met from GIDC. Domestic effluent will be disposed off through soak pit via septic tank, and same will continue after proposed expansion.
  - vi. The effluent generated from industrial process (9.8 kLD) shall be first treated in ETP, consisting of Primary Treatment. Then the ETP treated industrial wastewater shall be sent to own MEE plant. OR shall be sent to CMEE for further treatment.
  - vii. The treated water received from the CMEE or MEE plant (6 kLD) shall be used for cooling tower make up water. Treated wastewater will be sent to CETP.
  - viii. Power requirement after expansion will be 250 KVA including existing 100 KVA and will be met from DGVCL. 1 DG set of 125 KVA will be used as standby during power failure.
  - ix. The existing small industrial boiler of 1 TPH shall be discontinued and replaced with the proposed Briquette fired boiler of 2.5 TPH capacity. Two Briquette fired Thermic Fluid Heater of 800000 kcal/hr capacity will be installed. Multi Cyclone followed by bag filter will be used to control emissions.
  - x. Water and alkali scrubbers will be used to control process emissions.
  - xi. 30-35% HCl solution generated from scrubbing of HCl shall be partially or totally converted to CaCl<sub>2</sub> solution by reacting with either slaked lime or calcium carbonate. CaCl<sub>2</sub> solution so obtained shall be sold to authorized actual users. About 25-30% Sodium sulfite solution shall be obtained from scrubbing of SO<sub>2</sub> with Sodium hydroxide and water, shall be dried and sent to TSDF site.
  - xii. ETP / MEE Sludge/ Other salts will be sent to TSDF site. Spent Sulfuric Acid (30-40%) and Gypsum will be sold to actual user. Distillation residue will be sent to CHWIF. Calcium Chloride solution (30%), Mixed solvent and Aluminium chloride solution (30%) will be sent to actual user.
  - xiii. Following are the list of existing and proposed products:

Sr. No	Name of Products	CAS no.	CTO available	EC applied for additional production	Total after expansion	Remarks
			MT / Month			
1.	Sulfanilic Acid	121-57-3	1	0	1	Existing product
2.	2-(2,4-Dichlorophenyl)-1-(1H-1,2,4-triazol-1-yl) Hexan-2-ol	58905-16-1	25 (Either individual or total of all 5 products)		25 (Either individual or total of all 5 products)	Existing product
3.	Dibenzo[b,f][1,4] thiazepine-11-[10H]one	3159-07-7				Existing product
4.	Benzyl tri ethyl ammonium chloride	56-37-1				Existing product

5.	Cetyl Pyridinium Chloride	6004-24-6				Existing product
6.	4-Nitro Benzene Sulfonyl chloride	98-74-8				Existing product
7.	3-Nitro Benzene Sulfonyl Chloride	121-51-7	--	5	5	Proposed Product
8.	2-Chloro Phenyl Glycine Methyl Ester	141109-14-0	--	10	10	Proposed Product
9.	Ethyl-7-Chloro-2-Oxo Heptanoate	78834-75-0	--	1	1	Proposed Product
10.	4-Chlorobenzhydryl Amine	150700-52-0	--	5	5	Proposed Product
11.	4,6 Dimethoxy 2 Methane Sulfonyl Pyrimidine	113583-35-0	--	15	15	Proposed Product
12.	4,6-dimethoxy-2-(phenoxy carbonyl) Amino Pyrimidine	89392-03-0	--	10	10	Proposed Product
13.	2,4 Dichloro Valerophenone	61023-66-3	--	20	20	Proposed Product
14.	Benzhydryl Amine	91-00-9	--	5	5	Proposed Product
<b>TOTAL</b>				<b>26</b>	<b>71</b>	<b>97</b>

During presentation PP requested to use the base line data of M/s Mega Innovative crops Ltd. The distance of M/s Mega Innovative crops Ltd. from the proposed site is 500 m. EAC is agreed with it.

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

**A. Additional TOR**

- i. Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b) of the EIA notification, 2006.
- ii. ESR plan for 5 year @ 5 % of the project cost with the consultation of nearby villagers to be submitted.
- iii. Plan with 5 m wide green belt around periphery of the plant to be submitted.
- iv. A plan for in-house treatment of organic waste, sending it out side the plant premises will not be allowed.
- v. Ground Water will not be used.
- vi. Certified Compliance Report from concerned Regional Office of the Ministry for existing EC, if any.



24.4.4

**Proposed expansion of specialty chemicals (organic chemicals) in existing premises of M/s. Pragna Life Science Pvt. Ltd. plot no. 409/b/2, GIDC industrial estate, panoli-394 116, Tal: Ankleshwar, Dist: Bharuch, Gujarat-reg. TOR [IA/GJ/IND2/63992/2017, IA-J-11011/188/2017-IA-II(I)]**

The project proponent informed following:-

- i. The project involves proposed expansion of specialty chemicals (organic chemicals) in existing premises of M/s Pragna Life Science Pvt. Ltd. Plot No. 409/b/2, GIDC Industrial Estate, Panoli, Tal: Ankleshwar, Dist: Bharuch, Gujarat by M/s Pragna Life Science Pvt. Ltd.
- ii. All synthetic organic chemicals industry located in a notified industrial area/estate are listed at S.N. 5(f) under category 'B'. However, due to applicability of general condition i.e. Critically polluted areas as notified by the Central Pollution Control Board is situated within 5 km from the project site, the project is considered as category 'A' and appraised at Central level by Expert Appraisal Committee.
- iii. Existing unit is operating since 2003. Existing land area is 1900.06 m<sup>2</sup>; 1604.22 m<sup>2</sup> additional land will be used for proposed expansion. Industry will be developed Greenbelt in an area i.e. 450 m<sup>2</sup> out of 3504.28 m<sup>2</sup> of area of the project.
- iv. The estimated project cost is Rs. 4 Crores. Capital cost of air & water pollution control system and environmental monitoring equipments will be Rs. 1 crores. Total employment will be 20 persons as direct & 10 persons indirect for proposed project. Industry purposes to allocate Rs. 2.5 Lakhs @ 2.5 % towards Corporate Social Responsibility.
- v. It is reported that No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance.
- vi. Ambient air quality monitoring will be carried out at 8 locations during March-2017 to May-2017.
- vii. Total water requirement will be 34.88 KL/Day; which will be met through GIDC Water Supply.
- viii. Total 23.30 KL/Day (17.30 KL/Day Industrial + 6 KL/Day domestic) of effluent shall be treated in ETP and then sent to CETP, Panoli (M/s PETL) for further treatment.
- ix. Power requirement will be 1250 KVA (Existing: 250 KVA & Proposed: 1000 KVA) and will be met from DGVCL. D. G. Set 625 KVA (Existing: 125 KVA & Proposed: 500 KVA).
- x. Existing unit has Steam boiler (600 kg/hr) & Thermic Fluid Heater (4 lakh kcal/hr). Unit has proposed Steam boiler (800 kg/hr), Thermic Fluid Heater (6 lakh kcal/hr & 4 lakh kcal/hr).
- xi. ETP sludge will be sent to TSDF site. Used oil will be sent to registered refiners. Spent catalyst and inorganic salts will be sold to GPCB registered reprocessors. Spent sulfuric acid, sent formic acid, Acetic acid, NaBr solution, NaHS solution and dil. HCL will be sold to end user.
- xii. Following are the list of existing & proposed products:

S. No.	Product	Existing Capacity	Proposed Capacity	Total	Total	CAS No.	
		MT/Month	MT/Month	MT/Month	MT/Year		
1	N-ETHYL PYRIDONE	2	3.25	0	3.25	40.00	29097-12-9
2	DIETHYL MALONATE	2	2	0	2	24.00	105-53-3
3	ETHYL CYANO ACETATE	8	8	0	8	96.00	
4	2,5 DiChloro Para Phenylene Diamine	0	29.16	29.16	350.00	105-56-6	
5.	2 Nitro 4 Methoxy Aniline						20103-09-7

6.	2,5 Dimethyl-P-Phenylenediamine					96-96-8
7.	2-Mercapto 5-Methoxy Benzimidazole					07-01-6393
8.	3-[4-chloro-5-(cyclopentyloxy)-2-fluorophenyl]-5-(1-methylethylidene)-1,3-oxazolidin-2,4-dione					37052-78-1
9.	Sodium/Potassium { 2-[ 2,6 Dichloro Phenyl] Amino } Phenyl } Acetate	0	41.66	41.66	500.00	110956-75-7
10.	2 Chlor PPD					15307-79-6
11.	2 -{ 2[ 2-{2, 6 dichloro phenyl } Amino ] Phenyl Acetyl ] Oxyacetic Acid					139272-67-6
12.	2-Chloro 1-Phenoxy Benzene					2689-07-8
13.	2,3 Xylil Anthranilic Acid	0	33.33	33.33	400.00	61-68-7
14.	2 Chloro 5 Methyl PPD					09-03-5307
15.	5 Amino Ortho Toludine					95-53-4
16.	4-Bromo Anisole					104-92-7
17.	2 Chloro 4 Flouro 5 Nitro Benzyl Chloride					120890-66-6
18.	3 Amino 4 Methoxy Acetanilide	0	83.33	83.33	1000.00	6375-47-9
19.	Para Anisidine					104-94-9
20.	Para Amino Salicylic Acid					65-49-6
21.	Nitro to amino conversion by catalytic hydrogenation					
22.	Aldehyde to alcohol conversion by catalytic hydrogenation					
TOTAL		13.25	187.5	200.75	2410	

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

**A. Additional TOR**

- i. Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b) of the EIA notification, 2006 being the project site is located in notified industrial area.

	<ul style="list-style-type: none"> <li>ii. ESR plan for 5 year @ 5 % of the project cost with the consultation of nearby villagers to be submitted.</li> <li>iii. Plan for green belt (5-10m as per land availability) around periphery of the plant to be submitted.</li> <li>iv. Toxicity of chemicals w.r.t. LD-50 and LD-90 to be submitted.</li> <li>v. A plan for planting of 1000 trees /year till 5 years in identified 3 villages.</li> </ul> <p>It was recommended that ‘TORs’ prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under the provisions as per para 7 (i) III. Stage (3)(i)(b)of the EIA notification, 2006.</p>
24.4.5	<p><b>Proposal to enhance the capacity of existing products as well introduce new similar group of product under the category “Chlorinated Paraffin Wax” Plot No: 57/D/B, 1st Phase, GIDC, Vapi, Pin Code: 396195 Dist.-Valsad (Gujarat) by M/s Makwell Plastisizers Pvt. Limited-reg. TOR [IA/GJ/IND2/63965/2017, IA-J-11011/185/2017-IA-II(I)]</b></p> <p>The project proponent informed following:-</p> <ul style="list-style-type: none"> <li>i. The project involves proposal to enhance the capacity of existing products as well introduce new similar group of product under the category “Chlorinated Paraffin Wax” at Plot No: 57/D/B, 1st Phase, GIDC, Vapi, Dist.-Valsad (Gujarat) by M/s Makwell Plastisizers Pvt. Limited.</li> <li>ii. All synthetic organic chemicals industry located in a notified industrial area/estate are listed at S.N. 5(f) under category ‘B’. However, due to applicability of general condition i.e. project lies within 5 km radius of interstate boundary of Dadra and Nagar Haveli (D N &amp; H), hence the project will be treated as Category A hence appraised at central level.</li> <li>iii. Ministry has issued EC earlier vide Letter No. J-11011/86/2009-IA II (I) dated 09/04/2009 for existing unit to M/s Makwell Plastisizers Pvt. Limited.</li> <li>iv. Existing land area is 5126 m<sup>2</sup>, No additional land will be used for proposed expansion. Industry has already developed Greenbelt in an area of 15.02 % i.e. 770m<sup>2</sup> out of 5126 m<sup>2</sup> of area of the project.</li> <li>v. The estimated project cost is Rs 2.43 Crores, including existing investment of Rs 2.07Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 55.00 Lakhs and the Recurring cost (operation and maintenance) will be about Rs 7.00 Lakhs per annum.</li> <li>vi. Total Employment will be 35 persons as direct &amp; 10 persons indirect after expansion. Industry proposes to allocate Rs11.25 Lakhs @ of 2.5% towards Corporate Social Responsibility/Enterprise social commitment.</li> <li>vii. It is reported that as per Form-1 no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River/ water bodyDamangangais flowing at a distance of 1.60 Km in South direction.</li> <li>viii. Total water requirement is 142 m<sup>3</sup>/day of which fresh water requirement of 142m<sup>3</sup>/day and will be met from GIDC Water Supply.</li> <li>ix. Untreated effluent of 12 KLD will be treated in Effluent treatment plant and discharge into CETP, Vapi for further treatment.</li> <li>x. Power requirement after expansion will be 200 KVAincluding existing 140 KVA and will be met from Dakshin Gujarat Vij. Co. Ltd. (DGVCL). Existing unit has one DG sets of 125 KVA capacity, will be used as standby during power failure. Stack (height 11 m)is provided as per CPCB norms to the existing DG sets of 125 KVA.</li> </ul>

- xi. Existing unit has 1 boiler 3 TPH Imported Coal fired boiler is installed. Bag filter with 15 m stack height will be provided for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>).
- xii. Details of Process emissions generation and its management is as follows:

PROCESS GAS EMISSION				
1.	Stack attached to	Chlorinator: I,II,III,IV	Chlorinator: V, VI, VII, VIII, IX,X,XI,XII	Chlorinator: I,II,III,IV, V, VI, VII, VIII, IX,X,XI,XII
i.	Pollutants	HCl < 20 mg/NM <sup>3</sup> and Cl <sub>2</sub> < 9 mg/NM <sup>3</sup>		
ii.	APC	Graphite/FRP/HDPE Water Scrubber followed by Alkali Scrubber		
iii.	Height of Vent	11 m	11 m	11 m

- xiii. Details of Solid waste/Hazardous waste generation and its management is as follows:

S. No.	Type of Hazardous Waste	Category as H/W Rules 2016	Generation, TPA			Treatment	Disposal
			Exist-ing	Proposed	Total		
1.	Waste from ETP	35.3	3.6	5.0	8.6	Packed in HDPE bags/drums	Dispose off into TSDF Vapi
2.	Used Oil	5.1	0.024	0.30	0.324	Washed & stored	Sell to registered recycler
3.	Discarded Containers	33.1	5.0	10.0	15.0	Packed in HDPE bags, stored	Utilized for packing of hazardous waste or sell to authorized recycler
4.	Sludge from Wet Scrubber	37.1	2.0	4.0	6.0	Stored in a tank	Dispose off into TSDF Vapi
5.	30% HCl	B-15	5433.0	45759.0	51192.0	Stored in a tank	Sell to actual users
<b>SOLID WASTE</b>							
1.	Fly Ash	---	3000.0	---	3000.0	Stored in Silo	Sell to Brick Manufacturers

- xiv. Following are the list of existing and proposed project:  
Existing Product list:

S. No.	Product	Quantity (TPM)	Quantity (TPA)
1.	Chlorinated Paraffin Wax	250	3,000
	<b>Total</b>	<b>250</b>	<b>3,000</b>

Proposed Products and their Capacities for Expansion:

S. No.	Product	Quantity (TPM)	Quantity (TPA)
1.	Chlorinated Paraffin Wax	1,500	18,000
2.	Sulpho Chlorinated Paraffin Wax	500	6,000
	<b>Total</b>	<b>2,000</b>	<b>24,000</b>

The EAC noted that existing unit is operating since 1993. Ministry has issued EC for expansion vide dated 9<sup>th</sup> April, 2009. During presentation PP informed that earlier EC got expired due to moratorium imposed in the area. The EAC suggested to go for rapid EIA with one month base line data.

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

**A. Additional TOR**

- i. Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b) of the EIA notification, 2006.
- ii. One month base line data to be submitted.
- iii. A plan for implementation of ZLD to be submitted.

It was recommended that 'TORs' prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under the provisions as per para 7 (i) III. Stage (3)(i)(b) of the EIA notification, 2006.

24.4.6

**Expansion of the production of Pentaerythritol from 560 MTM to 730 MTM, and Sodium Formate from 336 MTM to 480 MTM in solid and solution form at SIPCOT Industrial Complex, Kudikadu Village, Cuddalore District, Tamil Nadu by M/s Asian Paints Limited. [IA/TN/IND2/63895/2017, IA-J-11011/181/2017-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s Bhagavathi Ana Labs Pvt. Ltd, made a detailed presentation on the salient features of the project and informed that:

- i. The proposal is for Increase in the production of Pentaerythritol from 560 Metric Tons/Month to 730 Metric Tons/Month & Sodium Formate from 336 Metric Tons /Month to 480 Metric Tons /Month (in solid & solution form), at Kudikadu Village, Cuddalore District, by M/s Asian Paints Limited located at SIPCOT Industrial Estate, Tamil Nadu.
- ii. All synthetic organic chemicals industry located in a notified industrial area/estate are listed at S.N. 5(f) under category 'B'. However, due to applicability of general condition i.e. Critically polluted areas as notified by the Central Pollution Control Board is situated within 5 km from the project site, the project is considered as category 'A' and appraised at Central level by Expert Appraisal Committee.
- iii. Ministry has issued EC earlier vide letter no J-11011/345/2011-IA II (I); dated 24<sup>th</sup> Feb 2014 for Penta plant of M/s Asian Paints Limited in Expansion case.
- iv. Existing land area is 29.20 Acres, No additional land will be used for proposed expansion.
- v. Industry has already developed Geenbelt in an area of 33 % i.e. 38996 m<sup>2</sup> out of 11, 8168.2 m<sup>2</sup> of

area of the project.

- vi. The estimated project cost is Rs 4.80 Crores including existing investment of Rs.62.53 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 461 Lakhs and the Recurring cost (operation and maintenance) will be about Rs 215 lakhs per annum.
- vii. Total Employment will be 139 Persons as direct & 170 persons indirect after expansion, the plant is modernized with field level automation and will reduce manual intervention. The manpower will remain the same even after the expansion.
- viii. Industry proposes to allocate Rs 50 Lakhs @10.42% of Rs 480 Lakhs 5/2.5 % towards Corporate Social Responsibility.
- ix. It is reported that as per form-1 NO national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River/ water body Uppanaru Lake is flowing at a distance a distance of 0.5 Km in East direction.
- x. Total water requirement is 695 m<sup>3</sup>/day of which fresh water requirement of 695..m<sup>3</sup>/day and will be met from SIPCOT Industrial Supply. Treated effluent of Penta plant will be treated through Effluent treatment Plant provided with Zero Liquid discharge system.
- xi. Treated effluent of Captive Power plant will be treated through effluent treatment Plant provided with Zero Liquid discharge system.
- xii. Power requirement after expansion will be 1450 KW. It Includes existing 1875 KVA power which will be met from our captive power plant & 350 KVA from Tamil Nadu EB. Existing unit has 4 nos of DG sets of 1830 KVA capacity. DG sets will be used as standby during power failure / Turbine failure. Stack height of 12 m is provided as per CPCB norms to the existing DG sets of 500 & 600 KVA. The existing DG sets will be used as standby during power failure / turbine failure.
- xiii. Existing unit is a 16 TPH coal fired boiler and it is installed with Multi cyclone separator/ bag filter with a stack of height of 42 m. Spare 14TPH coal fired boiler is available (with stack height of 50 m) and the same will be operated in the event of failure of 16 TPH boiler. Additional standby Boiler of 8 TPH will be procured to take care of peak requirements. Facilities for controlling the particulate emissions within statutory limit of 50 mg/Nm<sup>3</sup> will be provided for the proposed 8TPH Boiler.
- xiv. Details of process emissions generation and its management are as follows:

4 nos. of process stacks of the following dimensions:

Source	Control measure	Height (m above ground level)
Mono Pentaerythritol Dryer	Wet scrubber with stack	12
Dipentaerythritol Dryer	Wet scrubber with stack	18
Fluidised Bed Dryer	Bag filters with stack	10.5
Sodium Formate Dryer	Wet scrubber with stack	18

- xv. The Coal consumption for the boiler will increase by 52.5 MT/day due to the capacity expansion. The SPM levels from boiler chimney will be controlled on account of effective Air Pollution

Control (APC) controls like High efficiency multi cyclones followed by bag filters.

- The proposed plant does not have incinerator installed for the source emission, the hazardous waste generated is sent to TSDF Gummidipoondi for proper disposal of Incinerable waste.

xvi. Details of Solid waste/ Hazardous waste generation and its management is as follows:

Solid Waste Type	Existing Quantity	Expected Quantity	Mode of Disposal
Spent Carbon (Kg)	200	7780	To authorised waste processing agency
Used Spent Oil (Lts)	900	900	To authorised waste processing agency
Waste Oil (Lts)	300	300	To authorised waste processing agency
Sludge (Tons)	128	172*	TSDF Gummidipoondi, Chennai

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

**Existing Product list**

Sl.No	Products	Quantity MTM
1	Pentaerythritol	560
2	Sodium Formate	336

**Proposed Products and their Capacities for Expansion**

Sl.No	Products	Quantity MTM
1	Pentaerythritol	730
2	Sodium Formate	480

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

**A. Additional TOR**

- Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b) of the EIA notification, 2006.
- One month base line data to be submitted.
- Submit ESR plan @ 5 % prepared in consultation with nearby villagers.
- Layout plan earmarking space for development of 10 m green belt around plant periphery to be submitted.

It was recommended that 'TORs' prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under the provisions as per para 7 (i) III. Stage (3)(i)(b)of the EIA notification, 2006.

24.4.7 **Expansion of Bulk Drugs and Intermediates Manufacturing Unit (Manufacturing capacity from 49.6 TPA to 54.74 TPA at Plot No.1 A, 4th Phase, Bommasandra Industrial Area, Jigin Link Road, Anekal Taluk, Bangalore District, Karnataka by M/s. Apotex Pharmachem India Pvt. Ltd. [IA/KA/IND2/64281/2017, IA-J-11011/237/2017-IA-II(I)]**

	<p>During presentation the committee noted that this is a violation case hence the EAC suggested the PP to make application before the EAC constituted by the Ministry for consideration of violation cases.</p>
24.4.8	<p><b>Expansion of Bulk Drugs and Intermediate s Manufacturing Unit (from 34.7 TPM to 173 TPM) at Sy.No. 305, 369 to 371, 373, 374 and 377, Gundlamachanoor Village, Hatnoora Mandal, Sangareddy District, Telangana by M/s. Aurobindo Pharma Limited, Unit IX— TOR reg [IA/TG/IND2/64113/2017, IA-J-11011/198/2017-IA-II(I)]</b></p> <p>The project proponent informed following:-</p> <ol style="list-style-type: none"> <li>i. The project involves expansion of Bulk Drugs and Intermediates Manufacturing Unit (from 34.7 TPM to 173 TPM) at Sy. No. 305, 369 to 371, 373, 374 and 377, Gundlamachanoor Village, Hatnoora Mandal, Sangareddy District, Telangana by M/s Aurobindo Pharma Limited (Unit IX).</li> <li>ii. All Synthetic organic chemicals manufacturing units located outside notified industrial area are listed at S.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under category ‘A’ and are appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>iii. Ministry has issued EC earlier vide letter no F. No. J-11011/83/2004-IA II (I) dated: 21.06.2005.</li> <li>iv. Existing land area is 25.04 acres, no additional of land is used for proposed expansion.</li> <li>v. Industry already developed Greenbelt in an area of 33% i.e., 8.27 acres out of 25.04 acres of area of the project.</li> <li>vi. The estimated project cost is Rs 50 crores for proposed expansion.</li> <li>vii. Total Employment from the expansion will be 140 persons as direct &amp; 200 persons as indirect from proposed expansion. Industry proposes to allocate 2.5 % i.e., Rs. 1.25 crores towards Corporate Social Responsibility.</li> <li>viii. It is reported that No National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 Km distance. Nakkavagu is passing from NW to SE in west direction at a distance of 1.2 km, Manjera river stream is passing from NW to SW in west direction at a distance of 2.6 km.</li> <li>ix. The total water requirement is 726 KLD out of which 434 KLD will be fresh water and 292 KLD is recycled water. Fresh water requirement shall be met from ground water.</li> <li>x. Total effluent of 314.6 m<sup>3</sup>/day will be treated through “Zero Liquid Discharge” based effluent treatment system. The high COD/TDS stream of 234.6 m<sup>3</sup>/day is segregated and sent to stripper followed by multiple effect evaporator (MEE), and agitated thin film dryer (ATFD). The condensate from stripper is sent to cement plants for co-incineration, while condensate from MEE and ATFD is mixed with low TDS/COD from utility blow downs of 52.5 KLD in biological treatment plant followed by Reverse Osmosis. The treated wastewater is reused for cooling towers, boilers make-up and scrubbers. Domestic wastewater and garment washings of 27.5 KLD shall be sent to sewage Treatment Plant and treated wastewater shall be reused for gardening.</li> <li>xi. Total Power requirement will be met by TS Transco. DG sets of capacity 2 x 380 kva proposed in addition to existing 2 x 500 and 1 x 380 kva to cater to the energy requirement during load shut down by Transco. Stack (height 5m, 4m and 4 m) will be provided based on CPCB formulae for proposed DG sets of 2 x 500 kva, 1 x 380 kva and 2 x 380 kva.</li> <li>xii. Existing unit has 1 x 12 TPH and 1 x 8 TPH coal fired boilers. Bag filter is provided common for 1 x 12 TPH and 1 x 8 TPH capacity boilers. It is proposed to install an additional boiler of 1 x 12 TPH coal fired boiler with bag filter as control equipment with a stack height of 40 m as part of expansion for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>). Existing 1 x 12 TPH shall be kept as standby after expansion.</li> <li>xiii. Gaseous emissions from process are Ammonia, Hydrogen Chloride, Sulfur dioxide, Carbon dioxide, Hydrogen. Ammonia, Hydrogen Chloride and Sulfur dioxide emissions are scrubbed in two stage scrubbers and the resultant scrubbing effluent sent to ETP. The other gases are Carbon dioxide which are let out into atmosphere following a standard</li> </ol>



- xiv. operating procedure while Hydrogen gas is let out into atmosphere through water column. Solid wastes are generated from process, solvent distillation, wastewater treatment and utilities. The effluent treatment system generates stripper distillate, ATFD salts and ETP sludge. The process operations generate process residue and recycling operation of distillation generates solvent residue and spent mixed solvents. The utilities i.e., coal fired boiler generates ash while DG sets generate waste oil and used batteries. The stripper distillate, process residue and solvent residue are sent to cement plants for co-incineration based on acceptability. If these wastes are not suitable for co-incineration, the same is sent to TSDF facility. The evaporation salts and ETP sludge are sent to TSDF. Waste oil and used batteries from the DG sets are sent to authorized recyclers. 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.
- xv. Following are the list of existing and proposed manufacturing capacities:

Manufacturing Capacity – Permitted

S. No.	Name of Product	Capacity	
		Kg/day	TPM
<b>Group - A</b>			
1	Ethambutol Hydrochloride	916.67	27.5
2	Ciprofloxacin HCl (Crude to Tech Grade)	833.33	25
<b>Group - B</b>			
1	Lamivudine	50	1.5
2	IndinavirSulfate	28.33	0.8
3	Sertraline Hydrochloride	28.33	0.8
4	Losartan Potassium	83.33	2.5
5	NelfinavirMesylate	15	0.5
6	Pyrazinamide	15	0.5
7	SaquinavirMesylate	3.33	0.1
8	Simvastatin	3.33	0.1
9	Rabeprazole Sodium	15	0.5
10	Zidovudine	41.67	1.3
11	Aminocarbinol Tartrate	90	2.7
12	N-[2-Amino-4,6-dichloro-5-pyrimidinyl] formamide	70	2.1
13	(2S,3S,5S)-2-Amino -3-Hydroxy-5-[2S-(1-Tetrahydropyrimid-2-Onyl)-3-Methyl butanoyl} Amino-1,6-Diphenylhexane, (S)-Pyroglutamic acid Salt	66.67	2
14	2,6-Dimethylphenoxy acetic acid	23.33	0.7
15	N- {[N-Methyl-N{(2-Isopropyl-4-Thiazolyl) Methyl] Amino] Carbonyl]-L-Valine	15	0.5
16	(2S,3S,5S)-5-amino)-2-[N-[5-Thiazolyl)MethoxyCarbonyl ]Amino]-1,6-Diphenyl-3-Hydroxyhexane	15	0.5
17	(3S,4aS,8aS )-2-(2R)-2-{(4S)-2-(3-Hydroxy-2-methyl phenyl-4,5-dihydrooxazol-4-yl]-2-hydroxyethyl} decahyro isoquinoline-3-carboxylic acid-tert-butylamide	6.67	0.2
18	Metoprolol	140	4.2
19	BT Hydrazine Sulfonic acid	3.33	0.1
20	Trans-4-Cyclohexyl-L-Proline	8.33	0.2
21	N,N-Dimethyl -3-Chloropropyl Amine	8.33	0.2
22	N-[(S)-Ethoxy Carboxyl-1-Butyl]- (S)-Alanine-(ECBA)	11.67	0.4

23	Benzyl(2s,3as,7as) Octahydro-1H-Indole-2-Carboxylate P-Toluenesulfonic acid (OHI ESTER)	8.33	0.2
24	4-Amino-2-Hydroxymethyl-1-Butanol Hydrochloride	6.67	0.2
25	N-Methyl Paroxetine	83.33	2.5
26	N-(4-Aminobenzoyl)-b-Alanine	3.33	0.1
27	3-Chloro-trans-Octahydro-1H-Quindin-2-One	6.67	0.2
28	2-(2-Ethoxy Phenoxy) Ethyl Methane Sulfonate (EPE Mesylate)	6.67	0.2
29	8-Methoxy Quinoline Boron Difluoride Chelate	3.33	0.1
30	N-Isopropyl-2-methyl-2-n-propyl-3-hydroxypropyl carbamate	28.33	0.8
31	(6S)-(-)-2,6-Diamino-4,5,6,7-tertahydro benzothiazole	3.33	0.1
32	6-Hydroxy-2-(4-hydroxyphenyl) benzo[b]thiophene	3.33	0.1
33	1-Bromo-4a,5,9,10-Tetrahydro-3-Methoxy-6-Oxo-6H-Benzofuro {3a,3,2-ef}[2] Benzazepin-11-(12H)-Carboxaldehyde	3.33	0.1
34	L-Valine Methyl Ester	28.33	0.8
35	Polyphosphate Ester	83.33	2.5
36	4-(Dimethylamino) Butanal Diethyl Acetal	83.33	2.5
37	N-(Trifluoro Acetyl)-L-Lysine	41.67	1.3
38	Trityl Losartan	100	3
39	[R-(R*,S*[[2-Methyl-1-(1-oxopropoxy) propoxy] (4-phenyl butyl) phosphinyl] acetic acid Cinchonidine salt (MOPPA)	16.67	0.5
40	1-[4-(Pyridin-2-yl)phenyl]-5(s)-2,5-Bis-[(tert-Butyloxycarbonyl)-Amino]-4(S) Hydroxy-6-Phenyl-2-Azahexane (DIBOC Intermediate)	16.67	0.5
41	N-(Methoxy Carbonyl)-(L)-TertLeucine (MOC Leucine)	16.67	0.5
42	Prenyl Half Ester	16.67	0.5
43	Dichloro Compound of Famicyclovir	16.67	0.5
44	(Bromomethyl)Biphenyl Methyl Ester (Telmisartan Stage II)	16.67	0.5
45	Benzyl(2S,3aR,7aS)Octahydro-1H-Indole-2-Carboxylate Hydrochloride (BOHI HCl)	16.67	0.5
46	Methyl (2E)-3-[4-(4-Florophenyl)-6-Isopropyl-2-[N-methyl (N-Methyl sulfonyl) amino]Pyrimidine-5-yl]acrylate ([E] Pyrimidine Alkene) (substituted HydroxyPentanoic Acid)	26.67	0.8
47	Cilexetil Chloide	16.67	0.5
48	2-Ethoxy-1-Naphthoic Acid	16.67	0.5
49	O Acetyl Thio Ester	16.67	0.5
50	(2S,4S)-FMOC-4-Cyclohexyl-Pyrrolidine-2-Carboxylate (FMOC-ChxPro-OH)	16.67	0.5
51	Bis Methyl Silyl Urea (BSU)	66.68	2
52	3-(Methylamino)Propionitrile	16.67	0.5
53	Candesartam Methyl Ester	16.67	0.5
54	Sumitriptan Succinate	13.34	0.4
55	Cifuroxime Axetil	16.67	0.5

56	Valacyclovir	16.67	0.5
57	Chloromethyl Pivolate	16.67	0.5
58	N-Formyl Hexamethyl eneimine	16.67	0.5
59	Irbesartan	16.67	0.5
60	Atorvastatin	16.67	0.5
61	Citlaporam HBr	16.67	0.5
62	Domipiridone	20	0.6
63	Metaprolol Tartrate	16.67	0.5
64	Azithromycin	16.67	0.5
65	Celecoxib	16.67	0.5
66	Pregabalin	16.67	0.5
67	Iron Sucrose	32.87	1
68	Sevelamer HCl/Carbonate	3.2	0.1
69	AR Modafinil	23	0.7
70	Pitavastatin Intermediate	3.28	0.1
<b>Total Production Capacity (One product from Group A and two products from Group B)</b>		<b>1156.7</b>	<b>34.7</b>

Manufacturing Capacity – After Expansion

S. No.	Name of the Product	Capacity TPM
1	Ciprofloxacin HCl (Crude to Tech Grade)	12.00
2	Metoprolol(base)	11.25
3	N-Isopropyl-2-methyl-2-n-propyl-3-hydroxypropyl carbamate (monocarbamate)	6.00
4	Losartan Potassium	7.50
5	Aminocarbinol Tartrate	6.75
6	N-[2-Amino-4,6-dichloro-5-pyrimidinyl] formamide	6.75
7	(2S,3S,5S)-2-Amino -3-Hydroxy-5-[2S-(1-Tetrahydropyrimid-2-Onyl)-3-Methyl butanoyl] Amino-1,6-Diphenylhexane, (S)-Pyroglutamic acid Salt	6.75
8	Trityl Losartan	6.00
9	[R-(R*,S*[[2-Methyl-1-(1-oxopropoxy) propoxy] (4-phenyl butyl) phosphinyl] acetic acid Cinchonidine salt (MOPPA)	6.75
10	Prenyl Half Ester	6.00
11	Metaprolol Tartrate	6.75
12	Candesartan Methyl Ester	4.50
13	N-Methyl Paroxetine	3.75
14	N,N-Dimethyl -3-Chloropropyl Amine (Citalopram – int –A)	3.00
15	Dichloro Compound of Famicyclovir	3.00
16	Iron Sucrose	3.00
17	2,6-Dimethylphenoxy acetic acid	3.30
18	Lamivudine	3.00
19	Simvastatin	3.00
20	Zidovudine	3.00
21	Polyphosphate Ester	3.00
22	4-(Dimethylamino) Butanal Diethyl Acetal	3.00
23	Cilexetil Chloride	3.00

24	O Acetyl Thio Ester	3.00
25	Bis Methyl Silyl Urea (BSU)	3.00
26	4-Amino-2-Hydroxymethyl-1-Butanol Hydrochloride (Famciclovir side chain)	3.00
27	(2S,3S,5S)-5-amino)-2-[N-[5-Thiazolyl)MethoxyCarbonyl ] Amino]-1,6-Diphenyl-3-Hydroxyhexane(ATADH)	2.63
28	IndinavirSulfate	1.50
29	N-{[N-Methyl-N{(2-Isopropyl-4-Thiazolyl) Methyl] Amino] Carbonyl]-L-Valine (MITAVA)	1.50
30	L-Valine Methyl Ester	1.50
31	N-(Trifluoro Acetyl)-L-Lysine (Lisinopropil)	1.50
32	2-Ethoxy-1-Naphthoic Acid	1.50
33	Sevelamer Hydrochloride/ Carbonate	1.50
34	AR Modafinil	1.50
35	(Bromomethyl)Biphenyl Methyl Ester (Telmisartan Stage II)	1.13
36	1-Bromo-4a,5,9,10-Tetrahydro-3-Methoxy-6-Oxo-6H-Benzofuro{3a,3,2-ef}[2] Benzazepin-11-(12H)-Carboxaldehyde (Bromoformylnarnorvedine)	1.05
37	Rabeprazole Sodium	0.75
38	Methyl (2E)-3-[4-(4-Fluorophenyl)-6-Isopropyl-2-[N-methyl (N-Methyl sulfonyl) amino]Pyrimidine-5-yl]acrylate ([E] Pyrimidine Alkene) (substituted HydroxyPentanoic Acid)	0.75
39	Pitavastatin Intermediate	0.75
40	Benzyl(2S,3aR,7aS)Octahydro-1H-Indole-2-Carboxylate Hydrochloride (BOHI HCl)	0.60
41	1-[4-(Pyridin-2-yl)phenyl]-5(s)-2,5-Bis-[(tert-Butyloxycarbonyl)-Amino]-4(S) Hydroxy-6-Phenyl-2-Azahexane (DIBOC Intermediate)	0.45
42	N-[(S)-Ethoxy Carboxyl-1-Butyl]- (S)-Alanine-(ECBA)	0.38
43	Benzyl(2s,3as,7as) Octahydro-1H-Indole-2-Carboxylate P-Toluenesulfonic acid (OHI ESTER)	0.38
44	6-Hydroxy-2-(4-hydroxyphenyl) benzo[b]thiophene (Dihydroxybenzothiophene)	0.38
45	NelfinavirMesylate	0.30
46	(3S,4aS,8aS)-2-(2R)-2-{(4S)-2-(3-Hydroxy-2-methyl phenyl-4,5-dihydrooxazol-4-yl)-2-hydroxyethyl} decahydro isoquinoline-3-carboxylic acid-tert-butylamide (Nelfinavir stage viii)	0.30
47	Trans-4-Cyclohexyl-L-Proline (CHP)	0.30
48	3-Chloro-trans-Octahydro-1H-Quindin-2-One (Bohi)	0.30
49	2-(2-Ethoxy Phenoxy) Ethyl Methane Sulfonate (EPE Mesylate)	0.30
50	8-Methoxy Quinoline Boron Difluoride Chelate (Moxifloxacin)	0.30
51	N-(Methoxy Carbonyl)-(L)-TertLeucine (MOC Leucine)	0.30
52	3-(Methylamino)Propionitrile	0.30

53	N-(4-Aminobenzoyl)-b-Alanine (4ABBA)	0.15
57	(6S)-(-)-2,6-Diamino-4,5,6,7-tetrahydro benzothiazole (Pramipexoldiamine)	0.15
55	(2S,4S)-Fmoc-4-Cyclohexyl-Pyrrolidine-2-Carboxylate (Fmoc-ChxPro-OH)	0.03
56	BT Hydrazine Sulfonic acid	0.02
57	Silodosin (intermediate)	0.38
58	FosaprepitantDimeglumine	0.38
59	Mirabegron	0.75
60	Colesevelam	1.13
61	3-Hehyan-2-ol	0.08
62	Methoxitil	0.08
63	Rivastigimine	0.08
64	Bezafibrate	0.08
65	2-Isopentyl-2-Isopropyl-1,3-Dimethoxy propane	0.38
66	Efavirenz	1.50
67	Tramadol Hydrochloride	3.75
68	Lorcaserin Hydrochloride	0.30
69	Teriflunomide	0.15
70	Apixaban	0.08
71	Canagliflutine	0.03
72	Atovaquone	0.75
73	Sodium Ferric Gluconate	2.25
74	Fluvastatin Sodium	2.25
75	DiprotectedRosuvastatin	2.25
76	Lamivudine Coupled Ester	1.13
77	Oxocompound Free Base	0.08
78	Sofosbuvir	0.08
79	Raltegravir Potassium	1.01
80	Flecainide acetate	0.38
81	Nebivolol	0.38
82	Clobazam	0.12
83	Nefopam	0.08
84	Carbimazole	0.08
85	ledipasvir	0.08
86	R & D Pilot Plant Trial Run Products (Bulk Drugs and Intermediates)	0.50
	<b>Total</b>	<b>173</b>

List of Utilities

S.No	Utility	Permitted	Proposed	After Expansion
1	Coal Fired Boilers (TPH)	12 8	12	2 x 12* 1 x 8
2	DG Sets (kVA)**	2 x 500 1 x 380	2 x 380	2 x 500 3 x 380

\* 1 x 12 TPH Boiler shall be kept as standby.

\*\*DG sets will be used during load shut down by Transco.

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

	<p><b>A. Additional TOR</b></p> <ol style="list-style-type: none"> <li>i. Public Consultation shall be done as per provisions of the EIA Notification, 2006.</li> <li>ii. Layout Plan for 10 m wide green belt around periphery of the plant to be submitted.</li> <li>iii. Certified compliance report of existing EC from RO, MoEF&amp;CC to be submitted.</li> <li>iv. A plan for implementation of ZLD to be submitted.</li> <li>v. Plan for in-house treatment of organic waste.</li> <li>vi. Toxicity study of the each chemical proposed to be manufactured.</li> <li>vii. Action Taken Report duly certified by the RO, MoEF&amp;CC on the non compliance point in compliance report to be submitted.</li> </ol> <p>It was recommended that ‘TOR’ with Public consultation prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006.</p>
24.4.9	<p><b>Proposed dyes &amp; dye intermediates manufacturing plant of M/s.Tvisha impex plot no. 501/b, GIDC estate, Ankleshwar, Dist: Bharuch, Gujarat-reg. TOR [ IA/GJ/IND2/64308/2017 , IA-J-11011/214/2017-IA-II(I)]</b></p> <p>The project proponent informed following:-</p> <ol style="list-style-type: none"> <li>i. The project involves proposed dyes &amp; dye intermediates manufacturing plant of M/s Tvisha Impex Plot No. 501/b, GIDC Estate, Ankleshwar, Dist: Bharuch, Gujarat by M/s Tvisha Impex.</li> <li>ii. All synthetic organic chemicals industry located in a notified industrial area/estate are listed at S.N. 5(f) under category ‘B’. However, due to applicability of general condition i.e. Critically polluted areas as notified by the Central Pollution Control Board hence project is considered as category ‘A’ and appraised at Central level by Expert Appraisal Committee.</li> <li>iii. Proposed land area is 2196 m<sup>2</sup>; additional -- land will be used for proposed expansion.</li> <li>iv. Industry will be developed Greenbelt in an area of 33% i.e. 725 m<sup>2</sup> out of 2196 m<sup>2</sup> of area of the project.</li> <li>v. The estimated project cost is Rs. 200 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 20 Lakhs and the recurring cost (operation &amp; maintenance) will be about Rs. 5 Lakhs per annum.</li> <li>vi. Total employment will be 25 persons as direct &amp; 10 persons indirect for proposed project. Industry purposes to allocate Rs. 5 Lakhs @ 2.5 % towards Corporate Social Responsibility.</li> <li>vii. It is reported that No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River/water body Narmada River is flowing at a distance a distance of 9 km in N direction.</li> <li>viii. Ambient air quality monitoring will be carried out at 8 locations during March-2017 to May-2017.</li> <li>ix. Total water requirement will be 13.1 KL/Day; which will be met from GIDC Water Supply.</li> <li>x. Total 6.95 KL/Day (4.95 KL/Day Industrial + 2 KL/Day domestic) of effluent shall be</li> </ol>

generated. Industrial effluent 4.95 KL/Day will be treated in ETP and then sent to CETP, Ankleshwar (M/s. ETL) for further treatment.

- xi. Power requirement will be 100 HP and will be met from DGVCL.
- xii. Proposed unit will have 1.5 TPH Steam boiler. Multi cyclone separator with bag filter with a stack of height of 11 m will be installed for controlling the Particulates emissions (within statutory limit of 115 mg/Nm<sup>3</sup>).
- xiii. Details of Solid waste/Hazardous waste generation and its management is as follows:

S. No.	Type of waste	Cate-gory	Quantity	Disposal Method
1	ETP Sludge	35.1	10.0 MT/Month	Collection, Storage, Transportation and disposal to nearest TSDF site (M/s. BEIL)
2	Discarded Containers/Bags/Liners	33.1	2.0 MT/Month	Collection, Storage, Transportation, decontamination & sell to GPCB authorized vendors
3	Iron Oxide Sludge	--	10.0 MT/Month	Collection, Storage, Transportation and given to cement industries or disposal to nearest TSDF site (M/s. BEIL)
4	Acetic Acid	--	3.0 MT/Month	Collection, Storage, Transportation, & sell to authorized end users
5	Used oil	5.1	0.01 MT/Month	Collection, Storage, Transportation & Sell to GPCB registered re-processor

**xiv. Following are the list of proposed products:**

Proposed Product List:

S. No.	Products	CAS NO.	Production Capacity (MT/Month)
1	Disperse Red F3BS	99031-78-6	35
2	Disperse Blue GSL	41642-51-7	20
3	Disperse Yellow SG	12236-36-1	12
4	Disperse Yellow 4G	86836-02-4	12
5	Disperse Yellow SGL	61968-66-9	12
6	Butyl Pyridone	39108-47-9	6
7	Ethyl Pyridone	29097-12-9	6
8	Methyl Pydridone	1003-56-1	6
9	N,N-Diethyl Meta Amino Methane Sulphonilide	134-62-3	10
10	2,6 – Dibromo Para Toluidine	6968-24-7	15
11	2,6 – Dibromo Para Nitro Aniline	827-94-1	10

12	Zinc Cyanide	557-21-1	5
13	Copper Cyanide	544-92-3	5
14	Intermediate of Disperse Red 343	99035-78-6	10
15	Intermediate of Blue 165	41642-51-7	7
16	Para Amino Acetanilide	122-80-5	6
17	Standardization (Formulation) of Dyes & Pigments	--	100
<b>TOTAL</b>			<b>277</b>

The EAC noted that PP has started ambient air quality monitoring at 8 locations since March, 2017. EAC agreed with it.

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

**A. Additional TOR**

- i. Public hearing is exempted under the provisions as per para 7(i)III. Stage (3)(i)(b) of the EIA notification, 2006.
- ii. ESR plan for 5 year @ 2.5 % of the project cost with the consultation of nearby villagers to be submitted.
- iii. Toxicity study of each chemical proposed to be manufactured.

It was recommended that 'TORs' prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b) of the EIA notification, 2006.

24.4.10	<p><b>Expansion of existing molasses based distillery from 35KLPD to 65KLPD at at Shreepur, Malshiras (Tq.), Solapur (Dist) in Maharashtra by M/s Brima Sagar Maharashtra Distilleries Ltd. [IA/MH/IND2/64043/2017, IA-J-11011/192/2017-IA-II(I)]</b></p> <p>The project proponent informed following:-</p> <ol style="list-style-type: none"> <li>i. The project involves expansion of existing molasses based distillery from 35KLPD to 65KLPD at at Shreepur, Malshiras (Tq.), Solapur (Dist) in Maharashtra by M/s Brima Sagar Maharashtra Distilleries Ltd.</li> <li>ii. The project proposal was considered by the Expert Appraisal Committee (Industry 2) in its 13<sup>th</sup> Reconstituted Expert Appraisal Committee held on 19<sup>th</sup> November 2013 and recommended Terms of Reference (TORs) for the project .The TOR was issued by the Ministry vide letter no. J-11011/249/2013/IA.II (I) dated 31<sup>st</sup> January 2014.</li> <li>iii. All molasses based distillery project are listed at S.N. 5 (g) of schedule of Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at central</li> </ol>
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- level by Expert Appraisal Committee.
- iv. Ministry has issued EC earlier vide letter no. J-11011/68/2002-IA.II (I) dated 14<sup>th</sup> May 2003 for Distillery unit – to M/S Brihan Maharashtra Sugar Syndicate Ltd., the name of which is changed to Brima Sagar Maharashtra Distilleries Ltd.
  - v. Existing land area is 30.60 hectares and no additional area is required for expansion.
  - vi. Industry developed 5.0 hectares to land for greenbelt and the remaining 5.25 hectares of land to cover 33% of greenbelt is under development.
  - vii. Total employment will be 254 persons as direct and 60 persons indirect after expansion. Industry proposes to allocate 1.25 cores at 2.5% towards Corporate Social Responsibility.
  - viii. It is reported that as per Form 1, there are no national parks, wild life sanctuaries, biosphere resources, tiger/ elephant- Reserves, wild life corridors etc. lies within 10 km distance. Bhima River is flowing at a distance of 4.6 km in N-E direction.
  - ix. Total water requirement is 1050 m<sup>3</sup>/day of which fresh water requirement is 715m<sup>3</sup>/day and will be met from Nira right Bank canal.
  - x. Treated effluent 260 m<sup>3</sup>/day will be treated through Biomethanation followed by RO and Composting and will achieve zero liquid discharge.
  - xi. Power requirement after expansion will be 0.90MW including existing 0.50MW and will be met from its own co-generation plant based on bio-gas with H<sub>2</sub>S Scrubber. Additionally two numbers of 380 KVA DG sets are used as stand by during Power failure. Stack height of 6.5 meters was provided as per CPCB norms. DG sets of additional numbers will be require as standby during power failure.
  - xii. Existing limit has 10 TPH and 4 TPH Bio- gas/ coal/ pet-coke/ bagasse fired boilers which were already in existence. Multicyclones with a stack height of 35 meter were installed for controlling the particulate emissions (within statutory limit of 150 mg/Nm<sup>3</sup>) for exiting 10 and 4 TPH boilers. No additional boilers are required.
  - xiii. Process emissions are particulate matter and H<sub>2</sub>S. Multicyclone and H<sub>2</sub>S scrubber are provided as APC equipment.
  - xiv. Solid waste generated are digested sludge from anaerobic digester and yeast sludge from fermentation tanks which are around 100 MT/ month and composted along with spentwash. Solid waste generated are digested sludge from anaerobic digester and yeast sludge from fermentation tanks which are around 100 MT/ month and composted along with spentwash.
  - xv. Public hearing for the proposed has been conducted by the state pollution control board on 2<sup>nd</sup> December 2016.
  - xvi. No litigation against the project proponent.
  - xvii. Following are the list of existing and proposed Product:

S. No.	Product	Existing (TPA)	Proposed (TPA)	Total (After expansion) (TPA)
1	Rectified Spirit	7560	6480	14040
2	ENA	2400	11000	13400
3	Malt Spirit	312	888	1200
4	Grape Spirit	600	600	1200
5	Potable Liquor	4000	5940	9940

During presentation PP informed that Ministry has issued TOR for this proposal vide letter no J-11011/249/2013/IA.II (I) dated 31<sup>st</sup> January 2014. Public hearing for the proposed project has been conducted by the state pollution control board on 2<sup>nd</sup> December 2016. The EAC noted that as earlier PP has already conducted public hearing but earlier TOR got expired and PP could not submitted the EIA report on time. EAC decided to exempt public hearing under para 7 (ii) of EIA notification, 2006.

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

**A. Additional TOR**

- i. Public hearing is exempted under the provisions as per para 7(ii) of the EIA notification, 2006.
- ii. Fresh base line data to be submitted.

It was recommended that 'TORs' prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b) of the EIA notification, 2006.

24.4.11

**Proposed expansion of dyes and dye intermediates in existing manufacturing unit at plot No.C1-b-3416, nr.pci chokdi, GIDC Estate, Ankleshwar, Tal: Ankleshwar, Dist:Bharuch (Guj.)- reg. TOR by M/S. PEARL CHEMICAL INDUSTRIES [IA/GJ/IND2/64321/2017, IA-J-11011/238/2017-IA-II(I)]**

The project proponent informed following:-

- i. The project involves proposed expansion of dyes and dye intermediates in existing manufacturing unit at plot No. C1-b-3416, Nr. PCI Chokdi, GIDC Estate, Ankleshwar, Tal: Ankleshwar, Dist: Bharuch, Gujarat by M/s Pearl Chemical Industries.
- ii. All synthetic organic chemicals industry located in a notified industrial area/estate are listed at S.N. 5(f) under category 'B'. However, due to applicability of general condition i.e. Critically polluted areas as notified by the Central Pollution Control Board hence project is considered as category 'A' and appraised at Central level by Expert Appraisal Committee.
- iii. Existing land area is 704 m<sup>2</sup>; No additional land will be used for proposed expansion.
- iv. Industry will be developed Greenbelt in an area of 30% i.e. 211.20 m<sup>2</sup> out of 704 m<sup>2</sup> of area of the project.
- v. The total cost of the project after proposed expansion will be Rs. 65 Lakhs.
- vi. Total employment will be 15 persons as direct 10 persons indirect for proposed project. Industry purposes to allocate Rs. 1,62,500 Lakhs @ 2.5 % towards Corporate Social Responsibility.
- vii. It is reported that No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance.
- viii. Ambient air quality monitoring will be carried out at 8 locations during March-2017 to May-2017.
- ix. Total water requirement will be 13.2 KL/Day; which will be met through GIDC Water Supply.
- x. Total 5.0 KL/Day (3.0 KL/Day Industrial + 2.0 KL/Day domestic) of effluent shall be treated in ETP and then sent to CETP, Ankleshwar (M/s. ETL) for further treatment.
- xi. Power requirement will be 102 HP (Existing: 27 HP & Proposed: 75 HP) and will be met from DGVCL.
- xii. Existing unit has Baby boiler (0.6 TPH) & Hot Air Generator. Unit has proposed boiler (1.0 TPH).
- xiii. Details of Process emissions generation and its management Not Applicable.
- xiv. Details of Solid waste/Hazardous waste generation and its management is as follows:

CAT. NO.	Hazardous Waste	Existing Quantity	Proposed Quantity	Total Quantity	Method of Disposal
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33.1	Discarded Containers/Drums /Carboys	9 MT/Year	24 MT/Year	33 MT/Year	Collection, Storage, Transportation, Reuse or Sale to authorized vendor.
5.1	Used /Spent Oil	0.015 KL/Year	0.012 KL/Year	0.027 KL/Year	Collection, Storage, Transportation, Reuse or Sale to authorized re-processors.
33.1	ETP Sludge	--	5 MT/Year	5 MT/Year	Collection, Storage, Sent to TSDF(BEIL) for land filling.
26.1	Solid Waste	--	4.0 MT/Year	4.0 MT/Year	Collection, Storage, Sent to TSDF (BEIL) for final disposal

xv. Following are the list of existing & proposed products:

S. No.	Name of Products	CAS No.	Existing Quantity (MT/Month)	Additional Quantity (MT/Month)	Total Quantity (MT/Month)
<b>EXISTING</b>					
1	Copper Sulphate	7758-98-7	400	---	400
2	Nickel Sulphate	7786-81-4			
3	Zinc Sulphate	7733-02-0			
4	Ammonium Sulphate	7783-20-2			
5	Cobalt Sulphate	10124-43-3			
6	Ferrous Sulphate	7720-78-7			
7	Potassium Sulphate	7778-80-5			
8	Sodium Bromide	7647-15-6			
9	Potassium Bromide	7758-02-3			
10	Sodium Sulphite	7757-83-7			
11	Ammonium Molybdate	13106-76-8			
12	Potassium Chloride	7447-40-7			
13	Potassium Nitrate	7757-79-1			
<b>PROPOSED</b>					
14	Disperse Red 343 or F3bs	99031-78-6	--	10.5	10.5
15	Disperse Blue 165 or Blue GSL	41642-51-7	--	7.5	7.5
16	Disperse Yellow 114 or Yellow SG	61968-66-9	--	10	10
17	Disperse Yellow 211 or Yellow 4G	86836 -02-4	--	10	10
18	Disperse Yellow SGL	61968-66-9	--	10	10
19	Butyl Pyridone	39108-47-9	--	5	5
20	Ethyl Pyridone	28141-13-1	--	5	5
21	Methyl Pyridone	694-85-9	--	5	5
22	N-N-Diethyl Meta Amino Methane Sulfonilide	6375-46-8	--	10	10
23	2:6 Dibromo Para Toluidine	6968-24-7	--	15	15
24	2:6 Dibromo Para Nitro Aniline	827-94-1	--	10	10
25	Zinc Cyanide	557-21-1	--	5	5
26	Copper Cyanide	544-92-3	--	5	5

27	Monoazo of Red 343 or Intermediate of Red 343	--	--	10	10
28	Monoazo of Blue 165 or Intermediate of Blue GSL	--	--	7.5	7.5
29	Disperse Yellow 10GN	164578-37-4	--	6	6
30	Standardization of Dyes & Pigments	--	300	100	400
<b>TOTAL</b>			<b>700</b>	<b>231.5</b>	<b>931.5</b>

The EAC noted that PP has started ambient air quality monitoring at 8 locations since March, 2017. EAC agreed with it.

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

**A. Additional TOR**

- i. Public hearing is exempted under the provisions as per para 7(i)III. Stage (3)(i)(b) of the EIA notification, 2006.
- ii. ESR plan for 5 year @ 5 % of the project cost with the consultation of nearby villagers to be submitted.
- iii. No use of ground water.
- iv. layout plan earmarking space for development of 5 m peripheral green belt. 33% area of total project cover area shall be developed as green area with plantation of perennial trees.
- v. Plan for plantation of 1000 trees/year till 5 year in nearby 3 identified villages.
- vi. Compliance report of the existing EC , if any, duly certified by RO, MoEF&CC to be submitted.

It was recommended that 'TORs' prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b) of the EIA notification, 2006.

24.4.12	<p><b>Proposal to expand the existing few products &amp; also plans to add new products at the site Plot No. 775, 776 and 777, GIDC Estate Jhagadia, Dist. Bharuch, State – Gujarat by M/s. Amarjyot Chemical Limited, (Formerly known as M/s. Draagon Drugs Pvt. Ltd.) -reg. TOR [IA/GJ/IND2/64350/2017, IA-J-11011/215/2017-IA-II(I)]</b></p> <p>The project proponent informed following:-</p> <ol style="list-style-type: none"> <li>i. The project involves proposal to expand the existing few products &amp; also plans to add new products at the site Plot No. 775, 776 and 777, GIDC Estate Jhagadia, Dist. Bharuch, State – Gujarat-393110 by M/s Amarjyot Chemical Limited (Formerly known as M/s Draagon Drugs Pvt. Ltd.).</li> <li>ii. All synthetic organic chemicals industry located in a notified industrial area/estate are listed at S.N. 5(f) under category 'B'. However, due to unavailability of SEIAA in Gujarat hence</li> </ol>
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- project is considered as category 'B' and appraised at Central level by Expert Appraisal Committee.
- iii. Existing unit is operating since 2004. Earlier EC issued vide letter no. J-11011/751/2008/-IA-II (I), Dated 30<sup>th</sup> Jan 2009, had lapsed due to hydraulic load constraints in Jhagadia GIDC.
  - iv. Existing land area is 8100 sq.m. and same shall be used for proposed expansion.
  - v. Industry will develop greenbelt in an area of 1203.58 sq. m (approx. 15%) out of 8100 sq.m. of area of the project. GIDC land is procured by the unit for balance 18% greenbelt development.
  - vi. The estimated project cost is Rs. 56.65 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 4.0 Crore. and the Recurring cost (operation and maintenance) shall be provided in EIA report.
  - vii. Existing Man power: Permanent 27 Nos. + Contract Labour  
Proposed additional: Permanent 100 Nos. + Contract Labour  
Total: 127 Permanent + Contract labour.  
Fund allocation towards Corporate Social Responsibility – to be provided in EIA report.
  - viii. National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. located outside 10 Km (aerial distance) from project site. Narmada River is flowing at a distance of 8 Km in NNW direction.
  - ix. Total fresh water requirement is 211 m<sup>3</sup>/day and will be met from GIDC, Jhagadia.
  - x. Industrial wastewater 22.3 m<sup>3</sup>/day shall be treated in own ETP (consisting of Primary, Secondary & Tertiary treatment). Treated effluent shall be sent to M/s. NCT (Narmada Clean Tech, Ankleshwar) through pipeline after achieving inlet std. norms of NCT.
  - xi. Proposed total requirement of Electricity = Approx. 2700 KVA and will be met by DGVCL (Dakshin Gujarat Vij Company Limited.) D.G. Set of 1175 kVA shall be installed, to be used as standby during power failure. Stack height 11 m will be provided as per CPCB norms.
  - xii. Existing unit has 3 TPH LDO fired boiler with 11 m stack height. Additionally Two Coal fired boiler of 5 TPH and 10 TPH capacity. Two Coal fired Thermo Pack of 10 lac. kcal/h capacity will be installed. Multi cyclone separator followed by bag filter with a stack of height of 20 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>).
  - xiii. There is no process emission from existing manufacturing process as well as any other ancillary process.
  - xiv. Details of Solid waste/Hazardous waste generation and its management:

Sr. No.	Type of Waste	Category* (As per Sch-I)	Quantity Per Annum			Mode of Treatment & Disposal
			As per Existing CC&A	EC applied for Additional Qty	Total After EC expansion	
1.	Used Oil	5.1	20 Lit	10 Lit	30 Lit	Collection, Storage, Transportation & sale to MoEF&CC registered rerefiners.
2.	Discarded containers / Barrels/ Liners	33.1	780 Nos 780 Nos	7020 Nos. 7020 Nos.	7800 Nos. (117 MT) 7800 Nos. (1.95 MT)	Collection, storage, Transportation & Decontamination and reused.

3.	Spent catalyst	26.1	3 MT	30 MT	33 MT	Collection, Storage, Transportation and sent to supplier for regeneration <b>OR</b> to CHWIF.
4.	Distillation residue	36.1	--	720 MT	720 MT	Collection, Storage, Transportation and sent for co-processing <b>OR</b> to CHWIF
5.	Spent Filter cloth	36.2	--	5 MT	5 MT	Collection, storage, Transportation & sent to CHWIF
6.	ETP/ MEE Sludge	33.5	--	90 MT	90 MT	Collection, Storage, Transportation & sent to TSDF-BEIL, Ankleshwar
	Other inorganic salts			1000 MT	1000 MT	
7.	Off- spec product / raw material <b>OR</b> failed batch	--	--	24 MT	24 MT	Collection, Storage, Transportation and sent for co-processing <b>OR</b> to CHWIF

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

**PRODUCT LIST (EXISTING + PROPOSED AFTER EC EXPANSION)**

Sr. No	Name of Products	CAS no.	CTO available MT / month	EC applied for additional /new production	Total after EC expansion	End Use	Remarks
				MT / month	MT / month		
1.	Metanilic Acid	121-47-1	240 (either individual or sum total of Sr. No. 1 to 28)	3000 (either individual or sum total of Sr. no. 1 to 28)	3240 (either individual or sum total of Sr. no. 1 to 28)	Intermediate	Existing Products (Sr. No. 1 to 28)  Increase in production capacity
2.	Ortho Cumidine	643-28-7					
3.	Para Cumidine	99-88-7					
4.	Ortho Toluidine	95-53-4					
5.	Meta Toluidine	108-44-1					
6.	Para Toluidine	106-49-0					
7.	Ortho Anisidine	90-04-0					
8.	Meta Anisidine	536-90-3					
9.	Para Anisidine	104-94-9					
10.	Ortho Chloro Aniline	95-51-2					
11.	Meta Chloro Aniline	108-42-9					
12.	Para Chloro Aniline	106-47-8					
13.	2-3, Xylidine	87-59-2					
14.	2-4, Xylidine	95-68-1					
15.	4-Phenyl Butane-2-on	2550-26-					

		7					
16.	Amino Ethyl Carbazole	132-32-1					
17.	4-Chloro-3-Amino Benzoic acid	2840-28-0					
18.	Di Amino Diphenyl Sulphone	80-08-0					
19.	Thio Salicylic Acid	147-93-3					
20.	2,3- Di Chloro Aniline	608-27-5					
21.	Meta Phenoxy Benzyl Alcohol	13826-35-2					
22.	2- Methyl Cyclohexanol	583-59-5					
23.	Ortho Phenoxy Aniline	2688-84-8					
24.	Para Amino Benzoic Acid	150-13-0					
25.	Para Cresidine	120-71-8					
26.	Phenyl Ethyl Alcohol	60-12-8					
27.	Iso Propyl Para Chloro Aniline	770-40-1					
28.	1,3- Cyclohexanodnone	504-02-9					
29.	6-Amino-7-methoxy-1,4-dihydroquinoxaline-2,3-dione	69904-10-5					
30.	Aniline	62-53-3					
31.	2,4 Di Chloro Aniline	554-00-7					
32.	2,5 Di Chloro Aniline	95-82-9					
33.	3,4 Di Chloro Aniline	95-76-1					
34.	2,5 - Xylidine	95-78-3					
35.	2,6 - Xylidine	87-62-7					
36.	3'-Aminoacetophenone	99-03-6					
37.	4 Chloro 2-Amino Phenol	95-85-2					
38.	4,4-Methylene bis [n-sec-butyl aniline]	5285-60-9	---				
39.	4'-Aminoacetanilide	122-80-5					
40.	4-Aminobenzonitrile	873-74-5					
41.	4-Methoxy Benzene 1,2 Diamine	102-51-2					
42.	Cis Pinane	6876-13-7					
43.	Dimethyl Amino ter-phthalate	5372-81-6					
44.	DMACT( 2-(2,4-Dichloro-5-amino phenyl)-4-	--					
				3000 (either individual or sum total of Sr. no. 29 to 74)	3000 (either individual or sum total of Sr. no. 29 to 74)	Intermediate	New Products (Sr. no. 29 to 74)

	(difluoromethyl) -2,4-dihydro-5-methyl-3H-1,2,4-triazol-3-one) (intermediate chemical)						
45.	Furfuryl Alcohol	98-00-0					
46.	Meta bromo aniline	591-19-5					
47.	Meta phenylene di amine	108-45-2					
48.	Methyl isobutyl carbinol	108-11-2					
49.	N,N'-Diisopropylidene isophorone diamine	68482-78-0					
50.	Ortho tertiary butyl cyclohexyl (intermediate chemical)	--					
51.	Para anisic alcohol	105-13-5					
52.	Para tertiary butyl cyclohexyl (intermediate chemical)	--					
53.	2,4 Di Amino Anisole	615-05-4					
54.	Ortho Amino Phenol	95-55-6					
55.	3 Amino Salicylic Acid	570-23-0					
56.	5 Amino Salicylic Acid	89-57-6					
57.	3-Chloro 4-Fluro Aniline	367-21-5					
58.	3 4 Dimethyl-N-[3-Pentanyl] Aniline	56038-89-2					
59.	3-Amino-4-Methoxy Acetenilide	6375-47-9					
60.	4-Fluoro-N-Isopropylaniline	70441-63-3					
61.	N,N-Disec-Butyl P-Phenylene Amine	101-96-2					
62.	Ortho Amino Phenol Para Sulphonic Acid	98-37-3					
63.	Ortho phenylene di amine	95-54-5					
64.	Para fluoro aniline	371-40-4					
65.	Piperidine	110-89-4					
66.	Para phenylene di amine	106-50-3					
67.	CL-1000 (4,4'-Methylenebis (N-sec-butylcyclohexanamine)	154279-60-4					
68.	Ortho Nitro Anisole	91-23-6					
69.	Para Nitro Anisole	100-17-4					
70.	2, 4 Dinitro Anisole	119-27-7					
			---	3000 (either individual or sum total of Sr. no. 29 to 74)	3000 (either individual or sum total of Sr. no. 29 to 74)	Intermediat e	New Products (Sr. no. 29 to 74)



71.	Ortho Acetanilide	--					
72.	Ortho Nitro Phenol ( <b>Note 1</b> )	88-75-5					
73.	Para Nitro Phenol ( <b>Note 1</b> )	100-02-7					
74.	Reduction product through hydrogenation	--					
TOTAL (Either individual or sum total of Sr. no. 1 to 28)					<b>240 + 3000 = 3240 MT / Month</b>		
TOTAL (Either individual or sum total of Sr. no. 29 to 74)					<b>3000 MT / Month</b>		
<p><b>Note 1:</b> ONP &amp; PNP is generated 34 kg per ton production of ONA &amp; PNA respectively. Max monthly production of ONP and PNP shall be 17 MT/month.</p> <p><b>After Proposed Expansion:</b></p> <ul style="list-style-type: none"> <li>• Total Production capacity of Existing 28 Nos. products shall be increased upto 3240 MT/month</li> <li>• There shall be addition of 46 new products with total production capacity upto 3000 MT/month</li> </ul> <p>After detailed deliberations, the Committee prescribed the following additional TOR in addition to standard TOR (refer Ministry's website) for preparation of EIA-EMP report:</p> <p><b>A. Additional TOR</b></p> <ol style="list-style-type: none"> <li>Public hearing is exempted under the provisions as per para 7(i)III. Stage (3)(i)(b) of the EIA notification, 2006.</li> <li>ESR plan for 5 year @ 5 % of the project cost with the consultation of nearby villagers to be submitted.</li> <li>No use of ground water.</li> <li>A plan for implementation of ZLD.</li> <li>Layout plan earmarking space for development of 5 m peripheral green belt.</li> <li>Plan for plantation of 1000 trees/year till 5 years in 3 identified villages.</li> <li>Toxicity study of each chemical in local environment.</li> <li>In-house treatment plan for organic waste.</li> <li></li> </ol> <p>It was recommended that 'TORs' prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b) of the EIA notification, 2006.</p>							
24.4.13	<p><b>Installation of Gas Turbine (GT) driven Process Air Compressor (PAC IV) and Heat Recovery Steam Generator (HRSG) at RCF Thal under energy reduction scheme at Raigad, Maharashtra by M/s Rashtriya Chemicals and Fertilizers Ltd.-reg. TOR[IA/MH/IND2/64525/2017, IA-J-11011/217/2017-IA-II(I)]</b></p> <p>The project proponent informed following:-</p> <ol style="list-style-type: none"> <li>The proposal is for Installation of Gas Turbine (GT) driven Process Air Compressor (PAC IV) and Heat Recovery Steam Generator (HRSG) at RCF Thal under energy reduction scheme at Raigad, Maharashtra by M/s Rashtriya Chemicals and Fertilizers Ltd.</li> </ol>						

- ii. All Chemical Fertilizers are listed at S.N.5(a) of Schedule of Environmental Impact Assessment(EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee(EAC).
- iii. Ministry has issued EC earlier vide letter no F.NO.J-11011/862/2008-IA-II(I); dated-June 10, 2009 for Thal Unit to M/s. Rashtriya Chemicals & Fertilizers Ltd.,Thal Unit- for Expansion by De Bottlenecking of Thal Ammonia Plants 2 x 1500 MTPD to 2 x 1750 MTPD and Urea Plant 3 x 1724 MTPD to 3x2040 MTPD at District Raigad, Maharashtra .  
  
Ministry has issued EC earlier vide letter no J-11011/1291/2007-IA-II(I); dated-10 th Sept., 2012 and Amendment dated 1<sup>st</sup> May, 2013 for THAL Unit to M/s.Rashtriya Chemicals & Fertilizers Ltd., Thal unit for Expansion of Fertilizer Unit by installing Production Stream of Ammonia(2200 MTPD) and Urea( 3850 MTPD) at Thal Fertilizer Complex, District Raigad, Maharashtra.  
  
Ministry has issued EC earlier vide letter no J-11011/392/2014-IA-II(I); dated-10<sup>th</sup> February, 2016 for THAL Unit to M/s. Rashtriya Chemicals & Fertilizers Ltd., Thalfor Installation of Gas Turbine Generator and Heat Recovery steam Generator under energy reduction scheme at TashilAlibag, District Raigad, Maharashtra.
- iv. Existing land area is used , additional no land will be used for proposed expansion. Industry is already developed Greenbelt in an area of 33% i.e. , 300 acres out of 850 acres of area of the project.
- v. The estimated project cost is Rs.2365.57 crores - including existing investment of Rs. 2018.69 crores . Total capital cost earmarked towards environmental pollution control measures is Rs. 10.21 crore and the Recurring cost( operation and maintenance) will be about Rs. 4.67 crore per annum.
- vi. Total Employment will be NIL persons as direct and NIL persons indirect after expansion. (No additional manpower is required).
- vii. It is reported that as per form-1 no National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies 10 km distance. River/water body, Khadtal river is flowing at distance of 3 kms in south direction.
- viii. Total water requirement at present is 45000 m3/day. In the proposed project water requirement will be reduced by 3484 M3/day. Treated effluent of 6500 m3/day is being treated through existing Effluent Treatment Plant.
- ix. Power requirement after expansion will be 44 MW against 46 MW before expansion and will be met from GTG-HRSG / Maharashtra State Electricity Distribution Corporation Limited (MSEDCL). Existing unit has 2(two) DG sets of 1600 KVA each.
- x. In the existing unit Gas Turbine (GT) driven Process Air Compressor & Heat Recovery Steam Generator (HRSG) will be installed . Gas turbine exhaust flue gas along with supplementary Natural Gas firing will produce Steam in HRSG @ 100 TPH. A stack height of minimum 30 m will be installed for controlling the particulate emissions (within statutory limit of 150 mg/Nm3).
- xi. Due to change over scheme, the fuel NG consumption will reduce. NOx emission will reduce from 17.9 kg/hr to 14.5 kg/hr and SOx emission will reduce from 1.79 kg/hr to 1.45 kg/hr. Low NOx burner will be used for fuel NG firing.
- xii. No solid waste / hazardous waste shall be generated from this project.

After detailed deliberations, the Committee prescribed the following additional TOR in addition to

standard TOR (refer Ministry's website) for preparation of EIA-EMP report:

A. Additional TOR

- i. Public Consultation shall be done as per provisions of the EIA Notification, 2006.
- ii. Layout Plan for 10 m wide green belt around periphery of the plant to be submitted.
- iii. Certified compliance report of existing EC from RO, MoEF&CC to be submitted.

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

24.4.14

**Proposed specialty chemicals manufacturing unit at Plot no. 907/5, GIDCc estate, panoli, Tal: Ankleshwar, Dist: Bharuch, Gujarat by M/s NIC Bioscience Pvt. Ltd - reg. Tor [IA/GJ/IND2/64569/2017, ia-j-11011/219/2017-ia-ii(i)]**

The project proponent informed following:-

- i. The project involves proposed specialty chemicals manufacturing unit at Plot no. 907/5, GIDCc estate, panoli, Tal: Ankleshwar, Dist: Bharuch, Gujarat by M/s NIC Bioscience Pvt. Ltd.
- ii. All synthetic organic chemicals industry located in a notified industrial area/estate are listed at S.N. 5(f) under category 'B'. However, due to applicability of general condition i.e. Critically polluted areas as notified by the Central Pollution Control Board is situated within 5 km from the project site, the project is considered as category 'A' and appraised at Central level by Expert Appraisal Committee.
- iii. Proposed land area is 1618.95 m<sup>2</sup>. Industry will be developed Greenbelt in an area of 33% i.e. 535 m<sup>2</sup> out of 1618.95 m<sup>2</sup> of area of the project.
- iv. The estimated project cost is Rs. 1000 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 100 Lakhs and the recurring cost (operation & maintenance) will be about Rs. 5 Lakhs per annum.
- v. Total employment will be 25 persons as direct & 10 persons indirect for the project. Industry purposes to allocate Rs. 25 Lakhs @ 2.5 % towards Corporate Social Responsibility.
- vi. It is reported that No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River/water body Narmada River is flowing at a distance a distance of 12 km in N direction.
- vii. Total water requirement will be 28.0 KL/Day; which will be met from GIDC Water Supply.
- viii. Total 12.4 KL/Day (7.9 KL/Day Industrial + 4.5 KL/Day domestic) of effluent will be generated. Industrial effluent will be treated in ETP & finally sent to CETP (M/s. PETL, Panoli, Bharuch), High COD stream = 1.3 KLD will be sent to Common spray dryer (M/s. PETL, Panoli, Bharuch), High COD stream = 3.3 KLD will be sent to Common MEE (M/s. BEIL, Anleshwar, Bharuch).
- ix. Power requirement will be 250 KVA and will be met from DGVCL.
- x. Proposed unit will have N.G. based 1.0 TPH Steam boiler, Thermo pack (3 LKC/Hr.) & D.G. Set (125 KVA) Adequate stack height will be provided for controlling the Particulates emissions.
- xi. HBr, HCl & H<sub>2</sub>S gas as Process emissions generates from vent attached to Reaction Vessel. Two stage Scrubbers will be provided as APCM.
- xii. Details of Solid waste/Hazardous waste generation and its management is as follows:

S. No.	Type Of Haz. Waste	Quantity Mt/Month	Source	Mode of Packing	Mode of Disposal
1	Used oil	0.050	Mainta-nance	MS Drums	Collection, Storage, Transportation & Disposal by

			Activities		selling to Authorised Refiners
2	Spent Carbon, hyflo, off spec products	2.5	Processing	Plastic Bags	Collection, Storage, Transportation & Disposal by selling to cement industries for co-processing or by incineration at CHWIF
3	Organic Residue	28.0	Processing	HDPE Carboys	Collection, Storage, Transportation & Disposal by selling to cement industries for co-processing or by incineration at CHWIF
4	Discarded containers, barrels, Liners, plastic Bags	100 Nos.	Used containers, drums, Liners	NA	Collection, Storage, Decontamination and Reuse or Sale to Authorised Recyclers
5	Inorganic Solid waste	4.0	Processing	Plastic Bags	Collection, Storage, Transportation & Disposal at TSDF
6	ETP Sludge	2.0	ETP Plant	Plastic Bags	Collection, Storage, Transportation & Disposal at TSDF
7	Ash from Boiler	0.6	Boiler	Plastic Bags	Collection, Storage, Transportation & Disposal at TSDF or selling to brick manufacturers
8	Dilute HCl	6.0	Scrubbing	HDPE Drum	Collection, Storage, Used for Neutralisation in ETP & sent to CETP
9	Dilute HBr	21.0	Scrubbing	HDPE Drum	Collection, Storage, Treated in ETP & sent to CETP
10	Dilute H <sub>2</sub> S	3.0	Scrubbing	HDPE Drum	Collection, Storage, Treated in ETP & sent to CETP

xiii. Proposed Product List:

S. No.	Name of Product	CAS No.	Quantity (MT/Month)
<b>CATEGORY : I</b>			
1	Oxyclozanide	2277-92-1	<b>30.0</b>
2	Erythromycin Stearate	643-22-1	
3	Levetiracetam	102767-28-2	
4	Metronidazole Benzoate	13182-89-3	
5	Mefenamic Acid	61-68-7	
6	Metoprolol Tartrate	56392-17-7	
7	Etoricoxib	202409-33-4	
8	4-Bromo Fluorobenzene	460-00-4	
9	Ethyl-2-Bromobutyrate	533-68-6	
10	Phenyl Acetic Acid	103-82-2	
11	Pyridine Hydrobromide	18820-82-1	
12	4-Bromoanisole	104-92-7	
13	N-Decyl Bromide	112-29-8	
14	N-Hexyl Bromide	111-25-1	
15	N-Propyl Bromide	106-94-5	

16	1-Benzylpiperidine-4-Carboxaldehyde	22065-85-6	
17	1-(2-(2-Hydroxyethoxy)ethyl)piperazine	13349-82-1	
18	Benzyl Bromide	100-39-0	
19	Ethyl Bromoacetate	105-36-2	
20	Ethyl-2-Bromopropionate	535-11-5	
21	2-Bromopropionic Acid	598-72-1	
22	1,4-Dibromobutane	110-52-1	
23	3,4,5-Trimethoxybenzaldehyde	86-81-7	
<b>CATEGORY : II</b>			
24	Irbesartan	<b>138402-11-6</b>	<b>13.5</b>
25	Flurbiprofen	<b>5104-49-4</b>	
26	Cloxacillin Sodium	7081-44-9	
27	Rosuvastatin Calcium	147098-20-2	
28	Terbinafine Hydrochloride	78628-80-5	
29	Azithromycin	<b>83905-01-5</b>	
30	Roxithromycin	<b>80214-83-1</b>	
31	Tramadol Hydrochloride	36282-47-0	
32	Ornidazole	<b>16773-42-5</b>	
33	Des Loratadine	<b>100643-71-8</b>	
34	Fexofenadine Hydrochloride	153439-40-8	
35	Sertraline Hydrochloride	79559-97-0	
36	Clarithromycin	<b>81103-11-9</b>	
37	Lisinopril	<b>83915-83-7</b>	
38	Artesunate	88495-63-0	
39	Lumefantrine	82186-77-4	
40	Bisoprolol Fumarate	104344-23-2	
41	Tinidazole	<b>19387-91-8</b>	
42	Telmisartan	<b>144701-48-4</b>	
43	Quetiapine Fumarate	111974-72-2	
44	Atorvastatin Calcium	134523-03-8	
45	Carvedilol Phosphate	610309-89-2	
46	Omeprazole Sodium	95510-70-6	
47	Fluconazole	<b>86386-73-4</b>	
48	Arteether	75887-54-6	
49	Gabapentin	<b>60142-96-3</b>	
50	Hydrochlorothiazide	<b>58-93-5</b>	
51	Atenolol	<b>29122-68-7</b>	
52	Domperidone	<b>57808-66-9</b>	
53	1-(3-Chlorophenyl)-4-(3-Chloropropyl)Piperazine Hydrochloride	52605-52-4	
54	5,6-Dimethoxy-1-Indanone	2107-69-9	
55	Dibenzo [b,f][1,4] Thiazepin-11(10H)-One	3159-07-7	
56	$\alpha,\alpha$ -Dimethyl Phenylacetic Acid	826-55-1	
57	2-Aminobutyramide Hydrochloride	7682-20-4	
58	2-Mercapto-5-Methoxybenzimidazole	37052-78-1	
<b>CATEGORY : III</b>			
59	Clopidogrel Bisulphate	120202-66-6	<b>8.5</b>
60	Cetirizine Dihydrochloride	83881-52-1	
61	Itopride Hydrochloride	122892-31-3	
62	Rabeprazole Sodium	117976-90-6	
63	Lansoprazole	<b>103577-45-3</b>	
64	Amoxicillin Trihydrate	61336-70-7	
65	Venlafaxine Hydrochloride	99300-78-4	
66	Donepezil Hydrochloride	120011-70-3	
67	Celecoxib	<b>169590-42-5</b>	

68	Pantoprazole Sodium	138786-67-1	
69	Artemether	71963-77-4	
70	Losartan Potassium	124750-99-8	
71	Valsartan	<b>137862-53-4</b>	
72	Ampicillin Trihydrate	7177-48-2	
73	Linezolid	<b>165800-03-3</b>	
74	Pregabalin	<b>148553-50-8</b>	
75	Topiramate	<b>97240-79-4</b>	
<b>CATEGORY : IV</b>			
1	R & D Trial Run Products		<b>0.2</b>
<b>Total</b>			<b>52.0</b>

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

**A. Additional TOR**

- i. Public hearing is exempted under the provisions as per para 7(i)III. Stage (3)(i)(b) of the EIA notification, 2006.
- ii. ESR plan for 5 year @ 2.5 % of the project cost with the consultation of nearby villagers to be submitted.
- iii. Plan for 3 m wide green belt around plant periphery to be submitted.
- iv. No use of ground water.
- v. Toxicity study of each chemical in local environment.
- vi. Plan for plantation of 1000 trees/ year till 5 years in identified villages.
- vii. Certified Compliance report of existing EC ,if any, to be submitted.

It was recommended that 'TORs' prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b) of the EIA notification, 2006.

24.4.15	<p><b>Proposes to enhance the capacity of existing products as well introduce new similar group of products under the category “Rubber Chemicals &amp; Speciality Chemicals” at Plot No: 2514, 2515, 4th phase, G.I.D.C, VAPI. Pin Code: 396195 Dist. - Valsad (Gujarat) by M/s Yasho Industries Pvt. Limited (Unit:I)-reg. TOR [IA/GJ/IND2/63757/2017, IA-J-11011/160/2017-IA-II(I)]</b></p> <p>The project proponent informed following:-</p> <ol style="list-style-type: none"> <li>i. The project involves proposes to enhance the capacity of existing products as well introduce new similar group of products under the category “Rubber Chemicals &amp; Speciality Chemicals” at Plot No: 2514, 2515, 4<sup>th</sup> phase, G.I.D.C, VAPI, Dist. - Valsad (Gujarat) by M/s Yasho Industries Pvt. Limited (Unit:I).</li> <li>ii. All Synthetic organic chemicals industry are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'B' and are appraised at Central Level by Expert Appraisal Committee (EAC) as General Condition Applicable because the project lies within 5 km radius of interstate boundary of Dadra and Nagar Haveli (D N &amp; H), hence the project will be treated as Category A.</li> <li>iii. Ministry has issued EC earlier vide letter no. -11011/116/2008-IA II (I); dated 08.07.2008 for existing unit to M/s Yasho Industries Pvt. Ltd (Unit-I).</li> <li>iv. Existing land area is 5500 m<sup>2</sup>, No additional land will be used for proposed expansion.</li> <li>v. Industry has already developed Greenbelt in an area of 22% i.e. 1200 m<sup>2</sup> out of 5500 m<sup>2</sup> of</li> </ol>
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- area of the project.
- vi. The estimated project cost is Rs 48.03Crores, including existing investment of Rs 39.25Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 2.20Crores and the Recurring cost (operation and maintenance) will be about Rs 260Lakhs per annum.
  - vii. Total Employment will be 193 persons as direct & 15 persons indirect after expansion. Industry proposes to allocate Rs1.2Crores @ of 2.5% towards Corporate Social Responsibility/Enterprise social commitment.
  - viii. It is reported that as per Form-1 no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River Damanganga is flowing at a distance of 2.0 Km in SSW direction.
  - ix. Total water requirement is 217.0m<sup>3</sup>/day of which fresh water requirement of 217.0m<sup>3</sup>/day and will be met from GIDC Water Supply.
  - x. Untreated effluent of 127.4 KLD is/will be treated in Effluent treatment plant and discharge into CETP, Vapi for further treatment.
  - xi. Power requirement after expansion will be 1000 KVA including existing 1000 KVA and will be met from Dakshin Gujarat VijCo. Ltd.(DGVCL). Existing unit has one DG sets of 1010 KVA capacity, No additional DG set are used as standby during power failure. Stack (height 11 m) has been provided as per CPCB norms to the DG sets of 1010 KVA.
  - xii. Existing unit has 3 TPH Natural gas/Furnace oil fired boiler and in expansion no boiler will be installed. No APC will be required for Natural gas fired boiler. Adequate stack height will be provided
  - xiii. Details of Process emissions generation and its management:

S. No.	Particulars	Details		
		Exist-ing	Proposed	Total
1.	<b>Pulveriser (Proposed)</b>	-	Cyclone separator followed by bag filter	Cyclone separator followed by bag filter
I.	Height of vent	Not required as closed balloon system with air handling units provided		
II.	Pollutant to be emitted	-	PM: < 150 mg/Nm <sup>3</sup>	PM: < 150 mg/Nm <sup>3</sup>

- xiv. **Details of Solid waste/ Hazardous waste generation and its management is as follows:**

S. No.	Type of Hazardous Waste	Generation, TPA			Treatment	Disposal
		Existing	Proposed	Total		
1.	Waste from ETP/MEE	1.2	432.0	433.2	Packed in HDE bags, stored	Dispose off into TSDF Vapi & SEPPL, Kutch
2.	Spent/used Carbon	0.636	163.2	163.836	Packed in HDPE drums	Send for co-processing to M/s RSPL, Panoli
3.	Spent solvent	232.5	1865	2097.5	Distilled and recycled	Store & Recycle in the process
4.	Distillation Residue	7.45	600	607.45	Packed in HDPE drums	Send for co-processing to M/s RSPL, Panoli
5.	Used Oil	0.3	0.3	0.6		
6.	Discarded containers	60.0	150.0	210.0	Washed & stored	Utilized for packing of hazardous waste or sell to authorized recycler
7.	Electronic waste	0	0.5	0.5	Collect, stored	Sell to registered recycler

- xv. Following are the list of existing and proposed project:  
Existing Product list

S. No	Product	Quantity (MT/MONTH)	Quantity (TPA)
1.	Tertiary Butyl Hydro Quinone (TBHQ)	50	600
2.	Clove Oil (Rect.)	5	60
3.	Eucalyptus Oil (Rect.)	0.05	0.6
4.	Eugenol	5	60
5.	IsoEugenol	3	36
6.	Methyl Eugenol	2	24
7.	Methyl IsoEugenol	1	12
8.	Dimethyl Hydroquinone	0.5	6
9.	AscorbylPalmitate (AP)	1	12
10.	Aromatic Derivatives of Diphenylamine (ADA)	5	60
11.	Cinnamon Oil	0.5	6
12.	Ortho Toly Bi Guanidine (OTBG)	2	24
13.	OctylatedDiphenyl Amine (Qureanti OCD)	10	120
14.	Zinc DibutylDithiocarbamate(Qureacc ZDBC) Or Zinc Diethyl Dithiocarbamate (Qureacc ZDC)	0.1	1.2
15.	Zinc 2-Mercapto Toluimidazole Or Zinc 2-Mercapto Benzimidazole (Qureanti ZMB)	0.1	1.2
16.	ButylatedHydroxy Anisole (BHA)	5	60
17.	ButylatedOctylated Di Phenyl Amine (Yalub BOPDA)	2	24
18.	Di Nonylated Di Phenyl Amine (Yalub DND)	2	24
19.	Hydro Quinone Ethoxylated Ether (YapoxCl 30/10)	1	12
	<b>TOTAL</b>	<b>95.25</b>	<b>1143.00</b>

- xvi. Proposed Products and their Capacities for Expansion:

S. No	Product	Quantity (MT/MONTH)	Quantity (TPA)
1.	Tertiary Butyl Hydro Quinone (TBHQ)	25	300
2.	Clove Oil (Rect.)	20	240
3.	Eucalyptus Oil (Rect.)	9.95	119.4
4.	Eugenol	20	240
5.	IsoEugenol	7	84
6.	Methyl Eugenol	3	36
7.	Methyl IsoEugenol	4	48
8.	Dimethyl Hydroquinone	1.5	18
9.	AscorbylPalmitate (AP)	9	108
10.	Aromatic Derivatives of Diphenylamine (ADA)	45	540
11.	Cinnamon Oil	0	0
12.	Ortho Toly Bi Guanidine (OTBG)	3	36
13.	OctylatedDiphenyl Amine(Qureanti OCD)	65	780



14.	Zinc DibutylDithiocarbamate(Qureacc ZDBC) Or Zinc Diethyl Dithiocarbamate (Qureacc ZDC)	0.4	4.8
15.	Zinc 2-Mercapto Toluimidazole Or Zinc 2- Mercapto Benzimidazole (Qureanti ZMB)	0.4	4.8
16.	ButylatedHydroxy Anisole (BHA)	45	540
17.	ButylatedOctylated Di Phenyl Amine( Yalub BOPDA)	148	1776
18.	Di Nonylated Di Phenyl Amine( Yalub DND)	148	1776
19.	Hydro Quinone Ethoxylated Ether(YapoxCl 30/10)	1	12
20.	N-N- M-Phenyle Di Maleimide (QUREACC PDM)	5	60
21.	Polnox – 7070 (Anti oxidant compound blend mixture of purified paraffinic oil)	50	600
22.	Polnox – 8174	50	600
23.	2,5-Di tertiary Butylbenzoquinone( Yapox - 2255)	10	120
24.	Caryophyllene	5	60
25.	Clove Oil (Tech.)	5	60
26.	Zinc Recinoleate ( Yapox - ZR)	10	120
27.	50%Tolyltriazole Sodium Salt.(Yapox 50%Ttz)	5	60
28.	Cuelure	1	12
29.	Di Tert. Amyl Hydroquinone(Yapox - 2275)	10	120
30.	Di Tertiary Butyl Hydroquinone( Yapox - 2245).	10	120
31.	Zinc Diacrylate( Qureacc ZDA)	10	120
32.	Zinc Dimethacrylate(Qureacc ZDMA).	25	300
33.	N-Nitroso Diphenylamine	5	60
34.	Yalub Pa - 137 (1137) (Benzenepropanoic acid, 3-5 bis(1,1-Dimethylethyl)4-hydroxy, C7-C9 branched alkyl esters)	100	1200
35.	Yalub Pa - 135 (1135)	100	1200
36.	Tertiary Butyl Chloride( Yapox - TBC)	2	24
37.	Eucalyptol	10	120
38.	Na-06 (1- Octylated-N- phenyl-1- naphthylamine)	10	120
39.	Yalub La (Molybdenum Di[2 ethylhexy]phosphorodithioate)	10	120
40.	Di Nonene Naphthalene Sulfonic Acid(DINNSA)	5	60
41.	Dodecyl-N-Phenyl Naphthylamine	5	60
42.	Dodecyl Benzene Sulfonic Acid	5	60
43.	Yantq - 2020 (TBHQ Solution)	2	24
44.	Yantq - 2030 (TBHQ Solution)	2	24
45.	Yantq - 3030 (TBHQ Solution)	30	360
46.	Yapox - 2800m (TBHQ Solution)	20	240
47.	Yalub Pa-115 (2,2-Thiodiethylene Bis[3,5 Di tertiary butyl Hydroxy Hydro Cinnamate]	10	120
48.	Yapox NW (N-N'-Di-2- Naphthyl -1-4- Phenylenediamine. NOCRACK White)	5	60
49.	5- SulphoSalysilic acid	1	12
50.	ButylatedHydroxy Toluene (BHT)	10	120
	<b>TOTAL</b>	<b>1083.25</b>	<b>12999.00</b>

After detailed deliberations, the Committee prescribed the following additional TOR in addition to

	<p>standard TOR (refer Ministry’s website) for preparation of EIA-EMP report:</p> <p><b>A. Additional TOR</b></p> <ol style="list-style-type: none"> <li>i. Public hearing is exempted under the provisions as per para 7(i)III. Stage (3)(i)(b) of the EIA notification, 2006.</li> <li>ii. ESR plan for 5 year @ 5 % of the project cost with the consultation of nearby villagers to be submitted.</li> <li>iii. Plan for 10 m wide green belt around plant periphery to be submitted.</li> <li>iv. Performance assessment report of CETP for last three years prepared by government agency to be submitted.</li> <li>v. Recommendation of SPCB is required.</li> <li>vi. Certified compliance report of RO, MoEFCC for existing EC, if any, to be submitted.</li> </ol> <p>It was recommended that ‘TORs’ prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b)of the EIA notification, 2006.</p>
24.4.16	<p><b>Proposes to enhance the capacity of existing products as well introduce new similar group of products under the category “Rubber Chemicals &amp; Speciality Chemicals” at Plot No: 1713, 3rd phase, G.I.D.C, VAPI. Dist. - Valsad (Gujarat) by M/S Yasho Industries Pvt. Limited (Unit: II) –reg. TOR [IA/GJ/IND2/63759/2017, IA-J-11011/161/2017-IA-II(I)]</b></p> <p>The project proponent informed following:-</p> <ol style="list-style-type: none"> <li>i. The project involves proposes to enhance the capacity of existing products as well introduce new similar group of products under the category “Rubber Chemicals &amp; Speciality Chemicals” at Plot No: 1713, 3rd phase, G.I.D.C, VAPI. Dist. - Valsad (Gujarat) by M/s Yasho Industries Pvt. Limited (Unit: II).</li> <li>ii. All synthetic organic chemicals industry are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under category ‘B’ and are appraised at Central Level by Expert Appraisal Committee (EAC) as General Condition Applicable because the project lies within 5 km radius of interstate boundary of Dadra and Nagar Haveli (D N &amp; H), hence the project will be treated as Category ‘A’.</li> <li>iii. Ministry has issued EC earlier vide letter no. J-11011/503/2008-IA II (I) dated 14/11/2008 for existing unit toM/s Yasho Industries Pvt. Ltd (Unit-II).</li> <li>iv. Existing land area is 5000 m<sup>2</sup>, No additional land will be used for proposed expansion.</li> <li>v. Industry has already developed Greenbelt in an area of 24% i.e. 1200 m<sup>2</sup> out of 5000 m<sup>2</sup> of area of the project.</li> <li>vi. The estimated project cost is Rs 55.05Crores, including existing investment of Rs 27.80Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 3.00Croresand the Recurring cost (operation and maintenance) will be about Rs 260.0 Lakhs per annum.</li> <li>vii. Total Employment will be 132 persons as direct &amp; 15 persons indirect after expansion.</li> <li>viii. It is reported that as per Form-1,no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Rive Kolak is flowing at a distance of 3.04 Km in NNE direction.</li> <li>ix. Total water requirement is 210.5 m<sup>3</sup>/day of which fresh water requirement of 208.5 m<sup>3</sup>/day and will be met from GIDC Water Supply.</li> <li>x. Untreated effluent of 107 KLDIs/will be treated in Effluent treatment plant and discharge into CETP, Vapi for further treatment.</li> <li>xi. Power requirement after expansion will be 1000 KVAincluding existing 750 KVA and will</li> </ol>

be met from Dakshin Gujarat VijCo. Ltd.(DGVCL). Existing unit has one DG sets of 500 KVA capacity, additionally 1010 KVA DG sets are used as standby during power failure (existing DG set will be discontinued). Stack (height 11 m) will be provided as per CPCB norms to the proposed DG sets of 1010 KVA.

xii. Existing unit has no boiler and in expansion 2 TPH Natural gas/Furnace oil fired boiler will be installed. No APC will be required for Natural gas fired boiler. Adequate stack height will be provided.

xiii. At present, there is no process gas emission. After proposed expansion, there will be evolution of H<sub>2</sub>S gas and hydrogen gas from proposed products. For the scrubbing of Hydrogen sulphide gas, the unit proposed to installed two stage alkali scrubber and for hydrogen gas water scrubber will be provided along with 11 m meters height of stack. Scrubber effluent will be sent to ETP for treatment.

xiv. Details of Solid waste/ Hazardous waste generation and its management is as follows:

S. No.	Type of Hazardous waste	Generation, MT/Anum		Treatment	Disposal
		Existing	Proposed		
1.	Waste from ETP & salt from MEE	0	55.0 + 270=325	Packed in HDE bags, stored/drums	Dispose off into TSDF Vapi & SEPL, Kutch
2.	Spent/used Carbon	0	510.48		Send for co-processing to M/S RSPL, Panoli
3.	Spent solvent	0	775	Distilled and recycled	Store & Recycle in the process
4.	Distillation Residue	0	461.28	Packed in HDPE drums	Send for co-processing to M/S RSPL, Panoli
5.	Used Oil	0.024	0.3		
6.	Discarded containers	5.0	15.0	Washed & stored	Utilized for packing of hazardous waste or sell to authorized recycler
7.	Oily rags/cotton waste	0	0.5	Collect, stored	Send for co-processing to M/S RSPL, Panoli

xv. **Following are the list of existing and proposed project:**

Existing Product list

S. No.	Product	Quantity (MT/MONTH)	Quantity (TPA)
1.	Zinc di benzyl di ThioCarbamate (QUREACC ZBEC)	20	240
2.	Copper Di Butyl Di ThioCarbamate (QUREACC CDBC)	20	240
3.	Copper Di Methyl Di ThioCarbamate (QUREACC CDMC)	1	12
4.	Nickel Di Butyl Di ThioCarbamate (QUREANTI NDBC)	2	24
<b>Total</b>		<b>43</b>	<b>516</b>

Proposed Products and their Capacities for Expansion:

S.No	Product	Quantity (MT/MONTH)	Quantity (TPA)
1.	Zinc di benzyl di ThioCarbamate (QUREACC ZBEC)	30	360
2.	Copper Di Butyl Di ThioCarbamate (QUREACC CDBC)	5	60
3.	Copper Di Methyl Di ThioCarbamate (QUREACC CDMC)	4	48
4.	Nickel Di Butyl Di ThioCarbamate (QUREANTI)	3	36

	NDBC)		
5.	5-Methoxy-2-Mercapto Benzimidazole ( 5- MMBI )	30	360
6.	2-Mercapto Benzimidazole (QUREANTI MB)	15	180
7.	Zinc 2- MercaptoBenzimidazole (QUREANTI ZMB)	5	60
8.	Zinc salt of 4 & 5, methyl 2- mercaptoBenzimidazole (QUREANTI ZMMB)	30	360
9.	Zinc Di ethyl Di thioCarbamate ( QUREACC ZDC)	50	600
10.	Zinc Di Butyl Di ThioCarbamate ( QUREACC ZDBC)	50	600
11.	Zinc Di Methyl Di ThioCarbamate (QUREACC ZDMC)	50	600
12.	Zinc ethyl Phenyl Di ThioCarbamate(QUREACC ZEPC)	10	120
13.	Zinc Penta Methylene Di ThioCarbamate ( QUREACC ZPD)	5	60
14.	Bismuth Di methyl Di ThioCarbamate ( BIDD)	3	36
15.	Iron Di Methyl Di ThioCarbamate ( YAPOX IDMC)	5	60
16.	Sodium Di Butyl Di ThioCarbamate ( QUREACC SDBC)	10	120
17.	Sodium Di Methyl Di ThioCarbamate ( YAPOX SDMC)	50	600
18.	Molybdenum Di (2- Ethylhexyl) Phosphorodithioate ( YALUB LA)	20	240
19.	Molybdenum Di tri Decylamine Di thioCarbamate ( YALUB 822M)	25	300
20.	Molybdenum Di tri Decylamine Di thioCarbamate ( YALUB 525- S)	5	60
21.	Molybdenum Di butyl Di thioCarbamate ( YALUB MDBC)	20	240
22.	Di Penta DIPENTA methylene thiuram Tetra sulphide (QUREACC DPTT)	50	600
23.	Di Methyl Di Phenyl Thiuram Di Sulphide ( QUREACC MPTD)	10	120
24.	Tetra Benzyl Thiuram TETRA BENZYL THIURAM DISULFIDE (QUREACC TBZTD)	100	1200
25.	Tetra butyl thiuramdisulphide ( QUREACC TBTD )	10	120
26.	Tetra ethyl thiuram disulfide (QUREACC TETD)	5	60
27.	Zinc mercaptobenzothiazole ( ZMBT)	25	300
28.	N-tert-butyl-bis (2- BENZO THIAZOLE SULFEN) amide (QUREACC TBSI)	25	300
29.	2,4,6-trimercapto-s-triazole (QUREACC TST)	2.5	30
30.	Hydro quinoneEthoxylated ether ( YAPOX CL-30/10)	100	1200
31.	Triallylcynurate ( QUREACC TAC )	10	120
32.	TriallylIsocynurate( QUREACC TA IC )	10	120
33.	Molybdenum di ThioCarbamate ( YALUB - 3000D )	25	300
34.	4,4-methylene bis [BUTYL DITHIOCARBAMATE] (YALUB 44-MBC)	50	600
35.	Diphenylthiourea (QUREACC DPTU )	5	60

36.	2,5-bis( octyldithio)-1,3,4 thiadiazole ( YALUB DM-86)	10	120
37.	Tolytriazole-formaldehyde-bis [2-ETHYL HEXYL] Amine (YALUB TT-33).	100	1200
38.	Organomolybdenum complex of organic amide (YALUB M-85)	50	600
39.	Zinc benzene sulphinate dehydrate ( YAPOX ZBS)	25	300
40.	2,2-dithio bis -benzanilide ( QURECIT- DBD)	100	1200
41.	Zinc DiamylDithiocarbamate ( YALUB AZ )	15	180
42.	2,5-dimercapto-1,3,4- thiadiazole ( YALUB DMTD)	10	120
43.	ButylatedOctylated diphenylamine ( YALUB BODPA)	150	1800
44.	Di Nonylated di phenyl amine(YALUB DND)	150	1800
45.	Octylated diphenylamine(QUREANTI OCD)	75	900
46.	Aromatic derivative of diphenylamine( QUREANTI ADA)	50	600
47.	<b>1- Octylated-n-phenyl-1- naphthylamine 2- (NA-06).</b>	10	120
	<b>Total</b>	<b>1597.5</b>	<b>19170.0</b>

During presentation PP informed that due to moratorium earlier EC could not be commissioned and got expired. PP informed that they want to use the base line data of nearby industry i.e. M/s Kunder Chemicals collected during March-May, 2017. The EAC agreed with it and suggested to collect additional one month data with the data collected during March-May, 2017.

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

#### A. Additional TOR

- i. Public hearing is exempted under the provisions as per para 7(i)III. Stage (3)(i)(b) of the EIA notification, 2006.
- ii. ESR plan for 5 year @ 5 % of the project cost with the consultation of nearby villagers to be submitted.
- iii. Plan for 10 m wide green belt around plant periphery to be submitted.
- iv. Certified compliance report of RO, MoEFCC for existing EC, if any, to be submitted.
- v. Toxicity study of each chemical in local environment.

It was recommended that 'TORs' prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b) of the EIA notification, 2006.

24.4.17 **PROPOSED BULK DRUGS INTERMEDIATES MANUFACTURING UNIT at Sy No: Parts of 318,319 & 321, Palleshahad (V), Thurkapally(M) Yadadri-Bhongir District, Telangana State by M/s Vedgir Life Sciences- reg. TOR [IA/TG/IND2/64844/2017, IA-J-11011/253/2017-IA-II(I)]**

The project proponent informed following:-

- i. The project involves proposed Bulk Drugs Intermediates Manufacturing Unit at Sy No: Parts of 318,319 & 321, Palleshahad (V), Thurkapally(M) Yadadri-Bhongir District, Telangana by M/s Vedgir Life Sciences.
- ii. All Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates) 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. It is Green field project. Proposed land area is 9.77 Acres/ 39537.79 Sq.m. Industry will be developed Greenbelt in an area of 48.78 % i.e 4.76 Acres out of 9.77 Acres of area of the project.
- iv. The estimated proposed project cost is Rs. 18.0 Crores.
- v. Total Employment will be 70 persons as direct & 20 persons as indirect. Industry proposed to allocate Rs. 90 Lakhs for 5 years @ 5% of Project cost towards Corporate Social Responsibility.
- vi. It is reported that no national parks, wildlife sanctuaries Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance.  
**Following environmental sensitivity involved within 10 km area:**  
Malkapur RF- 4.60 Kms (NNW),  
Venkatapuram RF- 5.02 Kms (NNE),  
Daffayapally RF- 7.53 Kms(NNE),  
Vasalamarri RF- 6.63 kms(NW),  
Kondapuram RF- 8.66 Kms(NNW),  
Chinna Lakshmapuram RF - 7.89 Kms (NNW),  
Gopalpur RF - 8.86 Kms (NNW).  
Water bodies:  
Water body Near Dharmaram- 0.50 Km (W),  
Water body Near Palleshahad- 1.50 Km (E),  
Water body Near Chowdarpally- 1.10 Km (SW),  
Water body Near Golladudem- 1.76 Km (NNW),  
Sharmirpet Vagu - 4.10 Km (South),  
Water body Near Medipally- 5.84 Km (South),  
Water body Near Hanmapur- 5.93 Km (SSE),  
Baswapur Cheruvu- 7.56 Km (E),  
Datharpally Lake- 7.80Km (E),  
Water Body near Madhapuram- 6.83 Km (NW),  
Water Body Near Paravaram- 8.70 Km (W),  
Water Body Near Turkapally- 8.30 Km (E)
- vii. The total water requirement is 164.15 KLD of which fresh water requirement of around 104.15 KLD and will be met from ground water sources.
- viii. Generated effluent of 76.59 KLD will be treated through stripper followed by MEE/ATFD, Biological Treatment Plant followed by RO plant will be based on Zero Liquid Discharge System.
- ix. Power requirement for proposed project will be 800 KVA and will be met from TSSPDCL. DG sets of 380 KVA & 250 KVA capacities will be installed and used as standby during power failure; Stack (height 10 meters) will be provided as per CPCB norms to the proposed DG sets of 380 KVA & 250 KVA.
- x. 2 TPH & 5 TPH Coal Fired Boilers are Proposed for the new unit with a stack of height of each 30 mtr, Cyclone separator followed by bag filter will be installed for controlling the particulate emissions (within statutory limit of 115 mg/ Nm<sup>3</sup>).
- xi. Details of Process emissions generation and its management is as follows:

S. No.	Name of the Gas	Quantity In Kg/Day	Treatment Method
1	Carbon dioxide	83.16	Dispersed into the atmosphere
2	Sulphur dioxide	142.29	Scrubbed by using C.S.Lye Solution
3	Hydrogen	2.33	Diffused by using Nitrogen through Flame arrestor
4	Nitrogen	26.94	Dispersed into the atmosphere
5	Ammonia	27.65	Scrubbed by using chilled water media
6	Hydrogen chloride	55.78	Scrubbed by using chilled water media
7	Hydrogen Bromide	97.98	Scrubbed by using C.S.Lye Solution
8	Oxygen	36.11	Dispersed into the atmosphere
9	Chloromethane	17.60	Scrubbed by using C.S.Lye Solution

**xii. Details of Solid waste/Hazardous waste generation and its management is as follows:**

S. No	Name of the Solid/ Hazardous Wastes	Quantity	Disposal Method
1	Organic waste (Process Residue)	456 Kgs/Day	Sent to Cement Industries
2	Spent Carbon	138 Kgs/Day	Sent to Cement Industries
3	Solvent Distillation Residue	1248 Kgs/Day	Sent to Cement Industries
4	Inorganic Waste	463 Kgs/Day	Sent to TSDF
5	MEE Salts	1666 Kgs/Day	Sent to TSDF
6	Organic Evaporative Liquid ( from MEE Stripper)	890 Kgs/Day	Sent to Cement Industry
7	ETP Sludge	200 Kgs/Day	Sent to TSDF
8	Used Oils	500 Ltrs/Annum	SPCB Authorized Agencies for Reprocessing/Recycling
9	Containers liners	300 No's / Month	After Detoxification sent to outside agencies
10	Used Lead Acid Batteries	4 No's/ Annum	Send back to suppliers for buyback of New Batteries
11	Ash from boiler operations	9800 Kg/Day	Sent to Brick Manufacturers

**xiii. Following are the list of existing and proposed products - It is Green field Project**

TABLE: LIST OF PROPOSED PRODUCTS AND CAPACITIES

S. No	Product Name	Production capacity MT/ Month
1	Aceclofenac	10.00
2	Cetirizine Dihydrochloride	10.00
3	Domperidone	4.50

4	Drotaverine Hydrochloride	4.00
5	Emtricitabine Hydrochloride	5.00
6	Esomeprazole	3.00
7	Fexofenadine Hydrochloride	4.50
8	Fluconazole	5.00
9	Gliclazide	5.00
10	Ketoconazole	5.00
11	Levetiracetam	3.00
12	Loratadine	4.00
13	Losartan Potassium	4.50
14	Lansoprazole	10.00
15	Montelukast Sodium	3.00
16	Omeprazole	10.00
17	Pantoprazole sodium	4.50
18	Sertraline Hydrochloride	5.00
19	Telmisartan	4.50
20	Tramadol Hydrochloride	10.00
	<b>Total (Worst combination of any 10 products at any given point of time)</b>	<b>75.00</b>

TABLE: LIST OF BY-PRODUCTS

S. No	Name of the Product	Name of the By-Product	Quantity In Kg/Day
1	Accelofenac	t- Butanol	69.85
2	Emtricitabine	TEA Hcl	106.55
3	Fluconazole	DMSO	44.08
4	Montelukast Sodium	Diisopropyl amine HCl	30.40
5	Losartan Potassium	Succinimide	41.54
		Trityl chloride	105.84
6	Omeprazole	Sodium Sulphate	152.04
7	Tramadol Hydrochloride	Magnesium Sulphate	218.55

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

A. Additional TOR

- i. Public Consultation shall be done as per provisions of the EIA Notification, 2006.
- ii. Layout Plan for 10 m wide green belt around periphery of the plant to be submitted.
- iii. Permission from CGWB for groundwater withdrawal to be submitted.
- iv. Commitment to use only Briquettes as boiler fuel.
- v. Implementation plan for ZLD.
- vi. Certified Compliance report of RO, MoEFCC for existing EC, if any, to be submitted.

It was recommended that 'TOR' with Public consultation prescribed by the Expert Appraisal



	Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.																					
24.4.18	<p><b>Expansion of manufacturing of bulk drugs at Survey No. (old) 60 &amp; 61/ (revise) 76, 77, Village: Ankhol, Tal: Kadi, Dist. Mehsana, Gujarat by M/s M/s. Nebula Health Care –reg. TOR [IA/GJ/IND2/63782/2017, IA-J-11011/220/2017-IA-II(I)]</b></p> <p>The project proponent informed following:-</p> <ol style="list-style-type: none"> <li>i. The project involves Expansion of manufacturing of bulk drugs at Survey No. (old) 60 &amp; 61/ (revise) 76, 77, Village: Ankhol, Tal: Kadi, Dist. Mehsana, Gujarat by M/s Nebula Health Care.</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 is appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>iii. Ministry has issued EC earlier vide letter no. J-11011/420/2009-IA-II(I), dated 31<sup>st</sup> March, 2011 for bulk drugs manufacturing (240 MT/month) to Nebula Health Care.</li> <li>iv. Existing land area is 9394 m<sup>2</sup>; additional 12486 m<sup>2</sup> land of adjoining plot will be used for proposed expansion.</li> <li>v. Industry has already developed Greenbelt in an area of 33% i.e. 3100 m<sup>2</sup> of 9394 m<sup>2</sup> area. After expansion unit will increase the greenbelt area to 1020 m<sup>2</sup> hence it will be tune around 33% of the total area.</li> <li>vi. Existing cost of the project is Rs. 50 lakhs. Estimated cost for the proposed expansion is Rs. 3.5 crore. Out of which Rs. 50 lakhs will be used for Environmental Management System and the Recurring cost (operation and maintenance) will be about Rs.30 Lacs per annum.</li> <li>vii. Total existing employment is 30 persons as direct &amp; additional 18 persons will be employed as direct employment after expansion. Industry proposes to allocate Rs. 8.00 lakhs of 2.5 % towards Corporate Social Responsibility.</li> <li>viii. No National Parks, Wildlife Sanctuaries, Biosphere reserves, Tiger/Elephant reserves, wildlife corridors etc. lies within the 10 km radius of the project site.</li> <li>ix. Total water requirement is 95.6 m<sup>3</sup>/day of which fresh water requirement of 73.6 m<sup>3</sup>/day and will be met from bore well.</li> <li>x. The industrial wastewater generation after proposed expansion will be @17.5 m<sup>3</sup>/day. W/w generated from process, lab, scrubber washing and utilities will be evaporated after primary treatment and passing from RO. RO Permeate &amp; Condensate will be recycled.</li> <li>xi. Power requirement after expansion will be 250 KVA including existing 75 KVA will be made from UGVCL. Existing unit has one DG set of 25 kVA capacity, additionally one D.G.Set (125 kVA) will be used as standby during power failure. Stack (height 7 meters) is provided as per CPCB norms, which will be used as standby during power failure.</li> <li>xii. Existing unit has 1 no. of biofuel fired (5.0 MT/month) boiler of 0.5 TPH, 1 Agro waste/ briquette fired (95 MT/month) Thermic fluid heater of 6.0 lacks kcal/hr.and after proposed expansion, 2 nos. of Agro waste/ briquette fired boiler of (1.0 TPH &amp; 2 TPH), 1 Thermic fluid heater of 10.0 lacks kcal/hr., will be installed. Cyclone &amp; bag filter with a stack height of 30 m will be provided for controlling the particulate emissions.</li> <li>xiii. In existing unit, one process vent is attached to spray dryer &amp; spin flash dryer and 11 meter stack height is provided to control the emission. After expansion, process emission will be from reaction vessel &amp; spray Dryer, water Scrubber and Inbuilt cyclone &amp; water scrubber with adequate stack height will be provided.</li> </ol> <table border="1" data-bbox="347 1732 1459 1923"> <thead> <tr> <th>S. No.</th> <th>Stack attached to</th> <th>Fuel</th> <th>Fuel consumption</th> <th>Stack Height (m)</th> <th>APC measure</th> <th>Pollutants</th> </tr> </thead> <tbody> <tr> <td colspan="7"><b>Flue gas stacks – Existing</b></td> </tr> <tr> <td>1.</td> <td>Boiler (0.5 Mt/hr.)</td> <td>Bio fuel</td> <td>5.0 Mt/Month</td> <td>15</td> <td>Cyclone</td> <td>SPM&lt;150 mg/nm<sup>3</sup></td> </tr> </tbody> </table>	S. No.	Stack attached to	Fuel	Fuel consumption	Stack Height (m)	APC measure	Pollutants	<b>Flue gas stacks – Existing</b>							1.	Boiler (0.5 Mt/hr.)	Bio fuel	5.0 Mt/Month	15	Cyclone	SPM<150 mg/nm <sup>3</sup>
S. No.	Stack attached to	Fuel	Fuel consumption	Stack Height (m)	APC measure	Pollutants																
<b>Flue gas stacks – Existing</b>																						
1.	Boiler (0.5 Mt/hr.)	Bio fuel	5.0 Mt/Month	15	Cyclone	SPM<150 mg/nm <sup>3</sup>																

2.	Thermic fluid heater (6 lakh k cal)	Agro waste/ briquette	95.0 Mt/Month	30	Cyclone & bag filter	SO <sub>2</sub> <100 ppm NO <sub>x</sub> <50 ppm
3.	D.G. set (25 kVA) (stand by)	HSD	10 lit/hr.	7	--	
<b>Process stacks – Existing</b>						
1.	Vent of Spray dryer	-	-	11	Inbuilt cyclone & water scrubber	SPM<150 mg/nm <sup>3</sup>
2.	Spin flash dryer	-	-	11	Bag filter	SPM<150 mg/nm <sup>3</sup>
<b>Flue gas stacks – Proposed</b>						
1	Boiler x 2 Nos. (1.0 + 2.0 TPH)	Agro waste/ briquette	275 Mt/Month	30	Cyclone & bag filter	SPM<150 mg/nm <sup>3</sup> SO <sub>2</sub> <100 ppm NO <sub>x</sub> <50 ppm
2.	Thermic fluid heater (10 lakh k cal)	Agro waste/ briquette	125 Mt/Month	30	Cyclone & bag filter	SPM<150 mg/nm <sup>3</sup> SO <sub>2</sub> <100 ppm NO <sub>x</sub> <50 ppm
3.	D.G. set (125 kVA) (stand by)	HSD	20 lit/hr.	11	--	SPM<150 mg/nm <sup>3</sup> SO <sub>2</sub> <100 ppm NO <sub>x</sub> <50 ppm
<b>Process stacks – Proposed</b>						
1.	Process Vent	-	-	11	Water Scrubber	NH <sub>3</sub> <175 mg/nm <sup>3</sup>
2.	Vent of Spray dryer	-	-	11	Inbuilt cyclone & water scrubber	SPM<150 mg/nm <sup>3</sup>

xiv. Details of Solid waste/Hazardous waste generation and its management is as follows:

S. No.	Type of Waste	Category No. as per HWM rules, 2016	Quantity		Method of Disposal
			Existing	Total after expansion	
1.	ETP waste MEE Salt	35.3	0.2 MT/month	2.0 MT/month 6.25 MT/month	Collection, storage & disposal at TSDF site of Eco care infrastructure Pvt. Ltd.
2.	Discarded containers/ drums/ liners	33.1	Drum: 500 nos./yr. Liner: 0.250 MT/yr.	Drum: 1000 nos./yr. Liner: 10 MT/yr.	Collection, storage and disposal by selling to approved recycler
3.	Used Lubricating Oil	5.1	10 lit/yr.	200 lit/yr.	Collection, storage & use within premises as lubricant/sell to registered recycler.
4.	Distillation	20.3	0.25	5.0 MT/month	Collection, Storage,

	Residue		MT/month		transportation, disposal to CHWIF.
5.	Spent Carbon	28.3	--	2.5 MT/month	Collection, Storage, Transportation, Disposal at CHWIF.

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

S. No.	Name of Product	Quantity (MTPM)		
		Existing	Proposed	Total
<b>1.</b>	<b>Paraben Products</b>			
a)	Propyl Paraben	10	400	490
b)	Methyl Paraben	20		
c)	Sodium Propyl Paraben	20		
d)	Sodium Methyl Paraben	40		
	<b>Total</b>	<b>90</b>	<b>400</b>	<b>490</b>
<b>2.</b>	<b>Niacinamide</b>	50	50	100
<b>3.</b>	<b>Metformin</b>	100	00	100
	<b>New products</b>			
<b>4.</b>	<b>Niacin (Nicotinic Acid)</b>	00	25	25
<b>5.</b>	<b>Steroid products</b>			
a)	Beclomethasone Dipropionate	00	2	2
b)	Betamethasone Acetate			
c)	Betamethasone Dipropionate			
d)	Betamethasone Sodium Phosphate			
e)	Betamethasone 17 Valerate			
f)	Clobetasole 17 Propionate			
g)	Clobetasole Butyrate			
h)	Dexamethasone Sodium Phosphate			
i)	Hydrocortisone Hemi Succinate			
j)	Hydrocortisone Acetate			
k)	Methyl Prednisolone Acetate			
l)	Methyl Prednisolone Hemi succinate			
m)	Prednisolone Acetate			
n)	Prednisolone Sodium Phosphate			
o)	Methyl Coblamine			
<b>6.</b>	<b>Steroid products (Single stage process/IP Grade)</b>			
a)	Betamethasone IP	0.0	1.0	1.0
b)	Dexamethasone IP	0.0	1.0	1.0
c)	Methylprednisolone IP	0.0	1.0	1.0
d)	Prednisolone IP	0.0	1.0	1.0
e)	Hydrocortisone IP	0.0	1.0	1.0
	<b>Total</b>	<b>240</b>	<b>482</b>	<b>722</b>

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

**A. Additional TOR**

- i. Public Consultation shall be done as per provisions of the EIA Notification, 2006.
- ii. Layout Plan for 10 m wide green belt around periphery of the plant to be submitted.
- iii. Permission from CGWB for groundwater withdrawal to be submitted.
- iv. Plan for implementation of ZLD.
- v. ESR Plan @5% with implementation period to be submitted.

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

24.4.19

**Proposed expansion of Bulk Drugs manufacturing Facility for capacity of 9156 TPA for 8 nos products at R.S No. 30 / 4 PT, 32 / 1A, 32 / 2, 32 / 3,,33 / 1, 33 / 10, 33 / 11, 33 / 13, 33 / 2, 33 / 3, 33 / 4, 33 / 5, 33 / 6, 33 / 9, 34 / 1, 34 / 2, 34 / 3, 34 / 4, 34 / 5, 34 / 6, 34 / 7, 34 / 8, 35 / 4, 35 / 5, 35 / 6, 35 / 7, 36 / 5PERIAKALAPET, MATHUR ROAD, PONDICHERRY by M/s STRIDES SHASUN LIMITED – reg. TOR [IA/PY/IND2/64233/2017, IA-J-11011/211/2017-IA-II(I)].**

The project proponent informed following:-

- i. The project involves proposed expansion of Bulk Drugs manufacturing Facility for capacity of 9156 TPA for 8 nos products at R.S No. 30/4 PT, 32/1A, 32/2, 32/3, 33/1, 33/10, 33/11, 33/13, 33/2, 33/3, 33/4, 33/5, 33/6, 33/9, 34/1, 34/2, 34/3, 34/4, 34/5, 34/6, 34/7, 34/8, 35/4, 35/5, 35/6, 35/7, 36/5 Periakalapet, Mathur Road, Pondicherry by M/s Strides Shasun Limited.
- 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 is appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. Existing land area is 24.99 Acres, no additional land will be used for proposal expansion.
- iv. Industry is existing Greenbelt in an area of 30.6 % i.e., 7.65Acres out of 24.99 Acres of area of the project and will be developed 0.97 Acres total green belt is 8.62 Acres(34.5 %)
- v. The estimated project cost is Rs. 125 Crore including existing investment. Total capital cost earmarked towards environmental pollution control measures is Rs 52.25 Crores and th Recurring cost (operation and maintenance) will be about Rs. 1.90 Crore. Per annum
- vi. Total Employment will be 850 persons as direct & indirect after expansions will 900 persons.
- vii. 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 sea is situated at a distance of 1.72 km in East direction.
- viii. Total existing water requirement is 1001 m<sup>3</sup>/day of which fresh water requirement of 411m<sup>3</sup>/day and Treated sewage water from PWD & PIMS 590 m<sup>3</sup>/day and will be met from Existing: Fresh water will be met from approved In house Bore wells from the project site. Proposed: Fresh water requirement for expansion shall be met through usage of Treated sewage water from PWD & PIMS or usage of fresh water. Treated sewage water is further treated in ZLD plant for reuse.
- ix. Effluent of 618 KLD is treated through ETP, ZLD system has been installed as per approval from PPCC and it is under operation. Current ZLD plant capacity is sufficient to treat increased effluent quantity. High pollutant stream is treated in Stripper and MEE. The condensate is sent to Biological treatment followed by RO plant for using in Process/Non process area.
- x. Power requirement:

Details	Existing	Proposed	After expansion
<b>Power Requirement Source: Puducherry Electricity Board</b>	3860 KVA	2000 KVA	5860 KVA
<b>Power Back Up through DGs</b>	2 x 1500 KVA 2 x 1000 KVA	1 x 1500 KVA 1 x 1000 KVA	3 x 1500 KVA 3 x 1000 KVA
<b>Boiler (Bio Mass Briquette)</b>	1 x 16 TPH 1 x 3.5 & 2 x 4.5 TPH (standby boiler)	1 x 16 TPH (standby)	2 x 16 TPH (1 is standby) 1 x 3.5 & 2 x 4.5

TPH (standby boiler)
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- xi. **Details of Solid waste/Hazardous waste generation and its management is as follows:**  
Solid waste

S. No.	Description	Quantity (T/year)		Method of Collection	Method of Disposal
		Existing (TPA)	After Modification (TPA)		
1	Food and garden waste	35	60	Manual	Composted in Organic waste convertor and used as manure

Hazardous waste

S. No.	Schedule No	Name of the Hazardous Waste	Method of Stage / Disposal	Existing Quantity KLA/TP A	Additional Quantity KLA/TPA	Total Quantity KLA/TPA
1	Class A of Schedule II	Waste Sodium Dichromate Solution	Selling to Authorized Vendor	22000	13000	35000
2	34.3 Schedule I	ETP Sludge	Sent to Coprocessing in Cement Industries/ GEPIL	3	5	8
3	5.1 Schedule I	Spent Lubricating Oil	Selling to Authorized Vendor	4	6	10
4	5.2 Schedule I	Waste / Residue containing Oil	Selling to Authorized Vendor	150	150	300
5	20.2 Schedule I	Spent Solvent	Selling to Authorized Vendor	900	680	1580
6	20.3 Schedule I	Distillation Residue	Selling to Authorized Vendor	48	48	96
7	28.1 Schedule I	Process Residue / Waste	Selling to Authorized Vendor	720	620	1340
8	28.2 Schedule II	Spent Catalyst / Spent Carbon	Selling to Authorized Vendor	54	20	74
9	28.3 Schedule II	Off Specification Product	Selling to Authorized Vendor	1	4	5
10	28.4 Schedule II	Date Expired / Discarded Off Specification drugs / Medicines	Bio Medical waste Treatment Facility	1	2	3

11	28.5 Schedule II	Spent Organic Solvent	Selling to Authorized Vendor	36	50	86
12	33.2 Schedule I	Sludge from Treatment of Waste water arising out of cleaning / disposal of Barrels / containers	Selling to Authorized Vendor	20	10	30
13	33.3 Schedule I	Discarded Containers / Barrels / Liners , Contaminated with Hazardous waste Chemicals	Selling to Authorized Vendor	250	180	430
14	35.1 Schedule I	Chemical Sludge from Waste water treatment	Secured Land Fill	1003	4500	5503
15	34.4 Schedule I	Oil and Grease Skimming Residues	Selling to Authorized Vendor	1	1	2
16	35.2 Schedule I	Spent Catalyst	Selling to Authorized Vendor	1	1	2
17	35.3 Schedule I	Spent Carbon	Selling to Authorized Vendor	90	50	140

xii. Following are the list of existing and proposed units associated with the project:

Details	Air pollution source			No of stacks			APC Measures
	Exist-ing	Proposed	After expansion	Exist-ing	Propos-ed	Total	
Stack Process	IBU	-	IBU	2	0	2	Wet Scrubber/ Bag filter
	S-IBU	-	S-IBU	1	0	1	Bag Filter
	IBU Lysine	-	IBU Lysine	1	0	1	Bag Filter
	-	IBU Sodium	IBU Sodium	0	1	1	Bag Filter
	-	DC-90	DC-90	0	1	1	Bag Filter
	-	Pilot Plant	Pilot Plant	0	1	1	Bag Filter
	-	Pregabalin	Pregabalin	0	1	1	Bag Filter
	-	Sapropetrein	Sapropetrein	0	1	1	Bag Filter
	Stack – Non Process (DG)	2 x 1500 KVA	1 x 1500 KVA	3 x 1500 KVA	4	2	6
	2 x 1000 KVA	1 x 1000 KVA	3 x 1000 KVA				

Boiler - Briquette	1 x 16TPH	1 x 16TPH (Standby)	2 x 16TPH (1 in Standby)	2	0	2	Multi cyclone dust collector going in for bag filter and then to stack, 30 mtr AGL
	1 x 3.5 & 2 x 4.5 TPH (standby boiler)		1 x 3.5 & 2 x 4.5 TPH (standby boiler)				
<b>Total No of Stacks</b>				<b>8</b>	<b>7</b>	<b>15</b>	

The Committee also took note of the representation received from Shri R. Kotandaraman, President of Puducherry Environment Protection Association, Koodapakkam, Puducherry raising concerns that the PP has not mentioned the project details correctly in the Form-1. The Committee critically examined the details given in Form-1 and observed that the project site is located 2.2 km from the Bay of Bengal. The committee suggested the PP to submit the authenticated map with clearcut demarcation of CRZ. After detailed deliberations, the Committee prescribed the following additional TOR in addition to standard TOR (refer Ministry's website) for preparation of EIA-EMP report:

**A. Additional TOR**

- i. Public Consultation shall be done as per provisions of the EIA Notification, 2006.
- ii. Layout Plan for 10 m wide green belt around periphery of the plant to be submitted.
- iii. ZLD Plan to be submitted.
- iv. Chronology w.r.t. production since its establishment.
- v. Copy of permission from CGWB for groundwater withdrawal to be submitted.
- vi. List of scrubbers installed and proposed w.r.t. process emissions.
- vii. Toxicity study for each chemical in local environment.
- viii. Certified compliance report for existing EC, if any, to be obtained from RO, MoEFCC.
- ix. Copy of valid consent to operate for the existing unit.
- x. Autheticated Map with clearcut demarcation of CRZ.

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

24.4.20	<p><b>PROPOSED BULK DRUGS MANUFACTURING UNIT of M/s. MAHEK LIFE SCIENCE Plot No. 2329, GIDC Industrial Estate, Panoli - 394116, Taluka: Ankleshwar, Dist. Bharuch, Gujarat- reg. TOR [IA/GJ/IND2/65000/2017, IA-J-11011/271/2017-IA-II(I)]</b></p> <p>The project proponent informed following:-</p> <ul style="list-style-type: none"> <li>i. The project involves proposed Bulk Drugs Manufacturing Unit of M/s Mahek Life Science Plot No. 2329, GIDC Industrial Estate, Panoli, Taluka: Ankleshwar, Dist. Bharuch, Gujarat by M/s Mahek Life Science.</li> <li>ii. All synthetic organic chemicals industry located in a notified industrial area/estate are listed at S.N. 5(f) under category 'B'. However, due to applicability of general condition i.e. Critically polluted areas as notified by the Central Pollution Control Board is situated within 5 km from the project site, the project is considered as category 'A' and appraised at Central level by Expert Appraisal Committee.</li> </ul>
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- iii. Proposed land area is 1500 m<sup>2</sup>. Industry will be developed Greenbelt in an area of 15 % i.e. 225 m<sup>2</sup> out of 1500 m<sup>2</sup> of area of the project.
- iv. The estimated project cost is Rs. 500 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 35 Lakhs and the recurring cost (operation & maintenance) is about Rs. 2.5 Lakhs per annum.
- v. It is reported that No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. lies within 10 km distance.
- vi. Total fresh water requirement will be 17.5 KL/Day and will be met from GIDC Water Supply.
- vii. Treated Effluent 5.0 KL/Day. After primary treatment and Tertiary Treatment, treated effluent will be sent to the Common Effluent Treatment Plant (CETP) of M/s PETL, Panoli for the further treatment and final disposal. Domestic effluent (2.5 KL/Day) will be disposed of through septic tank & soak pit.
- viii. Power requirement will be 250 KVA and will be met from DGVCL and D.G. Set (1 No.) - 125 KVA capacity (emergency standby).
- ix. Unit will have Boilers (1 no.), Thermic Fluid Heater (1 no.), Process Vent (1 no.) & DG Set (1 No.). Adequate air pollution control equipments i.e. Stack Height shall be provided, multicyclone separator with bag filter & water scrubber follow by alkali scrubber shall be installed to prevent air pollution with a stack of height of 10 m, 10 m, 15 m & 5 m respectively will be installed for controlling the Particulates emissions.
- x. Details of Process emissions generation and its management is as follows:

S. No.	Stack/Vent attached to	Stack Height (meter)	Stack Diameter (meter)	Fuel name & Quantity	Type of Emission	APCM
1	Boiler (1,500 Kg/hr)	10	0.15	Agro Waste/ Imported coal (1,500 Kg/Day)	PM SO <sub>2</sub> NO <sub>x</sub>	Multicyclone Separator with bag filter
2	Thermic Fluid Heater (1 Lac KL/hr.)	10	0.15	Agro Waste/Imported coal (500 Kg/Day)	PM SO <sub>2</sub> NO <sub>x</sub>	
3	Process Vent	15	0.3	--	HCl	Water scrubber followed by Alkali scrubber
4	D.G. Set* (125 KVA)	5	0.1	Diesel 25 Liter/hr.	PM SO <sub>2</sub> NO <sub>x</sub>	--

\* To be used in emergency only.

- xi. Details of Solid waste/Hazardous waste generation and its management is as follows:

S. No.	Type of Waste	Category No.	Quantity	Disposal
1	ETP Sludge	34.3	2 MT/Month	Collection, Storage, Transportation and sent to common TSDF site for disposal.



2	Process Waste	28.1	1 MT/Month	Collection, Storage, Transportation and sent to common TSDF site for disposal.
3	Used Oil	5.1	30 Liter/Month	Collection, Storage, Transportation and sell to GPCB registered reprocessor/refiner
4	Discarded Drums/Bags	33.1	50 nos./Month	Collection, Storage, Decontamination, Transportation & given to GPCB authorized Vendor
5	Spent Carbon	35.3	1.6 MT/Month	Collection, Storage, Transportation and sent for co-processing in cement industries or to CHWIF.
6	Distillation Residue	20.3	2.1 MT/Month	Collection, Storage, Transportation and sent for co-processing in cement industries or to CHWIF.

**xii. Following are the list of proposed products:**

S. No.	Products	CAS No.	Proposed Capacity (MT/Month)
1	Citrizine Di HCl	83881-52-1	10
2	Levocetirizine Di HCl	130018-87-0	
3	Pregabalin	148553-50-8	
4	Gabapentine	60142-96-3	
5	Sildenafil Citrate	171599-83-0	
6	Diclofenac Sodium	15307-79-6	
7	Chlorzoxazone	95-25-0	
8	Mefenamic Acid	61-68-7	
9	Ondansetron HCl	103639-04-9	
10	Rosuvastatin Calcium	147098-20-2	
<b>Total</b>			<b>10</b>

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

**A. Additional TOR**

- i. Public hearing is exempted under the provisions as per para 7(i)III. Stage (3)(i)(b) of the EIA notification, 2006.
- ii. ESR plan for 5 year @ 2.5 % of the project cost with the consultation of nearby villagers to be submitted.
- iii. Plan for 5 m wide green belt around plant periphery to be submitted.
- iv. Certified compliance report of RO, MoEFCC for existing EC, if any, to be submitted.
- v. Plan for plantation of 1000 trees/year till 5 year in 3 identified villages.

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

24.4.21 **Proposing to develop a Formaldehyde Manufacturing Plant of capacity 100 MTD Formaldehyde at**

**Plot no. B-12, Focal Point, Mandi Gobindgarh, Dist: Fatehgarh Sahib, Punjab by M/s Bansal Chemicals industries – reg. TOR [IA/PB/IND2/64987/2017, IA-J-11011/268/2017-IA-II(I)]**

The PP was not present. The EAC decided to defer the proposal.

24.4.22

**Expansion of production capacity of Epoxy Plasticizer (54 TPM to 1000 TPM) located at GIDC Vapi, Valsad, Gujrat by M/s Makwell Organics Pvt. –reg. TOR[IA/GJ/IND2/63963/2017, IA-J-11011/184/2017-IA-II(I)]**

The project proponent informed following:-

- i. The project involves expansion of production capacity of Epoxy Plasticizer (54 TPM to 1000 TPM) located at GIDC Vapi, Valsad, Gujarat by M/s Makwell Organics Pvt. Ltd.
- ii. All project activity are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under category ‘B’ and are appraised at Central Level by Expert Appraisal Committee (EAC) as General Condition Applicable because the project lies within 5 km radius of interstate boundary of Dadra and Nagar Haveli (D N & H), hence the project will be treated as Category–‘A’]  
Ministry has issued EC earlier vide letter no. -J-11011/746/2008-IA II (I); dated 30.01.2009 for existing unit to sM/s Makwell Organics Pvt. Ltd. Earlier EC got expired.
- iii. Existing land area is 4576 m<sup>2</sup>, No additional land will be used for proposed expansion.
- iv. Industry has already developed Greenbelt in an area of approx. 17% i.e. 700m<sup>2</sup> out of 4576 m<sup>2</sup> of area of the project.
- v. The estimated project cost is Rs297.0 Lakhs, including existing investment of Rs 97.0Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs 22.0Lakhs and the Recurring cost (operation and maintenance) will be about Rs7.0Lakhs per annum.
- vi. Total Employment will be 55 persons as direct & 10 persons indirect after expansion. Industry proposes to allocate Rs7.5Lakhs @ of 2.5% towards Corporate Social Responsibility/Enterprise social commitment.
- vii. It is reported that as per Form-1 no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River/ water body Damangangais flowing at a distance of 2.2 Km in SW direction.
- viii. Total water requirement is 49.14m<sup>3</sup>/day of which fresh water requirement of 49.14m<sup>3</sup>/day and will be met from GIDC Water Supply.
- ix. Untreated effluent of 22.99 m<sup>3</sup>/day will be treated in Effluent treatment plant and discharge into CETP, Vapi for further treatment.
- x. Power requirement after expansion will be 220 KVA including existing 80 KVA and will be met from Dakshin Gujarat VijiCo. Ltd.(DGVCL). Existing unit has no DG sets, after expansion one DG set with 500 KVA capacity will be used as standby during power failure. Stack (height 11 m) will be provided as per CPCB norms to the DG sets of 500 KVA.
- xi. Existing unit has no boiler and in expansion 3TPH coal fired boiler will be installed. Multi cyclone separator/ bag filter with a stack height of 30 m will be installed for controlling the particulate emission (within statutory emission of 115mg/Nm<sup>3</sup>) for proposed 3 TPH coal fired boiler.
- xii. Details of Solid waste/ Hazardous waste generation and its management is as follows:

S. No.	Type of Hazardous waste	Generation, TPA		Treatment	Disposal
		Existing	Proposed		
1.	Waste from ETP	2.5	5.0	Packed in HDE bags, stored	Dispose off into TSDF Vapi
2.	Used Oil	0.024	0.3	Packed in HDPE drum	Sell to registered recycler
3.	Discarded containers	5.0	15.0	Washed and stored	Utilized for packing of hazardous waste or sell to authorized recycler
<b>Solid Waste</b>					
1.	Fly ash	-	144	Stored in silo	Sell to brick manufacture

**xiii. Following are the list of existing and proposed project:**

S. No	Product	Quantity (MT/MONTH)	Quantity (TPA)
1.	Epoxy Plasticizer	54	648

**xiv. Proposed Products and their Capacities for Expansion:**

S. No	Product	Quantity (MT/MONTH)	Quantity (TPA)
1.	Epoxy Plasticizer	946	11352

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

**A. Additional TOR**

- i. Public hearing is exempted under the provisions as per para 7(i)III. Stage (3)(i)(b) of the EIA notification, 2006.
- ii. ESR plan for 5 year @ 2.5 % of the project cost with the consultation of nearby villagers to be submitted.
- iii. Plan for 10 m wide green belt around plant periphery to be submitted.
- iv. Certified compliance report of RO, MoEFCC for existing EC, if any, to be submitted.

It was recommended that 'TORs' prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b) of the EIA notification, 2006.

24.4.23

**Proposed dyes & pigments in existing inorganic & formulation products unit at plot no. 906/27, Nr. Ganeshananad chokdi, GIDC Estate, Panoli, Tal: Ankleshwar, District: Bharuch, Gujarat by M/s. Kunj Industries - reg. Tor [IA/GJ/IND2/64187/2017, IA-J-11011/209/2017-IA II(I)]**

The project proponent informed following:-

- i. The project involves proposed Dyes & Pigments in Existing Inorganic & Formulation Products Unit of M/s Kunj Industries Plot No. 906/27, Nr. Ganeshananad Chokdi, Gidc Estate, Panoli-394116, Tal: Ankleshwar, District: Bharuch, Gujarat by M/s Kunj Industries.
- ii. All synthetic organic chemicals industry located in a notified industrial area/estate are listed at S.N. 5(f) under category 'B'. However, due to applicability of general condition i.e. Critically polluted areas as notified by the Central Pollution Control Board is situated within 5 km from the project site, the project is considered as category 'A' and appraised at Central level by Expert Appraisal Committee.
- iii. Proposed land area is 988 m<sup>2</sup>. Industry will be developed Greenbelt in an area of 25 % i.e. 250 m<sup>2</sup> out of 988 m<sup>2</sup> of area of the project.
- iv. The estimated project cost is Rs. 150 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 10 Lakhs and the recurring cost (operation & maintenance) will be about Rs. 2 Lakhs per annum.
- v. Total employment will be 18 persons as direct & 6 persons indirect for project. Industry purposes to allocate Rs. 2.5 Lakhs @ 2.5 % towards Corporate Social Responsibility.
- vi. It is reported that No national parks, wildlife sanctuaries, Biosphere Reserves,

- Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River/water body Narmada River is flowing at a distance a distance of 13 km in N direction.
- vii. Total water requirement will be 22.0 KL/Day; which will be met from GIDC Water Supply.
- viii. Total 7.0 KL/Day (3.5 KL/Day Industrial + 3.5 KL/Day domestic) of effluent shall be generated. Industrial effluent = 3.0 KLD will be treated in ETP & finally sent to CETP (M/s. PETL, Panoli, Bharuch), Boiler Blow down @ 0.5 KL/Day will be reused for cooling purpose
- ix. Power requirement will be 25 KW and will be met from DGVCL.
- x. Unit will have N.G. based 0.8 TPH Steam Boiler-1, Hot Air Generator & D.G. Set (25 KVA) Adequate stack height will be provided.
- xi. Details of Solid waste/Hazardous waste generation and its management is as follows:

S.No.	Type of Hazardous Waste	Hazardous Waste Category	CTE Qty. MT/Month	Total proposed Qty. MT/Month	Mode of disposal
1.	Discarded Containers/Bags/Liners	33.1	1.0	25.0	Collection, Storage, Transportation, Decontamination, Reuse/ Sale to Authorized Vendor.
2.	Used Oil/Spent Oil	5.1	0.001	0.05	Collection, Storage, Transportation, Reuse or sale to authorized reproprocessors.
3.	ETP Sludge	35.3	--	1.0	Collection, Storage, Transportation, disposal at nearest TSDF site.

- xii. **Following are the list of proposed products:**  
Proposed Product List

Products		CAS No.	Existing Qty. (MT/Month)	Total Proposed Qty. (MT/Month)
<b>Existing (CTE)</b>				
1	Standardization* of Dyes & Pigments	-	50	50
2	Mono Ammonium Phosphate OR	7722-76-1	100	100
3	Di Ammonium Phosphate OR	7783-28-0		
4	Tri Sodium Phosphate	7601-54-9		
5	Potassium Sulphate OR	7778-80-5	200	200
6	Sodium Sulphate OR	7757-82-6		
7	Zinc Sulphate OR	7733-02-0		
8	Ammonium Sulphate	7783-20-2		
<b>Proposed</b>				
1	Acid Red-131	12234-99-0	--	20
2	Acid Red-88	1658-56-6		
3	Acid Red-18	2611-82-7		

4	Acid Orange-7	633-96-5		
5	Acid Yellow-36	587-98-4		
6	Acid Black-1	1064-48-8		
7	Acid Blue-113	3351-05-1		
8	Direct Red-31	5001-72-9		
9	Direct Orange-39	1325-54-8		
10	Direct Violet-9	6227-14-1		
11	Pigment Red-8	6410-30-6		
<b>Total</b>			<b>350</b>	<b>370</b>

\* **Standardization = Formulation**

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

**A. Additional TOR**

- i. Public hearing is exempted under the provisions as per para 7(i)III. Stage (3)(i)(b) of the EIA notification, 2006.
- ii. ESR plan for 5 year @ 5 % of the project cost with the consultation of nearby villagers to be submitted.
- iii. Plan for 5 m wide green belt around plant periphery to be submitted.
- iv. No use of ground water.
- v. Plan for plantation of 1000 trees/year till 5 years in identified 3 villages.

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

24.4.24

**Expansion of manufacturing of API and API intermediates at plot no:-3709/1&2,,Ankleshwar, Dist-Bharuch by M/s Vihita Chem (P) ltd (Unit-2) –reg. TOR [IA/GJ/IND2/64781/2017, IA-J-11011/250/2017-IA-II(I)]**

The project proponent informed following:-

- i. The project involves Expansion of manufacturing of API and API intermediates at plot no:- 3709/1&2, Ankleshwar, Dist. - Bharuch by M/s Vihita Chem (P) Ltd. (Unit-2).
- ii. All synthetic organic chemicals industry located in a notified industrial area/estate are listed at S.N. 5(f) under category 'B'. However, due to applicability of general condition i.e. Critically polluted areas as notified by the Central Pollution Control Board hence project is considered as category 'A' and appraised at Central level by Expert Appraisal Committee.
- iii. Existing unit is operating since 2004. Existing Land area is 6800 Square Meter. No additional land will be used for proposed expansion.
- iv. Industry will develop greenbelt in an area of 20.58 %, i.e. 1400 sq. mt. out of 6800 sq. mt. of area of the project.
- v. The estimated cost of project is Rs 951.75 Lacs including existing investment of Rs 201.75 Lacs. The expected cost of proposed expansion will be Rs. 750 Lacs.Total capital cost earmarked toward environmental pollution control measures is Rs. 55 lacs and recurring

- cost (operation and maintenance) will be about Rs. 25 lacs per annum.
- vi. Total employment will be 44 persons as direct and 25 persons indirect after expansion. Industry propose to allocate Rs. 14 lacs @ of 5/2.5% of capital cost towards corporate social responsibility.
  - vii. It is reported that there is no any national parks, wildlife sanctuaries, Biosphere Reserves, Tigers/Elephants Reserves, Wildlife Corridors lies within 10 km distance. River Narmada is flowing at the distance of 8 KM in N direction.
  - viii. Total water requirement will be 55 m<sup>3</sup>/dayof which fresh water requirement of 55 m<sup>3</sup>/day and will be met from GIDC, Ankleshwar.
  - ix. The total effluent generation from the unit will be 16 m<sup>3</sup>/day. Unit will send 4 m<sup>3</sup>/day effluent into ETL and remaining will send into ACPTCL.(ZLD Plant)
  - x. Power requirement after expansion will be 650 KVA including existing 225 KVA and will be met from Daxin Gujarat Vij Company Ltd. Existing unit has one D. G. Sets, additionally two D.G. set (500 KVA& 750 KVA)will be used as standby during power failure. Stack (height 11 m) will be provided as per CPCB Norms to the proposed D.G. set of 500 & 750 KVA will be used as standby during power failure.
  - xi. Existing unit has 1 TPH Natural gas based boiler and 2 lac Kcal/hr Thermic fluid heater.Common stack of 15 meter is attached between boiler and TFH. For Proposed expansion 2 TPH & 5 TPH steam boiler and 2 lac kcal/hr Thermic Fluid Heater will be installed.
  - xii. In existing condition there is no process gas emission. After expansion, there will be a process gas emission of Ammonia,Hydrochloric acid, Hydrobromic acid, Chlorine and Bromine.Unit has provision of Water Scrubber, Acid Scrubber and Alkali Scrubber to prevent process gas emission.
  - xiii. Detail of Solid waste/Hazardous waste generation and its management is given below:

S. No.	Waste	Cate-gory	Quantity/ Year	Quantity/ Year (As per Proposed Expansion)	Total	Facility
1.	Process Solid Waste	28.1	18	736	754	Process waste- Disposal by send it to TSDF-BEIL,Ankleshwar
2.	Spent solvent	28.6	36	264	300	Disposal by Reuse OR sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
3.	Distillation residue	28.1	12	163	175	Disposal by incineration in common incineration of BEIL,Ankleshwar
4.	Process residue and	28.1	144	476	620	Formic acid

	waste						solution(50 to 60% soln);Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
5.	Process residue and wastes	28.1	432	1376	1808		Zinc chloride Solution (20 to 22% soln);Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
6.	Process residue and wastes	28.1	48	528	576		Succinimide solution: Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
7.	Process residue and wastes	28.1	720	2340	3060		Sodium Bromide Solution (10 to 12% soln);Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
8.	Process residue and wastes	28.1	---	720	720		Aluminium Chloride Solution, Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9 permission to

						receive this waste.
9.	Process residue and wastes	28.1	---	600	600	Hydrochloric acid, Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
10.	Process residue and wastes	28.1	---	980	980	Acetic acid, Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
11.	Process residue and wastes	28.1	---	980	980	Hydrobromic acid, Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
12.	Empty barrels/containers/liners contaminate with hazardous chemicals/wastes	33.1	34.560	35.44	70	Disposal by send it to authorized decontamination facility/recycler or reuse or send back to supplier
13.	Chemical sludge from waste water treatment	35.3	18	62	80	Disposal by send it to TSDF-BEIL, Ankleshwar
14.	Used or Spent oil	5.1	0.200	4.8	5	Disposal by reuse in plant & machineries as lubrication or sell it to authorized re-refiners/recycler.
15.	Spent Carbon	28.3	0	39	39	Collection, Storage, Transportation disposal at incineration site



xiv. **Following are the list of existing and proposed product:**

**EXISTING PRODUCT LIST**

S. NO.	PRODUCTS	QUANTITY (MT/MONTH )	REMARKS
<b>LIST OF PRODUCTS AS PER EXISTING CCA NO:-H-84112</b>			
1.	4-METHYL CATECHLO <b>AND/OR</b>	7	Total Production of sr.no.1 to 8 shall not exceed 7 MT/Month in any case.
2.	HYDROXY UREA <b>AND/OR</b>	7	
3.	4-HYDROXY BENZYL ALCOHOL <b>AND/OR</b>	7	
4.	BENZALDEHYDE DIMETHYL ACETAL <b>AND/OR</b>	7	
5.	4-METHOXY BENZALDEHYDE DIMETHYL ACETAL <b>AND/OR</b>	7	
6.	DI METHYL FORMAMIDE DI ISO PROPYL ACETAL <b>AND/OR</b>	7	
7.	2-BROMO 2',5'-DIMETHOXY ACETOPHENONE <b>AND/OR</b>	7	
8.	METHYLENE DIOXY PHENOL	7	
9.	DI METHYL FORMAMIDE DI METHYL ACETAL <b>AND/OR</b>	13	Total Production of sr.no.9 to 15 shall not exceed 13 MT/Month in any case.
10.	4-CHLORO-4' HYDROXY BENZOPHENONE <b>AND/OR</b>	13	
11.	2,3,4,5,-BIS-O-[1-METHYL ETHYL IDENE] B-D- FRUCTOPYRANOSE <b>AND/OR</b>	13	
12.	ALPHA-BROMO-2-CHLORO PHENYL ACETIC ACID <b>AND/OR</b>	13	
13.	ALPHA-BROMO-2-CHLORO PHENYL ACETIC ACID METHYL ESTER <b>AND/OR</b>	13	
14.	O-BENZYL HYDROXYL AMINE HYDROCHLORIDE <b>AND/OR</b>	13	
15.	O-BENXYL HYDROXYL AMINE METHANE SULPHONIC ACID	13	

**LIST OF PRODUCTS AFTER PROPOSED EXPANSION**

S. NO.	NAME OF THE PRODUCT	PRODUCTION CAPACITY MT/MONTH
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GROUP-1 (Each product not more than 100 MT/Month)			
1.	2,3,4,5-bis-O-[1-Methyl Ethyl idene] B-D-Fructopyranose	100 (Either/Or)	
2.	Di Methyl Formamide Di Methyl Acetal		
3.	4-Methyl CatecholDi-acetic acid Dimethyl ester		
<b>(Sr No:-1 to 3) TOTAL:</b>		<b>100 MT/Month</b>	
GROUP-2 (Each product not more than 30 MT/Month)			
4.	4-Methyl Catechol	30 (Either/Or)	
5.	Methylene dioxy phenol		
6.	4-Chloro-4'Hydroxy Benzophenone		
7.	2-Bromo Veratryl Bromide		
8.	7-Ethyl tryptophol		
9.	2 -Bromo 2',5' – dimethoxyacetophenone		
10.	Di Methyl Formamide Di Iso Propyl Acetal		
11.	4-Methoxy Benzaldehyde dimethyl Acetal		
12.	Benzaldehyde dimethyl Acetal		
13.	4-Hydroxy Benzyl Alcohol		
14.	O-Benzyl hydroxyl amine Hydrochloride		
15.	Alpha –Bromo -2-Chloro Phenyl Acetic Acid Methyl Ester		
16.	3-(1-Piperaziny)-1,2-Benzisoxazole/Hydrochloride		
17.	5-Chloroethyl-6-Chloro-2-Oxindole		
18.	2,4,6 TrimethoxyBenzaldehyde		
19.	4-Methoxy-3-nitrobenzylsulfonylacetic acid		
20.	(1R,2R)-1-2-bis (methane sulfonyloxy methyl) cyclohexane		
21.	4-Isopropyl catechol		
22.	3-Methoxy Phenol		
23.	Veratrol Alcohol		
24.	3,4-Dihydroxy Benzoic Acid		
25.	3,4 DihydroxyBenzaldehyde		
26.	4-Propyl Catechol		
27.	Dimethyl Acetamide Dimethyl Acetal		
28.	Tert-butyl(4-bromophenyl) Methylcarbamate		
29.	4-[(4-Methyl-1-piperaziny)-methyl]-benzoyl chloride dihydrochloride		
30.	(2-cyclopropyl-4-(4-fluorophenyl)quinolone-3yl)methanol		
31.	(-) Alcohol		
32.	3 –MethoxyPropiophenone		
<b>(Sr No:-4 to 32) TOTAL:</b>			<b>30 MT/Month</b>
GROUP-3 (Each product not more than 20 MT/Month)			
33.	AfatinibDimalate		

	34.	Arbutin	20 (Either/Or)	
	35.	Agomelatine		
	36.	Apixaban		
	37.	Aripiprazole		
	38.	Asenapine		
	39.	Axitinib		
	40.	Azilsartan		
	41.	Abacavir Sulfate		
	42.	Atorvastatin Calcium		
	43.	Bupropion HCL		
	44.	Bazedoxifene		
	45.	Canagliflozin		
	46.	Candesartan Cilexetil		
	47.	Celecoxib		
	48.	Clopidogrel bi sulfate		
	49.	Dabigatran		
	50.	Dapagliflozin		
	51.	Darifenacin		
	52.	Donepezil		
	53.	Dronedarone		
	54.	Desvenlafaxine Succinate monohydrate		
	55.	Duloxetine Hydrochloride		
	56.	Erlotinib		
	57.	Etoricoxib		
	58.	Etodolac		
	59.	Escitalopram oxalate		
	60.	Febuxostate		
	61.	Felodipine		
	62.	Fluconazol		
	63.	Granisetron HCl		
	64.	Gefitinib		
	65.	Gabapentin		
	66.	ILoperidone		
	67.	Irbesartan		
	68.	Itopride Hydrochloride		
	69.	Lapatinib		
	70.	Lurasidone Hydrochloride		
	71.	Losartan Potassium		
	72.	Mem Chloride		
	73.	Minodronic Acid		
	74.	Moclobemide		
	75.	Modafinil		
	76.	Metoprolol Tartrate		
	77.	Nisoldipine		
	78.	Omeprazole		
	79.	O Des Venlafexine		
	80.	Olmesartan		
	81.	Pitavastatin		

82	Piperonylic Acid	
83	Pramipexole Dihydrochloride Monohydrate	
84	Prasugrel Hydrochloride	
85	Paroxetine	
86	Pinaverium Bromide	
87	Pioglitazone HCl	
88	Quetiapine Fumarate	
89	Rabeprazole Sodium	
90	Rivaroxaban	
91	Ropinirole Hydrochloride	
92	Resperidone	
93	Sertraline Hydrochloride	
94	1-[3-(benzyloxy)propyl]-5-formylindoline-7-carbonitrile	
95	Solifenacin Succinate	
96	Dimethylformamide di-tert-butyl Acetal	
97	Tadalafil	
98	Ticagrelor	
99	Topiramate	
100	Vilazodone Hydrochloride	
101	Valsartan	
102	Vortioxetine Hydrobromide	
103	Vemurafinib	
104	Warfarin <b>Sodium clathrate</b>	
105	Ziprasidone HCl	
<b>(Sr No:-33 to 105) TOTAL:</b>		<b>20 MT/Month</b>
GROUP-4 (R&D Products 5 MT/Month)		
106	Various New Product developed by In-house R&D	5.0
	TOTAL	5.0
<b>Group-1+Group-2+Group-3+Group-4)</b>		<b>155 MT/Month</b>

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

**A. Additional TOR**

- i. Public hearing is exempted under the provisions as per para 7(i)III. Stage (3)(i)(b) of the EIA notification, 2006.
- ii. ESR plan for 5 year @ 5 % of the project cost with the consultation of nearby villagers to be submitted.
- iii. Plan for 10 m wide green belt around plant periphery to be submitted.
- iv. Plan for plantation of 1000 trees / year till 5 years in 3 identified villages.
- v. Certified compliance report of RO, MoEFCC for existing EC, if any, to be submitted.

It was recommended that 'TORs' prescribed by the Expert Appraisal Committee (Industry) should be

considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b) of the EIA notification, 2006.

**15<sup>th</sup> Jun, 2017 (Day 2)**

**24.5 (Environmental Clearance)**

24.5.1	<p><b>Setting up of LPG Bottling Plant (3 x 600 MT) at Plot no. D-143, Additional Buti Bori MIDC, Nagpur, Maharashtra by M/s Indian Oil Corporation Limited- Environmental Clearance-reg [IA/MH/IND2/61619/2017, IA-J-11011/14/2017-IA-II(I)]</b></p> <p>The Project Proponent and the accredited consultant M/s Ultra-Tech made 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 Setting up of LPG Bottling Plant at at Plot no. D-143, Additional Buti Bori MIDC, Nagpur, Maharashtra by M/s Indian Oil Corporation Limited.</li> <li>ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 20<sup>th</sup> EAC meeting held during 27/2/2017 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter noJ-11011/14/2017-IA-II(I); dated 26<sup>th</sup> May, 2017.</li> <li>iii. All the Isolated Storage &amp; Handling of Hazardous chemicals Projects (as per threshold planning quantity indicated in column 3 of schedule 2 &amp; 3 of MSIHC Rules 1989 amended 2000) are listed at S.N 6 (b) of schedule of environmental impact assessment (EIA) notification under category 'B'. However, due to non functioning of SEIAA, Maharashtra, the project has been considered under category 'B' and appraised at Central level by Expert Appraisal Committee (EAC).</li> <li>iv. Existing land area is 18.2 ha (45 acres). No additional land is required for the project.</li> <li>v. Industry will develop green belt in an area of 33% i.e 6.1 ha out of 18.2 ha of area of the project.</li> <li>vi. The estimated project cost is Rs139.39 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 85 lakhs and the Recurring cost (operation and maintenance)will be about Rs9.6 lakhs per annum.</li> <li>vii. Total Employment will be 23 persons as direct &amp; 40 persons during operation after proposed activity. Industry proposes to allocate Rs186 Lacs @ of 5/2.5 % towards Corporate Social Responsibility.</li> <li>viii. No national parks, wild life sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wild life Corridors etc are located within 10 km distance of the project site.</li> <li>ix. Ambient air quality monitoring was carried out at 10 locations during</li> </ol>
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November 2016 to January 2017 and the baseline data indicates the ranges of concentrations as : PM10 (43.0 to 69  $\mu\text{g}/\text{m}^3$ ), PM2.5 (11.3 to 22.9  $\mu\text{g}/\text{m}^3$ ), NO<sub>2</sub>(10.1 to 26.2  $\mu\text{g}/\text{m}^3$ ) and SO<sub>x</sub>(5.1 to 17.6 $\mu\text{g}/\text{m}^3$ ) respectively. The resultant concentrations are within the National Ambient Air Quality Standards(NAAQS).

- x. Total water requirement is approx 15m<sup>3</sup>/day of which water requirement of 15m<sup>3</sup>/day and will be met from proposed tube well on site.
- xi. Treated effluent of 5 m<sup>3</sup>/day will be treated through Sedimentation and plant will be based on zero liquid discharge system.
- xii. Power requirement during operation will be 400kW and will be met from Maharashtra State Electricity Board. Additionally DG set of 1x750 kVA and 1x250 KVA will be used standby during power failure. Stack (height 5.5m and 3.5m above roof respectively) will be provided as per CPCB norms.
- xiii. Public Consultation is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate.
- xiv. The proposed project is for setting up of 3 nos. of mounded bullets with 600 MT capacities each with bottling capacity of 60 TMTPA.

EAC has deliberated on the proposal and the documents submitted by the PP. **EAC after detailed deliberation has recommended the project for environmental clearance subject to compliance of following specific and other general conditions:**

**Specific Conditions:**

- i. PP shall strictly comply with Government of India's Gas Cylinder Rules and its amendments.
- ii. PP shall strictly follow Oil Industry Safety Directorate (OISD) norms/guidelines for installation and design of equipments and operation of the LPG Bottling Plants.
- iii. Cylinders should be filled with the LPG and should never be over-filled. Cylinders should be checked before and after filling to ensure that they are fit to fill, have been correctly filled, are gas tight and will be trouble-free in service.
- iv. Cylinder filling operations should be carried out in accordance with a reputable technical standard or code such as ISO 10691 .
- v. Static electricity discharge shall be checked. Steel structures and pipeline should be securely earthed. Road tankers should be bonded to earth before LP Gas transfers commence and remain so until the operation is complete and the hose is disconnected.
- vi. No packing/loading/unloading of LPG cylinders shall be made on road/outside factory premises. Vehicles loaded/unloaded with LPG cylinders shall be parked inside the plant premises only. No parking shall be made on road sides.
- vii. Road tankers admitted to the plant should be equipped to the standard specified in national regulations or in a reputable code. Vehicles should be immobilised during transfer operations and equipped to prevent untimely movement. Loading/unloading bays should be protected against impact. Fire-resistant coatings shall be provided to tanks/vessels.
- viii. Sections of pipeline and storage systems that can be isolated with valves or blinds should be equipped with safety valves to protect against possible damage as liquid LPG expands with increases in temperature.
- ix. High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.
- x. Adequate stack height has to be provided to the DG sets as per CPCB norms.
- xi. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

	<p>xii. Water sprinkling has to be undertaken on regular basis to control the polluting particles.</p> <p>xiii. Hazardous Waste shall be handled and disposed as per the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and necessary permissions shall be obtained under the said rules.</p> <p>xiv. Solid waste shall be handled and disposed as per Solid Waste Management Rules, 2016.</p> <p>xv. Zero Liquid Discharge system shall be ensured.</p> <p>xvi. Enterprise Social Commitment (ESC) plan shall be implemented with atleast 2.5 % of the project cost. PP shall develop and maintain RO drinking water facility with modern facilities in the identified three nearby villages, for at least five years.</p> <p>xvii. Green belt of 10 m width shall be developed along the periphery of the plant with trees which can control/reduce the pollutant from the project. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.</p> <p>xviii. PP shall plant and maintain at least 1000 trees/year for five year in the nearby villages. The survival rate of the plants shall be reported to the concerned Regional Office in Six monthly compliance report.</p> <p>xix. The trees which are grown well shall not be cut for the project. All the endangered species of flora and fauna in the premises shall be protected.</p>
24.5.2	<p><b>Drilling of five exploratory wells at MB-OSN-2005/3 (NELP VII Block), Mumbai Offshore, Southwest of Mumbai High DCS platform, Maharashtra by M/s Oil and Natural Gas Corporation Limited–Environmental Clearance-reg. [IA/MH/IND2/54026/2016 ,J-11011/176/2016- IA II(I)]</b></p> <p>The Project Proponent and the accredited consultant M/s ONGC gave a detailed presentation on the salient features of the project and informed that:</p> <p>(i) The project involves drilling of five exploratory wells at MB-OSN-2005/3 (NELP VII Block), Mumbai Offshore, Southwest of Mumbai High DCS platform, Maharashtra by M/s Oil and Natural Gas Corporation Limited.</p> <p>(ii) All the projects related to Offshore and Onshore Oil and Gas exploration, Development and Production are listed in S.No. 1(b) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 under Category ‘A’ and are appraised at Central Level by Expert Appraisal Committee (EAC).</p> <p>(iii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 11<sup>th</sup> 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 dated 23<sup>rd</sup> September, 2016.</p> <p>(iv) The NELP-VII Block MB-OSN-2005/3 is located in the southwest of the Mumbai High-DCS platform of Mumbai Offshore Basin, having an area of 1685 sq. km. The average cost of drilling a well is estimated at approximately Rs. 140 crores and the total cost of the project is Rs. 700 crores.</p> <p>(v) 5-appraisal wells will be drilled by the ONGC is in this block which is about ~138 nm from the coast. Offshore Floater Drillship rigs will be deployed for the proposed drilling. ONGC has its centralized warehouse/ stores at Nhava. Accordingly, all the material will be brought to the site from Nhava supply base by sea route through Offshore Supply Vessel (OSVs).</p> <p>(vi) No sensitive or legally protected areas lie in the close vicinity of the block which is located about 250 km southwest off the coast of Mumbai, Maharashtra.</p> <p>(vii) Water depth of the 3D area (within the block) where prospects are identified and to be drilled, falls within the range of 102 m to 107 m. The total depth of the well to be drilled</p>

will be 1600 m to 2300 m.

- (viii) The block MB-OSN-2005/3 is located beyond 12 nautical miles from the coast line, CRZ regulations, therefore, is not applicable.
- (ix) In the present project, drilling will be done by deploying a floater rig where in a rig is mounted on a ship. ONGC will use Mobile Offshore Drilling Unit (Floater/Jack up Rig) for drilling the well. Offshore wells are drilled in sections, with the diameter of each section decreasing with increasing depth. Lengths and diameters of each section are determined prior to drilling and depend on geological conditions through which the well is to be drilled. The conduit or pipe section will be set in place by jetting operations. Drilling starts with spudding a hole of diameter 26" on the sea bed, followed by lining it with a metal casing of 20". The above structural section is likely to be drilled using sea water. Next hole will be of 17-1/2" diameter and casing will be 13-3/8". Further hole will be of 12-1/2" diameter with 9-5/8" casing.
- (x) Well head equipment is installed thereafter followed by marine riser including the Blowout Preventer. The blowout preventer is a large underwater assembly of control valve that prevents high pressure from the well escaping through the water and oil column into the surface at the derrick floor. The release of this pressure is called a —blowout and can result in an explosion and could cause large scale damage to the environment. If a blowout were to occur with a BOP in place, giant valves inside it seal off the well, containing any excessive pressure and putting it back into the ground. The BOP is placed on top of the wellhead (the top of the well), which is why it is important to make sure the casing is properly cemented in place. A marine riser is a type of offshore drilling tool that is used as a temporary extension connecting the oil well to the rig.
- (xi) As drill pipe is lowered down through the marine riser, through the BOP, into the wellhead, and then further down into the well, drill fluid or mud (fluid that helps clear the rock bits or —cuttings that are being chipped away when drilled) is pumped back up through the pipe annulus and out through the drill bit. The mud eventually circulates around up through the marine riser and back to the surface of the oil rig. As each section is drilled, casing is run and cemented into place ready for drilling the next smaller diameter section. Operations continue in this way until target depth is reached. During drilling operations, the drilling fluid (or mud) is pumped through the drill string down to the drilling bit and returns via the drill pipe – casing annulus up to surface back into the circulation system. After separation of drill cuttings /solids through solids control equipment, the mud is circulated back.
- (xii) ONGC is committed to using Water Based Mud (WBM) for the offshore exploratory drilling operations. However, synthetic oil based mud (SOBM) will be used to address specific down-hole issues, if so warranted. Otherwise, keeping in view the environmental factors in the backdrop, only water based mud is proposed to be used in the drilling the exploratory wells in the block. Water-based mud is made up of clay (bentonite) and water; it may include barite, a heavy mineral to increase specific gravity of the mud system. Chemical additives are mixed in to stabilize the drilling fluid during use, and to reduce corrosion and bacterial activity. Chemical additives viz. glycols and salts may be used in conjunction to mitigate potential problems related to hydrate formation.
- (xiii) After drilling and initial testing, the rig is usually dismantled and moved to the next site. If the exploratory drilling has discovered commercial quantities of hydrocarbons, a wellhead valve assembly may be stalled. If the well does not contain commercial quantities of hydrocarbon, the site is decommissioned to a safe and stable condition and restored to its original state. Open rock formations are sealed with cement plugs to prevent upward migration of fluids. The casing wellhead and the top joint of the casings are cut at the ground level and capped with a cement plug.



- (xiv) Water requirement in a drilling rig is mainly meant for preparation of drilling mud apart from washings and domestic use. The average daily water consumption is of the order of 40 m<sup>3</sup>/day will be drawn from Nhava supply base of ONGC (which is a main material supply base for offshore installations of western region) along with other materials through sea route. Nhava supply base of ONGC receives water from Industrial Development Corporation of Maharashtra Limited (CIDCO).
- (xv) Waste water generated at the rig will be of three types and its disposal methodologies are explained in the subsequent sections. The International Convention for the Prevention of Pollution from Ships (MARPOL) is the primary regulations/ guidelines on prevention of pollution of the marine environment by ships. The Convention includes regulations aimed at preventing and minimizing pollution from ships - both accidental pollution and that from routine operations.
- (xvi) Bilge fluids are a mix of sea water, petroleum products and other brackish material that settles to the bottom of a ship. The collection and disposal system for this fluid will be done in compliance with the International Convention for Prevention of Pollution from Ships, 1973 as modified by the protocol of 1978 (MARPOL 73/78). The rig will be having provision to collect bilge fluids into a sludge tank and then to a water/oil separator. Separated oil will then be diverted into "dirty oil" tank, where exhaust oil from engine lubricant change is collected. The dirty oil will be periodically sent to shore in drums or special containers by supply vessels. Separated water can be directly discharged overboard, provided that oil content does not exceed 15 ppm as per MARPOL standards.
- (xvii) The unit has 5 DG sets of 1000 KVA capacity. Stack (height 40m) will be provided as per CPCB norms to the proposed DG sets.
- (xviii) Baseline data on marine water quality and sediment characteristics are generated and analysed for 23 sites in and around the project area and the drilling locations. The study was also conducted for marine biodiversity including fishery, plankton and Chlorophyll-a.
- (xix) The proposed drilling locations are:

SNo.	Location Name	Water Depth (m)	Target Depth (m)	Latitude	Longitude
1	MBS053NAC-A	102	1900	18° 51' 11.98" N	70° 19' 36.21" E
2	MBS053NAB-A	102	1750	18° 54' 27.09" N	70° 16' 33.79" E
3	MBS053NAD-A	106	1750	18° 46' 54.4" N	70° 22' 15.81" E
4	MBS053NAE-A	105	1650	18° 45' 26.08" N	70° 23' 28.73" E
5	MBS053NAF-A	107	2300	18° 50' 27.92" N	70° 24' 00.38" E

EAC has deliberated on the proposal. EAC noted that the project is located beyond territorial waters (beyond the stipulated 12 nautical miles). However, PP has informed that the Production Sharing Contract (PSC) requires conducting of EIA studies and obtaining its approval from MOEF&CC. It is also emphasized in the PSC that the contractor shall conduct its petroleum operations with due regard to and concern with respect to protection of the environment and conservation of natural resources.

**EAC after detailed deliberation has recommended the project for environmental clearance**

	<p><b>subject to compliance of following specific and other general conditions:</b></p> <p><b>Specific Conditions:</b></p> <ol style="list-style-type: none"> <li>i. PP shall ensure compliance of the standards for equipment referred in the Petroleum and Natural Gas (safety in offshore operations) Rules, 2008.</li> <li>ii. Blowout preventer shall be pressure tested regularly in order to maintain its capability in accordance with international standards.</li> <li>iii. The project proponent shall take due care and adopt the best practices to ensure that there is no oil spill. However, to meet with any unforeseen situation and combat the oil spill, the PP shall prepare the Oil Spill Disaster Contingency Plan in line with the provisions of the National Oil Spill Disaster Contingency Plan(NOSDCP). Regular Mock Drills shall also be conducted.-<b>Oil/Drilling Sector</b>. The PP shall also ensure compliance of International norms for Oil Spill Contingency Plan.</li> <li>iv. H<sub>2</sub>S emissions in adverse scenario shall be envisaged and emission control plans shall be prepared. Necessary detection and alarm system (H<sub>2</sub>S sensor) shall be ensured.</li> <li>v. If the well does not contain commercial quantities of hydrocarbon, the site shall be decommissioned to a safe and stable condition and restored to its original state. Necessary precautions have to be taken to prevent upward migration of fluids.</li> <li>vi. The International Convention for the Prevention of Pollution from Ships (MARPOL) regulations/ guidelines shall be followed for prevention of pollution of the marine environment by ships. Waste water generated at the rig shall be disposed off as per norms.</li> <li>vii. The collection and disposal system of Bilge fluids shall be done in compliance with the International Convention for Prevention of Pollution from Ships, 1973 as modified by the protocol of 1978 (MARPOL 73/78).</li> <li>viii. The environmental management plan shall be strictly followed to reduce the impact of pollution in the marine environment.</li> <li>ix. PP shall conducted water &amp; sediment quality (including heavy metals and petroleum components) and bio-diversity study in every six months in selected sites around 5 km radius of the drilling location, during the project phase through National Institute of Oceanography.</li> </ol>
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**Reconsideration of EC**

24.5.3	<p><b>Expansion of Specialty Chemicals in Existing Manufacturing Plant (58.33 MTPM to 613.33 MTPM) at Plot No. 37/A, AKVNL, Industrial Estate, Meghnagar, District Jhabua, Madhya Pradesh by M/s Anjaniya Industries- Environmental Clearance-reg. [IA/GJ/IND2/30316/2014, J-11011/369/2013-IA II(I)]</b></p> <p>The Project Proponent and their consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd., gave a detailed presentation on the salient features of the project &amp; informed that:</p> <ol style="list-style-type: none"> <li>i. The proposal is for Expansion of Specialty Chemicals in Existing Manufacturing Plant (58.33 MTPM to 613.33 MTPM) at Plot No. 37/A, AKVNL, Industrial Estate, Meghnagar, District Jhabua, Madhya Pradesh by M/s Anjaniya Industries.</li> <li>ii. The project proposal was considered by the Expert Appraisal Committee (industry) in its 17<sup>th</sup> meeting held during 18-19<sup>th</sup> March, 2014 and recommended Terms of References</li> </ol>
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(TORs) for the Project. The TOR has been issued by Ministry vide letter dated 06<sup>th</sup> June, 2014.

- iii. All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B' but due to the applicability of general condition (located within 5 km distance of the interstate boundary), it is considered under Category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).
- iv. Proposed land area is 1500 m<sup>2</sup>.
- v. Industry will be developed Greenbelt in an area of 33% i.e. 295 m<sup>2</sup> out of 1500 m<sup>2</sup> of area of the project.
- vi. The estimated project cost is Rs. 2.5 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 30 Lakhs and the recurring cost (operation & maintenance) will be about Rs. 5 Lakhs per annum.
- vii. Total employment will be 25 persons as direct & 25 persons indirect for proposed expansion project. Industry purposes to allocate Rs. 6.25 Lakhs @ 2.5 % towards Corporate Social Responsibility.
- viii. No National Parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Anas River is flowing at a distance of 2.5 km from project site.
- ix. Ambient air quality monitoring was carried out at 8 locations during October-2016 to December-2016.
- x. Total water requirement will be 18.7 KL/Day; which will be met from GIDC Water Supply.
- xi. Unit will not generate any industrial wastewater.
- xii. Power requirement will be 75 HP/Hr and will be met from MP Electricity Supply.
- xiii. Unit will have 1 TPH Steam boiler. Multi cyclone separator with bag filter with a stack of height of 30 m will be installed for controlling the Particulates emissions (within statutory limit of 115 mg/Nm<sup>3</sup>). And to control process gas emission from HCl, Cl<sub>2</sub> & SO<sub>2</sub> vent; Two Stage Scrubber will be installed.
- xiv. Details of Solid waste / Hazardous waste generation and its management.

Sr. No	Hazardous waste	Schedule	Quantity	Disposal methods
1.	Discarded Begg & Containers	33.1	150 Nos./Month	Collection, Storage, Reused or Sale to MPPCB Approved Scrape Vendor after decontamination
2.	Waste Or Spent Oil	5.1	1.5 Lit/Year	Collection, Storage, Reused for Oiling in Machinery or Sale To MPPCB Approved Recycler
3.	Process Sludge	26.1	115 MT/Month	Collection, Storage, Transportation and Disposal at Nearest TSDF Site

4.	Distillation Residue	36.1	10 MT/Month	Collection, Storage, Transportation and sell to Cement Industry for Co-processing or Disposal at Common Incineration Site
5.	Hydrochloric Acid (30%)	--	300 MT/Month	Sell to end users
6.	Sodium Sulfate	--	5 MT/Month	Sell to end users

xv. Public hearing is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate.

xv. The existing and proposed products are:

S. No.	Products	CAS No.	Quantity (MT/Month)		
			Existing	Additional	Total
1.	Liquid Bromine	7726-95-6	58.33	--	58.33
2.	Chloro Acetyl Chloride*	79-04-9	--	150	150
3.	Mono Chloro Acetic Acid	79-11-8	--	100	100
4.	Hydrochloric Acid (30%) (By-product)	7647-01-0	--	300	300
5.	Sodium Sulfate (By-product)	1313-82-2	--	5	5
<b>Total</b>			<b>58.33</b>	<b>555</b>	<b>613.33</b>

EAC has deliberated on the proposal. EAC noted that the project is located in the Industrial area.

**EAC after detailed deliberation has recommended the project for environmental clearance subject to compliance of following specific and other general conditions:**

**Specific Conditions:**

- i. Zero Liquid Discharge system shall be ensured. Waste water shall be recycled and reused.
- ii. The by-products which fall under the Hazardous Waste Rules, be handled as per the provisions of the said Rules and necessary permissions shall be obtained under the said rules.
- iii. Hazardous Waste shall be handled and disposed as per the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- iv. Solid waste shall be handled and disposed as per Solid Waste Management Rules, 2016.
- v. Green belt of atleast 5m width shall be developed along the periphery of the plant with trees which can control/reduce the pollutant from the project. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.
- vi. PP shall plant and maintain at least 1000 trees/year for five year in the nearby villages. The survival rate of the plants shall be reported to the concerned Regional Office of the

	<p>MoEF&amp;CC in Six monthly compliance report.</p> <p>vii. Enterprise Social Commitment (ESC) plan shall be implemented with atleast 5 % amount of the project cost. PP shall develop and maintain RO drinking water facility with modern facilities in an identified nearby village, for at least five years.</p> <p>viii. Adequate stack height has to be provided to the DG sets as per CPCB norms.</p> <p>ix. Fresh water utilization shall not exceed the proposed quantity.</p> <p>x. Unit shall have an Environment Management cell with full fledged laboratory with an Environmental Manager having Post Graduate/Graduate qualification in Environmental Sciences/Environmental Engineering.</p>
24.5.4	<p><b>Expansion of existing production capacity of Dyes, Chloro-Alkali, Pesticides, Bulk Drugs &amp; Pharmaceuticals, Resin &amp; other Chemicals and adding new product (Flavours &amp; Fragrances) [31237.96 TPM to 38008.91 TPM] at Plot No. 5, 6, 29, 30, 33, 34, 35, 37, 38, 80, 81, 84, 85, 91 Survey No. 274, 275, 276, Atul, District Valsad, Gujarat by M/s Atul Limited– Environmental Clearance- reg [IA/GJ/IND2/57601/2015, J-11011/108/2015-IA II (I)]</b></p> <p>The Member Secretary informed the EAC that the project was considered by the EAC in its 18<sup>th</sup> meeting held during 23-25<sup>th</sup> January, 2017. EAC desired to have the latest certified compliance report from the Regional Office of MoEFCC at Bhopal. The RO Bhopal has submitted the latest certified compliance report vide letter no. 5-30/2004(Env)/219 dated 29.04.2017.</p> <p>EAC has deliberated on the certified compliance report. EAC noted that as per RO's report, the PP have co-generation power plants, other than the approved ones, integrated to the project without prior EC/approval from Ministry. <b>EAC has deferred the proposal and suggested PP to submit the proposal with the committee for examining the violation cases.</b></p>

## 24.6 Terms of Reference (TOR)

24.6.1	<p><b>Expansion of Existing Sugar Unit (6500 TCD to 14000 TCD) &amp; Co-Generation Power Plant (18.14 MW to 62.14 MW) with existing Distillery (50 KLPD) at Sy. No 90, 92, Krishnanagar, Hosur post, Vijayapur Taluk&amp; district, Karnataka by M/s Nandi Sahakari Sakkare Karkhane Niyamit –Terms of Reference-reg [IA/KA/IND2/62675/2017, IA-J-11011/110/2017-IA-II(I)]</b></p> <p>The Project Proponent and the accredited Consultant M/s ULTRA-TECH made a detailed presentation on the salient features of the project and informed that:</p> <p>(i). The proposal is for Expansion of Existing Sugar Unit from 6500 TCD to 14000 TCD &amp; Co-Generation Power Plant from 18.14 MW to 62.14MW with existing Distillery (50 KLPD) at Sy. No 90, 92, Krishnanagar, Hosur post, Vijayapur Taluk&amp; district, Karnataka State by M/s Nandi Sahakari Sakkare Karkhane Niyamit</p> <p>(ii). The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 21<sup>st</sup> meeting held during 29/03/2017 for Terms of References (TORs). EAC has deferred the proposal for want of following information:</p> <p>1.Revised layout plan with 3 layer of trees to be submitted.</p>
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2. Certified compliance report of existing EC to be submitted.

The PP has now submitted the desired details.

- (iii). All the sugar industry and Co-generation listed under item no. 5(j) and 1 (d) of the Schedule of Environmental Impact Assessment (EIA) Notification, 2006 under Category 'B' and are appraised at State Level by Environment Impact Assessment Authority (SEIAA). The proposed project is integrated with the existing Distillery. All Molasses based Distilleries are listed at item no.5 (g) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and thus the integrated proposal is appraised at Central Level by Expert Appraisal Committee (EAC).
- (iv). Ministry has issued EC earlier vide letter no. J-11011/644/2007-IA-II(I).; dated 2<sup>nd</sup> September 2008 for Expansion of production capacity of sugar unit from 3500 TCD to 6500 TCD and Installation of new 50 KLPD at Sy. No 90, 92, Krishnanagar, Hosur post, Vijayapur Taluk & district, Karnataka to M/s Nandi Sahakari Sakkare Karkhane Niyamit.
- (v). Existing land area is 240 Acre. No additional land will be used for proposed expansion.
- (vi). Industry has already developed Greenbelt in an area of 33 % i.e., 84 Acres out of 240 Acres of area of the project.
- (vii). The estimated project cost is Rs 35,600 Lakhs, the existing investment of Rs104.2 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 600Lakhs and the Recurring cost (operation and maintenance) will be about Rs 75 Lakhs per annum.
- (viii). The existing manpower in the industry is 697 no's (Sugar Co-Gen and Distillery), 627 no's all alone for Sugar Co-Gen. The additional direct man power to the industry after expansion will be 150 no's & there will be more than 500 persons indirect after expansion. Industry proposes to allocate Rs100 Lakhs towards Corporate Social Responsibility.
- (ix). No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Krishna river is flowing at a distance a distance of 1.5 in East direction.
- (x). Total water requirement is 11,200 m<sup>3</sup>/day of which fresh water requirement of 1400 m<sup>3</sup>/day and will be met from Krishna River, Permission has taken from Executive Engineer, Karnataka Nigam Ltd – Biligi for lifting water from Krishna river.
- (xi). Treated effluent of 1473m<sup>3</sup>/day will be treated through Effluent Treatment Plant of capacity 1500 KLD will be based on Zero Liquid discharge system.
- (xii). Power requirement after expansion will be 16 MW including existing 6 MW and will be met from in-house Power generation. The surplus power of 46.14 MW produced will be exported to the public power grid. Existing unit has 2 numbers of DG sets of capacity's 1250 kVA (Sugar and Co-gen) & 500 KVA for (Distillery), additionally 1250 kVA DG sets are used as standby during power failure. Stack (height 30m & 8m ) is provided as per CPCB norms is for existing DG sets, additional 30m height stack is proposed for the new DG sets which will be used as standby during power failure.
- (xiii). Existing unit has 105 TPH Bagasse fired boiler is installed. Multi cyclone separator/ bag filter with a stack of height of 65 m is installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>) for Proposed 240 TPH Bagasse Fired boilers respectively.
- (xiv). Details of Process emissions generation. and its management is as follows ;

Sl. No.	Source, air Pollution	Fuel, T/h	Emission	Air pollution control system
1	105 T/h boiler at co-gen power unit	During season Bagasse: 1050T/d	SPM, SO <sub>2</sub> and NO <sub>x</sub>	Chimney of 65 m ht and ESP
2	Additional 240 T/h boiler	Bagasse: 2400T/d	SPM, SO <sub>2</sub> and NO <sub>x</sub>	A new Chimney of 77 m ht proposed and ESP
3	Existing - 1250 KVA Proposed - 1250 KVA D.G. Set ( Sugar & Co-Gen)	HSD	SPM, SO <sub>2</sub> and NO <sub>x</sub>	Chimney Ht :30 m AGL and acoustic control measures
4	500 KVA D.G. Set (Distillery)	HSD	SPM, SO <sub>2</sub> and NO <sub>x</sub>	Chimney Ht :8 m AGL and acoustic control measures

(xvi) Details of Solid waste/ Hazardous waste generation and its management is as follows ;

Parameters	Bagasse	Press mud	Molasses	Boiler Ash	Lime sludge
i. Moister content %	50	75	20	-	50
ii. % of cane	30	4	4.5	2.0	-
iii. Quantity, T/d	4200	560	630	69	0.6
Storage	Closed yard	Prepared yard	Steel Storage Tanks with water cooling arrangement	Prepared yard	Prepared yard
Utilization	As fuel in boiler	As manure preparation or as soil nutrients	As raw material in distillery	Cane growers use as manure.	In road preparation or as soil nutrients

(xvii) The existing and proposed products are :

Unit	Existing capacity	Proposed Capacity	Capacity after Expansion
Sugar	6500 TCD	7500 TCD	14000 TCD
Co-Gen Power	18.14 MW	44.0 MW	62.14 MW
Distillery	50 KLPD	---	50 KLPD

It was informed by the PP that, the present proposal was submitted and considered by SEAC during December, 2016. The baseline data has accordingly collected from December, 2016 to March, 2017. PP has requested to consider the data for preparation of EIA/EMP report.

The EAC considered the revised layout plan and certified compliance report (MoEFCC RO

	<p>Bangalore No. EP/12.1/573/KAR dated 18.04.2017) submitted by the PP. As the proposal has been considered by the SEAC during December, 2016 and referred to Ministry for appraisal, EAC has accepted the collection of baseline data during December, 2016- March, 2017.</p> <p><b>EAC after detailed deliberation has recommended the project for grant of Standard TOR as available in Ministry’s website in addition to the following Additional TOR with public hearing, for preparation of EIA/EMP report for the project:</b></p> <p><b>Additional TOR</b></p> <ul style="list-style-type: none"> <li>(i). Zero Liquid Discharge system plan shall be submitted.</li> <li>(ii). A layout plan earmarking space for development of Green belt of atleast 10 m width along the periphery of the plant with three layers of perrenial trees shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.</li> <li>(iii). Enterprise Social Commitment (ESC) plan shall be submitted with atleast 5 % amount of the project cost.</li> <li>(iv). No ground water shall be used for the proposed project.</li> <li>(v). PP shall reduce the water requirement of the project as proposed. PP shall submit a plan for reduction in process water consumption.</li> <li>(vi). Public hearing has to be conducted as per the provisions of EIA Notification, 2006.</li> </ul>
24.6.2	<p><b>Installation of 2G Ethanol Plant (100 KLD) at Bathinda, Punjab by M/s Hindustan Petroleum Corporation Limited. [IA/PB/IND2/64593/2017, IA-J-11011/221/2017-IA-II(I)]</b></p> <p>The project proponent and their consultant M/s Ultra-Tech made a detailed presentation on the project proposal and informed that:</p> <ul style="list-style-type: none"> <li>i. The proposal is for Installation of 2G Ethanol Plant (100 KLD) at Bathinda, Punjab by M/s Hindustan Petroleum Corporation Limited.</li> <li>ii. All Distilleries Project are listed at Sl.No. 5(g) 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 Land area of the project is 15.1 ha (37.28 Acres). The total water requirement for the proposed project will be 1800m<sup>3</sup>/day and will be sourced from Canal Water. Total power requirement will be 10 MW and will be met from Punjab State Electricity Board. Additionally DG set of 2x550 kVA will be installed. The total manpower requirement will be 120 persons during operation phase.</li> <li>iv. The project is designed to produce 100KL fuel grade ethanol per day, primarily from rice straw and will use approximately 400 tons of rice straw per day for the process. An additional 50 tons of straw per day will be used for supplementary fuel for steam generation. The process uses rice straw as feed stock to convert into its cellulose, hemi cellulose and lignin fractions. The cellulose and hemi cellulose fractions are then converted into respective sugars through a process called saccharification. The sugars are then converted into dilute ethanol by fermentation using appropriate yeasts. The dilute impure ethanol stream is then purified and concentrated to fuel grade ethanol.</li> <li>v. No industrial effluent will be generated during the process. The project is on the principle of ZLD.</li> <li>vi. Hazardous waste generated from D.G set operation will be disposed to PCB Authorized Recyclers.</li> <li>vii. The total cost of the Project is estimated to be Rs 600 crores.</li> </ul>



	<p>viii. There are no Forest/Eco-sensitive zones within 10km of the study area. There are no major water bodies within 10km of the study area.</p> <p>EAC has deliberated on the proposal. EAC noted that the project is important for the nation, in view of production of ethanol as fuel from rice straw. As the proposed project utilizes waste from agriculture production, it will also indirectly address the pollution issues arose due to burning of these agriculture wastes by farmers. In response to PP's query regarding construction of boundary wall for the proposed area, EAC opinioned that boundary walls may be constructed for securing the land.</p> <p><b>EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR along with public hearing ,for preparation of EIA/EMP report.</b></p> <p><b>Additional ToR</b></p> <ol style="list-style-type: none"> <li>i. Zero Liquid Discharge shall be ensured.</li> <li>ii. No construction activity (other than for securing land) shall be started without obtaining prior EC.</li> <li>iii. A layout plan earmarking space for development of Green belt of atleast 10 m width along the periphery of the plant with three layers of perrenial trees shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.</li> <li>iv. Water requirement in the cooling tower shall be reduced. PP shall submit a revised water balance plan.</li> <li>v. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.</li> <li>vi. Public hearing has to conducted as per the provisions of EIA Notification, 2006.</li> </ol>
24.6.3	<p><b>Setting up of LNG Terminal in the Industrial Zone of Haldia Dock Complex at Haldia, West Bengal by M/s Ultra LNG Haldia Limited-Terms of Reference-reg [IA/WB/IND2/63893/2017, IA-J-11011/180/2017-IA-II(I)]</b></p> <p>The Project Proponent and their consultant M/s. Ultra-Tech, gave a detailed presentation on the salient features of the project &amp; informed that:</p> <ol style="list-style-type: none"> <li>i. The proposal is for Setting up of LNG Terminal in the Industrial Zone of Haldia Dock Complex at Haldia, West Bengal by M/s Ultra LNG Haldia Limited.</li> <li>ii. All the Isolated Storage &amp; Handling of Hazardous chemicals Projects (as per threshold planning quantity indicated in column 3 of schedule 2 &amp; 3 of MSIHC Rules 1989 amended 2000) are listed at S.N 6 (b) of schedule of environmental impact assessment (EIA) notification under category 'B' but due to the applicability of general condition (located in Critically Polluted Area), it is considered under Category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>iii. The land area of the project is 10 acres. Total Water Requirement is approx. 15m<sup>3</sup>/day via Haldia Dock Complex. Power required for the operations is 2 MW sourced from Haldia Dock Complex. The total manpower requirement will be 50 persons during operation phase.</li> <li>iv. The project proposes storage capacity of 40,000 m<sup>3</sup> in the form of double walled</li> </ol>

	<p>pressurized bullets and double walled atmospheric tanks.</p> <ul style="list-style-type: none"> <li>v. There will be no chemical process involved and the operation carried out will be receipt, storage, regasification and dispatch of LNG.</li> <li>vi. No industrial solid waste will be generated during the process. Hazardous waste generated from D.G set operation will be disposed to WBPCB Authorized Recyclers.</li> <li>vii. The LNG Terminal Project is estimated to cost Rs 450 crores and the proposed project is estimated to be completed within 18 months after obtaining all the regulatory clearances.</li> <li>viii. Site selected for project is already being used as industrial land. The proposed project will be established in premises of existing Industrial Zone of Haldia Dock Complex will be optimized. The land of area ~4.05 ha (~10 acres) is leased by company from Haldia Dock Complex. There are no eco-sensitive zones.</li> </ul> <p>EAC has deliberated on the proposal. EAC noted that the project is located in the Industrial Zone of Haldia Dock Complex at Haldia. PP has not submitted the notification and land allotment letter in this regard. EAC has agreed to the request of the PP for exemption of public hearing, being the project location in the Industrial area. EAC desired that the PP shall submit the notification and land allotment letter in the EIA/EMP report. In response to PP’s query regarding fencing of the proposed area, EAC opinioned that fencing may be done for securing the land.</p> <p><b>EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR for preparation of EIA/EMP report. Public hearing is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate. However, PP has to submit the notification and land allotment letter along with the EIA/EMP report.</b></p> <p><b>Additional TOR</b></p> <ul style="list-style-type: none"> <li>i. PP shall obtain CRZ clearance. PP shall submit the recommendations of State Coastal Zone Management Authority (SCZMA).</li> <li>ii. PP shall undertake Risk Assessment (including Disaster management and considering port infrastructure) study and submit risk and disaster management plan.</li> <li>iii. A traffic management shall be submitted duly verified by Transport Department.</li> <li>iv. Details of LNG transportation to the destination and details of pipelines in the proposed project shall be provided.</li> <li>v. The exact details of number of bullets and capacity shall be provided.</li> </ul>
24.6.4	<p><b>Expansion of Specialty Chemical Manufacturing plant (3.7 MTPM to 56 MTPM) at Plot No. C-1B, 407/5, GIDC Estate, Panoli, Tal: Ankleshwar, Dist: Bharuch-394116, Gujarat by M/S. Neeta Interchem-Terms of Reference- reg[IA/GJ/IND2/64680/2017, IA-J-11011/242/2017-IA-II(I)]</b></p> <p>The Project Proponent and their consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd., gave a detailed presentation on the salient features of the project &amp; informed that:</p> <ul style="list-style-type: none"> <li>i. The proposal is for Expansion of Specialty Chemical Manufacturing plant (3.7 MTPM to</li> </ul>

- 56 MTPM) at Plot No. C-1B, 407/5, GIDC Estate, Panoli, Tal: Ankleshwar, Dist: Bharuch-394116, Gujarat by M/S. Neeta Interchem
- ii. All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B' but due to the applicability of general condition (located in Critically Polluted Area), it is considered under Category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).
  - iii. Proposed land area is 731.5 m<sup>2</sup>. Industry will be developed Greenbelt in an area of 20 % i.e.146 m<sup>2</sup> out of 731.5 m<sup>2</sup> of area of the project.
  - iv. The estimated project cost is Rs. 270 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 35 Lakhs and the recurring cost (operation & maintenance) will be about Rs. 4 Lakhs per annum.
  - v. Total employment will be 15 persons as direct & 5 persons indirect for the project. Industry purposes to allocate Rs. 1.75 Lakhs @ 2.5 % towards Corporate Social Responsibility.
  - vi. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Narmada River is flowing at a distance a distance of 12 km in N direction.
  - vii. Ambient air quality monitoring carried out at 8 locations during March-2017 to May-2017, may be considered for EIA/EMP preparation.
  - viii. Total water requirement will be 12.0 KL/Day; which will be met from GIDC Water Supply.
  - ix. Total 7.0 KL/Day ( 4.6 KL/Day Industrial + 2.4 KL/Day domestic) of effluent shall be generated. Industrial effluent Low COD stream = 1.6 KLD will be treated in ETP & finally sent to CETP (M/s. PETL, Panoli, Bharuch), High COD stream = 1.0 KLD will be sent to Common spray dryer (M/s. PETL, Panoli, Bharuch), High COD stream = 2.0 KLD will be sent to Common MEE (M/s. BEIL, Anleshwar, Bharuch)
  - x. Power requirement will be 125 KVA and will be met from DGVCL.
  - xi. Unit will have Natural Gas based 0.6 TPH Steam Boiler-1, coal based 0.6 TPH Steam Boiler-2, Thermo pack (3 LKC/Hr.) & D.G. Set (40 KVA) Adequate stack height /MCB will be provided for controlling the Particulates emissions.
  - xii. HBr, HCl gas as Process emissions generates from vent attached to Reaction Vessel. Two stage Scrubbers will be provided as APCM.
  - xiii. The existing and proposed products are:

Sr. No.	NAME OF PRODUCT	CAS No.	Existing	Total Proposed
			PRODUCTION CAPACITY (MT/MONTH)	
1	Hydrated Sodium Sulphate (Existing)	7757-82-6	3.0	--
<b>CATEGORY : I</b>				
1	1-(3-Chlorophenyl)-4-(3-Chloropropyl)Piperazine	52605-52-4	--	16
2	5,6-Dimethoxy-1-Indanone	2107-69-9	--	
3	Dibenzo [b,f][1,4] Thiazepin-11(10H)-One	3159-07-7	--	

4	$\alpha,\alpha$ -Dimethyl Phenylacetic Acid	826-55-1	--	
5	2-Ethoxybenzoic Acid	134-11-2	--	
6	1,4-Dibromobutane	110-52-1	--	
7	3,4,5-Trimethoxybenzaldehyde	86-81-7	--	
8	2-Aminobutyramide Hydrochloride	7682-20-4	--	
<b>CATEGORY : II</b>				
9	4-Bromo Fluorobenzene	460-00-4	--	<b>40</b>
10	Ethyl-2-Bromobutyrate	533-68-6	--	
11	Phenyl Acetic Acid ( <b>Existing</b> )	103-82-2	<b>0.7</b>	
12	Pyridine Hydrobromide	18820-82-1	--	
13	2-Bromopropionic Acid	598-72-1	--	
14	Ethyl-2-Bromoproionate	535-11-5	--	
15	Ethyl Bromoacetate	105-36-2	--	
16	Benzyl Bromide	100-39-0	--	
17	1-(2-(2-Hydroxyethoxy)ethyl)piperazine	13349-82-1	--	
18	1-Benzylpiperidine-4-Carboxaldehyde	22065-85-6	--	
19	N-Propyl Bromide	106-94-5	--	
20	N-Hexyl Bromide	111-25-1	--	
21	N-Decyl Bromide	112-29-8	--	
22	4-Bromoanisole	104-92-7	--	
23	Hydro Bromic Acid (48%)	10035-10-6	--	
<b>Total</b>			<b>3.7</b>	<b>56</b>

- xiv. The Product at S.No.1 (Hydrated Sodium Sulphate) will be discontinued after expansion.

EAC has deliberated on the proposal. EAC noted that the project is located in the notified Industrial area. EAC has accepted the request for consideration of baseline data collected during March-2017 to May-2017 for preparation of EIA/EMP report, considering the upcoming monsoon period.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following Additional ToR, for preparation of EIA/EMP report. Public hearing is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate.**

#### **Additional ToR**

- i. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.
- ii. A layout plan earmarking space for development of Green belt of atleast 3 m width along the periphery of the plant with three layers of perrenial trees shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.
- iii. Chemical name of the product with CAS No. number and the actual end use shall be provided.
- iv. Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.

	<p>v. A programme for plantation of 1000 trees/year for a period of 5 year in nearby 3 identified villages shall be prepared in consultation with local/forest authorities.</p>									
<p>24.6.5</p>	<p><b>Setting up of LPG Bottling Plant (350x3 MT LPG Mounded Bullet) at Gonda, Uttar Pradesh by M/S Hindustan Petroleum Corporation Ltd. –Terms of Reference-reg [IA/UP/IND2/64713/2017, IA-J-11011/231/2017-IA-II(I)]</b></p> <p>The Project Proponent and their consultant M/s. Projects &amp; Development India Ltd., gave a detailed presentation on the salient features of the project &amp; informed that:</p> <p>i. The proposal is for Setting up of LPG Bottling Plant (350x3 MT LPG Mounded Bullet) at Gonda, Uttar Pradesh by M/S Hindustan Petroleum Corporation Ltd.</p> <p>ii. All the Isolated Storage &amp; Handling of Hazardous chemicals Projects (as per threshold planning quantity indicated in column 3 of schedule 2 &amp; 3 of MSIHC Rules 1989 amended 2000) are listed at S.N 6 (b) of schedule of environmental impact assessment (EIA) notification under category ‘B’. However, due to non functioning of SEIAA, Uttar Pradesh, the project is considered under category ‘B’ and appraised at Central level by Expert Appraisal Committee (EAC).</p> <p>iii. The total area of the project is 22 acres. Industry will develop Green-belt in an area of 33 % i.e., 7.5 acres out of 22 acres of area of the project. The estimated project cost is Rs. 115.88 Crore. Total employment will be 11 persons as direct and 100 persons indirect during construction &amp; operation.</p> <p>iv. No National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies 10 km distance. No River/water body is flowing at distance of 10 km from the project site.</p> <p>v. Total water requirement is 20 m<sup>3</sup>/day and will be met from existing tube wells. Treated effluent/sanitary wastewater of about 5 m<sup>3</sup>/day will be treated through proposed septic tank.</p> <p>vi. Power requirement will be met from UP State electricity board. Proposed unit will have DG sets and are used as standby during power failure.</p> <p>vii. The Proposed Products and their Capacities are</p> <table border="1" data-bbox="391 1297 1390 1467"> <thead> <tr> <th>Sl.N</th> <th>Products/Facility</th> <th>Quantity(TPA)</th> </tr> </thead> <tbody> <tr> <td>o.</td> <td></td> <td></td> </tr> <tr> <td>1.</td> <td>LPG Bottling Plant</td> <td>120 TMTPA</td> </tr> </tbody> </table> <p>viii. The Proposed facilities are:</p> <p>(a). 2 nos. 24 filling guns fully automatic Electronic Carousels</p> <p>(b). LPG Cylinder Sheds (Filled &amp; empty)</p> <p>(c). Filling and testing equipment</p> <p>(d). 3 Nos. of 350 MT capacity Mounded Bullets</p> <p>(e). Fire water storage tanks and allied Firefighting facilities, Gas Monitoring system and PPE as per OISD 144</p> <p>(f). 8 bays Tank Truck unloading facilities</p>	Sl.N	Products/Facility	Quantity(TPA)	o.			1.	LPG Bottling Plant	120 TMTPA
Sl.N	Products/Facility	Quantity(TPA)								
o.										
1.	LPG Bottling Plant	120 TMTPA								

- (g). 2 Nos. of Manual filling scales for 35 Kg./47.5 Kg. capacity cylinders filling
- (h). Shed & Testing equipment for in-house Periodic Cylinder Testing Facility
- (i). LPG Pump & Compressors
- (j). Air Compressors, DG sets and electrical equipment.

EAC has deliberated on the proposal. EAC suggested PP to strictly follow the safety and pollution control measure. EAC has also noted that, the land available is not sufficient for the execution of the project. PP has clarified that they have sufficient land and they follow all the national and international norms

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR along with public hearing, for preparation of EIA/EMP report.**

**Additional ToR**

- i. Zero Liquid Discharge shall be ensured.
- ii. A layout plan earmarking space for development of Green belt of atleast 10 m width along the periphery of the plant with three layers of perennial trees shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.
- iii. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.
- iv. PP shall strictly follow Oil Industry Safety Directorate (OISD) norms/guidelines for installation and design of equipments and operation of the Industry. PP shall submit a plan in environmental and safety angle.
- v. No packing/loading/unloading of LPG cylinders shall be made on road/outside factory premises.
- vi. PP shall submit a traffic management plan duly approved by Transport Department.
- vii. PP shall undertake an alternate site analysis study.
- viii. Public hearing has to be conducted as per the provisions of EIA Notification, 2006.

24.6.6

**Development Drilling of 110 wells and establishment of Madnam CPF, Cauvery Asset, Tamil Nadu by M/s Oil and Natural Gas Corporation Limited – Terms of Reference- reg. [IA/TN/IND2/64682/20170, IA-J-11011/230/2017-IA-II(I)]**

The Project Proponent gave a detailed presentation on the salient features of the project & informed that:

- i. The proposed project is for Development Drilling of 110 wells and establishment of Madnam CPF, Cauvery Asset, Tamil Nadu by M/s Oil and Natural Gas Corporation Limited.
- ii. All the projects related to Offshore and Onshore Oil and Gas exploration, Development and Production are listed in S.No. 1(b) of Schedule of Environmental Impact

	<p>Assessment (EIA) Notification, 2006 under Category ‘A’ and are appraised at Central Level by Expert Appraisal Committee (EAC).</p> <ul style="list-style-type: none"> <li>iii. Existing land area is- NELP BLOCK CY-ONN-2002/2 ARE-280 SQ. M. The estimated project cost is including existing investment of Rs 194 crore. Proposed project has employment potential of 70-80 personnel and contractual employees around 150.</li> <li>iv. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Koduvaiyur river, Odampokkiyar river, Vellappar river, Uppanar river, Chittar river and Vaigai river are located within 10 km distance of the drilling sites.</li> <li>v. Total water requirement is 25 m<sup>3</sup> per day per well which will be sourced from nearby water source (CPF: • Cooling – 80m<sup>3</sup>/hr • Raw water requirement – 120 m<sup>3</sup>/hr).</li> <li>vi. Effluent generated will be treated at ETP NRM (1300 m<sup>3</sup> capacity) and ETP KMP (500 m<sup>3</sup> capacity) .</li> <li>vii. The power requirement will be met through the operation of 4 DG sets of 1430 kVA each. 6-7 KLD Diesel will be used as fuel during drilling Phase.</li> <li>viii. The coordinates of the wells and CPF are:</li> </ul>
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110 proposed locations Tentative co-ordinates and ML block are mentioned below

**Table-1:**

**1. ADICHAPURAM FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-AC-1	10° 37' 21.20"	79° 31' 20.80"	Adichapuram
2.	A-AC-2	10° 37' 12.60"	79° 31' 36.72"	
3.	A-AC-3	10° 37' 02.23"	79° 31' 47.10"	
4.	A-AC-4	10° 37' 17.46"	79° 32' 08.20"	

**2. KIZHVELUR FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-KZ-1	10° 45' 11.80"	79° 42' 15.01"	KIZHVELUR
2.	A-KZ-2	10° 45' 25.12"	79° 42' 37.16"	
3.	A-KZ-3	10° 45' 13.84"	79° 42' 42.21"	

**3. KANJIRANGUDI FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-KJ-1	09° 16' 06.80"	78° 48' 20.15"	KANJIRANGUDI
2.	A-KJ-2	09° 15' 58.85"	78° 48' 31.00"	
3.	A-KJ-3	09° 15' 29.90"	78° 48' 30.10"	
4.	A-KJ-4	09° 15' 10.82"	78° 48' 51.60"	
5.	A-KJ-5	09° 15' 32.15"	78° 49' 12.14"	
6.	A-KJ-6	09° 16' 40.52"	78° 48' 54.21"	
7.	A-KJ-7	09° 15' 49.20"	78° 49' 38.60"	
8.	A-KJ-8	09° 16' 28.90"	78° 49' 55.10"	
9.	A-KJ-9	09° 16' 39.90"	78° 50' 13.18"	
10.	A-KJ-10	09° 16' 50.12"	78° 50' 12.26"	

**4. PALK BAY SHALLOW FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-PBS-1	09° 22' 58.20"	78° 57' 07.50"	PALK BAY SHALLOW
2.	A-PBS-2	09° 22' 25.10"	78° 57' 52.20"	
3.	A-PBS-3	09° 22' 20.25"	78° 57' 23.25"	
4.	A-PBS-4	09° 22' 05.10"	78° 57' 33.50"	
5.	A-PBS-5	09° 22' 07.65"	78° 56' 58.80"	



**PERIYAPATTINAM FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-PP-1	09°18'22.18"	78°55'30.08"	PERIYAPATTINAM
2.	A-PP-2	09°18'10.48"	78°55'49.26"	
3.	A-PP-3	09°17'47.14"	78°56'10.34"	
4.	A-PP-4	09°17'19.88"	78°55'58.90"	
5.	A-PP-5	09°17'27.84"	78°55'28.13"	
6.	A-PP-6	09°16'46.74"	78°55'27.04"	

**PERUNGULAM FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-PE-1	09°20'10.36"	78°54'49.10"	PERUNGULAM
2.	A-PE-2	09°19'32.21"	78°54'48.42"	
3.	A-PE-3	09°20'53.46"	78°55'54.18"	
4.	A-PE-4	09°20'27.43"	78°55'43.28"	

**TIRUVARUR FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-TV-11	10°48'11.12"	79°44'03.52"	TIRUVARUR
2.	A-TV-12	10°48'17.13"	79°44'16.00"	
3.	A-TV-13	10°48'10.23"	79°44'41.86"	
4.	A-TV-14	10°48'03.32"	79°44'50.18"	
5.	A-TV-15	10°47'49.37"	79°44'57.16"	

**MATTUR FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-MT-1	10°49'16.21"	79°24'24.15"	MATTUR
2.	A-MT-2	10°49'08.12"	79°24'23.84"	
3.	A-MT-3	10°49'06.34"	79°24'16.92"	

**NANNILAM FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-NL-10	10°48'00.00"	79°32'07.50"	NANNILAM
2.	A-NL-11	10°47'37.12"	79°32'17.01"	
3.	A-NL-12	10°47'22.85"	79°32'01.21"	
4.	A-NL-13	10°46'20.78"	79°31'17.87"	
5.	A-NL-14	10°46'19.82"	79°31'43.90"	

**NARIMANAM FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-NR-9	10°50'40.01"	79°46'41.50"	NARIMANAM
2.	A-NR-10	10°50'43.47"	79°47'03.16"	
3.	A-NR-11	10°50'31.04"	79°46'54.80"	
4.	A-NR-12	10°50'11.56"	79°46'30.00"	
5.	A-NR-13	10°49'58.50"	79°46'28.15"	

**ADIYAKKAMANGALAM FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-AK-9	10°45'03.10"	79°39'31.86"	ADIYAKKAMANGALAM
2.	A-AK-10	10°45'15.30"	79°39'49.31"	
3.	A-AK-11	10°45'20.41"	79°40'15.10"	
4.	A-AK-12	10°45'14.80"	79°40'25.47"	
5.	A-AK-13	10°45'06.74"	79°40'22.81"	

**NORTH KOVILKALAPPAL FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-NKK-13	10°36'20.21"	79°31'35.40"	NORTH KOVIL KALAPPAL
2.	A-NKK-14	10°36'17.89"	79°31'49.51"	
3.	A-NKK-15	10°36'01.15"	79°31'19.01"	
4.	A-NKK-16	10°35'49.10"	79°31'42.80"	
5.	A-NKK-17	10°35'50.80"	79°32'22.30"	
6.	A-NKK-18	10°35'47.20"	79°31'14.10"	
7.	A-NKK-19	10°35'18.20"	79°31'27.15"	
8.	A-NKK-20	10°35'24.60"	79°31'55.85"	
9.	A-NKK-21	10°35'18.20"	79°32'11.90"	
10.	A-NKK-22	10°35'53.18"	79°32'31.00"	

**KUTHALAM FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-KA-1	11°03'50.16"	79°32'38.60"	KUTHALAM
2.	A-KA-2	11°04'09.92"	79°32'37.90"	
3.	A-KA-3	11°04'34.18"	79°33'01.00"	
4.	A-KA-4	11°04'48.25"	79°33'14.80"	
5.	A-KA-5	11°04'51.90"	79°33'30.04"	
6.	A-KA-6	11°04'52.60"	79°34'37.10"	
7.	A-KA-7	11°04'14.20"	79°34'28.90"	
8.	A-KA-8	11°03'57.90"	79°33'35.30"	
9.	A-KA-9	11°03'59.00"	79°33'11.08"	
10.	A-KA-10	11°03'36.70"	79°32'48.90"	

**KALI FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-KI-4	11°07'48.31"	79°36'18.20"	KALI
2.	A-KI-5	11°07'46.00"	79°36'32.42"	
3.	A-KI-6	11°07'34.20"	79°36'45.60"	
4.	A-KI-7	11°07'15.00"	79°36'50.10"	
5.	A-KI-8	11°07'12.10"	79°36'55.28"	



**MADANAM FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	A-MD-11	11° 19' 07.51"	79° 47' 13.15"	NELP Block
2.	A-MD-12	11° 18' 56.39"	79° 47' 47.93"	
3.	A-MD-13	11° 18' 39.47"	79° 47' 13.15"	
4.	A-MD-14	11° 18' 31.95"	79° 47' 33.83"	
5.	A-MD-15	11° 18' 00.15"	79° 48' 46.99"	
6.	A-MD-16	11° 17' 39.47"	79° 48' 18.79"	
7.	A-MD-17	11° 17' 13.15"	79° 48' 46.99"	
8.	A-MD-18	11° 17' 13.15"	79° 49' 28.19"	
9.	A-MD-19	11° 16' 48.87"	79° 49' 43.23"	
10.	A-MD-20	11° 16' 15.03"	79° 48' 58.27"	
11.	A-MD-21	11° 15' 39.47"	79° 50' 24.43"	
12.	A-MD-22	11° 15' 29.48"	79° 49' 59.00"	
13.	A-MD-23	11° 15' 15.03"	79° 49' 28.19"	
14.	A-MD-24	11° 15' 00.13"	79° 49' 11.27"	
15.	A-MD-25	11° 15' 00.13"	79° 49' 43.23"	
16.	A-MD-26	11° 14' 38.53"	79° 48' 18.79"	
17.	A-MD-27	11° 14' 09.39"	79° 48' 38.53"	
18.	A-MD-28	11° 13' 41.33"	79° 48' 07.51"	
19.	A-MD-29	11° 13' 03.75"	79° 47' 22.55"	
20.	A-MD-29	11° 12' 39.47"	79° 46' 48.87"	

**PANDANALLUR FIELD**

Sl No.	Proposed Location	Sub-Surface Co-Ordinates		Remarks
		Latitude	Longitude	
1.	N-NP-1	11° 11' 29.14"N	79° 27' 36.14"E	NELP Block  Area of the field 375 sq. km
2.	N-NP-2	11° 11' 42.28"N	79° 27' 55.98"E	
3.	N-NP-3	11° 11' 59.98"N	79° 28' 24.57"E	
4.	N-NP-4	11° 12' 31.14"N	79° 28' 15.42"E	
5.	N-NP-5	11° 12' 36.12"N	79° 28' 47.42"E	
6.	N-NP-6	11° 11' 30.85"N	79° 28' 18.11"E	
7.	N-NP-7	11° 11' 37.71"N	79° 28' 49.71"E	
8.	N-NP-8	11° 12' 18.28"N	79° 29' 11.28"E	
9.	N-NP-9	11° 11' 36.22"N	79° 29' 16.98"E	
10.	N-NP-10	11° 11' 59.60"N	79° 29' 33.14"E	

EAC has deliberated on the proposal. **EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR along with public hearing, for preparation of EIA/EMP report.**

**Additional ToR**

- i. No construction activity (other than for securing land) shall be started without obtaining prior EC.
- ii. Cooling Water requirement shall be reduced. PP shall submit a revised water balance plan.
- iii. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.
- iv. Public hearing has to be conducted in all the districts where the drilling site is located, as per the provisions of EIA Notification, 2006.
- v.

24.6.7	<p><b>Coal based ammonia and urea fertilizer project at Anugul, Orissa of M/s TFL at closed unit of FCIL Talcher- reg.TOR[IA/OR/IND2/64804/2017, IA-J-11011/244/2017-IA-II(I)]</b></p> <p>The PP was not present for the EAC meeting.</p>																																																
24.6.8	<p><b>Construction of Additional tankages at Ambabai Depot, IOCL, Jhansi by M/s INDIAN OIL CORPORATION LIMITED-Terms of Reference-reg. [IA/UP/IND2/64956/2017, IA-J-11011/267/2017-IA-II(I)]</b></p> <p>The Project Proponent gave a detailed presentation on the salient features of the project &amp; informed that:</p> <ol style="list-style-type: none"> <li>i. The proposal is for Construction of Additional tankages at Ambabai Depot, IOCL, Jhansi by M/s Indian Oil Corporation Limited.</li> <li>ii. All the Isolated Storage &amp; Handling of Hazardous chemicals Projects (as per threshold planning quantity indicated in column 3 of schedule 2 &amp; 3 of MSIHC Rules 1989 amended 2000) are listed at S.N 6 (b) of schedule of environmental impact assessment (EIA) notification under category ‘B’. However, due to non functioning of SEIAA, Uttar Pradesh, the project is considered under category ‘B’ and appraised at Central level by Expert Appraisal Committee (EAC).</li> <li>iii. The land area of the project is 30 acres (of total 55 acres). No additional land will be used / acquired for proposed project. Industry will develop Green-belt in an area of 33 % i.e., 10 acres out of 30 acres of area of the project. The estimated project cost is Rs. 8 Crore.</li> <li>iv. No National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies 10 km distance. No river/water body is flowing at distance of 10 km from the site.</li> <li>v. Total water requirement at present is 10 KL/day and will be met from ground water (Existing Tube wells).</li> <li>vi. Power requirement is met from UP State electricity board. Ambabai, Jhansi unit have 02 x 500 KVA+01 x 75 KVA capacity and are used as standby during power failure.</li> <li>vii. Stack (height- 7.5 m ) have been provided as per CPCB norms to the proposed DG sets in addition to the existing DG sets of nil which will be used as standby during power failure.</li> <li>viii. No hazardous waste will be generated as plant activity involves only receipt, storage &amp; dispatch of Petroleum products. Oily sludge generated intermittently during tank cleaning operations shall be sent for bioremediation. Solid waste shall be generated only in the form of excavated soil &amp; construction waste.</li> <li>ix. The existing and proposed products with capacity are :</li> </ol> <p style="text-align: center;">Existing Product List</p> <table border="1" data-bbox="332 1612 1453 1927"> <thead> <tr> <th>Storage Tank No.</th> <th>Products</th> <th>Capacity (KL)</th> <th>Diameter (m)</th> <th>Height (m)</th> <th>Tank Type</th> </tr> </thead> <tbody> <tr> <td>T001</td> <td>HSD</td> <td>4440</td> <td>18.0</td> <td>17.5</td> <td>VCR</td> </tr> <tr> <td>T002</td> <td>HSD</td> <td>4440</td> <td>18.0</td> <td>17.5</td> <td>VCR</td> </tr> <tr> <td>T003</td> <td>HSD</td> <td>4440</td> <td>18.0</td> <td>17.5</td> <td>VCR</td> </tr> <tr> <td>T004</td> <td>SKO</td> <td>2200</td> <td>16.0</td> <td>11.0</td> <td>VCR</td> </tr> <tr> <td>T005</td> <td>SKO</td> <td>2200</td> <td>16.0</td> <td>11.0</td> <td>VCR</td> </tr> <tr> <td>T006</td> <td>MS</td> <td>1460</td> <td>16.0</td> <td>10.0</td> <td>IFR</td> </tr> <tr> <td>T007</td> <td>MS</td> <td>1460</td> <td>16.0</td> <td>10.0</td> <td>IFR</td> </tr> </tbody> </table>	Storage Tank No.	Products	Capacity (KL)	Diameter (m)	Height (m)	Tank Type	T001	HSD	4440	18.0	17.5	VCR	T002	HSD	4440	18.0	17.5	VCR	T003	HSD	4440	18.0	17.5	VCR	T004	SKO	2200	16.0	11.0	VCR	T005	SKO	2200	16.0	11.0	VCR	T006	MS	1460	16.0	10.0	IFR	T007	MS	1460	16.0	10.0	IFR
Storage Tank No.	Products	Capacity (KL)	Diameter (m)	Height (m)	Tank Type																																												
T001	HSD	4440	18.0	17.5	VCR																																												
T002	HSD	4440	18.0	17.5	VCR																																												
T003	HSD	4440	18.0	17.5	VCR																																												
T004	SKO	2200	16.0	11.0	VCR																																												
T005	SKO	2200	16.0	11.0	VCR																																												
T006	MS	1460	16.0	10.0	IFR																																												
T007	MS	1460	16.0	10.0	IFR																																												

T008	Ethanol	70	3.0	10.5	HUG
T009	Ethanol	70	3.0	10.5	HUG

**Proposed Products and their Capacities**

Storage Tank No.	Storage Tank No.	Product	Capacity (KL)	Diameter (m)	Size (L.XB.) in m	Type of Tank
T010	Ethanol-1	Ethanol	500	10.0	12x9	IFR(A/G)
T011	Ethanol-2	Ethanol	500	10.0	12x9	IFR(A/G)
UG	Biodiesel-1	Biodiesel <sub>1</sub>	70	-	-	U/G

EAC has deliberated on the proposal. EAC suggested PP to strictly follow the safety and pollution control measure.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR along with public hearing, for preparation of EIA/EMP report.**

**Additional ToR**

- i. A plan for implementation of Zero Liquid Discharge system shall be submitted.
- i. A layout plan earmarking space for development of Green belt of atleast 10 m width along the periphery of the plant with three layers of perennial trees shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.
- ii. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.
- iii. PP shall strictly follow Oil Industry Safety Directorate (OISD) norms/guidelines for installation and design of equipments and operation of the Industry. PP shall submit a plan in environmental and safety angle.
- iv. Public hearing has to be conducted as per the provisions of EIA Notification, 2006.

24.6.9

**Capacity enhancement of Sugar unit (5,000 TCD to 8,500 TCD) and Cogeneration unit (19.7 MW to 36.0 MW) at/Po. Village- Kundal, Tal. Palus, Dist. Sangli, Maharashtra by M/s. Krantiagrani Dr. G. D. Bapu Lad Sahakari Sakhar Karkhana Ltd.- Terms of Reference- reg. [IA/MH/IND2/64737/2017, IA-J-11011/233/2017-IA-II(I)]**

The project proponent and their consultant M/s Vasantdada Sugar Institute made a detailed presentation on the proposal and informed the following:

- i. The proposal is for Capacity enhancement of Sugar unit (5,000 TCD to 8,500 TCD) and Cogeneration unit (19.7 MW to 36.0 MW) at/Po. Village- Kundal, Tal. Palus, Dist. Sangli, Maharashtra by M/s. Krantiagrani Dr. G. D. Bapu Lad Sahakari Sakhar Karkhana Ltd.

	<p>ii. All sugar Industry (<math>\geq 5000</math> TCD cane crushing capacity) are listed at S.N 5 (j) of schedule of environmental impact assessment (EIA) notification under category 'B' but due to the applicability of general condition (located within 5 km distance of the Protected Areas notified under the Wild Life (Protection) Act, 1972), it is considered under Category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).</p> <p>iii. Yashawantrao Chavan Sagreshwar Wild Life Sanctuary is located at 1.70 km from the project site.</p> <p>iv. The PP has obtained EC for the existing unit vide Ministry's letter no. J-11011/222/2012-IA.II(I) dated 22<sup>nd</sup> March, 2016.</p> <p>v. Total land available with the factory is 126.5 acres. Total land for proposed expansion including green belt area 5.5 acres.</p> <p>vi. The sugar unit will be operated for 180 days and Co-gen power plant will be operated for 273 days.</p> <p>vii. Water requirement is 284 m<sup>3</sup>/day during season and 1448.72 m<sup>3</sup>/day during off-season (Krishna River with permission from Tembhu lift irrigation Project Management Department).</p> <p>EAC has deliberated on the proposal. EAC has accepted the PP's request to consider the baseline data generated for the existing project during March - April, 2016. EAC has also exempted public hearing under Para 7(ii) of EIA Notification, 2006.</p> <p><b>EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR, for preparation of EIA/EMP report. As the PP has obtained EC for the existing unit vide Ministry's letter no. J-11011/222/2012-IA.II(I) dated 22<sup>nd</sup> March, 2016 wherein the Public Consultation was done, the decided to exempt Public Consultation for the proposed expansion under Para 7(ii) of EIA Notification, 2006.</b></p> <p><b>Additional ToR</b></p> <p>i. A plan for implementation of Zero Liquid Discharge system shall be submitted.</p> <p>ii. A layout plan earmarking space for development of Green belt of atleast 10 m width along the periphery of the plant with three layers of perrenial trees shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.</p> <p>iii. Atleast 5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.</p> <p>iv. As agreed, no additional water shall be used for the expansion project.</p> <p>v. Certified Compliance report of the conditions stipulated in existing Environmental Clearance to be obtained from the RO, MoEF&amp;CC and the same shall be submitted alongwith EIA/EMP report.</p> <p>vi. A programme shall be prepared for plantation of 1000 trees / year till 5 years in 3 identified nearby villages. The survival rate of the plants shall be reported to concerned RO, MoEF&amp;CC in 6 monthly compliance report.</p>
24.6.10	<b>Expansion Project for manufacturing of Speciality Chemicals at Plot No. 7906-7909, GIDC Estate, Ankleshwar, Dist. Bharuch-393 002, Gujarat by M/s Industrial Solvents and</b>

**Chemicals Pvt. Ltd., - reg. TOR [IA/GJ/IND2/64825/2017, IA-J-11011/246/2017-IA-II(I)]**

The Project Proponent made a detailed presentation on the salient features of the project and informed that:

- i. The proposal is Expansion Project for manufacturing of Speciality Chemicals at Plot No. 7906-7909, GIDC Estate, Ankleshwar, Dist. Bharuch-393 002, Gujarat by M/s Industrial Solvents and Chemicals Pvt. Ltd.
- ii. All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B' but due to the applicability of general condition (located in Critically Polluted Area), it is considered under Category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. Ministry has issued EC earlier vide letter no. J-11011/125/2007-IA-II[I], dated 9<sup>th</sup> May, 2008.
- iv. The proposed expansion will be done in the existing plant premises having area of 51316 sq m. There will be no purchase of additional land for the proposed expansion project.
- v. The unit has been developed an area of 27 % of the total area as green belt area. And the unit will develop the Greenbelt area of 33.00 %, i.e. 16930 m<sup>2</sup> out of 51316 m<sup>2</sup> area of the project.
- vi. The project cost is 5 crore for Proposed expansion.
- vii. The project will provide opportunity for employment of 220 nos. of employees through direct and Indirect on permanent/ contract basis.
- viii. There is not any National Parks, Wildlife Sanctuaries, etc. lies within the 10 km radius.
- ix. After proposed expansion, the total water requirement will be 1118 KLD and will be satisfied through GIDC water supply.
- x. For the existing production capacity, the generated waste water is collected, treated into ETP, RO, MEE Treatment system. After having treatment, the partially quantity of treated waste water is recycled in the utilities and partially quantity of treated waste water is discharged into the NCTL meeting with the prescribed norms. For proposed expansion, there will be increase in the generated waste water from the process and utility sections. This generated waste water will be treated into ETP and reused within the plant premises. For the additional waste water, additional RO and MEE system will be provided. From the proposed expansion, the generated additional waste water will have zero discharge and there will not be any increase in the consented discharged quantity.
- xi. The existing connected power load is 3000 KVA, satisfied through Daxin Gujarat Vij Company Ltd. For the proposed expansion, there will not be requirement of additional power.
- xii. The details of products are:

**DETAILS OF PRODUCTS**

Sr. NO.	List of Organic Product	Code	Production [ MT/month ]		
			Consented	Proposed	Total
1.	Dimethyl Sulphate	DMS	3000	2000	5000
2.	Diethyl Sulphate	DES	500	500	1000
3.	N-Ethyl Aniline (NEA)	NEA	100	0	100
4.	Diethyl Aniline	DEA	100	0	100
5.	Ethyl Benzyl Aniline	EBA	120	0	120

6.	N,N-Dimethyl Aniline	DMA	530	0	530
7.	N-Methyl Aniline	NMA	20	0	20
8.	Dimethyl Para Toluidine	DMPT	100	0	100
9.	Mono Ethyl Meta Toluidine & Diethyl Meta Toluidine	MEMT & DEMT	25	0	25
10.	Absolute Alcohol	Alc	100	0	100
11.	Mono Methyl Meta Toluidine & Di Methyl Meta Toluidine	MMMT & DMMT	10	0	10
12.	Methyl Benzyl Aniline	MBA	10	0	10
13.	Mono Ethyl Ortho Toluidine	MEOT	10	0	10
14.	Ether Solvents I.P./B.P	ES	500	0	500
15.	Ether Anaesthetic I.P./B.P	EA	15	0	15
16.	Ethyl Chloride I.P./B.P		2	0	2
	<b>TOTAL</b>		<b>5142</b>	<b>2500</b>	<b>7642</b>

Sr.NO.	List of In Organic Product	Code	Production [ MT/month ]		
			Consented	Proposed	Total
17.	Spent Sulphuric Acid [ 65% Min ]		800	630	1430
18.	Sulphuric Acid 70%		8000	0	8000
19.	Chloro Sulphonic Acid	CSA	6000	0	6000
20.	Sulphur Trioxide	SO3	15750	0	15750
21.	Sulphuric Acid				
22.	Oleum (65% & 24%)				
23.	Sulphamic Acid		900	0	900
24.	Non Ferric Alum		3000	0	3000
	<b>Total</b>		<b>34450</b>	<b>0</b>	<b>34450</b>
	<b>Other</b>				
25.	Captive Power Plant		2 MW [1MW X 2nos.]	0	2 MW [1MW X 2nos.]
26.	Plastic Carboys [ Capacity 20-60 lit]		50000	0	50000
27.	Plastic Barrels [Capacity 210-230 Lit]		30000	0	30000
28.	M. S. Barrels/G I Barrels [Capacity 200-220 Lit ]		20000	0	20000
29.	M.S. Drums [Capacity 20-100 Lit]		60000	0	60000



	<p>Note: While manufacturing DMS and DES Sulphuric acid 65% generated as per the reaction stoichiometric calculation.</p> <p>EAC has deliberated on the proposal. EAC noted that the project site is located in the notified Industrial area.</p> <p><b>EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR, for preparation of EIA/EMP report.</b></p> <p><b>Additional ToR</b></p> <ol style="list-style-type: none"> <li>i. Water requirement in the cooling tower shall be reduced. PP shall submit a revised water balance plan.</li> <li>ii. Atleast 5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.</li> <li>iii. Chemical name of the product with CAS No. number and the actual end use shall be provided.</li> <li>iv. Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.</li> <li>v. PP shall submit plan regarding plantation of 1000 trees/year for a period of 5 year in nearby identified villages.</li> <li>vi. A layout plan earmarking space for development of Green belt of atleast 10 m width along the periphery of the plant with three layers of perennial trees shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.</li> <li>vii. Certified Compliance report of the existing EC to be obtained from concerned RO, MoEF&amp;CC and the same shall be submitted along with EIA/EMP report.</li> </ol>
24.6.11	<p><b>Expansion of Sugar Plant (4500 TCD to 7500 TCD) &amp; Cogeneration Power Plant (14 MW to 30 MW) and Establishment of Distillery (60 KLPD) &amp; Installation of Incineration Boiler (3 MW) at Sy No. 411/1, 411/2, 411/3, 413/1, 412, Savadatti Village, Belgaum District, Karnataka by M/s. Harsha Sugars Ltd.- Terms of Reference-reg. [IA/KA/IND2/64689/2017, IA-J-11011/236/2017-IA-II(I)]</b></p> <p>The Project Proponent made 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 Expansion of Sugar Plant (4500 TCD to 7500 TCD) &amp; Cogeneration Power Plant (14 MW to 30 MW) and Establishment of Distillery (60 KLPD) &amp; Installation of Incineration Boiler (3 MW) at Sy No. 411/1, 411/2, 411/3, 413/1, 412, Savadatti Village, Belgaum District, Karnataka by M/s. Harsha Sugars Ltd.</li> <li>ii. All Molasses based Distilleries are listed at S.N. 5 (g) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and thus the integrated proposal of Sugar &amp; Cogeneration Power Plant are appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>iii. Existing land area is 51.3 Acres. No additional land will be required for proposed expansion. Industry will developed greenbelt in an area of 33 % i.e., 17 Acres( 6.8Ha) out of 51.3 Acres (20.63Ha) of area of the project. The estimated project cost is Rs. 307.32 Crores including existing investment of Rs. 62.32 Crores. Total capital cost</li> </ol>

- earmarked towards environmental pollution control measures is Rs. 27.4 Crores and the Recurring cost (operation and maintenance) will be about Rs.51 Lakhs per annum
- iv. Total Employment will be 470 persons as direct & 600 persons indirect after expansion. Industry proposes to allocate Rs 7.6 Crores/year @ of 2.5 %towards Corporate Social Responsibility.
  - v. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Malaprabha River from Renuka Sagar Reservoir is flowing at a distance a distance of 5Km in North direction.
  - vi. Total water requirement is 4630m<sup>3</sup>/day (Fresh water 724 m<sup>3</sup>/day) during season for sugar and cogen unit, during offseason 1567m<sup>3</sup>/day fresh water is required. For distillery section total of 951 KLD ( freshwater requirement 480 KLD) and will be met from Malaprabha River from Renuka sagar Reservoir.
  - vii. Effluent of 841 KLD from sugar unit will be treated through ETP Plant of 1000 KLD and 600 KLD of CPU will be installed for the treatment of condensate and spentlees. Spentwash will be concentrated and used as fuel in the incineration boiler. The plant will be Zero Liquid discharge system.
  - viii. Power requirement after expansion will be 9.5 MW during season and 4.2 MW during offseason including existing 8MW during season and 0.1MW during offseason and will be met from cogeneration unit. Existing unit has 1X 325 KVA DG set with stack height of 5AGL each, additionally for the expansion 2x1250KVA DG set is proposed with the stack height of 10 m AGL from the nearest working platform as per CPCB norms, which will be used as standby during power failure.
  - ix. Existing unit has 140 TPH Bagasse fired boiler installed ESP with a stack of height of 85m m installed for controlling the Particulate emissions (within statutory limit of 150 mg/Nm<sup>3</sup>). No additional Boiler required for expansion project.
  - x. Process emissions generation from proposed 140 TPH bagasse fired boiler and 22 TPH slop fired boiler will be managed by the installation of ESP.
  - xi. The PP has obtained CFE for the construction of 4500 TCD Sugar cane crushing and 14 MW Co-generation Power Plant. The work is under process.
  - xii. The proposed products and its capacity are

S.No	Product	Existing Capacity	Capacity after Expansion
1	Distillery	---	60 KLPD
2	Sugar Plant	4500 TCD	7500 TCD
3	Co-generation power plant	14 MW	30 MW
4	Incineration boiler	---	3 MW

EAC has deliberated on the proposal. EAC noted that the existing unit of the PP has obtained CFE from State Pollution Control Board.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR along with public hearing, for preparation of EIA/EMP report.**

**Additional ToR**

- i. A plan for implementation of Zero Liquid Discharge system shall be submitted.
- ii. A layout plan earmarking space for development of Green belt of atleast 10 m width along the periphery of the plant with three layers of perennial trees shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.

	<ul style="list-style-type: none"> <li>iii. Certified Compliance report of the existing EC to be obtained from concerned RO, MoEF&amp;CC and the same shall be submitted along with EIA/EMP report.</li> <li>iv. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.</li> <li>v. Public hearing has to be conducted as per the provisions of EIA Notification, 2006.</li> </ul>
24.6.12	<p><b>Proposed Expansion of Speciality Chemicals, Intermediates &amp; Pesticide Technicals in Existing Unit [10161 MTPM to 36115 MTPM including by products] of M/s. Hemani Industries Ltd. (Unit-III &amp; IV) at Plot No. CH-5 &amp; E-362, GIDC Estate, Dahej-i, Tal: Vagra, Dist: Bharuch, Gujarat by M/s. Hemani Industries Ltd. (Unit-III &amp; IV) –Terms of Reference- reg [IA/GJ/Ind2/63877/2017, IA-J-11011/177/2017-IA-II(I)]</b></p> <p>The Project Proponent and their consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd., gave a detailed presentation on the salient features of the project &amp; informed that:</p> <ul style="list-style-type: none"> <li>i. The proposal is for Proposed Expansion of Speciality Chemicals, Intermediates &amp; Pesticide Technicals in Existing Unit [10161 MTPM to 36115 MTPM including by products] of M/s. Hemani Industries Ltd. (Unit-III &amp; IV) at Plot No. CH-5 &amp; E-362, GIDC Estate, Dahej-i, Tal: Vagra, Dist: Bharuch, Gujarat by M/s. Hemani Industries Ltd. (Unit-III &amp; IV).</li> <li>ii. All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category ‘B’. All Pesticides industry and pesticide specific intermediates (excluding formulations) units producing technical grade pesticides are listed at Sl.No. 5(b) of Schedule of Environmental Impact Assessment (EIA) Notification under Category ‘A’ and are appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>iii. Existing land area is 52432.22 m<sup>2</sup>. 9705 m<sup>2</sup> additional land will be used for proposed expansion.</li> <li>iv. Industry will developed Greenbelt in an area of 30% i.e. 19702.63 m<sup>2</sup> out of 62137.22 m<sup>2</sup> of area of the project.</li> <li>v. The estimated project cost for proposed expansion project activity is Rs. 75 Crores. Capital cost of air &amp; water pollution control system and environmental monitoring equipments will be Rs. 8 Crore.</li> <li>vi. Total employment will be 150 persons as direct &amp; 50 persons indirect for proposed project. Industry purposes to allocate Rs. 1.875 Crore @ 2.5 % towards Corporate Social Responsibility.</li> <li>vii. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. and river lies within 10 km distance.</li> <li>viii. Ambient air quality monitoring will be carried out at 8 locations during March-2017 to May-2017.</li> <li>ix. Total water requirement will be 3565 KL/Day; which will be met through GIDC Water Supply.</li> <li>x. The total wastewater generation for existing scenario is 1168 m<sup>3</sup>/day and additional will be 732 m<sup>3</sup>/day. The total wastewater generation will be 1900 m<sup>3</sup>/day. Entire quantity of effluent shall be segregated as per organic load: <ul style="list-style-type: none"> <li>Stream-1 Low COD and Low TDS Effluent (1255 m<sup>3</sup>/day)</li> <li>Stream-2 High TDS Effluent (455 m<sup>3</sup>/day)</li> <li>Stream-3 High COD Effluent (20 m<sup>3</sup>/day)</li> </ul> </li> </ul>

- **Stream-1 Low COD and Low TDS Effluent**

Low COD and Low TDS Effluent will be treated in Effluent Treatment Plant, consisting Primary and Secondary Treatment. Tertiary polishing treatment in pressure sand filter and activated carbon filter. The final treated effluent will be discharged through GIDC sewer line into deep sea.

- **Stream-2 High TDS Effluent**

Clear effluent from PTS-2 shall be collected in Holding Tank (HT-01) before pumped to strippers. Effluent from stripper shall be then collected in MEE Feed Tank and then pumped to Multiple Effect Evaporator (MEE-01) followed by Agitated Film Dryer(ATFD-01). Condensate from MEE shall be reused.

- **Stream-3 High COD Effluent**

Neutralized effluent will be incinerated in own incinerator.

- xi. Power requirement will be 11000 KVA (Existing: 3000 KVA & Proposed: 8000 KVA) and will be met from DGVCL AND D.G. Sets will be 11110 KVA (Existing 1010 KVA x 3 Nos. & Proposed :1010 KVA x 8 Nos.) standby power supply.
- xii. Existing unit has 1,boiler-2,Incinerator -5 KL/Month & Thermic fluid heater & Unit has proposed Boiler- 3 (8 MT/Hr) ,Boiler-4 (10 MT/Hr) ,Thermic Fluid Heater (12 Lac kcal/Hr.)
- xiii. Details of Solid waste / Hazardous waste generation and its management.

SR . NO .	SOURCE OF WASTE	CATEGO RY	QUANTITY (MT/ MONTH)			MODE OF DISPOSAL
			EXISTIN G	ADDI TION AL	TOTA L	
1	ETP Sludge	35.3	420	200	620	Collection, Storage, Transportation & sent to common TSDF of M/s. SEPPL, Kutch or M/s. BEIL, Ankleshwar.
2	Date Expired & Off-Specificatio n products	29.3	20	-	20	Collection, Storage, Transportation & sent to on-site incinerator or common Incinerator of M/s. SEPPL, Kutch or M/s. BEIL, Ankleshwar or co-processing in cement industries or RSPL, Panoli.
3	Incinerable Liquid Waste	29.1	350	250	600	Collection, Storage, Transportation & sell to registered reprocessors / reuse as lubricant.
4	Distillation Residue	20.3	380	120	500	
5	Used Oil	5.1	200 Ltrs	400 Ltrs	600 Ltrs	Collection, Storage, Decontamination, Detoxification, Transportation & sell
6.	Discarded Containers/ Bags	33.1	4,500 Nos	4,500 Nos	9,000 Nos	

							to GPCB authorized vendors.
7.	Incineration Ash	37.2	15	--	15		Collection, Storage, Transportation & sent to common TSDF of M/s. BEIL, Ankleshwar or M/s. SEPPL, Kutch.
8	Fly Ash	37.2	4,340	5,660	10,000		Collection, Storage, Transportation & sell to brick manufactures.
9	Salts of Multiple Effect Evaporator	35.3	600	750	1,350		Collection, Storage, Transportation & sent to common TSDF of M/s. SEPPL, Kutch or M/s. BEIL, Ankleshwar.
10	30% HCl	29.6	263.75	1,401.25	1,665		Collection, Storage, Transportation & sell to GPCB authorized end user.
11	Sodium Sulphite (80% wet cake)	--	1,000.25	3,829.75	4,830		
12	Ammonium Chloride (75-80% wet cake)	--	425	4,495	4,920		
13	Ammonium Chloride (20-25% Solution)	--	1,500	--	1,500		
14	KCl (20-25% Solution)	--	1,610	940	2,550		
15	Spent Sulphuric Acid (55%)	29.6	700	405	1,105		
16	Sodium Sulphate Solution (30% to 35%)	--	2,000	5,240	7,240		
17	Potassium Bromide	--	--	215	215		
18	HBr	29.6	--	3,153	3,153		
19	Cupric Chloride Solution	--	85	65	150		
20	Cuprous Hydroxide	--	--	100	100		
21	Sodium Bisulfite	--	--	550	550		

xiv. Following are the list of existing & proposed products:

SR. NO.	NAME OF PRODUCTS	CAS No.	TYPE OF PRODUCT	EXISTING CAPACITY	ADDITIONAL CAPACITY	TOTAL AFTER PROPOSED EXPANSION
				(MT/MONTH)		
1	m-Phenoxy Benzaldehyde (MPBAD)	67-36-7		300	400	700
2	m-Bromo Nitrobenzene	586-78-7		100	-	100
3	m-Bromo Anisole	2398-37-0		100	-	100
4	Lambda-Cyhalothrin	91465-08-6		50	-	50
	Deltamethrin (T)	52918-63-5		12	-	12
5	DV-Acid Chloride/ CMAC	52314-67-7		200	450	650
6	Cypermethrin (T)	52315-07-8		150	500	650
7	Transfluthrin	118712-89-3				
8	Bifenthrin	82657-04-3				
9	Cyfluthrin & Beta Isomers (T)	68359-37-5		300	100	400
10	Imidacloprid ( T)	138261-41-3				
11	Alphamethrin (T)	67375-30-8		100	300	400
	Permethrin (T)	52645-53-1				
12	Metamitron (T)	41394-05-2		100	300	400
	Glyphosate (T)	1071-83-6				
13	Thionyl Chloride	7719-09-7		450	-	450
14	Sulphur chloride	7719-09-6		100	-	100
15	Acid chloride (Valeroyl chloride)			100	-	100
	Acid chloride (Phenyl acetyl chloride)	52315-68-9				
16	CPP		Power generation	1.5 MW	--	1.5 MW
17	Zeta Cypermethrin	52315-07-08	Insecticide	-	100	100
18	Beta Cypermethrin	86753-92-6	Insecticide	-	50	50
19	Chlorantraniliprole	500008-45-7	Insecticide	-	50	50
20	Fipronil	120068-37-3	Insecticide	-	25	25
21	Acetamaprid	160430-64-8	Insecticides	-	100	100
	Imidacloroprid	138261-41-3				
22	Hexaconzole	79983-71-4	Fungicide	300	250	550
	Tebuconzole	107534-96-3				
	Propinoconozole	60207-90-1				
23	Pendimethalin	40487421	Herbicide			
24	Metribuzin	21087-64-9	Herbicide	300	500	800
25	Dicamba	1918-00-9	Herbicide			
26	2,5 Dichloro Phenol	583-78-8	Intermediates	-	200	200
27	2,4 Di chloro phenoxy Acetic	94-75-7	Herbicide	-	200	200

	Acid					
28	Pyraclostobin	175013-18-0	Organic Intermediate	-	50	50
29	IR Hightrans CMA	52314-67-7	Intermediate	-	20	20
30	High Trans CMA and CMAC	52314-67-7	Intermediates	-	50	50
	High Cis CMA and CMAC	52314-67-7				
	<b>Total</b>			<b>2,662</b>	<b>3,545</b>	<b>6,207</b>
31	HCl (30%)		By-product	263.75	1,401.25	1,665
32	Sodium Sulfite		By-product	1,000.25	3,829.75	4,830
33	Ammonium Chloride (20% Solution)		By-product	425	4,495	4,920
34	Aluminum Chloride (25% Solution)		By-product	1,500	--	1,500
35	KCl (25% Solution)		By-product	1,610	940	2,550
36	Spent Sulphuric Acid		By-product	700	405	1,105
37	Sodium Sulphate (30% to 35% Solution)		By-product	2,000	5,240	7,240
38	Potassium Bromide		By-product	--	215	215
39	HBr		By-product	--	3,153	3,153
40	Cupric Chloride Solution		By-product	--	80	80
41	Cuprous Hydroxide		By-product	--	100	100
42	Sodium Bisulfite		By-product	--	550	550
	<b>Total</b>			<b>7,499</b>	<b>20,409</b>	<b>27,908</b>
	<b>Grand Total</b>			<b>10,161</b>	<b>23,954</b>	<b>34,115</b>

EAC noted that the PP has obtained EC for the existing pesticide unit (1862 MTPM) vide letter no. J-11011/583/2010-IA II (I) dated 30<sup>th</sup> August, 2012. EAC also noted that Gulf of Kambay is located at 5 Kms and River Narmada is located 7.5 Kms distance from project site. EAC also noted that the PP proposes to merge Unit III & Unit IV and EAC has earlier recommended for EC for Unit IV (Pesticide Manufacturing Plant-900 MT/Month).

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR, for preparation of EIA/EMP report. Public hearing is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification, as the project is located in the notified Industrial area/estate.**

**Additional ToR**

- i. PP shall submit Certified Compliance Report from the concerned Regional Office of the Ministry for the existing EC.
- ii. A plan shall be prepared for installation of Zero Liquid Discharge system for the expansion project.
- iii. A layout plan earmarking space for development of Green belt of at least 10 m width along the periphery of the plant with three layers of perennial trees shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.
- iv. At least 5 % of the total project cost shall be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.

	<ul style="list-style-type: none"> <li>v. Chemical name of the product with CAS No. number and the actual end use shall be provided.</li> <li>vi. Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.</li> <li>vii. PP shall submit the list of synthetic organic chemicals and pesticides separately along with its individual and total capacity.</li> <li>viii. PP shall submit a plan for plantation of 1000 trees/year for a period of 5 year in nearby identified 3/5 villages. Plan may be formulated in consultation with village/forest authorities.</li> </ul>
24.6.13	<p><b>Establishment of Bulk Drug &amp; Intermediates manufacturing Unit at Sy No: Parts of 87, 89, 90, 92, 98, 99, 100, 103 &amp; 104, Kurraram Village, Rajapet Mandal, Yadadri-Bhongiri District, Telangana by M/s Yadadri Drugs and Intermediates- Terms of Reference- reg. [IA/TG/IND2/64817/2017, IA-J-11011/245/2017-IA-II(I)]</b></p> <p>The Project Proponent and accredited Consultant M/s Rightsource Industrial Solutions 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 Establishment of Bulk Drug &amp; Intermediates manufacturing Unit at Sy No: Parts of 87, 89, 90, 92, 98, 99, 100, 103 &amp; 104, Kurraram Village, Rajapet Mandal, Yadadri-Bhongiri District, Telangana by M/s Yadadri Drugs and Intermediates.</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. It is green field project. Proposed land area is 14.55 Acres/ 58881 Sq.m. Industry will be developed Greenbelt in an area of 53.77 % i.e 7.82 Acres out of 14.55 Acres of area of the project. The estimated proposed project cost is Rs. 20.00 Crores. Total Employment will be 80 persons as direct &amp; 30 persons as indirect. Industry proposed to allocate Rs. 100 Lakhs for 5 years @ 5% of Project cost towards Corporate Social Responsibility.</li> <li>iv. No national parks, wildlife sanctuaries Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10km distance. Water bodies near to the project area are located at Lingampalli - 3.05 Kms (NNE), Konney - 3.76 Kms (NE), Bondugula - 4.04 Kms (SE), Ramachandrapuram - 4.44 Kms (ENE), Pamukunta - 4.53 Kms (SW), Gopala Cheruvu – 6.07 Kms (SSW) and Alimpur - 8.96 Kms (NE). The reserve forests located near to the project site are Nagpur R.F. - 4.20 Kms (NW), Singaram R.F. - 5.24 Kms (W), Kondapuram R.F. - 6.33 Kms (WSW), Daulapuram R.F. - 6.70 Kms (WSW) and Narsapuram R.F. - 7.58 Kms (SW)</li> <li>v. The total water requirement is 157 KLD of which fresh water requirement of around 98 KLD and will be met from ground water sources.</li> <li>vi. Generated effluent of 74.42 KLD will be treated through stripper followed by MEE/ATFD, Biological Treatment Plant followed by RO plant will be based on Zero Liquid Discharge System.</li> <li>vii. Power requirement for proposed project will be 800 KVA and will be met from TSSPDCL. DG sets of 380 KVA &amp; 250 KVA capacities will be installed and used as standby during power failure; Stack (height 10 meters) will be provided as per CPCB</li> </ul>



norms to the proposed DG sets of 380 KVA & 250 KVA.

- viii. 2 TPH & 5 TPH Coal Fired Boilers are Proposed for the new unit with a stack of height of each 30 mtr, Cyclone separator followed by bag filter will be installed for controlling the particulate emissions (within statutory limit of 115 mg/ Nm<sup>3</sup>).
- ix. Details of Process emissions generation and its management.

S. No.	Name of the Gas	Quantity In Kg/Day	Treatment Method
1	Carbon dioxide	117.34	Dispersed into the atmosphere
2	Sulphur dioxide	241.28	Scrubbed by using C.S. Lye Solution
3	Hydrogen	15.08	Diffused by using Nitrogen through Flame arrestor
4	Ammonia	114.37	Scrubbed by using chilled water media
5	Hydrogen chloride	439.45	Scrubbed by using chilled water media
6	Oxygen	177.75	Dispersed into the atmosphere

- x. Details of Solid waste/Hazardous waste generation and its management.

S. No	Name of the Solid & Hazardous Waste	Quantity Kg/Day	Disposal Method
1	Process Organic waste	657	Sent to Cement Industries
2	Spent Carbon	90	Sent to Cement Industries
3	Solvent Distillation Residue	404	Sent to Cement Industries
4	Inorganic Waste	350	Sent to TSDF
5	MEE Salts	3161	Sent to TSDF
6	Organic Evaporative Liquid ( from MEE Stripper)	824	Sent to Cement Industry
7	ETP Sludge	300	Sent to TSDF
8	Used Oils	500 Ltrs/Annum	SPCB Authorized Agencies for Reprocessing/Recycling
9	Detoxified Containers	300 No's / Month	After Detoxification sent back to suppliers/SPCB Authorized Parties
10	Used Lead Acid Batteries	4 No's/ Annum	Send back to suppliers for buyback of New Batteries
11	Ash from boiler Operations	9800	Sent to Brick Manufacturers

- xi. The proposed products and capacities are:

S. No	Product Name	Production capacity MT/ Month
1	Albendazole	10.00
2	Biapenem	5.00
3	Carvedilol	5.00
4	Ciprofloxacin	10.00
5	Closantel Sodium	10.00
6	Doripenem	5.00

7	Enrofloxacin	10.00
8	Gabapentin	5.00
9	Glucosamine HCl	5.00
10	Imipenem	5.00
11	Lamivudine	10.00
12	Lansoprazole	5.00
13	Meropenem	5.00
14	Nevirapine	10.00
15	Niclosamide	10.00
16	Omeprazole	5.00
17	Rafoxanide	10.00
18	Terbinafine HCl	5.00
19	Triclabendazole	10.00
20	Zidovudine	10.00
	<b>Total (Worst combination of any 10 products at any given point of time)</b>	<b>100.00</b>

#### LIST OF BY-PRODUCTS

S. No	Name of the Product	Name of the By-Product	Quantity In Kg/Day
1	Biapenem	1-Methyl-4-nitro benzene	66.67
2	Ciprofloxacin	Piperazine HCl	114.65
		Ammonium acetate	71.33
3	Doripenem	Para Nitro Toluene	56.00
4	Enrofloxacin	n-Ethyl piperazine	139.76
5	Glucosamine HCL	Poly glucosamine compound	81.33
6	Lamivudine	Trimethyl Silanol	142.00
		Trimethyl Chloro Silane	175.80
		L-Menthol	236.59
9	Meropenem	TEA HCl	63.33
8	Zidovudine	TEA HCl	348.00
		Trityl alcohol	326.97

	<p>EAC has deliberated on the proposal. EAC suggested the PP to consider initiation of plantation activities, considering the monsoon season.</p> <p><b>EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR along with public hearing, for preparation of EIA/EMP report.</b></p> <p><b>Additional ToR</b></p> <ol style="list-style-type: none"> <li>i. A plan for implementation of Zero Liquid Discharge system shall be submitted.</li> <li>ii. No construction activity (other than for securing land) shall be started without obtaining prior EC.</li> <li>iii. A layout plan earmarking space for development of Green belt of atleast 10 m width along the periphery of the plant with three layers of perrenial trees shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.</li> <li>viii. Certified Compliance report of the existing EC to be obtained from concerned RO, MoEF&amp;CC and the same shall be submitted along with EIA/EMP report.</li> <li>iv. Ground water extraction permission from the concerned authority shall be submitted with EIA/EMP report.</li> <li>v. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.</li> <li>vi. Public hearing has to be conducted as per the provisions of EIA Notification, 2006.</li> </ol>
24.6.14	<p><b>Modification -Manufacturing Of Bulk Drugs &amp; Intermediates Facility At Plot No.23-B,Kiadb Kolhar Industrial Area, Bidar Taluk &amp; District, Karnataka Promoter:M/S Chorus Labs Limited Bidar- reg TOR [IA/KA/IND2/64861/2017, IA-J-11011/257/2017-IA-II(I)]</b></p> <p>The PP was not present for the meeting. EAC noted that the proposal is a violation case. EAC opinioned that the PP can submit the proposal with the violation committee constituted by the Ministry.</p>
24.6.15	<p><b>Expansion of Manufacturing of Synthetic Organic Chemicals (13936 MTPM to 22136 MTPM) at Plot No. 801, 801/23, 806 &amp; 807, Phase-III, GIDC Estate, Vapi, Dist.: Valsad, Gujarat by M/s. Aarti Industries Limited (Organic Division)-reg. TOR [IA/GJ/IND2/64790/2017, IA-J-11011/248/2017-IA-II(I)]</b></p> <p>The Project Proponent and their consultant M/s. Jyoti Om Chemical Research Centre Private 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 Expansion of Manufacturing of Synthetic Organic Chemicals (13936 MTPM to 22136 MTPM) at Plot No. 801, 801/23, 806 &amp; 807, Phase-III, GIDC Estate, Vapi, Dist.: Valsad, Gujarat by M/s. Aarti Industries Limited (Organic Division).</li> <li>ii. All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category ‘B’ but due to the applicability of general condition (located in Critically Polluted Area), it is considered under Category ‘A’ and is appraised at</li> </ol>

	<p>Central Level by Expert Appraisal Committee (EAC).</p> <p>iii. Gujarat Pollution Control Board, Gandhinagar has issued CCA order 1616, issued on 24/02/2004. Further it was extended by CCA order no. AWH-50294 dated 22/10/2012 for manufacturing of Synthetic Organic products to M/s. Aarti Industries Limited (Organic Division). Now, unit has applied for expansion on the basis of existing CCA: AWH-50294, dated 22<sup>nd</sup> October, 2012.</p> <p>iv. Existing Land area is 45477 Square Meter. Industry will develop greenbelt in an area of 2732.65 sq.m. out of 45477 sq. m. of area of the project. Proposed green belt of 9605.22 sq.mt. will be developed.</p> <p>v. The proposed cost of project is Rs. 52.85 crore excluding existing investment of Rs. 401.9 Crore. Total proposed capital cost earmarked toward environmental pollution control measures is Rs. 2.85 crore.</p> <p>vi. Total proposed employment will be 65 persons as direct and 20 persons indirect after expansion. Industry proposed to allocate Rs. 1.32 crore @ of 2.5% towards corporate social responsibility.</p> <p>vii. No national parks, wildlife sanctuaries, Biosphere Reserves, Tigers/Elephants Reserves, Wildlife Corridors lies within 10 km distance. Daman Ganga River is flowing at the distance of 5.7 KM in SW direction.</p> <p>viii. Total water requirement will be 958KLD of which fresh water requirement will be met from GIDC, Vapi.</p> <p>ix. Treated effluent of 272KLD (Industrial) will be treated through Effluent Treatment Plant and effluent will be sent to CETP, Vapi and 50 KLD of domestic wastewater will be treated in sewage treatment plant. M/s. Aarti Industries Limited (Alchemie Organic Division) having discharge of 90 KLD and M/s. Aarti Industries Limited (Amine Division) having discharge of 55 KLD are in the process of achieving zero liquid discharge, already an EC is granted which will reduce the load of CETP.</p> <p>x. Power requirement after expansion will be 3500kVA including existing 2500kVA and will be met from Daxin Gujarat Viji Company Ltd. Existing unit has Two D. G. Sets i.e. (625 kVA and 750 kVA) and are used as standby during power failure. Stack (height 11 m) is provided as per CPCB Norms. Unit has proposed D.G. set of 1100 KVA will be used as standby during power failure. The unit is using steam from sister concern unit M/s. Aarti Industries Limited (Acid Division) which is next to our unit at plot no. 802, 803, 804/1,2,3, Phase-III, GIDC Vapi, Gujarat.</p> <p>xi. Detail of solid waste/Hazardous waste and its management given below:</p>																								
	<table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Name of Waste (Category)</th> <th>Existing Quantity</th> <th>Proposed Quantity</th> <th>Total Quantity</th> <th>Mode of disposal</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>ETP waste (34.3)</td> <td>75 T/month</td> <td>110 MT/Month</td> <td>185 MT/Month</td> <td>Collection, Storage, Transportation, disposal to TSDF developed by VGEL, Vapi</td> </tr> <tr> <td>2.</td> <td>Distillation Residue (26.1)</td> <td>120 T/month</td> <td>441 MT/Month</td> <td>561 MT/Month</td> <td>Collection, Storage, Transportation, disposal to CHWIF at SEPPL for incineration.</td> </tr> <tr> <td>3.</td> <td>Spent carbon (35.3)</td> <td>1 T/Month</td> <td>+0.00</td> <td>1 T/Month</td> <td>Collection, Storage, Transportation disposal to CHWIF at SEPPL.</td> </tr> </tbody> </table>	Sr. No.	Name of Waste (Category)	Existing Quantity	Proposed Quantity	Total Quantity	Mode of disposal	1.	ETP waste (34.3)	75 T/month	110 MT/Month	185 MT/Month	Collection, Storage, Transportation, disposal to TSDF developed by VGEL, Vapi	2.	Distillation Residue (26.1)	120 T/month	441 MT/Month	561 MT/Month	Collection, Storage, Transportation, disposal to CHWIF at SEPPL for incineration.	3.	Spent carbon (35.3)	1 T/Month	+0.00	1 T/Month	Collection, Storage, Transportation disposal to CHWIF at SEPPL.
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3.	Spent carbon (35.3)	1 T/Month	+0.00	1 T/Month	Collection, Storage, Transportation disposal to CHWIF at SEPPL.																				

4.	Discarded Material (plastic bags, Drums)(33.3)	What so ever	--	What so ever	Collection, Storage, Transportation disposal entire quantity reuse to filling sludge and drums for filling finished products
5.	UsedOil(5.1)	200 Lit/year	800 Lit/year	1000 Lit/year	Collection, Storage, Transportation disposal by reuse in plant & machinery for lubricating purpose.
6.	Insulation waste	2.0 T/Month	5 T/Month	7 MT/Month	Collection, Storage, Transportation and disposal to TSDF, Vapi
7.	a. Dil. H <sub>2</sub> SO <sub>4</sub> b. Dil. H <sub>2</sub> SO <sub>4</sub>	21600 T/year 7500 T/year	+0.00	21600 T/year 7500 T/year	M/s. Aarti Industries (Alchemie organic Div.) M/s. Apex Pharma Chem Pvt. Ltd. Reception/collection/Storage/ Reuse/

xii. The list of existing and proposed product are:

Sr. No.	Name of Product	Existing quantity in MT/Month as per CCA AWH-50294	Proposed quantity in MT/Month	Total quantity after expansion in MT/Month
1	Para Nitro Chloro Benzene(PNCB)	5000	3900	9000 (Either/Or)
2	Ortho Nitro Chloro Benzene(ONCB)			
3	Meta Nitro Chloro Benzene(MNCB)			
4	2,5 Dichloro Nitro Benzene(2,5 DCNB)	400	0	1500 (Either/Or)
5	3,4 Di Chloro Nitro Benzene(3,4 DCNB)	600		
6	2,3 DiChloro Nitro Benzene (2,3 DCNB)	100		
7	2,4 DiChloro Nitro Benzene(2,4DCNB)	400		
8	2,6 Di Chloro Nitro Benzene (2,6DCNB)	0		
9	2,3,4 TrichloroNitro Benzene (2,3,4 TCNB)	0		
10	2,4,5 TrichloroNitro Benzene (2,4,5 TCNB)	0		
11	2,4 Dichloro 3 Fluoro Nitro Benzene	0		
12	2,4 DiNitro Chloro Benzene	200	1300	1500 (Either/Or)
13	Mono Chloro Benzene(MCB)	3800	3000	8000* (Either/Or)
14	Ortho Dichloro Benzene(ODCB)	500		
15	Para Dichloro Benzene(PDCB)	500		
16	Meta Dichloro Benzene(MDCB)	0		

17	1,2,4 Tri Chloro Benzene(1,2,4 TCB)	200		
18	1,2,3 Tri ChloroBenzene(1,2,3 TCB)			
19	TCAN	0		
20	Ortho Anisidine	30	0	30
21	Para AniSidine	20	0	20
22	Dichloro Aniline	50	0	50
23	2,5 DiChloro Aniline	35	0	35
24	3,4 DiChloro Aniline	15	0	15
25	Ortho Chloro Aniline	10	0	10
26	PPDA	25	0	25
27	OPDA	225	0	225
28	OCPNA/PCONA	100	0	100
29	ONA/PNA	150	0	150
33	ONCB Para Sulphonic Acid	25	0	25
34	3,3 DiChloro Benzedine Sulphate	10	0	10
35	Dilute Sulphuric Acid	1441	0	1441
	<b>Total</b>	<b>13936</b>	<b>8200</b>	<b>22136</b>
<b>By-Product</b>				
1.	Sulphuric Acid 70%	3627	3027	6654
2.	Hydrochloric Acid 30%	6165	7038	13203
3.	Thio liquor	136.5	0	136.5
	<b>Total</b>	<b>9928.5</b>	<b>10065</b>	<b>19993.5</b>

\*NOTE: as such either/or any product will be 8000 MTt/Month, but 1, 2, 4 TCB, 1, 2, 3 TCB, TCAN not more than 3000MT/Month)

EAC has deliberated on the proposal. EAC noted that the water requirement for the process is at a higher level.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR, for preparation of EIA/EMP report. Public hearing is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate.**

#### **Additional ToR**

- i. A layout plan earmarking space for development of Green belt of atleast 10 m width along the periphery of the plant with three layers of perrenial trees shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.
- ii. Certified Compliance report of the existing EC to be obtained from concerned RO, MoEF&CC and the same shall be submitted along with EIA/EMP report.
- iii. Process water requirement shall be reduced. PP shall submit a revised water balance plan.
- iv. Atleast 5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.

	<ul style="list-style-type: none"> <li>v. Chemical name of the product with CAS No. number and the actual end use shall be provided.</li> <li>vi. Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.</li> <li>vii. PP shall submit a plant for plantation of 1000 trees/year for a period of 5 year in nearby villages. Plantation shall be done in consultation with local/forest authorities.</li> </ul>
24.6.16	<p><b>Expansion project for manufacturing of Agrochemical active ingredients, intermediates and fine chemicals (7430 TPA to 16055 TPA) at Plot No. 3505 to 3515, 6008 to 6010, 6301 to 6313 &amp; 6316/B1, GIDC Industrial Estate, P.B. No. 142, Ankleshwar-393002, Gujarat by M/s. Deccan Fine Chemicals (India) Pvt. Limited–Terms of Reference reg.[IA/GJ/IND2/64396/2017, IA-J-11011/270/2017-IA-II(I)].</b></p> <p>The Project Proponent and their consultant M/s. Precitech Laboratories 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. Expansion project for manufacturing of Agrochemical active ingredients, intermediates and fine chemicals (7430 TPA to 16055 TPA) at Plot No. 3505 to 3515, 6008 to 6010, 6301 to 6313 &amp; 6316/B1, GIDC Industrial Estate, P.B. No. 142, Ankleshwar-393002, Gujarat by M/s. Deccan Fine Chemicals (India) Pvt. Limited.</li> <li>ii. All Pesticides industry and pesticide specific intermediates (excluding formulations) units producing technical grade pesticides are listed at Sl.No. 5(b) of Schedule of Environmental Impact Assessment (EIA) Notification under Category ‘A’ and are appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>iii. Ministry had issued EC earlier vide letter No: J-11011/392/2005-IAII (I) dated 31.05.2006 and J-11011/749/2008-IA II (I) dated 8<sup>th</sup> December, 2008 for synthetic organic chemical products manufacturing unit in existing pesticide unit in the name of M/s. Bayer Crop Science Ltd. Deccan Fine Chemicals (India) Pvt. Ltd., a joint venture company with Mitsubishi Corporation (India) Pvt. Ltd acquired this manufacturing facility on 1<sup>st</sup> June, 2014.</li> <li>iv. Existing land area is 76691 m<sup>2</sup>. No additional land will be required for the proposed expansion. Industry already has developed Greenbelt in an area of Approx. 35% i.e., 27393.14m<sup>2</sup> out of 76691.00 m<sup>2</sup> of area of the project. The estimated project for proposed expansion is Rs 437.7 crores. Existing investment is about Rs 203 crores. Capital expenditure of proposed pollution control equipment and environmental protection is about Rs 35 crores.</li> <li>v. Total Employment will be 300 (Regular – 100 + Contractual - 200) persons as direct &amp; 300 persons indirect after expansion. Industry proposes to allocate about of 2. 5% of the project cost towards Corporate Social Responsibility.</li> <li>vi. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River Narmada is flowing at a distance of 8.55 km in North direction.</li> <li>vii. Total water requirement is 4602 m<sup>3</sup>/day of which fresh water requirement of 3849m<sup>3</sup>/day and will be met from GIDC Water Supply Department.</li> <li>viii. The effluents are segregated into three streams; High COD/ TDS and Low COD/TDS and high TDS stream. The segregation is at source and is stream wise based on characteristics of effluents, i.e., concentration of less than 15000 mg/l of TDS and COD is considered as low TDS effluents, while the others are considered as high COD/TDS effluents. Blow downs from utilities and scrubbers contain only inorganic salts with low COD.</li> <li>ix. High TDS/COD effluent from process of quantity 209 KLD sent to effluent treatment system consists of Stripper, Multiple Effect Evaporator (MEE) followed by Agitated Thin Film Dryer (ATFD). The organic layer distillate from the stripper is sent to cement</li> </ul>

plants for co-incineration and aqueous bottom from stripper is sent to MEE followed by ATFD for evaporation. The condensate from the MEE and ATFD are sent to effluent treatment plant based on biological treatment process. Salts from ATFD are disposed to TSDF. Low TDS/COD effluent of about 402 KLD waste from washes, condensate from ejectors & water from ring vacuum pumps, domestic wastewater of 151 KLD along with condensate from Stripper, MEE and ATFD sent to primary treatment consisting of equalization, neutralization, and primary sedimentation followed by secondary biological treatment system consisting of aeration tank, clarifier, rea-activator clarifier and decanter. Treated effluent will be mixed with 100 KL scrubber blow downs after chemical treatment and then sent to Narmada Clean Tech Ltd. (NCTL) for polishing and disposal to the Sea through marine outfall facility. Total quantity of treated effluent sent to NTCL is 862 KLD.

- x. About 757 KLD blow downs from Cooling Towers, Boiler, Softener and DM plant are sent to RO plant for recovery. About 605 KLD permeate from RO Plant is recycled to Cooling Towers for makeup. Reject of 152 KL sent to MEE. About 142 KL Condensate from MEE is recycled back to Cooling Towers as make up water.
- xi. Power requirement after expansion will be 29200 kVA including existing 2000 kVA as the fuel and will be met from Dakshin Gujarat Vij. Co. Ltd. Power requirement is high in the proposed expansion due to high utility loads. Existing unit has one DG sets of 250 kVA capacity and a, which issued as standby during power failure. Stack (height – 31.5 meter) will be provided as per CPCB norms to the proposed DG sets of 1500 kVA capacity – 10 Nos. in addition to the existing DG sets of 250 kVA which will be used as standby during power failure.
- xii. Existing unit has 8 TPH x 2 Nos. (Working - 1+ Standby -1) Natural Gas fired boiler are installed. Multi cyclone separator/ bag filter (Not required) with a stack of height of 33m (each) will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>) for Proposed 25 TPHx 2 Nos., Natural Gas fired boilers respectively.
- xiii. The existing & Proposed Products are:

Sr. No.	Name of Products	Quantity T/Year		
		Existing	Proposed Additional	Total
<b>A. Herbicides</b>				
<b>Group – 1</b>				
1.	Aclonifen	2350	1050	3400
2.	Oxadiargyl			
<b>Group – 2</b>				
3.	Pyridate	----	1500	1500
4.	Amicarbazone			
5.	Flucarbazone			
6.	Diuron			
<b>B. Veterinary Product</b>				
7.	Deltamethrin	70	30	100
8.	Flumethrin			
9.	Permethrin			
<b>C. Pesticides</b>				
<b>Group – 1</b>				
10.	Benfuresate	555	245	800
11.	Fluopicolide			
12.	Anilophos	300	----	300



13.	Triazophos	2800	----	2800
<b>D. Intermediate</b>				
<b>Group – 1</b>				
14.	SOD	1100	100	1200
15.	Dichlorohydroxyketone-NBA (DS 36)			
16.	Dichlorooxime – NBE (DS 38)			
17.	DMTA	255	----	255
18.	PBQ	----	1800	1800
<b>Group – 2</b>				
19.	Methoxy AA	----	2000	2000
20.	ABA HCl			
21.	DAT			
22.	Azura 5			
<b>E. Fungicides</b>				
23.	Propiconazole	----	900	900
24.	Tricyclazole			
25.	Fenbuconazole			
<b>F. Others</b>				
26.	Vulcuren	----	1000	1000
27.	Vulkalent – E			
<b>Total</b>		<b>7430</b>	<b>8625</b>	<b>16055</b>
<b>Total Formulations</b>				
		<b>11335</b>	<b>0</b>	<b>11335</b>

EAC has deliberated on the proposal. EAC noted that PP has to transfer/name the existing EC in the name of PP. EAC has also considered the request of PP for collection of baseline data from March, 2017 to May, 2017 considering the monsoon season.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR, for preparation of EIA/EMP report. Public hearing is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate.**

#### **Additional ToR**

- i. A layout plan earmarking space for development of Green belt of atleast 10 m width along the periphery of the plant with three layers of perennial trees shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.
- ii. Certified Compliance report of the existing EC to be obtained from concerned RO, MoEF&CC and the same shall be submitted along with EIA/EMP report.
- iii. Process Water requirement (especially in the cooling tower) shall be reduced. PP shall submit a revised water balance plan.
- iv. PP shall explore the possibility of Zero Liquid Discharge System.
- v. Atleast 5 % of the total project cost may be earmarked towards Enterprise Social

	<p>Commitment (ESC). PP shall submit a five year plan for ESC.</p> <p>vi. PP shall explore the feasibility of constructing underground pass connecting the units/area across the road.</p>										
24.6.17	<p><b>Setting up of Pigment Manufacturing Unit (20 MTPM) at Plot No. 604, GIDC, Panoli, Tal: Ankleshwar, Dist: Bharuch, Gujarat by of M/s. Honest Corporation-Terms of Reference-reg. [IA/GJ/IND2/65043/2017, IA-J-11011/276/2017-IA-II(I)]</b></p> <p>The Project Proponent and their consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd., gave a detailed presentation on the salient features of the project &amp; informed that:</p> <ol style="list-style-type: none"> <li>i. The proposal is for Setting up of Pigment Manufacturing Unit (20 MTPM) at Plot No. 604, GIDC, Panoli, Tal: Ankleshwar, Dist: Bharuch, Gujarat by of M/s. Honest Corporation.</li> <li>ii. All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B' but due to the applicability of general condition (located within 5 km distance of the Critically Polluted Area), it is considered under Category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>iii. Industry will develop greenbelt in an area of 10 % i.e. 250 m<sup>2</sup> out of 1575 m<sup>2</sup> of area of the project.</li> <li>iv. The estimated project cost is Rs. 451 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 46 Lakhs and the recurring cost (operation &amp; maintenance) is about Rs. 2.5 Lakhs per annum.</li> <li>v. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. lies within 10 km distance.</li> <li>vi. Ambient air quality monitoring is carried out during March to May 2017.</li> <li>vii. Total water requirement will be 92.5 KL/Day of which fresh water requirement of 92.5 KL/Day and will be met from GIDC Water Supply.</li> <li>viii. Treated Effluent 18.1 KL/Day. The neutralized low COD effluent after primary treatment (16.5 KL/Day) will be sent to the CETP of M/s PETL, Panoli for the further treatment and final disposal. Domestic effluent (1.6 KL/Day) will be sent to septic tank &amp; soak pit.</li> <li>ix. Power requirement will be 225 HP and will be met from DGVCL.</li> <li>x. Unit will have Boiler (1 No.), Thermopack (1 No.), Reaction Vessel (1 No.) &amp; DG Set (1 No.). Adequate air pollution control equipments i.e. Stack Height shall be provided, Water Scrubber followed by Alkali Scrubber shall be installed to prevent air pollution from process vent. With a stack of height of 15m, 15m, 8m &amp; 8m respectively will be installed for controlling the Particulates emissions.</li> <li>xi. Details of Solid waste / Hazardous waste generation and its management.</li> </ol> <table border="1" data-bbox="337 1753 1446 1822"> <thead> <tr> <th>Sr. No</th> <th>Type of Waste</th> <th>Category</th> <th>Generation Qty.</th> <th>Mode of Treatment &amp; Disposal</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Sr. No	Type of Waste	Category	Generation Qty.	Mode of Treatment & Disposal					
Sr. No	Type of Waste	Category	Generation Qty.	Mode of Treatment & Disposal							

1.	ETP Sludge	35.3	20.8 MT/Month	Collection, Storage, Transportation & Sent to TSDF site of M/s. BEIL, Ankleshwar
2.	Used Oil	5.1	2.5 Kg/Month	Collection, Storage, Transportation & Sale to registered re-processor or used for lubrication within premises
3.	Discarded Containers/Bag s/Liners	33.1	667 Kg/Month	Collection, Storage, Transportation, Decontamination & given to registered vendors
4.	Filter Cloth contaminated with waste sludge/residues	-	4.16 Kg/Month	Collection, Storage, Transportation & Sent to TSDF site of M/s. BEIL, Ankleshwar
5.	Hydrochloric Acid (30%)	-	12 MT/Month	Collection, Storage & Sold to re-processors or end users

xii. The proposed products are :

Sr. No.	Name of Product	Production Capacity (MT/Month)	CAS Nos.
1.	CPC Green Pigment	20	1328-53-6
	<b>Total</b>	<b>20</b>	
<b>By Product</b>			
1.	Hydrochloric Acid (30 %)	12	Mixture Water - 7732-18-5 Hydrogen Chloride – 7647-01-0

EAC has deliberated on the proposal. EAC desired that PP shall develop atleast 7 m wide green belt around the periphery of the plant. EAC also considered the request of the PP regarding baseline data collected during March- May, 2017, in view of the monsoon season.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR, for preparation of EIA/EMP report. Public hearing is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate.**

**Additional ToR**

- i. A lay out plan earmarking space for peripheral Green belt of atleast 7 m width shall be submitted with three layers of trees which can control/reduce the pollutant from the project. Trees shall be selected as per CPCB norms.

	<ul style="list-style-type: none"> <li>ii. Atleast 5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.</li> <li>iii. The actual end use of the product shall be provided.</li> <li>iv. Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.</li> <li>v. PP shall submit a plan for plantation 1000 trees/year for a period of 5 year in nearby 3 villages. Plantation shall be done in consultation with local/forest authorities.</li> </ul>														
24.6.18	<p><b>Expansion for Manufacturing of Drug Intermediates and Sepciality Chemicals (5600 to 5779 MTPM) at Plot No. 3045, GIDC Estate Panoli, Ankleshwar, Dist. Bharuch, Gujarat by M/s. Sagar Life Science Pvt. Ltd- Terms of Reference- reg. [IA/GJ/IND2/64349/2017, IA-J-11011/234/2017-IA II(I)]</b></p> <p>The Project Proponent and their accredited consultant M/s. Siddhi Green Excellence Private Limited, gave a detailed presentation on the salient features of the project &amp; informed that:</p> <ul style="list-style-type: none"> <li>i. The proposal is for Expansion for Manufacturing of Drug Intermediates and Sepciality Chemicals (5600 to 5779 MTPM) at Plot No. 3045, GIDC Estate Panoli, Ankleshwar, Dist. Bharuch, Gujarat by M/s. Sagar Life Science Pvt. Ltd.</li> <li>ii. All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category ‘B’ but due to the applicability of general condition (located within 5 km distance of the Critically Polluted Area), it is considered under Category ‘A’ and is appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>iii. Existing land area is 1500 sq. m. No additional land will be used for proposed expansion. Existing green belt is approx. 225 Sq. meters (15-20%) of total area. The estimated project cost is Rs. 6.63 crore. No national parks, wildlife sanctuaries, Biosphere, Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Narmada river is flowing at a distance a distance of 14.47 km in North direction.</li> <li>iv. Total water requirement is 107 KL/day and will be met from GIDC.</li> <li>v. At present domestic effluent is disposed off through soak pit via septic tank, and same will continue after proposed expansion. (3 KL/day). The effluent generated from industrial process (19.81 KLD) shall be first treated in ETP, consisting of Primary Treatment. Then the ETP treated industrial wastewater shall be sent to own MEE plant. OR shall be sent to CMEE for further treatment. The treated water received from the CMEE or MEE plant (12 KLD) shall be used for cooling tower make up water. It is proposed to sent industrial effluent to M/s. PETL, Panoli</li> <li>vi. Power requirement after expansion will be 250 KVA including existing 100 KVA and will be met from DGVCL. 1 DG set will be used as standby during power failure. Stack (height 7m) will be provided as per CPCB norms to the proposed DG set of 250 KVA.</li> <li>vii. The existing Furnace shall be discontinued after expansion</li> </ul> <p style="text-align: center;"><b><u>Existing</u></b></p> <table border="1" data-bbox="344 1724 1442 1929"> <thead> <tr> <th>Stack No.</th> <th>Stack Attached to</th> <th>Fuel used &amp; rate of consumption</th> <th>Stack Height (m)</th> <th>Parameters</th> <th>Permissible Limits</th> <th>Control Measures provided</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Furnace</td> <td>Wood/Briquette 800 Kg/day</td> <td>13</td> <td>PM SO<sub>2</sub> NO<sub>x</sub></td> <td>150 mg/Nm<sup>3</sup> 100 ppm</td> <td>Bag Filter</td> </tr> </tbody> </table>	Stack No.	Stack Attached to	Fuel used & rate of consumption	Stack Height (m)	Parameters	Permissible Limits	Control Measures provided	1.	Furnace	Wood/Briquette 800 Kg/day	13	PM SO <sub>2</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm	Bag Filter
Stack No.	Stack Attached to	Fuel used & rate of consumption	Stack Height (m)	Parameters	Permissible Limits	Control Measures provided									
1.	Furnace	Wood/Briquette 800 Kg/day	13	PM SO <sub>2</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm	Bag Filter									

**Proposed Additional**

Stack No.	Stack Attached to	Fuel used & rate of consumption	Stack Height (m)	Parameters	Permissible Limits	Control Measures provided
1 (New)	Multi fuel boiler (2 TPH)	Wood/ Briquette 4MT/day	15	PM SO <sub>2</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm	Multi Cyclone + Bag filter + water scrubber
2 (New)	Thermic Fluid Heater 10, 00,000 Kcal/hr	Wood/ Briquette 4MT/day	15			Multi Cyclone + Bag filter + water scrubber
3 (New)	D.G. Set (250 kVA) (standby)	Diesel - 60 L/h	7			---

viii. The existing and proposed products are

Sr. No	Name of Products	CAS no.	CTO available MT / month	Additional /new production MT / month	Total after expansion		Remarks		
					MT / month	MT / month			
75.	Calcium Chloride		100	-	100		Existing Products- No change		
76.	Repackaging & formulation of agrochemicals liquid products	-	250	-	250				
77.	Repackaging & formulation of agrochemicals Powder products	-	250	-	250				
78.	Soil Conditioner (Powder & Granules)	-	5000	-	5000				
79.	Iodobenzene Di acetate	3240-34-4	--	2	2		New Products		
80.	Tert Butyl Carbazate	870-46-2							
81.	2 Hydroxy Decanoic Acid	5393-81-7							
82.	4, Hydroxy Benzyl Alcohol	623-05-2							
83.	Ammonium Acetate	631-61-8						25	25
84.	4 Chloro Butryl Chloride	4635-59-0.						75	75
85.	Ortho Toludene Di Sulphate	95-53-4							
86.	Tri Methyl Silyl Triflate	27607-77-8						5	5
87.	Trfflic Anhydride	358-23-6							
88.	Tri Fluoro Acetic Anhydride	407-25-0							
89.	1- Ethyl 3 -(3-dimethyl	25952-53-8		5	5				

	amino propyl) Carbodiimide.HCl				
90.	Hydrogenation of Aldehyde & Nitro Compounds(Meta Phenoxy Benzyl Alcohol or Meta Bromo Aniline)	13826-35-2/ 591-19-5		50	50
91.	Methyl Triflate	333-27-7		1	1
92.	Penta Methyl Bromo Benzene	5153-40-2		1	1
93.	4-OCTYNE 1-OL	34126-19-7		15	15
94.	7-OCTYN 1-OL	871-91-0			
95.	1-bromo,6 methyl heptane	52648-04-1			
<b>TOTAL</b>			<b>5600</b>	<b>179</b>	<b>5779</b>

EAC has deliberated on the proposal. EAC noted that the project is located in the notified Industrial area; hence public consultation would be exempted. EAC has also considered the request for use of baseline data collected during February- April, 2017 considering the monsoon season.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR, for preparation of EIA/EMP report.**

**Additional ToR**

- i. A layout plan earmarking space for development of Green belt along the periphery of the plant with perennial trees shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.
- ii. Water requirement in the cooling tower shall be reduced. PP shall submit a revised water balance plan.
- iii. The details of formulation products shall be submitted in the EIA report.
- iv. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.
- v. Chemical name of the product with CAS No. number and the actual end use shall be provided.
- vi. Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.
- vii. PP shall submit a plan for plantation of 1000 trees/year for a period of 5 year in nearby villages in consultation with local/forest authorities.

24.6.19	<p><b>Manufacturing of New Specialty Chemicals in existing Inorganic Products Unit (500 MTPM to 550 MTPM) at Plot No. 1032/4, GIDC Estate, Panoli, Ankleshwar, District Bharuch, Gujarat by M/s. Maruti Industries (Formerly known as M/s. Unity Petrotech) – Terms of Reference-reg [IA/GJ/IND2/64487/2017, IA-J-11011/252/2017-IA-II(I)]</b></p> <p>The Project Proponent and their consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd., gave a detailed presentation on the salient features of the project &amp; informed that:</p> <ol style="list-style-type: none"> <li>i. The proposal is for Manufacturing of New Specialty Chemicals in existing Inorganic</li> </ol>
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Products Unit (500 MTPM to 550 MTPM) at Plot No. 1032/4, GIDC Estate, Panoli, Ankleshwar, District Bharuch, Gujarat by M/s. Maruti Industries (Formerly known as M/s. Unity Petrotech) .

- ii. All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B' but due to the applicability of general condition (located within 5 km distance of the Critically Polluted Area), it is considered under Category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. Proposed land area is 1040 m<sup>2</sup>. Industry will develop greenbelt in an area of 14 % i.e.146 m<sup>2</sup> out of 1040 m<sup>2</sup> of area of the project. The estimated project cost is Rs. 380 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 20 Lakhs and the recurring cost (operation & maintenance) will be about Rs. 3 Lakhs per annum. Total employment will be 15 persons as direct & 8 persons indirect for project. Industry purposes to allocate Rs. 7.5 Lakhs @ 2.5 % towards Corporate Social Responsibility.
- iv. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Narmada River is flowing at a distance a distance of 13 km in N direction.
- v. Ambient air quality monitoring has been carried out at 8 locations during March-2017 to May-2017.
- vi. Total water requirement will be 30.0 KL/Day; which will be met from GIDC Water Supply.
- vii. Total 15.5 KL/Day ( 3.5 KL/Day Industrial + 12 KL/Day domestic) of effluent shall be generated. Industrial effluent Low COD stream =6.6 KLD will be treated in ETP & finally sent to CETP (M/s. PETL, Panoli, Bharuch), High COD stream = 0.4 KLD will be sent to Common spray dryer (M/s. PETL, Panoli, Bharuch), High COD stream = 5.0 KLD will be sent to Common MEE (M/s.ACPTCL, Anleshwar, Bharuch)
- viii. Power requirement will be 120 KW and will be met from DGVCL.
- ix. Unit will have N.G. based 1.0 TPH Steam Boiler-1, Thermo pack (1 LKC/Hr.) & D.G. Set (125 KVA) Adequate stack height will be provided. Alkali Scrubber will be provided as APCM with Spray Dryer.
- x. HF, HCl, Cl<sub>2</sub>, NH<sub>3</sub> SO<sub>2</sub> gas as Process emissions generates from vent attached to Reaction Vessel. Two stage Scrubbers will be provided as APCM.
- xi. The existing and proposed products are :

Sr. No.	Name of Products	CAS No.	Production Capacity (MT/Month)	
			Existing	Proposed
<b>EXISTING</b>				
1	Sodium Sulphate	7757-82-6	500	--
2	Ammonium Sulphate	7783-20-2		
3	Potassium Nitrate	7757-79-1		
<b>PROPOSED</b>				
1	1-Acetyl-4-(4'- Hydroxyphenyl) Piperazine	67914-60-7	-	50
2	2-Amino -5-Methyl Thiazol	7305-71-7	-	
3	2-Chloroethylamine Hydrochloride	870-24-6	-	
4	N,N BIS (2- Chloroethyl)Amine	821-48-7	-	

	Hydrochloride			
5	1-(4-Methoxy Phenyl ) Piperazine	38212-30-5	-	
6	1-(2,3-Dichlorophenyl) Piperazine HCl	119532-26-2	-	
7	1-(2-Proponyl)-2- Benzimidazolidinone	35681-40-4	-	
8	1-(3-Chlorophenyl) PiperzineHCl	65369-76-8	-	
9	P-Chloro Benzhydryl Piperzine	303-26-4	-	
10	Trans-4-(4- Floro- Phenyl)-N-Methyl-3-Hydroxy Methyl Piperidine (Bis Carbinole)	<a href="#">109887-53-8</a>	-	
11	Hydrogenation of Aromatic Compounds*:		-	
	4-fluoro nitrobenzene	350-46-9	-	
	2-fluoronitrobenzene	1493-27-2	-	
	N-ethyl-nitromethyl pyrrolidine	265315-52-4	-	
	1(4-hydroxy phenyl)4-(4-nitrophenyl)piperazine	112559-81-6	-	
	Meta Phenoxy Benzaldehyde	39515-51-0	-	
	Paracresol	106-44-5	-	
12	4-Hydroxy Coumarin	1076-38-6	-	
13	4 4' Di Fluoro Benzophenone	345-92-6	-	
14	4-Fluorophenylacetic Acid	405-50-5	-	
15	Sodium Bromide	7647-15-6	-	
16	Potassium Fluoride (KF)	7789-23-3	-	
17	HBr-Acetic acid (33-35%)	37348-16-6	-	
18	Triazole	288-88-0	-	
19	Sevelamar Carbonate : Poly(allylamine-co-N’N’ diallyl,3-diamino-2-hydroxy propane) carbonate salt	917381-47-6	-	
20	Zonisamide	68291-97-4	-	
21	Albendazole	54965-21-8		
22	Febendazole	43210-67-9		
23	Mebendazole	31431-39-7		
24	Spray Drying of various specialty chemicals*	-	-	500
<b>Total</b>			<b>500</b>	<b>550</b>

EAC has deliberated on the proposal. EAC noted that the industry is located in the notified Industrial area. EAC has also considered the request of the PP regarding use of baseline data collected during March-May, 2017 considering the upcoming monsoon period, for preparation of EIA/EMP report.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR, for preparation of EIA/EMP report.**

**Additional ToR**

- i. A layout plan earmarking space for development of Green belt of atleast 5 m width



	<p>along the periphery of the plant with trees which can control/reduce the pollutant from the project. Trees shall be selected as per CPCB norms.</p> <ul style="list-style-type: none"> <li>ii. Atleast 5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.</li> <li>iii. Chemical name of the product with CAS No. number and the actual end use shall be provided.</li> <li>iv. Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.</li> <li>v. PP shall submit plan for plantation of 1000 trees/year for a period of 5 year in nearby villages in consultation with local/forest authorities.</li> <li>vi. Public hearing is exempted Public Consultation is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate.</li> </ul>
24.6.20	<p><b>Addition of Carbon black Manufacturing facility in existing plant at Village Paddhar, Taluka Bhuj, District Kuchchh by M/s Balkrishna Industries Limited –Terms of Reference- reg. [IA/GJ/IND2/63420/2017, IA-J-11011/162/2017-IA-II(I)]</b></p> <p>The Project Proponent and the accredited consultant M/s. Kadam Environmental Consultants, gave a detailed presentation on the salient features of the project &amp; informed that:</p> <ul style="list-style-type: none"> <li>i. The proposal is for Addition of Carbon black Manufacturing facility in existing plant at Village Paddhar, Taluka Bhuj, District Kuchchh by M/s Balkrishna Industries Limited.</li> <li>ii. All Petrochemical products and petrochemical based processing such as production of carbon black and electrode grade graphite (processes other than cracking &amp; reformation and not covered under the complexes) industries located outside the notified industrial area/ estate are listed at S.N. 5(e) 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. PP have obtained EC vide letter no. SEIAA/GUJ/EC/1(d)/71/2012; dated 20<sup>th</sup> March 2012 for 20 MW Captive Power Plant unit for M/s. <u>Balkrishna Industry Limited.</u></li> <li>iv. Existing land area is 1212560 m<sup>2</sup>, out of which 873508 m<sup>2</sup> is already utilised for existing plant (i.e. Tubes, Tyre and Captive power plant) and 133488 m<sup>2</sup> will be developed for proposed expansion (i.e Carbon Black Plant). Industry plans to developed Greenbelt &amp; plantation in an area of 33 % i.e. 400144 m<sup>2</sup> out of 1212560 m<sup>2</sup>of area of the project. Industry already developed Greenbelt &amp; Plantation (as on date May 2017) in an area of 1,56,049 m<sup>2</sup> and plan to developed Green belt in an area 91,490 m<sup>2</sup> in current monsoon period (2017) and rest area equivalent to 1,53,000 m<sup>2</sup> in next monsoon period after completion of construction activities of Carbon Plant.</li> <li>v. The estimated project cost is Rs 2879.56 Crores (2759.56 crore for Existing Tire &amp; CPP as on Sept 2016 + 120 Crores for Carbon Plant) including existing investment of Rs 2879.56 Crore for existing Tire &amp; CPP. Total capital cost earmarked towards environmental pollution control measures is Rs 56.78 Crore (41.78 Crore for Existing Tire &amp; CPP + 15 Crore for Carbon Plant) and the Recurring cost (operation and maintenance) will be about Rs144 Lac per annum + 108 Lacs per Annum of Carbon Black plant.</li> <li>vi. Existing Employment is 4000 for Tire &amp; CPP. For proposed Carbon Black Plant additional employment will be ~120 during operational phase and ~300 during construction phase. Industry proposes to allocate Rs 3 crores @ of 2.5 % towards</li> </ul>

Corporate Social Responsibility.

- vii. no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Ghada Reserve Forest ~7.4 km in W, Kalitala Reserve Forest ~2.76 Km in NW, Chapreli Reserve Forest 5.22 Km in NNW, Napada Reserve Forest ~5.44 Km in N, HabaiRakhal Reserve Forest ~9.37 Km in NW, KashRakhal Reserve Forest ~8 Km in NNE, Syedpur Reserve Forest ~4 Km in S, Nigal Reserve Forest ~8 Km in SSE direction and Paddhar Pond ~2.65 km in W, Mamura Pond ~3.15 km in NNE direction, Dhaneti Pond ~5.64 km in ENE direction, Ratnal Pond ~7.26 Km in SSE direction, Wadvala Stream ~2 in ESE, Pur River ~9.5 km WNW and Sana River ~6.5 km in NE direction are located within 10 km distance from the project site.
- viii. Ambient air quality monitoring has been carried out at 8 locations from March-May, 2017.
- ix. Total water requirement is 8030 m<sup>3</sup>/day of which fresh water requirement of 6930 m<sup>3</sup>/day and will be met from Gujarat Water Infrastructure Limited (GWIL) and 1100 m<sup>3</sup>/day will be reused in process after treatment at ETP and Zero Liquid Discharge System.
- x. Existing wastewater generation is 1757 KLD (1237 KLD industrial + 520 KLD Domestic). For proposed Carbon Black plant wastewater generation will be 280 KLD (260 KLD Industrial + 20 KLD Domestic). So, after proposed expansion total wastewater generation will be 2037 KLD (1497 KLD Industrial + 540 KLD Domestic). Capacity of existing ETP is 1320 KLD and existing STP is 600 KLD. Capacity of proposed ETP will be 300 KLD and STP will be 25 KLD.
- xi. Power requirement after expansion will be 23.5 MW including existing 18 MW for existing Tire & CPP will be met from 20 MW CPP and Paschim Gujarat State power distribution corporation limited (PGSPDCL) (Sanction Load is 7.5 MVA). Existing unit has 4 DG sets, 2 of 250 KVA, 1 of 2000 KVA and 1 of 4.2 MW capacities as stand by. No additional DG sets will be required for proposed Carbon Black plant.
- xii. Existing unit has Boiler-1 (20TPH) Coal fired with ESP, Boiler-2 (2.8 TPH) FO fired, Boiler-3 & 4 (66 TPH each) for Power plant Indigenous Coal/Imported Coal, Lignite Fired with ESP, Boiler-5 (20TPH) Coal fired with ESP, Boiler-6 (1.5 TPH) FO fired. Proposed Carbon Black plant will have Boiler-7 (85 TPH) Offgas fired, Boiler-8 (55 TPH) Offgas fired, 5 No. of Waste heat Boilers (2.5 TPH each).
- xiii. Existing Process Emission is from 8 No. of Mixer units attached with Bag filters and 1 No. of Coal crusher house attached with Bag filters. For Proposed carbon black plant, process emission will be from 1 No. of Vapor Bag Collector attached with Bag filters and 1 No. of Pneumatic Carbon Conveying System attached with Bag filters in each line of production (3 line of production are proposed).
- xiv. Details of Solid waste/ Hazardous waste generation and its management.

S. No.	Type of Waste	Hazardous Waste Category as per 2016	Quantity per Year			Source	Method of Collection	Treatment / Disposal
			Existing (as CCA & NOC)	Proposed	Total			
1	ETP Chemical	33.2	1450 MT	60 MT	1510 MT	ETP	Bag / Drum	TSDf

	Sludge							
2	Paint Waste & Residue	21.1	120 Kg	0	120 Kg	Paint Both	Bag Drum /	TSDf
3	Oily Cotton Waste	33.2	6 MT	1 MT	7 MT	All Plant	Bag Drum /	TSDf
4	Spent / Used Oil	5.1	371 MT	50 MT	421 MT	All Plant	Drum	Sell to registered recycler
5	Discarded Container & Barrel	33.1	400 MT	25 MT	425 MT	All Plant	NA	

xv. PP has submitted the EC compliance report certified by RO, MoEF&CC vide letter no. 18-A-126/2012(SEAC)/290 dated 15<sup>th</sup> May 2017

xvi. The existing and proposed products are :

Existing Product

S. No.	Products	Quantity (TPA)
1.	Tyre and tubes	10000 MT/Month
2.	CPP	20 MWH

Proposed Products

S. No.	Products	Quantity (TPA)
1.	Carbon Black	11500 MT/Month

EAC has deliberated on the proposal. EAC noted that the certified compliance submitted by the PP is satisfactory. EAC has also considered the request of the PP for utilization of baseline data collected during March- May, 2017 for preparation of EIA/EMP report, considering the upcoming monsoon season.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR along with public hearing, for preparation of EIA/EMP report.**

**Additional ToR**

- i. A plan for implementation of Zero Liquid Discharge system shall be submitted.
- ii. A layout plan earmarking space for Green belt along the periphery of the plant with perennial trees, which can control/reduce the pollutant from the project, shall be submitted. Trees shall be selected as per CPCB norms.
- iii. Atleast 5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.
- iv. PP shall reduce the water requirement in the process and submit a revised water revised water balance plan.
- v. PP shall treat the waste water and reuse.
- vi. Public hearing has to be conducted as per the provisions of EIA Notification, 2006.

vii. The compliance status report shall be obtained from concerned Regional Office, MoEFCC for exiting EC.

**24.6.21 A Expansion of Organic Chemicals Manufacturing in Existing Inorganic Chemicals Manufacturing Unit (850 MTPM to 885 MTPM) at Plot no. 3003, Phase-III, GIDC Estate, Panoli, Ankleshwar, Dist. Bharuch, Gujarat by M/s. D Y Industries –Terms of Reference-reg. [IA/GJ/IND2/62870/2017, IA-J-11011/163/2017-IA-II(I)]**

The Project Proponent and their consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd., gave a detailed presentation on the salient features of the project & informed that:

- i. The proposal is for Expansion of Organic Chemicals Manufacturing in Existing Inorganic Chemicals Manufacturing Unit (850 MTPM to 885 MTPM) at Plot no. 3003, Phase-III, GIDC Estate, Panoli, Ankleshwar, Dist. Bharuch, Gujarat by M/s. D Y Industries.
- ii. All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category ‘B’ but due to the applicability of general condition (located within 5 km distance of the Critically Polluted Area), it is considered under Category ‘A’ and is appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. Existing land area is 1000 m<sup>2</sup>. Industry will be develop greenbelt in an area of 30% i.e. 300 m<sup>2</sup> out of 1000 m<sup>2</sup> of area of the project. The total cost of the project after proposed expansion will be around Rs. 2.0 Crores. Total employment will be 15 persons as direct & 10 persons indirect for proposed project. Industry purposes to allocate Rs. 2.5 Lac @ 2.5 % towards Corporate Social Responsibility.
- iv. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 5 km distance. Narmada River is flowing at a distance a distance of 13 km in N direction.
- v. Ambient air quality monitoring is carried out at 8 locations during March-2017 to May-2017.
- vi. Total water requirement will be 17.21 KL/Day; which will be met through GIDC Water Supply. Total 5.60 KL/Day (3.30 KL/Day Industrial + 2.30 KL/Day domestic) of effluent shall be treated in ETP and then sent to CETP, Panoli (M/s. PETL) for further treatment.
- vii. Power requirement will be 196 HP (Existing: 71 HP & Proposed: 125 HP) and will be met from DGVCL.
- viii. Existing unit has Thermic Fluid Heater (1.0 lac kcal/hr). Unit has proposed boiler (1.0 TPH).
- ix. The list of existing & proposed products are :

Sr. No	NAME OF PRODUCTS	Existing Quantity (MT/Month)	Proposed Quantity (MT/Month)	Total After Proposed Expansion Quantity (MT/Month)
<b>Inorganic Products</b>				
1	Copper Sulphate	850.00	0.00	850.00
2	Potassium Sulphate			
3	Mono Ammonium Phosphate			
4	Sodium Nitrate			
<b>Organic Products</b>				

1.	Theobromine	0.00	10.00	10.00
2.	MetaBromo Anisol	0.00	25.00	25.00
3.	Chlorhexidine			
4.	Chlohexidine Digluconate			
5.	Chlorhexidine Diacetate			
6.	Chlorhexidin Hydrochloride			
7.	3- Chloropropiophenone			
8.	Tetra Butyl Ammonium Bromide			
9.	Tetra Butyl Ammonium Chloride			
10.	Tetra Butyl Ammonium Hydrogen Sulphate			
11.	Tetra Butyl Ammonium Iodide			
12.	Tetra Butyl Ammonium Fluoride Trihydrate			
13.	N-Butyl Bromide			
14.	N- Propyl Bromide			
15.	Bis-2- chloro ethyl amine hydrochloride			
16.	2-Nitro 4- ThicynoAniline			
<b>TOTAL</b>		<b>850.00</b>	<b>35.00</b>	<b>885.00</b>

EAC has deliberated on the proposal. EAC noted the project is located in the Industrial area. EAC has considered the request of the PP regarding collection of baseline data from March-May, 2017.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional, for preparation of EIA/EMP report.**

**Additional ToR**

- i. A layout plan earmarking space for development of Green belt of atleast 5 m width along the periphery of the plant with trees which can control/reduce the pollutant from the project shall be submitted. Trees shall be selected as per CPCB norms.
- ii. Atleast 5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.
- iii. Chemical name of the product with CAS No. number and the actual end use shall be provided.
- iv. Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.
- v. PP shall submit plan for plantation of 1000 trees/year for a period of 5 year in nearby villages in consultation with local/forest authorities.

24.6.21 B	<p><b>Expansion of Additional two storage tanks (2000 KL capacity each) at IOCL, Delhi Terminal, Bijwasan, New Delhi by M/s Indian Oil Corporation Limited –Terms of Reference-reg.[IA/DL/IND2/64268/2017, IA-J-11011/255/2017-IA-II(I)]</b></p> <p>The Project Proponent and accredited consultant M/s. Eco Chem Sales and Services, gave a</p>
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detailed presentation on the salient features of the project & informed that:

- i. The proposal is for Expansion of Additional two storage tanks (2000 KL capacity each) at IOCL, Delhi Terminal, Bijwasan, New Delhi by M/s Indian Oil Corporation Limited.
- ii. All the Isolated Storage & Handling of Hazardous chemicals Projects (as per threshold planning quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules 1989 amended 2000) are listed at S.N 6 (b) of schedule of environmental impact assessment (EIA) notification under category 'B'. However, due to the general condition (location of interstate boundary within 5 km distance), the project has been considered under category 'A' and appraised at Central level by Expert Appraisal Committee (EAC).
- iii. Existing land area is 287327 m<sup>2</sup>. No additional land will be acquired for proposed expansion, as expansion is within the site. Industry has already developed Greenbelt in an area of 16721 m<sup>2</sup> out of 287327 m<sup>2</sup> of area of the project.
- iv. The estimated project cost is Rs 9.96 Cr.
- v. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Sahibi River (Najafgarh drain) is flowing at a distance of 4.5 km in West direction.
- vi. Total water requirement is 50 m<sup>3</sup>/day and will be met from tankers. Water is required only for gardening and domestic purpose. No additional water required after proposed expansion.
- vii. It is a zero liquid discharge unit as the terminal is providing only storage and handling services, there will be no generation of industrial effluent. Domestic waste water of 20 m<sup>3</sup>/day will be disposed off in soak pit through septic tank.
- viii. Power requirement for the terminal is 1.15 MW (Existing 1.15 MW + Proposed Nil) supplied by BSES through a 6.6/0.415 KV Transformer. As a backup plan during emergency, terminal equipped with 02 Nos. of 750 KVA & 01 No. of 500 KVA DG Sets. Stack (height 7 meters) is provided as per CPCB Norms to the existing DG Set of 2 x 750 KVA & 1 x 500 KVA. There is no additional power requirement for proposed expansion and additional DG Set will not be proposed.
- ix. Details of Solid waste/ Hazardous waste generation and its management.

S. No.	Hazardous Waste	Hazardous Waste Category	Quantity per Annum			Management
			Existing	Proposed	Total	
1	Used Oil	5.1	60 liters	0.00	60 liters	Disposed to authorized agency
2	Tank cleaning Sludge	3.3	0.6 MT	0.02 MT	0.62 MT	Internal Bio-remedial

- x. The terminal is providing only storage and handling services, Details of storage & handling for existing and additional products/ Hazardous chemicals are given as below:

Material	Existing	Additional	Total
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		Storage Capacity (KL)	No. of Storage Tanks	Storage Capacity (KL)	No. of Storage Tanks	Storage Capacity (KL)	No. of Storage Tanks
HSD		11000	1	-	-	42396	4
		13791	1	-	-		
		10805	1	-	-		
		6800	1	-	-		
MS		9163	1	-	-	31952	4
		8827	1	-	-		
		6981	2	-	-		
SKO		8385	2	-	-	13615	3
		5230	1	-	-		
LDO		5200	1	-	-	5200	1
ATF		16220	2	-	-	62072	6
		8655	1	-	-		
		7194	1	-	-		
		9783	1	-	-		
		4000	1	-	-		
EMPTY		180	2	-	-	360	2
93-OCTANE		180	1	-	-	180	1
ETHANOL		938	2	2000	2	5876	4
Total		166036	23	4000	2	170036	25

EAC has deliberated on the proposal. EAC noted that adequate space as per the norms are not available as per the layout plan. EAC also noted that the green belt and green cover area need to be clearly earmarked the plan.

**EAC after detailed deliberation has deferred the proposal for want of revised layout plan clearly marking the storage tank area, green belt and green cover area along with all the other facilities in the site.**

24.6.22 **Modification & Expansion of Bulk Drug and Intermediates Unit located at Plot No.94&95(P), KIADB Industrial Area, Humnabad Taluk, Bidar District, Karnataka by M/s Lakshmidurga Drugs & Intermediates Pvt. Ltd. reg. TOR [IA/KA/IND2/64896/2017, IA-J-11011/260/2017-IA-II(I)]**

The PP was not present for the meeting. EAC noted that the project falls in the violation category and opined that the PP may apply for consideration by EAC dealing with violation case.

## 24.7 Any other

24.7.1 **Sodium Cyanide & other Cyanide based products at plot no. 26-37, 54-57, 122, 143,**

	<p><b>Village Asnabad, Tehsil Olpad, District Surat, Gujarat by M/s Hindusthan Chemicals Company (Formerly known as M/s Cyanide &amp; Chemicals Company)- Regarding amendment in EC. [IA/GJ/IND2/42271/2014, J-11011/466/2011-IA-II(I)]</b></p> <p>The project proponent and their consultant M/s Green Circle, Inc., made a detailed presentation on the project.</p> <p>EAC noted that the PP has already constructed facilities for the proposed project, without intimation/prior permission from the Ministry.</p> <p><b>EAC after detailed deliberation has deferred the proposal and noted that the project falls in the violation category and suggested the PP to apply for consideration by EAC dealing with violation case.</b></p>												
24.7.2	<p><b>Expansion of Synthetic Organic Chemicals Manufacturing Unit at Village Ukharal, Tehsil Ghogha, District Bhavnagar, Gujarat by M/s Medinex Specialty Chemicals Pvt. Ltd – reg. Amendment in EC.[ IA/GJ/IND2/64531/2015, J-11011/351/2012-IA II(I)]</b></p> <p>The project proponent made a presentation on the proposal and requested for amendment in EC as below:</p> <ol style="list-style-type: none"> <li>The existing unit is operating with EC letter dated J-11011/351/2012-IA.II(I) dated 14.08.2015. In the specific conditions of the EC letter, DG sets are mentioned. PP informed that unit has installed solar power plant at terrace and there is no DG set.</li> <li>The fresh water requirement in the letter is 5 m<sup>3</sup>/day and as per EIA it is 4.915 m<sup>3</sup>/day.</li> </ol> <p>EAC has deliberated on the proposal. EAC noted that, if DG sets are not installed in the project, the condition may be treated as not applicable. EAC has considered the rounded figure for the water requirement while recommending for EC.</p> <p><b>EAC after detailed deliberation has suggested that there is no need of amendment in the existing EC, as clarified above.</b></p>												
24.7.3	<p><b>Proposed expansion of Chemicals unit at plot no. 2 &amp; 3, Village Ukharala, District. Bhavnagar, Gujarat by M/s Medinex Laboratories Pvt. Ltd.- reg. amendment in EC.[ A/GJ/IND2/28782/2012, J-11011/352/2012-IA-II(I)]</b></p> <p>The project proponent made a detailed presentation on the proposal and informed the following:</p> <ol style="list-style-type: none"> <li>The proposal is for amendment in the EC issued vide Ministry’s letter no. J-11011/352/2012-IA (I) dated 10.11.2016.</li> <li>The PP proposed for following amendment in the EC conditions:</li> </ol> <table border="1" data-bbox="386 1570 1403 1919"> <thead> <tr> <th>Condition no.</th> <th>EC Condition</th> <th>Amendment required</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>3.0</td> <td>.....Out of which fresh water requirement will be 8.784 m<sup>3</sup>/day.....</td> <td>Out of which fresh water requirement will be 13.654 m<sup>3</sup>/day</td> <td>EIA Page no. 2-36</td> </tr> <tr> <td></td> <td>....Treated effluent will be evaporated through MEE.....</td> <td>...Treated effluent after conforming to the prescribed standards shall be reused for green belt development within</td> <td>EIA Page no. 2-37</td> </tr> </tbody> </table>	Condition no.	EC Condition	Amendment required	Remarks	3.0	.....Out of which fresh water requirement will be 8.784 m <sup>3</sup> /day.....	Out of which fresh water requirement will be 13.654 m <sup>3</sup> /day	EIA Page no. 2-36		....Treated effluent will be evaporated through MEE.....	...Treated effluent after conforming to the prescribed standards shall be reused for green belt development within	EIA Page no. 2-37
Condition no.	EC Condition	Amendment required	Remarks										
3.0	.....Out of which fresh water requirement will be 8.784 m <sup>3</sup> /day.....	Out of which fresh water requirement will be 13.654 m <sup>3</sup> /day	EIA Page no. 2-36										
	....Treated effluent will be evaporated through MEE.....	...Treated effluent after conforming to the prescribed standards shall be reused for green belt development within	EIA Page no. 2-37										



			premises or evaporated through forced evaporator.....	
	EAC has deliberated on the proposal. <b>EAC after detailed deliberation has recommended the proposal for amendment in the EC condition.</b>			
24.7.4	<p><b>Expansion approval for manufacture of Carbon Black (From 12500 MTPM to 18750 MTPM) along with Power Plant (From 33.7 MW to 47 MW) at K-16, Phase II, SIPCOT Village Pappankuppam, Gummidipoondi, district Tiruvallur, Tamil Nadu by M/s SKI CARBON BLACK INDIA PVT LTD UNIT-reg. Amendment in EC [IA/TN/IND/4429/2011, J-11011/350/2010-IA.II(I)]</b></p> <p>The project proponent made a detailed presentation on the proposal and informed the following:</p> <ol style="list-style-type: none"> <li>The PP has obtained EC for the unit vide Ministry's letter no. J-11011/350/2010-IA.II(I)] dated 21<sup>st</sup> September, 2011.</li> <li>PP now proposes to replace the existing stack for Line 1, 2 Boilers with separate stacks.</li> <li>PP has requested for amendment in EC conditions accordingly to facilitate the same.</li> </ol> <p>EAC has deliberated on the proposal. EAC noted that due to the proposed replacement, there will not be any change in production and the proposal can also be considered in the safety point of the unit.</p> <p><b>EAC after detailed deliberation has recommended the project for amendment in the existing EC with the following conditions:</b></p> <ol style="list-style-type: none"> <li>As proposed PP shall replace the existing stack for Line 1, 2 Boilers with separate stacks.</li> <li>All the other conditions in the existing EC shall remain the same</li> </ol>			

**16<sup>th</sup> June, 2017 (Day-3)**

**24.8 (Environmental Clearance)**

24.8.1	<p><b>Ammonia- 2200 MTPD and Urea- 3850 MTPD Fertilizer Project at Barauni, Dist-Begusarai, Bihar by M/s Hindustan Urvarak and Rasayan Limited (HURL)- reg EC [IA/BR/IND2/61377/2016, J- 11011/371/2016-IA.II(I)]</b></p> <p>The Project Proponent and the NABET accredited Consultant M/s. Projects &amp; Development India Ltd., made a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>Proposal is for Ammonia- 2200 MTPD and Urea- 3850 MTPD Fertilizer Project at Barauni, Dist-Begusarai, Bihar by M/s Hindustan Urvarak and Rasayan Limited (HURL)- reg EC[IA/BR/IND2/61377/2016, J- 11011/371/2016-IA.II(I)]</li> <li>The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 18<sup>th</sup> EAC meeting held during 23<sup>rd</sup> to 25<sup>th</sup> January 2017 and recommended Terms of References ( TORs) for the Project. The TOR has been issued by Ministry vide letter no. J- 11011/371/2016-IA.II(I) dated 29.04.2017.</li> <li>All Chemical Fertilizer units are listed at S.N. 5(a) under category 'A' and appraised at Central level.</li> </ol>
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	<p>iv. Existing land area 480 acres shall be used, no additional land will be used / acquired for proposed project.</p> <p>v. Industry will develop Greenbelt in an area of 33 % i.e., 130 acres out of 350 acres of area of the project.</p> <p>vi. The estimated project cost is Rs. 5825.27 Crore environmental pollution control measures is Rs. 200 crore and the Recurring cost (operation and maintenance) will be about Rs. 5 crore per annum.</p> <p>vii. Total Employment will be 400 persons as direct and 1500 persons indirect during construction &amp; operation.</p> <p>viii. Industry proposes to allocate Rs. 300 crore @ 2.5 % towards Corporate Social Responsibility</p> <p>ix. It is reported that as per form-1, no National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies 10 km distance. Ganga river is flowing at distance of 4 kms in SW direction.</p> <p>x. Ambient air quality monitoring was carried out at 08 locations during 01.10.2016 to 31.12.2016 and submitted base line data indicates that ranges of concentrations of PM10 (42 to 120 µg/m<sup>3</sup>), PM2.5 (32 to 75 µg/m<sup>3</sup>), SO<sub>2</sub> (9.8 to 34.2 µg/m<sup>3</sup>) and NO<sub>2</sub> (13.2 to 34.4 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 2.06 µg/m<sup>3</sup>, &lt;1 µg/m<sup>3</sup> and &lt;1 µg/m<sup>3</sup> with respect to PM10, Sox and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).</p> <p>xi. Total water requirement at present is 26400 m<sup>3</sup>/day of which pre-treated water requirement of 20664m<sup>3</sup>/day @ 861 m<sup>3</sup>/Hr (5.4 m<sup>3</sup>/Ton of Urea) for the subject project and will be met from River Ganga or Ground water.</p> <p>xii. Treated effluent of 150 m<sup>3</sup>/hr shall be treated through proposed Effluent Treatment Plant. Plant will be based on zero liquid discharge system.</p> <p>xiii. Power requirement will be 23 MW and will be met from GTG (2x15 MW ISO rating). Proposed unit shall have 1(One) DG sets of 2000 KVA capacity and are used as standby during power failure.</p> <p>xiv. Stack (height- 8.5 m ) will be provided as per CPCB norms to the proposed DG sets of 2000 KVA in addition to the existing DG sets of nil which will be used as standby during power failure .</p> <p>xv. Generation of PM &amp; SO<sub>2</sub> is negligible as NG is used as fuel having Sulphur content &lt;10ppm</p> <p>xvi. NO<sub>x</sub> Emission shall be reduced by installation of low NO<sub>x</sub> burner and conc. of &lt;1 µg/m<sup>3</sup> shall be added to GLC.</p> <p>xvii. Only spent catalyst and spent resin, are the solid wastes generated from Ammonia-Urea Plant.</p> <p>xviii. Public Hearing for the proposed project has been conducted by the Gujarat Pollution Control Board on 29.04.2017.</p> <p>xix. Status of Litigation Pending against the proposal, if any. – Nil.</p> <p>xx. Following are the list of proposed products and their Capacities</p>
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Sl.No.	Products	Quantity(TPA)
1.	Ammonia (Intermediate product)	2200 MTPD / 726000 TPA
2.	Urea (Neem Coated)	3850 MTPD / 1270500 TPA

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding discharge of waste water, education of local children in DAV School, Medical facility, drinking facility, school building, and etc. EAC noted that the PP has addressed the issue in the EIA/EMP report. The EAC also noted that PP has collected baseline data during October, 2016 to December, 2016 i.e. prior TOR application. Due to importance of the project for national need, the EAC accepted the baseline data collected by PP.

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

- (i) Adequate stack height shall be provided to DG sets.
- (ii) Scrubbers shall be provided to all emissions sources.
- (iii) Fresh water requirement shall not exceed 5.36 m<sup>3</sup>/ ton of Urea production. Fresh water shall be sourced only from River Ganga. During construction Ground water shall be used. Prior permission shall be obtained by the concerned authority.
- (iv) As proposed, no effluent from plant shall be discharged outside the plant premises and Zero discharge shall be adopted. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- (v) Industry shall develop Greenbelt in an area of 33 % i.e., 130 acres out of 350 acres of area of the project. 30 m wide green belt around periphery of the plant shall be provided.
- (vi) 5000 trees per year in 5 year shall be planted in nearby villages with the consultation of the villagers. Survival rate of plants shall be reported to RO, MoEF&CC in 6 monthly compliance report.
- (vii) All the commitments made during the Public Hearing/Public Consultation meeting held on 29.04.2017 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.
- (viii) At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner. Besides, Multi specialty hospital shall be operated in nearby area. Existing school shall continue with upgradation in terms of modern educational facilities.
- (ix) A regular environment manager having post graduate qualification in environmental sciences/ environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.
- (x) 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.
- (xi) 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.
- (xii) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xiii) Storage of hazardous raw material shall not exceed more than 7 days.
- (xiv) Urea dust shall be controlled by prescribed standard technique.
- (xv) In Urea Plant, particulate emissions shall not exceed 50 mg/Nm<sup>3</sup>. Monitoring of

	<p>Prilling Tower shall be carried out as per CPCB guidelines.</p> <p>(xvi) Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R. No. 826(E) dated 16th September, 2009. The levels of PM10 (Urea dust), 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 SPCB.</p> <p>(xvii) 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 SPCB.</p> <p>(xviii) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2016 and amended as on date for management of Hazardous wastes. Measures shall be taken for fire fighting facilities in case of emergency.</p> <p>(xix) Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, 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>
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### Reconsideration of EC

24.8.2	<p><b>Proposal of expansion of Oil Terminal at Jasidih Industrial area, Jasidih, Deoghar, Jharkhand by M/s IOCL.–reconsideration of EC- [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> and 19<sup>th</sup> meeting of the EAC (Industry-2) held during 26-27<sup>th</sup> October, 2016 and 6-7<sup>th</sup> February, 2017. Wherein the EAC noted 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>Now, the PP has again submitted the CCR duly certified by the RO, MoEF&amp;CC issued vide dated 8<sup>th</sup> May, 2017 from RO, MoEF&amp;CC, Ranchi. The EAC deliberated on the certified compliance report submitted by the RO, MoEF&amp;CC, Banaglore and found that RO has raised 7 non compliance points (4 specific conditions and 3 general conditions). Against which PP need to submit copy of permission for ground water withdrawal from CGWB immediately and action taken report on non compliance points raised by RO MoEF&amp;CC. EAC was of the view that Certified compliance report is not satisfactory.</p> <p>After critical examination EAC deferred the proposal for want of above mentioned additional information.</p>
24.8.3	<p><b>Expansion of Specialty Chemicals Manufacturing Unit at Plot No.E-7 &amp; E-8, MIDC Chincholi, TalukaMohol, District Solapur, Maharashtra by M/s Balaji Amines Ltd.-reg. Reconsideration of EC { IA/MH/IND2/29191/2015 , J-11011/195/2015-IAI (I)}</b></p>

Project was considered in 22nd EAC meeting held during 17<sup>th</sup>-18<sup>th</sup> April, 2017. During presentation the EAC was noted that product list that mentioned in the EIA report is not matching with the product list as mentioned in TOR letter. The EAC suggested to PP to submit the product list as mentioned in the TOR letter.

Now PP has submitted the product list as mentioned in the TOR letter.

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

- (i) The environmental clearance is subject to obtaining prior clearance from forestry and wildlife angle including clearance from the Standing Committee of the National Board for Wildlife as applicable. Grant of environmental clearance does not necessarily implies that Forestry and Wildlife Clearance shall be granted to the project and that their proposals for forestry and Wildlife Clearance will be considered by the respective authorities on their merits and decision taken. The investment made in the project, if any, based on environmental clearance so granted, in anticipation of the clearance from wildlife angle shall be entirely at the cost and risk of the project proponent and Ministry of Environment, Forest & Climate Change shall not be responsible in this regard in any manner.
- 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) Process emissions shall be controlled by essential scrubbers. To control particulate matter, bag filter shall be installed.
- iii) The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- iv) Ambient air quality data shall be collected as per 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).
- v) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- vi) Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.
- vii) As proposed, no effluent from plant shall be discharged outside the plant premises and Zero discharge shall be adopted. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- viii) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water

	<p>drain shall be passed through guard pond.</p> <ul style="list-style-type: none"> <li>ix) 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>x) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2016 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.</li> <li>xi) 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>xii) 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>xiii) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</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.</li> <li>xvi) Industry shall develop Greenbelt in an area of 33 %. 10 m wide green belt around periphery of the plant shall be provided.</li> <li>xvii) The by-products which fall under the purview of the Hazardous Waste Rules, be handled as per the provisions of the said Rules and necessary permissions shall be obtained under the said rules.</li> </ul>
24.8.4	<p><b>Setting up of technical grade pesticide (4800 MTPA) at Plot No. C-6, 7 &amp; 8 UPSIDC Industrial Area, Phase-2, Gajraula, J.P.Nagar, Uttar Pradesh by M/s Best Crop Science LLP– reg reconsideration of EC. [IA/UP/IND2/54796/2016, J-11011/165/2016- IA II(I)]</b></p> <p>The Member Secretary informed the EAC that the proposal was earlier considered in the 23<sup>rd</sup> meeting of the EAC (Industry-2) held during 3<sup>rd</sup>-5<sup>th</sup> May, 2017. Wherein the EAC deferred the proposal for want of following additional information.</p> <ul style="list-style-type: none"> <li>i. Despite the best safety devices installed in the plant and the safety practices in place, minor and major accidents do occur. In such a situation contamination of soil and water is a matter of serious concern. High polluting industries and also highly toxic industries such as pesticides need second thought before according EC and thus suggested to undertake site suitability study of the area.</li> <li>ii. Alternate site analysis has to be conducted. PP may prefer other industrial areas keeping safe distance from rivers and eco-sensitive locations.</li> <li>iii. Chemical name of the product with CAS No. number and the actual end use shall be provided. Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.</li> <li>iv. PP shall verify the product list with list as appraised by the EAC during TOR.</li> </ul>

- v. In principle permission from the local government authorities and concerned State Government Department for setting up of the proposed industry in the currently proposed site.

Now, the PP has submitted the alternate site analysis report, site suitability study of the area, Chemical name of the product with CAS No. number and the actual end use, Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products. PP has also submitted the copy of permission from the local government authorities and concerned State Government Department for setting up of the proposed industry in the currently proposed site.

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

- i) National Emission Standards for Pesticide Manufacturing and Formulation Industry issued by the Ministry vide G.S.R. 46(E) dated 3<sup>rd</sup> February, 2006 and amended time to time shall be followed by the unit.
- ii) Rice husk/ Briquettes shall be used as boiler fuel.
- i) In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored and records maintained. The emissions shall conform to the limits stipulated by the SPCB.
- iii) For further control of fugitive emissions, following steps shall be followed :
  - (a) Closed handling system shall be provided for chemicals.
  - (b) Reflux condenser shall be provided over reactor.
  - (c) System of leak detection and repair of pump/pipeline based on preventive maintenance.
  - (d) The acids shall be taken from storage tanks to reactors through closed pipeline. Storage tanks shall be vented through trap receiver and condenser operated on chilled water.
  - (e) Cathodic protection shall be provided to the underground solvent storage tanks.
- iv) A proper Leak Detection and Repair (LDAR) Program for pesticide industry shall be prepared and implemented as per CPCB guidelines. Focus shall be given for prevention of fugitive emissions for which preventive maintenance of pumps, valves, pipelines are required. Proper maintenance of mechanical seals of pumps and valves shall be given. A preventive maintenance schedule for each unit shall be prepared and adhered to.
- v) Company shall take all the measures in order to protect the machineries and equipments for pesticide producing unit from ageing.
- vi) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- vii) Indoor monitoring shall be carried out twice a year.
- viii) Total fresh water requirement from ground water shall not exceed 97 m<sup>3</sup>/day and prior permission should be obtained from the CGWA/SGWA.
- ix) No effluent from the plant shall be discharged outside the factory premises and 'Zero' effluent discharge concept shall be followed.
- x) Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and

	<p>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. To prevent bypassing of effluent during non-operation of ETP, software controlled interlocking facility should be provided on the basis of real time data from the plant control system.</p> <ul style="list-style-type: none"> <li>xi) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.</li> <li>xii) The company should obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2016 and amended as on date for management of Hazardous wastes and prior permission from GPCB should be obtained for disposal of solid / hazardous waste in the TSDF. Measures should be taken for fire fighting facilities in case of emergency.</li> <li>xiii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.</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 norms.</li> <li>xv) Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.</li> <li>xvi) All the commitments made to the public during the Public Hearing/Public Consultation meeting held on 10th April 2017 should be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office.</li> <li>xvii) Green belt over 33 % area shall be developed within plant premises with at least 3 to 5 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.</li> <li>xviii) 25000 plants shall be planted in five years in nearby identified villages. Survival rate of plants shall be reported to Regional Office of the Ministry in 6 monthly compliance report.</li> <li>xix) At least 2.5 % of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Lucknow. Implementation of such program should be ensured accordingly in a time bound manner within 5 years. Following activities shall be taken up in this regard: <ul style="list-style-type: none"> <li>a. Supply of safe drinking water with RO Plant in within 3 km range of the plant. Maintenance cost of RO plant shall be beared by the project authorities.</li> <li>b. Solar lights on the road in the villeges within 3 km range of the plant.</li> <li>c. Regular medical check up of villegers minimum twice in a year within 3 km range of the plant. The medical report shall be submitted to Regional office, MoEFCC in 6 monthly compliance report.</li> </ul> </li> <li>xx) 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.</li> </ul>
24.8.5	<p><b>Expansion of Fertilizer Plant by adding Ammonia (2200 TPD) and Urea (3850 TPD) at Village Piprola/Kanth, Tehsil Sadar, District Shahjahanpur, Uttar Pradesh by M/s KRIBHCO Shyam Fertilizers Ltd. -</b></p> <p><b>The Member Secretary informed that the EAC has recommended the project for grant of</b></p>



	<p>Environmental clearance in its 3<sup>rd</sup> meeting held during 18<sup>th</sup>-19<sup>th</sup> January, 2016. Thereafter, during processing of the EAC recommendations in the Ministry decided on dated 17<sup>th</sup> May, 2016 that the PP should conduct public hearing.</p> <p>Now, the PP informed that Public hearing has been conducted on 20<sup>th</sup> February, 2017 and has submitted the proceedings of Public hearing. The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding storage of ammonia, effect on environment of proposed expansion, education and medical facility to the nearby villagers and employment generation. The Committee noted that issues have satisfactorily been responded by the project proponent.</p> <p>After detailed deliberations the EAC recommended to the Ministry for grant of Environmental Clearance with the following additional conditions.</p> <p>i) All the commitments made during the Public Hearing / Public Consultation meeting held on 20<sup>th</sup> February, 2017 should be satisfactorily implemented and adequate budget provision should be made accordingly.</p>
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#### 24.9 Terms of Reference (TOR)

24.9.1	<p><b>Expansion of Sugar Factory from 5000 TCD to 7500 TCD (increase by 2500 TCD) and 30 MW co-gen plant of M/s. Deshbhakt Ratnappa Kumbhar Panchganga Sahakari Sakhar Karkhana Ltd. (D.B.R.K. Panchganga S.S.K. Ltd.) leased unit of Shree Renuka Sugars Ltd., Ganganagar, Ichalkaranji, Tal.: Hathkanangale, Dist. Kolhapur, Maharashtra-reg. TOR [IA/MH/IND2/62894/2017, IA-J-11011/116/2017-IA-II(I)]</b></p> <p>The Member Secretary informed the EAC that the proposal was earlier considered in the 22<sup>nd</sup> meeting of the EAC (Industry-2) held during 17<sup>th</sup>-18<sup>th</sup> April, 2017. Wherein the EAC noted that as per Form - 1, this is an expansion case but PP could not produce the existing EC and compliance of existing EC. PP also did not present the green belt of existing EC.</p> <p>Now during presentation PP informed that existing unit of 5000 TCD sugar is operating since 1978. In this regard PP has submitted the copy of CTO issued by MPCB vide dated 8.11.2000. PP has also submitted the photographs of existing green belt.</p> <p>The additional information submitted by the PP was discussed in the EAC (Industry-2) and the Committee noted that existing unit is operating on valid CTO since 1978.</p> <p>After detailed deliberation the EAC prescribed the following Additional TOR in addition to standard TOR (refer Ministry's website) for preparation of EIA-EMP report:</p> <p><b>A. Additional TOR</b></p> <ol style="list-style-type: none"> <li>i. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.</li> <li>ii. Proper water reduction plan to be submitted.</li> <li>iii. A plan for implementation of ZLD concept to be submitted.</li> <li>iv. ESR plan @ 5% with implementation period 5 years to be submitted.</li> <li>v. Layout plan earmarking space for development of 10 m peripheral green belt.</li> </ol> <p>It was recommended that 'TOR' with Public consultation prescribed by the Expert Appraisal</p>
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	<p>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.</p>
24.9.2	<p><b>PROPOSED PROJECT OF PHARMACEUTICAL API'S AND ORGANIC SYNTHETIC CHEMICALS Of M/s. Punagri Organics and Lifesciences Pvt. Ltd. Plot No. 180, Near Sardar Chowk, Phase II, GIDC, Vapi – reg. TOR [IA/GJ/IND2/63871/2017, IA-J-11011/176/2017-IA-II(D)]</b></p> <p>The Project Proponent and the accredited consultant <u>M/s. ENPRO Enviro Tech &amp; Engineers Pvt. Ltd.</u>, made 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 project of Pharmaceutical API's and Synthetic Organic Chemicals at Vapi by M/s. Punagri Organics and Lifesciences Pvt. Ltd. and located at Plot No. 180, Near Sardar Chowk, Phase II, GIDC, Vapi.</li> <li>ii. All synthetic organic chemicals industry located in a notified industrial area/estate are listed at S.N. 5(f) under category 'B'. However, due to applicability of general condition i.e. Critically polluted areas as notified by the Central Pollution Control Board hence project is considered as category 'A' and appraised at Central level by Expert Appraisal Committee.</li> <li>iii. Proposed land area is 10556 Sq. m. Industry will be developed Greenbelt in an area of 33% (3483 m<sup>2</sup>) out of 10556 m<sup>2</sup> of area of the project.</li> <li>iv. The estimated project cost is Rs. 60 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 7 crores.</li> <li>v. Total Employment will be 120 Persons skilled / semi skilled / un-skilled workers from the local area.</li> <li>vi. It is reported that as per Form-1 No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. Lies within 10 km distance. Daman Ganga River is flowing at a distance of 3.42 km in SW direction.</li> <li>vii. Total Water Requirement is 320 m<sup>3</sup>/day (including domestic use) of which fresh water requirement of 117 m<sup>3</sup>/day and will be met from GIDC Water supply.</li> <li>viii. Treated effluent of Process, Boiler, Cooling and scrubbing will be treated through Effluent Treatment Plant will be based on Zero Liquid discharge system. Waste water generation will be 277 KL/Day (247 KL/Day Industrial + 30 KL/Day domestic). Waste water stream will be segregated as Concentrate stream (217 KLD, generated from process) and Dilute stream (30 KLD, generated from utility such as Boiler, Cooling and Washing). Concentrated stream shall be treated through Stripper and MEE system. MEE condensate and Dilute stream shall be treated in an Effluent Treatment Plant having primary and secondary treatment facility. This treated effluent shall be passed through RO system. The RO permeate (203 KLD) water shall be reused in plant. RO reject (33 KLD) shall be subjected to evaporation in MEE along with concentrated stream. Effluent treated in MEE shall be 250 KLD (217 KLD Process effluent+ 33 KLD RO Reject).</li> <li>ix. Power requirement for proposed project will be 800 KVA and it will be met from Dakshin Gujarat Vij Company Limited. (DGVCL).</li> <li>x. Proposed unit shall have Boiler (1 TPH), Hot air Generator and Thermopack (200000 Kcal/Hr). Natural gas shall be used as fuel and Stack with 20 m height and 150 mm diameter will be installed for each unit. Alkali Scrubber and water Scrubber will be used as Air Pollution Control System to control process emission.</li> <li>xi. Following are the list of products with Production Capacity:</li> </ol>

Proposed Product List:				
Sr. No.	Products		Max. Production Capacity of Each Product MT/ Month	Production Capacity MT/Month
<b>Group I</b>	<b>API's, Intermediates for API's &amp; derivatives</b>			
	<b>A</b>	<b>Anti-ulcer API's</b>		
		<b>(I) Prazole chlorides</b>		
		1 Omeprazole chloride <b>OR</b>	11	11
		2 Pantoprazole chloride <b>OR</b>	7	
		3 Rabeprazole chloride	8	
		<b>(II) Prazole Benzimidazoles</b>		
		1 2-Mercapto-5-methoxybenzimidazole <b>OR</b>	30	30
		2 5-Difluoromethoxy-2-mercaptobenzimidazole <b>OR</b>	7	
		3 2-Mercaptobenzimidazole	9	
		<b>(III) API's</b>		
		1 Omeprazole sulphide/Omeprazole salts <b>OR</b>	7	10
		2 Esomeprazole salts <b>OR</b>	3	
		3 Pantoprazole sulphide/Pantoprazole salts <b>OR</b>	10	
		4 Rabeprazolesulphide/Rabeprazole salts	10	
	<b>B</b>	<b>Anti depressant</b>		
		<b>(I) Intermediates</b>		
		1 5-Cyanophthalide <b>OR</b>	28	35
		2 Cyanodiol salts	35	
		<b>(II) API's</b>		
		1 Citalopram salts <b>OR</b>	10	10
		2 Escitalopram salts <b>OR</b>	4	
	<b>C</b>	<b>Beta Blocker</b>		
		<b>(I) Intermediates</b>		
		1 4-Hydroxycarbazole <b>OR</b>	14	20
		2 4-(2,3-epoxypropoxy)-carbazole <b>OR</b>	14	
		3 2-(2-Methoxy-phenoxy)-ethylamine <b>OR</b>	11	
		<b>(II) API</b>		
		1 Carvedilol <b>OR</b>	20	
	<b>D</b>	<b>Antiarrhythmic</b>		
		1 Lidocaine Hydrochloride <b>OR</b>	3	
	<b>E</b>	<b>Antianginal</b>		
		<b>(I) Intermediates</b>		

		1	N-(2,6-dimethyl-phenyl)-2-piparazinoacetamide <b>OR</b>	3
		2	3-(2-Methoxyphenoxy)-1,2-epoxypropane	2
	<b>(II)</b>	<b>API</b>		
		1	Ranolazinedihydrochloride <b>OR</b>	2
<b>F</b>	<b>Anti-convulsant</b>			
	<b>(I)</b>	<b>Intermediates</b>		
		1	Isobutylglutaric acid <b>OR</b>	10
		2	R-(-)-3-(Carbamoylmethyl)-5-methylhexanoic acid <b>OR</b>	4
	<b>(II)</b>	<b>API</b>		
		1	Pregabalin <b>OR</b>	3
<b>G</b>	<b>Muscle relaxant</b>			
		1	Metaxalone <b>OR</b>	3
<b>H</b>	<b>Anti HIV/AIDS</b>			
	<b>(I)</b>	<b>Intermediates</b>		
		1	3-Amino-2-chloro-4-methylpyridine <b>OR</b>	4
	<b>(II)</b>	<b>API</b>		
		1	Nevirapine <b>OR</b>	
<b>I</b>	<b>Lipid-lowering</b>			
	<b>(I)</b>	<b>Intermediates</b>		
		1	(4R-cis)-1,1-Dimethylethyl-6-Cyanomethyl-2,2-dimethyl -1,3-dioxane-4-acetate <b>OR</b>	2
		2	tert-butyl [(4R,6R)-6-aminoethyl-2,2-dimethyl-1,3-dioxan-4-yl]acetate <b>OR</b>	
	<b>(II)</b>	<b>API</b>		
		1	Atorvastatin <b>OR</b>	
<b>J</b>	<b>NSAID</b>			
	<b>(I)</b>	<b>Intermediates</b>		
		1	1-(4-Methylphenyl)-4,4,4-Trifluoro-Butane-1,3-Dione <b>OR</b>	7
		2	4-Hydrazinobenzene-sulfonamide hydrochloride <b>OR</b>	7
	<b>(II)</b>	<b>API</b>		
		1	Celecoxib <b>OR</b>	10
<b>K</b>	<b>Anti-diabetic</b>			
	<b>(I)</b>	<b>Intermediates</b>		
		1	(S)-1-(2-chloroacetyl)pyrrolidine-2-carbonitrile <b>OR</b>	8
	<b>(II)</b>	<b>API</b>		
		1	Vildagliptine <b>OR</b>	9
<b>L</b>	<b>Anti-histamine</b>			
	<b>(I)</b>	<b>Intermediates</b>		

			1	2-Chlorobenzimidazole <b>OR</b>	10	
	<b>M</b>	<b>Cholinesterase inhibitors</b>				
		<b>(I)</b>	<b>Intermediates</b>			
			1	(S)-3-[1-(Dimethylamino)ethyl]phenol <b>OR</b>	6	
		<b>(II)</b>	<b>API</b>			
			1	Rivastigmine Salt <b>OR</b>	5	
	<b>N</b>	<b>Anti cancer ( Kinase inhibitors)</b>				
		<b>(I)</b>	<b>Intermediates</b>			6
			1	(2-Methyl-5-Nitrophenyl) Guanidine Nitrate <b>OR</b>		
			2	3-Dimethylamino-1-(3-Pyridyl)-2-Propen-1-One <b>OR</b>	4	
			3	N-(5-Amino-2-Methylphenyl)-4-(3-Pyridyl)-2-Pyrimidineamine <b>OR</b>	4	
		<b>(II)</b>	<b>API</b>			
			1	ImatinibMesylate <b>OR</b>	3	
			2	Axitinib	3	
<b>Group-II</b>	<b>Catalytic hydrogenation/dehydrogenation</b>					
			1	a. Nitro to amino b. Dearomatisation c. Aromatisation d. Debenzoylation e. Keto to alcohol etc.	200	200
<b>Group-III</b>	<b>Castor Oil &amp; derivatives</b>					
			1	Undecylenic acid	30	30
			2	Sebacic acid	5	5
<b>Group-IV</b>	<b>Intermediate for Pigments</b>					
			1	Fast Red KD Base <b>OR</b>	25	30
			2	Napthol ASLC <b>OR</b>	25	
			3	5-amino-6-methyl benzimidazolone (5-AMBI) <b>OR</b>	10	
			4	5-Acetoacetyl-amino-benzimidazolone	30	
<b>Group-V</b>	<b>Speciality Chemicals</b>					
			1	OPDA/ PPDA	100	100
<b>Group-VI</b>	<b>R&amp;D Centre</b>					
			1	Research activities of synthetic organic chemicals comprising of various unit processes & unit operations in a pilot reactor (like acetylation, nitration, hydrolysis, bromination, reduction,	2	2

				oxidation, hydrogenation, condensation etc.)		
					<b>Total/Month</b>	<b>483</b>
					<b>Total/Day</b>	<b>16.1</b>
	<p>After detailed deliberations, the Committee prescribed the following additional TOR in addition to standard TOR (refer Ministry’s website) for preparation of EIA-EMP report:</p> <p><b>A. Additional TOR</b></p> <ol style="list-style-type: none"> <li>i. Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b) of the EIA notification, 2006.</li> <li>ii. ZLD plan to be submitted.</li> <li>iii. Plan with 10 m wide green belt around lant periphery to be submitted.</li> <li>iv. ESR plan @ 2.5 % with the consultation with nearby villagers to be submitted.</li> </ol> <p>It was recommended that ‘TORs’ prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under the provisions as per para 7 (i) III. Stage (3)(i)(b)of the EIA notification, 2006.</p>					
24.9.3	<p><b>Proposed “Modification of Bulk drug and Intermediates unit” located at Survey No. 8 &amp; 16, Plot No. 183, KIADB Kolhar Industrial Area, Bidar Taluk &amp; District, Karnataka by M/s Stereo Drugs Private Limited-reg. TOR [IA/KA/IND2/64799/2017, IA-J-11011/243/2017-IA-II(I)]</b></p> <p>PP did not attend the meeting. The EAC decided to defer the proposal.</p>					
24.9.4	<p><b>Construction of Additional tankages and Tank lorry filling bays at Baitalpur Depot of IOCL, Baitalpur, UP by M/s INDIAN OIL CORPORATION LIMITED.-reg. Tor [IA/UP/IND2/64919/2017, IA-J-11011/263/2017-IA-II(I)]</b></p> <p>The Project Proponent and the NABET accredited Consultant M/s Projects &amp; Development India Ltd., made a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>i. Proposal is for construction of additional tankages and Tank lorry filling bays at Baitalpur Depot of IOCL, Baitalpur, UP by M/s Indian Oil Corporation Limited.</li> <li>ii. All the projects related to Isolated storage &amp; handling of hazardous chemicals are listed in para 6(b) of schedule of EIA Notification, 2006 covered under category ‘B’ but due to unavailability of SEIAA, it is treated as category ‘B’ and appraised at central level Expert appraisal committee.</li> <li>iii. Existing unit is operating since 1994. Existing land area 22 acres of total 40 acres shall be used, no additional land will be used / acquired for proposed project.</li> <li>iv. Industry will develop Green-belt in an area of 33 % i.e., 7.5 acres out of 22 acres of area of the project.</li> <li>v. The estimated project cost is Rs. 300 Crore.</li> </ol>					

- vi. Total Employment geration will be about 100 persons indirect during construction & operation.
- vii. It is reported that as per form-1, no National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/ElephantReserves,Wildlife Corridors etc. lies 10 km distance.
- viii. Total water requirement at present is 100 KL/day and will be met from ground water (Existing Tube wells).
- ix. Power requirement is met from UP State electricity board. Baitalpur unit have 02 x 500 KVA+01 x 160 KVA capacity and are used as standby during power failure.
- x. Stack (height- 7.5 m ) have been provided as per CPCB norms to the proposed DG sets in addition to the existing DG sets of nil which will be used as standby during power failure .
- xi. No hazardous waste will be generated as plant activity involves only receipt, storage & dispatch of Petroleum products. Oily sludge generated intermittently during tank cleaning operations shall be sent for bioremediation. Solid waste shall be generated only in the form of excavated soil & construction waste.
- xii. Status of Litigation Pending against the proposal, if any. – Nil
- xiii. Following are the list of existing and proposed products:

**Existing Product List**

Storage Tank No.	Products	Capacity (KL)	Diameter (m)	Height (m)	Tank Type
T11A	HSD	2609	14.0	17.0	VCR
T11B	HSD	2609	14.0	17.0	VCR
T11C	HSD	2609	14.0	17.0	VCR
T11D	HSD	3006	16.0	15.0	VCR
T11E	HSD	3006	16.0	15.0	VCR
T12A	SKO	2609	14.0	17.0	VCR
T12B	SKO	2609	14.0	17.0	VCR
T12C	SKO	3800	18.0	15.0	VCR
T13A	MS	515	10.0	7.50	VFR
T13C	MS	2000	16.0	10.0	VFR
T13D	MS	4584	20.0	14.50	VFR
T14A	Ethanol	70	3.00	10.50 (L)	U/G
T14B	Ethanol	70	3.00	10.50 (L)	U/G

**Proposed Products and their Capacities**

Storage Tank No.	Product	Capacity (KL)	Diameter (m)	Height (m)	Type of Tank
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HSD-1	HSD	15900	34.0	20.0	IFR(A/G)
HSD-2	HSD	15900	34.0	20.0	IFR(A/G)
HSD-3	HSD	15900	34.0	20.0	IFR(A/G)
MS-1	MS	12400	30.0	20.0	IFR(A/G)
MS-2	MS	12400	30.0	20.0	IFR(A/G)
MS-3	MS	12400	30.0	20.0	IFR(A/G)
SKO-1	SKO	3800	18.0	15.0	CR(A/G)
SKO-2	SKO	2000	16.0	10.0	CR(A/G)
HSD-4	HSD	3000	16.0	15.0	CR(A/G)
HSD-5	HSD	3000	16.0	15.0	CR(A/G)
Ethanol-1	Ethanol	3500	16.0	18.0	IFR(A/G)
Ethanol-2	Ethanol	3500	16.0	18.0	IFR(A/G)
Ethanol-3	Ethanol	70	3.0	10.50	U/G
HSD-6	HSD	50	3.0	7.50	U/G
MS-4	MS	50	3.0	7.50	U/G
SKO-3	SKO	50	3.0	7.50	U/G
Biodiesel-1	Biodiesel	200	4.2	15.9	U/G Semi-buried
Biodiesel-2	Biodiesel	200	4.2	15.9	U/G Semi-buried
Biodiesel-3	Biodiesel	200	4.2	15.9	U/G Semi-buried
Biodiesel-4	Biodiesel	200	4.2	15.9	U/G Semi-buried

After detailed deliberation the EAC prescribed the following Additional TOR in addition to standard TOR (refer Ministry's website) for preparation of EIA-EMP report:

**A. Additional TOR**

- i. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- ii. Copy of CTO issued by SPCB in 1994 to be submitted.
- iii. ESR plan @ 5 % to be submitted.

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

24.9.5

**Construction of Additional tankages at Lucknow Terminal, IOCL, Lucknow by M/s INDIAN OIL CORPORATION LIMITED- reg. TOR [IA/UP/IND2/64929/2017, IA-J-11011/265/2017-IA-**



	<p><b>II(D)</b></p> <p>The Project Proponent and the NABET accredited Consultant M/s. PROJECTS &amp; DEVELOPMENT INDIA LTD., made a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>i. Proposal is for construction of Additional tankages at Lucknow Terminal, IOCL, Lucknow by M/s Indian Oil Corporatton Limited.</li> <li>ii. All the projects related to Isolated storage &amp; handling of hazardous chemicals are listed in para 6(b) of schedule of EIA Notification, 2006 covered under category ‘B’ but due to unavailability of SEIAA, it is treated as category ‘B’ and appraised at central level Expert appraisal committee.</li> <li>iii. SEIAA has issued EC earlier vide letter no. 667/ Parya/SEAC/680/2011/DD(S) dated 30<sup>th</sup> March, 2012 for developing additional tannage.</li> <li>iv. Existing land area 16 acres of total 57 acres shall be used, no additional land will be used / acquired for proposed project. Unit will develop Green belt in an area of 33 % i.e., 5 acres out of 16 ares of area of the project.</li> <li>v. The estimated project cost is Rs. 20 Crore.</li> <li>vi. Total Employment geration will be about 100 persons indirect during construction &amp; operation.</li> <li>vii. It is reported that as per form-1, no National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/ElephantReserves,Wildlife Corridors etc. lies 10 km distance.</li> <li>viii. Total water requirement at present is 90 Kl/day of which pre-treated water requirement of --- m3/day for the subject project and will be met from ground water (Existing Tube wells).</li> <li>ix. Power requirement is met from UP State electricity board. Lucknow unit have 02 x 500 KVA + 01 x 250 KVA capacity and are used as standby during power failure; Stack (height- 7.5 m ) have been provided as per CPCB norms to the proposed DG sets in addition to the existing DG sets of nil which will be used as standby during power failure .</li> <li>x. No hazardous waste will be generated as plant activity involves only receipt, storage &amp; dispatch of Petroleum products. Oily sludge generated intermittently during tank cleaning operations shall be sent for bioremediation. Solid waste shall be generated only in the form of excavated soil &amp; construction waste.</li> <li>xi. List of existing and proposed storage facilities mentioned in the pre feasibility report.</li> </ol> <p>During presentation PP requested to exempt public hearing as Public hearing has already been conducetd earlier in 2012. The EAC noted that PP did not submit the report of earlier public hearing. The EAC suggested to PP to submit the report of earlier public hearing.</p> <p>After detailed delibration the EAC prescribed the following Additional TOR in addition to standard TOR (refer Ministry’s website) for preparation of EIA-EMP report:</p> <p><b>A. Additional TOR</b></p> <ol style="list-style-type: none"> <li>i. Public hearing is exempted under para 7 (ii) of EIA notification, 2006.</li> <li>ii. Submit the report of Public hearing conducted in 2012.</li> <li>iii. ESR plan @ 2.5 % to be submitted.</li> <li>iv. Layout plan earmarking space for peripheral green belt.</li> <li>v. Certified compliance report from RO, MoEFCC for existing EC to be submitted.</li> </ol> <p>It was recommended that ‘TOR’ without Public consultation prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under para 7 (ii) of EIA notification, 2006.</p>
24.9.6	<p><b>Set up an integrated petrochemical Complex (Guru Gobind Singh Polymer Additions Complex) within the existing refinery complex to maximise returns as well as expand their product</b></p>

**portfolio at Bathinda, Punjab by M/s HPCL-MITTAL ENERGY LIMITED (HMEL)-reg. TOR [IA/PB/IND2/64796/2017, IA-J-11011/266/2017-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s. Engineers India Limited made a detailed presentation on the salient features of the project and informed that:

- i. The proposal is for Polymer Addition Project at Guru Gobind Singh Refinery by M/s. Hindustan-Mittal Energy Limited and located at village Pullo Khari, Tehsil Talwandi Saboo, Bathinda district, Punjab.
- ii. All Petrochemical Complex are listed at S.N. 5(c) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. Ministry has issued EC earlier vide letter no. J-11011/275/2007-IA-II(I) dated 22.06.2015 for expansion of refinery from 9 MMTPA to 11.25 MMTPA at village Phulo Khari, Tehsil Talwandi Saboo, District Bathinda, Punjab by M/s HPCL-Mittal Energy Limited in Expansion case.
- iv. Existing land area is 787 Ha, no additional land will be used for proposed expansion. Industry is already developed Greenbelt in an area of 33 % i.e. 193 Ha out of 594 Ha area of the project.
- v. The estimated project cost is Rs 19635 crore.
- vi. It is reported that as per Form-1 no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River/waterbody is not present within 10 km radius from the refinery.
- vii. Total water requirement is 5952 m<sup>3</sup>/day of which fresh water requirement of 3500 m<sup>3</sup>/day for the proposed project and will be met from existing raw water system from Kotla canal.
- viii. Treated effluent of 185 m<sup>3</sup>/hr will be treated through a new ETP Plant envisaged which will be based on Zero Liquid discharge system.
- ix. Power requirement for polymer addition project will be 220 MW excluding existing 145.6 MW and will be met from State Grid of Punjab.
- x. No increase from existing 23.80 TPD of SO<sub>2</sub> emission.
- xi. Secured Landfill inside refinery complex.
- xii. Status of Litigation Pending against the proposal, if any. – Nil
- xiii. Following are the list of existing and proposed products:

**Existing Product list :**

S No.	Products	Post BS-VI, KTPA
1	LPG	963.9
2	Naphtha	369
3	Gasoline	Bharat VI 1540
4	ATF	250
5	Kerosene	200
6	Diesel	Bharat VI 5018

7	Sulphur	245.5
8	Coke	943.5
9	Hexane	5
10	Motor Turpentine Oil	25
11	Polypropylene	500
12	Bitumen	520

#### Proposed Products and their Capacities for Expansion

Processing Units	Units	Capacity
Dual Feed Cracker Unit	KTPA	1200
Linear Low Density Polyethylene/High Density Polyethylene swing	KTPA	2 x 400
High Density Polyethylene	KTPA	450
Butene-1	KTPA	55
Poly Propylene	KTPA	500
Storage facilities	Total 34 – DWST(4) / Spheres(6) / Bullets(4) / Tanks (20)	

During presentation PP requested to exempt public hearing as Public hearing has already been conducted earlier on 14<sup>th</sup> October, 2014. The EAC noted that PP has submitted the proceedings of the public hearing. It was agreed during the EAC meeting, the recent EIA data collected by PP may be allowed to be used as the proposed project is at the existing location, where data was recently collected. As the project is of national importance and the project is very large, this will save 3 months time. Also, this will have no impact on environment.

After detailed deliberation the EAC prescribed the following Additional TOR in addition to standard TOR (refer Ministry's website) for preparation of EIA-EMP report:

#### A. Additional TOR

- i. Public hearing is exempted under para 7 (ii) of EIA notification, 2006.
- ii. ESR plan @ 2.5 % to be submitted.
- iii. Certified compliance report of existing EC from RO, MoEF&CC to be submitted.
- iv. Plan for 10 m wide green belt around periphery of the plant to be submitted. 33% area of total project cover area shall be developed as green area with plantation of perennial trees.

It was recommended that 'TOR' without Public consultation prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under para 7 (ii) of EIA notification, 2006.

24.9.7

**Expansion project for manufacturing of synthetic organic Chemicals, Active Pharmaceutical Ingredients and Pesticide Technical located at Plot No. W-156, TTC Industrial Area, Pawane, Navi Mumbai 400710 , Maharashtra by M/s PAX CHEM LTD- reg. TOR [IA/MH/IND2/64578/2017, IA-J-11011/228/2017-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s JV Analytical Services, Pune made a detailed presentation on the salient features of the project and informed that:

- i. The proposal is for Expansion project for manufacturing of synthetic organic Chemicals, Active Pharmaceutical Ingredients and Pesticide Technical located at Plot No. W-156, TTC Industrial Area, Pawane, Navi Mumbai 400710 , Maharashtra by M/s Pax Chem Ltd.
- ii. All Pesticides industry and pesticide specific intermediates (excluding formulations) units producing technical grade pesticides are listed at Sl.No. 5(b) and All synthetic organic chemicals industry located in a 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 proposed land is situated in approved chemical zone of MIDC where land use is industrial. The MIDC has allotted a plot of area 1150 sq. M.
- iv. The proposed manufacturing capacity of the unit will be 700 MT/M
- v. Thane Creek at 4.26 km
- vi. Fresh water requirement of the project for domestic and industrial activity during operation phase will be 62.8 CMD. The water supply is from MIDC.
- vii. Trade effluent generated from the expansion project will be 7.5 CMD. This will be treated in ETP plant consisting primary treatment and will be discharged in the Common Effluent Treatment Plant.
- viii. Existing power requirement is 600 KW and additionally 400 KW will be required for expansion. Total power requirement will be 1000 KW. Source is State Electricity Board.
- ix. Non Hazardous solid waste generated will be sold to authorized agency prescribed by MPCB
- x. The emission from boiler will be discharged through the stack of height 22 meters & proper scrubber system is attached.
- xi. Following are the list of proposed products:

Sr. No.	List of Products	Capacity Tons / Month		
		Existing	Proposed	Total
1.	5,5- Dimethylhydantoin (DMDMH – 55)	000	100	100
2.	bis(2-pyridylthio)zinc 1,1'-dioxide (Zinc Pyrthione)	000	50	50
3.	Iodo Propynyl Butyl Carbamate (IPBC)	000	50	50
4.	Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and Methylchloroisothiazolinone (CMIT and MIT)	000	50	50
5.	Chloroxylenol (PCMX)	000	100	100
6.	Benzalkonium Chloride	000	200	200

7.	Para Chloro Meta Cresol (PCMC)	000	100	100
8.	Bronopol	000	50	50
	Total	000	700	700

During presentation PP informed that this is an expansion project and submit a copy of existing CTO issued by SPCB vide dated on 13.04.2013 for manufacture of 5 products. PP also informed that existing unit is manufacturing products by blending process hence EC was not required for the same.

The EAC noted that in the CTO it is not mentioned that product will be manufactured by mixing and blending process. PP need to submit the clarification from SPCB that existing unit is manufacturing product by mixing and blending process. The EAC also noted that PP did not mention the environmental sensitivity involved around 15 km radius of the project site in the Form-1.

The EAC deferred the proposal for want of above mentioned additional information.

24.9.8

**Manufacture of synthetic organic dyes at Plot No. 2110, Phase III, G.I.D.C Estate, Vatva, Ahmedabad-382445 M/s. POOJA DYE CHEM INDUSTRIES-TOR reg. [IA/GJ/IND2/65058/2017, IA-J-11011/278/2017-IA-II(I)]**

The project proponent informed following:-

- i. The proposal is for manufacture of synthetic organic dyes at Plot No. 2110, Phase III, G.I.D.C Estate, Vatva, Ahmedabad by M/s Pooja Dye Chem Industries.
- ii. All synthetic organic chemicals industry located in a notified industrial area/estate are listed at S.N. 5(f) under category 'B'. However, due to unavailability of SEIAA in the state project is considered as category 'B' and appraised at Central level by Expert Appraisal Committee.
- iii. Existing unit is operating prior 2006. Existing land area is 995 m<sup>2</sup>, no additional land will be used for proposed expansion.
- iv. Industry will be developed Greenbelt in an area of 10 % i.e.100 m<sup>2</sup> out of 995m<sup>2</sup> of area of the project.
- v. The estimated project cost is Rs. 1.4 Cr. including existing investment of Rs. 0.60 Cr.
- vi. Total capital cost earmarked towards environmental pollution control measures is Rs 0.15 Cr. and the Recurring cost (operation and maintenance) will be about Rs 0.10 Cr. per annum.
- vii. Total Employment will be 15 persons as direct & 10 persons indirect after expansion.
- viii. It is reported that as per form-1 there is no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River/waterbody 9.15 km.
- ix. Total water requirement is 52.3 m<sup>3</sup>/day of which fresh water requirement of 52.3.m<sup>3</sup>/day and will be met from GIDC Supply.
- x. Total Industrial Waste water generation will be 37.0 m<sup>3</sup>/day. After segregation of stream it will be discharged as follows:
  - Industrial process waste water @ 13.0 m<sup>3</sup>/day will be disposed to MEE.

- Washing and other diluted streams after treatment @ 24.0 m<sup>3</sup>/day will be discharged to the CETP, Vatva, Ahmedabad.
  - Domestic Sewage waste water is discharged to soak pit.
- xi. Power requirement after expansion will be 200 kw Including existing 58.93kw and will be met from Torrent Power Ltd. Existing unit has no DG sets, additionally one DG sets are used as standby during power failure. Stack (height 3m) will be provided as per CPCB norms to the proposed DGsets of 10 KVA which will be used as standby during power failure.
- xii. Existing unit has 0.3 TPH wood fired boiler & 2 nos. of HAG are of wood fire in existing. For proposed expansion one 0.5 TPH capacity wood/white coal fired boiler will be installed:

**Flue Gas Emission After Proposed**

S. No.	Stack Attached to	Stack Height (m)	Fuel Used	Quantity of Fuel	APCM	Pollutants
1.	Steam Boiler (1 Existing +2 proposed)	11	Wood/ White Coal	2.5 MT/day	-	PM 150 mg/Nm <sup>3</sup> SO <sub>2</sub> 100 ppm NO <sub>x</sub> 50 ppm
2	HAG (2 Nos.) {Existing}	11	Wood/ White Coal	0.3 MT/day	-	
3.	D.G. Set (10 KVA) (Stand by) (Proposed)	5	Diesel	10 Lit/Hr.	-	

- xiii. Details of Process emissions generation and its management is as follows:

**Process Gas Emission:(After Proposed)**

S. No.	Stack Attached to	Stack Height (m)	APCM System	Expected Pollutant	Pollutants
1.	Reactor	7	(Water Scrubber or Alkali Scrubber)	SO <sub>2</sub> HCl	SO <sub>2</sub> <40 mg/Nm <sup>3</sup> HCl<20 mg/Nm <sup>3</sup>

- xiv. Details of Solid waste/Hazardous waste generation and its management is as follows:

**HAZARDOUS WASTE MANAGEMENT AND STORAGE**

S. No.	Types of Waste	Category	Quantity Existing	Quantity Proposed	Quantity After Proposed	Mode of Disposal
1.	Waste ETP Sludge	34.3	0.6 MT/Year	199.4 MT/Year	200 MT/Year	Collection, Storage, Transportation and disposal to TSDF

						site.
2	Process/Iron sludge	26.1	--	200 MT/Year	200 MT/Year	Collection, Storage, Transportation and disposal to TSDF site.
3.	Used Oil/ Spent Oil	5.1	15 Lit/Year	85 Lit/Year	100 Lit/Year	Collection, Storage, Transportation and Sold to Recycler, Re processor or used as Lubricants for Machineries.
4.	Discarded Container / Drum	33.3	2.0 MT/Year	33 MT/Year	35 MT/Year	Collection, Storage, Transportation and Sold to Registered Recycler Or Send back to Raw Material supplier Or Use for ETP sludge packing
	Bags					

xv. Following are the list of proposed products:

**Production Details**

Sr. No.	Name of Product	Production Capacity MT/Month		
		Existing	Proposed	After Proposed
1	Direct Red 5 BL	12	<b>1257.6</b>	<b>1320</b>
2	Reactive Red- H	6		
3	L.F. Blue G	4.8		
4	Reactive Black HEBL	6		
5	Reactive Orange 2R	6		
6	All Pigment Emulsion	12		
7	Direct Blue GLL	6		
8	Direct Grey IIRL	3.6		
9	Reactive Navy Blue M3K	6		
1	Reactive Black 5/8/39	-		
2	Reactive Blue 13/19/49/171/198/220/221/250			
3	Reactive Brown 11			
4	Reactive Violet 46			
5	Reactive Orange 2R/ 12/13/16/W3R 35/84/107/122			
6	Reactive Red 3.1/24.1/31/45/111/120/195/198/ 218/245/278			
7	Reactive Yellow 15/18/42/57/84/85/86/95/135/14 5/186/210			
<b>Total</b>		<b>62.4</b>	<b>1257.6</b>	<b>1320</b>

**Product List with CAS No.**

S. No.	Name of Product	Production Capacity
		Total MT/Month CAS No.
		110
1	Reactive Black 5	12225-25-1
2	Reactive Black 8	12225-26-2
3	Reactive Black 39	68259-02-9
4	Reactive Blue 13	14692-76-3
5	Reactive Blue 19	2580-78-1
6	Reactive Blue 49	12236-92-9
7	Reactive Blue 171	77907-32-5
8	Reactive Blue 198	124448-55-1
9	Reactive Blue 220	128416-19-3
10	Reactive Blue 221	93051-41-3
11	Reactive Blue 250	93951-21-4
12	Reactive Brown 11	12225-68-2
13	Reactive Violet 46	--
14	Reactive Orange 2r	--
15	Reactive Orange 12	12225-84-2
16	Reactive Orange 13	70616-89-6
17	Reactive Orange 16	<a href="#">12225-83-1</a>
18	Reactive Orange w3r	--
19	Reactive Orange 35	12270-76-7
20	Reactive Orange 84	91261-29-9
21	Reactive Orange 107	90597-79-8
22	Reactive Orange 122	79809-27-1
23	Reactive Red 3.1	92307-87-4
24	Reactive Red 24.1	72829-25-5
25	Reactive Red 31	12237-00-2
26	Reactive Red 45	12226-22-1
27	Reactive Red 111	88232-20-6
28	Reactive Red 120	61951-82-4
29	Reactive Red 195	93050-79-4
30	Reactive Red 198	145017-98-7
31	Reactive Red 218	113653-03-5
32	Reactive Red 245	340977-00-6
33	Reactive Red 278	68248-10-2
34	Reactive Yellow 15	12226-47-0
35	Reactive Yellow 18	12226-48-1
36	Reactive Yellow 42	12226-63-0
37	Reactive Yellow 57	61969-35-5
38	Reactive Yellow 84	61951-85-7
39	Reactive Yellow 85	71872-81-6
40	Reactive Yellow 86	61951-86-8
41	Reactive Yellow 95	84045-63-6
42	Reactive Yellow 135	68991-98-0
43	Reactive Yellow 145	93050-80-7
44	Reactive Yellow 186	10041-73-7
45	Reactive Yellow 210	--

EAC  
has submitted  
CTO issued by SPCB vide dated 27.06.2002 i.e. prior EIA Notification, 2006.

noted that PP  
the copy of

After detailed deliberations, the Committee prescribed the following additional



	<p>TOR in addition to standard TOR (refer Ministry's website) for preparation of EIA-EMP report:</p> <p><b>A. Additional TOR</b></p> <ol style="list-style-type: none"> <li>i. Public hearing is exempted under the provisions as per para 7(i) III. Stage (3) (i) (b) of the EIA notification, 2006.</li> <li>ii. Plan with 10 m wide green belt around plant periphery to be submitted.</li> <li>iii. ESR plan @ 5 % with the consultation with nearby villagers to be submitted.</li> </ol> <p>It was recommended that 'TORs' prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing is exempted under the provisions as per para 7 (i) III. Stage (3)(i)(b)of the EIA notification, 2006.</p>
24.9.9	<p><b>Proposed Capacity expansion of distillery unit from 6KLPD [mollases/grain based] to 65KLPD [Grain based] Distillery Unit along with 1.5 MW Cogeneration Power Plant at Village -Suidihi, P.O. Lathikata, District-Sundargarh of Odisha by M/s Suidihi Distillery Private Limited-reg. TOR [IA/KA/IND2/64903/2017, IA-J-11011/262/2017-IA-II(I)]</b></p> <p>PP did not attend the meeting.</p>
24.9.10	<p><b>For the Proposed Resins and Laminated Sheets Manufacturing Unit of M/s. Ovel Laminate LLP Survey No. : 128 , Village: Bahadurgadh , Taluka &amp; District : Morbi , Gujarat –reg. TOR [IA/GJ/IND2/65032/2017, IA-J-11011/273/2017-IA-II(I)]</b></p> <p>The project proponent and the accredited consultant <b>M/s T. R. Associates</b> 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 Synthetic Organic Chemicals manufacturing unit at Survey No.: 128, Village :Bahadurgadh, Taluka&amp; District: Morbi - 363642, Gujarat by M/s.Ovel Laminate LLP.</li> <li>ii. All Synthetic Organic Chemicals Industry located outside a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>iii. Industry will develop greenbelt in an area of 34.98% i.e. 8035 m<sup>2</sup> out of 22966 m<sup>2</sup> of area of the project.</li> <li>iv. The estimated project cost is Rs.1.25 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 40 Lakhs and the recurring cost (operation and maintenance) will be about Rs. 31 lacs per annum.</li> <li>v. Total employment will be 60 persons.</li> <li>vi. It is reported that as per Form-1, no national parks, wildlife sanctuaries, Biosphere reserves,</li> </ol>

Tiger/Elephant reserves, wildlife corridors etc., lies within 10 km distance. River Machchhu is flowing at a distance a distance of 4.79 km in W direction.

- vii. Total water requirement is 35m<sup>3</sup>/day, which will be met from Bore well/Open well.
- viii. Treated effluent of 12.6 m<sup>3</sup>/day will be treated through Effluent treatmentplant (including Evaporator followed by R.O.) will be based on Zero Liquid Discharge system.
- ix. Power requirement of proposed project be 350 KVA-and will be met from Paschim Gujarat Vij Company Limited (PGVCL).
- x. Stack (height 6 mt) will be provided as per CPCB norms to the proposed DG sets of 380 KVA, which will be used as standby during power failure.
- xi. In Proposed unit 4 TPH coal/ briquettes Fired boiler and 15 Lakh Kcal/hr Thermic Fluid Heater will be installed. Cylone separator followed by Bag filter with a stack height of 30 mt., will be installed for controlling the particulate emissions (within statutory limit of 150 mg/Nm<sup>3</sup>).

Sr. No.	Stack attached to	Height of the stack In meter	Fuel & its Consumption	APC System	Expected Pollutant	GPCB Limit
1	Steam Boiler (4 TPH)	30 m	Coal / Briquettes 7.8MT/Day	Cyclone Separator followed by Bag Filter	SPM	As per GPCB Norms SPM ≤ 150 mg/Nm <sup>3</sup> SO <sub>2</sub> ≤ 100 ppm
2	Thermic Fluid Heater (15 Lakh Kcal/hr)				SO <sub>2</sub> NO <sub>2</sub>	
3	D.G. Set (380 KVA)	6 m	HSD 70.7Liter/Hr.	N.A.	SPM SO <sub>2</sub> NO <sub>2</sub>	NO <sub>2</sub> ≤ 50 ppm

- xii. Detaile of process emissions and its details is as follows:

Sr. No.	Stack attached to	Stack Height	Expected pollutant	Quality of pollutant	APC System
1	Laminated Sheets Dryer	11 m	Methanol	As per GPCB Norms	Condenser

- xiii. Details of solid waste/hazardous waste generation and its management.

Sr. No.	Description	Category	Quantity (MT/Month)	Mode of Disposal
1	ETP Sludge + Evaporation Residue	35.3	6.3	Collection, storage and disposal at Approved TSDF site
2	Used Oil	5.1	0.004	Collection, storage and used within premises as a lubricant / sold to registered recycler.
3	Discarded Plastic Bags / Barrels	33.1	0.76	Collection, storage & sold to authorized vendor.
4	Edge Cutting Waste	23.1	1.2	Collection, storage & disposal at CHWIF site.
5	Spent carbon	54.3	19.2	Collection, storage, transportation & disposal at CHWIF site / sell to authorized vendor

xiv. Following are the list of proposed products.

Proposed product and their capacities is as follows:

Sr. No.	Name of Product	Quantity
1	Phenol Formaldehyde Resin	700 MT/Month
2	Melamine Formaldehyde Resin	700 MT/Month
3	Urea Formaldehyde Resin	500 MT/Month
4	Laminated Sheets	3,00,000 Sheets/Month

During presentation PP informed that they have already collected the baseline data during March-May, 2017 and requested to consider the same. The EAC agreed with it and suggested to collect additional one month data of October, 2017.

After detailed deliberation the EAC prescribed the following Additional TOR in addition to standard TOR (refer Ministry's website) for preparation of EIA-EMP report:

**A. Additional TOR**

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

	<ul style="list-style-type: none"> <li>ii. Commitment to use Briquettes/ important coal as boiler fuel only to be submitted.</li> <li>iii. Permission from CGWB for ground water withdrawal to be submitted.</li> <li>iv. Additional one month baseline data of October, 2017 along with existing baseline data collected during March-May, 2017 to be submitted.</li> <li>iv. A layout plan earmarking space for development of Green belt of atleast 10 m width along the periphery of the plant, with three layers of trees which can control/reduce the pollutant from the project, shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.</li> <li>v. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.</li> <li>vi. Chemical name of the product with CAS No. number and the actual end use shall be provided.</li> <li>vii. Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.</li> </ul> <p>It was recommended that 'TOR' with Public consultation prescribed by the Expert Appraisal Committee (Industry) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.</p>
24.9.11	<p><b>Bulk Drugs, Bulk Drug Intermediates &amp; Specialty Chemicals Manufacturing Unit (650 MTPM) at Plot No.2423 &amp; 2425, GIDC Estate Sachin, Tal. Choryasi, Dist. Surat, Gujarat by M/s. Anupam Rasayan India Limited (Unit-VI).- Terms of Reference-reg. [IA/GJ/IND2/65026/2017, IA-J-11011/272/2017-IA-II(I)]</b></p> <p>The Project Proponent and their consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd., gave a detailed presentation on the salient features of the project &amp; informed that:</p> <ul style="list-style-type: none"> <li>i. The proposal is for Bulk Drugs, Bulk Drug Intermediates &amp; Specialty Chemicals Manufacturing Unit (650 MTPM) at Plot No.2423 &amp; 2425, GIDC Estate Sachin, Tal. Choryasi, Dist. Surat, Gujarat by M/s. Anupam Rasayan India Limited (Unit-VI).</li> <li>ii. All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B'. However, due to non functioning of SEIAA, Gujarat, the project has been considered under category 'B' and appraised at Central level by Expert Appraisal Committee (EAC).</li> <li>iii. Proposed land area is 18,755 m<sup>2</sup>. Industry will develop greenbelt in an area of 38% i.e.7195 m<sup>2</sup> out of 18,755m<sup>2</sup> of area of the project. The estimated project cost is Rs. 80 Crores. Total employment will be 90 persons as direct &amp; 20 persons indirect for proposed project. Industry purposes to allocate Rs. 2 Crores @ 2.5 % towards Corporate Social Responsibility.</li> <li>iv. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance of the project site. Mindhola River is around 5.2 Km away from the project site.</li> <li>v. Ambient air quality monitoring carried out at 8 locations during December, 2016-February, 2017 may be considered for EIA/EMP report preparation.</li> <li>vi. Total water requirement will be 455 KL/Day; which will be met from GIDC Water Supply.</li> </ul>

- vii. Total 92 KL/Day (72 KL/Day Industrial + 20 KL/Day domestic) of effluent shall be generated. Industrial effluent 72 KL/Day in which 57 KL/Day Waste Water generated from process, washing and scrubbing will be treated in ETP and then after neutralized waste water shall go to CETP of M/s. GECL. In case of CETP becomes non- functional then we shall operate our MEE, Solvent Stripper, ATFD, RO, etc. for the treatment of effluent & RO Permeate will be reused within premises and RO Reject will be sent to MEE and 15 KL/Day Waste Water generated from cooling tower and boiler will be reused in scrubbing and washing purpose.
- viii. Power requirement will be 3000 KVA and will be met from DGVCL AND 1025 KVA (2 nos.) D.G. Set (for emergency only)
- ix. Proposed unit will have Gas based boiler =10 TPH, Thermopack Heater=6000 U x 4 Nos, D.G. Set =2 Nos. & Process Vent (3 nos). Two Stage Water + Alkali Scrubber will be installed to control the emission from air pollution source.
- x. Details of Process emissions generation and its management

<b>PROCESS GAS EMISSION</b>				
<b>STACK NO.</b>	<b>VENT ATTACHED TO</b>	<b>VENT HEIGHT &amp; DIAMETER</b>	<b>POLLUTANTS</b>	<b>APCM</b>
1	Process Vent - 1	Height: 13 meter Dia: 10 cm	HBr	Two Stage Alkali Scrubber
2	Process Vent - 2	Height: 15 meter DIA: 10 CM	HCl SO2	Two Stage Alkali Scrubber
3	Process Vent -3	Height: 15 meter DIA: 10 CM	NH3	Scrubber

- xi. Details of Solid waste / Hazardous waste generation and its management.

<b>CAT. NO.</b>	<b>HAZARDOUS WASTE</b>	<i>SOURCE</i>	<i>GENERATION QUANTITY</i>	<b>METHOD OF DISPOSAL</b>
5.1	Used Oil	From plant & machinery	50 Liters/Month	Collection, Storage, Transportation & send to authorized recycler
33.1	Discarded barrels/ containers/ liners	From raw material packaging	1000 Nos./Month	Collection, Storage, Transportation, Decontamination & send to authorized recycler
35.3	ETP Sludge	From ETP	30 MT/Month	Collection, Storage, Transportation & sent to TSDF Site
35.3	MEE Salt *	From MEE	100 MT/Month	Collection, Storage, Transportation & sent to TSDF Site
20.3	Distillation Residue	From Manufacturing Process	15 MT/Month	Collection, Storage, Transportation & sale to cement industries for co-processing or sent to CHWIF

28.1	Process Waste	From manufacturing Process	10 MT/Month	Collection, Storage, Transportation & sale to cement industries for co-processing or sent to CHWIF
28.2	Spent Catalyst	From manufacturing Process	1 MT/Month	Collection, Storage, Transportation & sent to regenerator for regeneration
28.3	Spent Carbon	From manufacturing Process	1 MT/Month	Collection, Storage, Transportation & sale to cement industries for co-processing or sent to CHWIF
--	Sodium Sulphate	From manufacturing Process	175 MT/Month	Collection, Storage, Transportation & sent to TSDF Site
--	24-28 % Aluminum Chloride Solution	From manufacturing Process	2588 MT/Month	Collection, Storage, Transportation & sale to end user
--	28 - 30% Hydrochloric Acid	From manufacturing Process	439 MT/Month	Collection, Storage, Transportation & sale to end user
--	22 - 28% HBr Solution	From manufacturing Process	538 MT/Month	Collection, Storage, Transportation & sale to end user
--	Dilute Sulphuric Acid	From manufacturing Process	706 MT/Month	Collection, Storage, Transportation & sale to end user
--	15 - 20% Sodium Sulphate (Na <sub>2</sub> SO <sub>4</sub> ) Solution	From manufacturing Process	330 MT/Month	Collection, Storage, Transportation & sale to end user
--	Sodium Bromide Salt & Solution	From manufacturing Process	133 MT/Month	Collection, Storage, Transportation & sale to end user
--	15-20% NaCl Salt & Solution	From manufacturing Process	1509 MT/Month	Collection, Storage, Transportation & sale to end user
--	Potassium Bromide Salt & Solution	From manufacturing Process	32 MT/Month	Collection, Storage, Transportation & sale to end user
--	Potassium Chloride Salt & Solution	From manufacturing Process	153 MT/Month	Collection, Storage, Transportation & sale to end user
--	Aluminum Hydroxide Salt	From manufacturing Process	152 MT/Month	Collection, Storage, Transportation & sale to end user
--	Sodium Bi Sulphite Salt &	From manufacturing	3655 MT/Month	Collection, Storage, Transportation & sale to

	Solution	Process		end user
--	Ammonium Chloride salt	From manufacturing Process	24 MT/Month	Collection, Storage, Transportation & sale to end user
--	Sodium Acetate Salt	From manufacturing Process	78 MT/Month	Collection, Storage, Transportation & sale to end user
--	Ammonium Acetate Salt	From manufacturing Process	550 MT/Month	Collection, Storage, Transportation & sale to end user
--	Zink Chloride (ZnCl <sub>2</sub> ) Solution	From manufacturing Process	596 MT/Month	Collection, Storage, Transportation & sale to end user
--	Magnesium Sulphate (MgSO <sub>4</sub> ) Salt	From manufacturing Process	61 MT/Month	Collection, Storage, Transportation & sale to end user
--	Silica Oxide (SiO <sub>2</sub> )	From manufacturing Process	110 MT/Month	Collection, Storage, Transportation & sale to end user

xii. The list of proposed products are:

Sr. No.	NAME OF PRODUCT	CAS No.	PROPOSED CAPACITY (MT/MONTH)
<b>Acetylated Compounds</b>			
1	2,4-Dichloro Acetophenone	2234-16-4	200
2	2,5-Dichloro Acetophenone	2476-37-1	
3	4-Fluoro Acetophenone	403-42-9	
4	2,4-Dichloro-5-Fluoro Acetophenone	704-10-9	
5	2,4-Dichloro Phenacyl Bromide	2631-72-3	
6	2,4-Dichloro Phenacyl Chloride	4252-78-2	
7	2,4-Dichlorobutero Phenone	66353-47-7	
<b>Phenoxy Compounds / Diphenyl Ether Compounds</b>			
8	2-Chloro-4-(4-Chloro Phenoxy) Phenacyl Bromide	112110-16-4	200
9	2-Chloro-4-(4-Chlorophenoxy) Acetophenone / 4-Acetyl-3,4'-Dichloro Diphenyl Ether	119851-28-4	
10	3-Chloro-4-(2-Bromo Ethyl-4-Methyl-1,3-dioxolane-2-yl)-4-Chloro Diphenyl Ether	873012-43-2	
11	4-(2-Bromomethyl -4-propyl-1,3-dioxolane-2-yl)-1,3-Dichlorobenzene	60207-89-8	
<b>Benzoic Acid Compounds</b>			
12	5-Methyl-2,3-Pyridine Dicarboxylic Acid	112110-16-4	100
13	3,4,5-Tri Methoxy Benzoic acid	118-41-2	

14	3,4,5-Tri Methoxy Toluene	6443-69-2	
15	1-(4-methoxyphenyl)-3-(4-tert-butylphenyl)propane-1,3-dione	87075-14-7	
16	2-Ethylhexyl-2-Cyano-3,3-diphenyl-2-Propionate	6197-30-4	
17	2-Ethylhexyl(2E)-3-(4-methoxyphenyl)prop-2-enoate	5466-77-3	
18	2-Ethylhexyl-2-Hydroxybenzoate	118-60-5	
<b>Advanced Specialty / Pharma Products</b>			
19	4-[[[4,6-bis[[4-(2-ethylhexoxy-oxomethyl)phenyl]amine]-1,3,5-triazin-2-yl]amino]benzoic acid -2-ethylhexyl ester	88122-99-0	
20	4, 4'-[[[6-[[[(1, 1-dimethylethyl)amino]carbonyl]phenyl]amino]-1, 3, 5-triazine-2, 4-diyl]diimino]bis-bis(2-ethylhexyl)benzoate.	154702-15-5	
21	2-(2, 4-dihydroxyphenyl)-4, 6-bis (2, 4-dimethylphenyl)-1, 3, 5-triazine.	1668-53-7	
22	4-n-Butyl Resorcinol	18979-61-8	
23	4-n-Hexyl Resorcinol	136-77-6	
24	Propanedionic 2,2'-(1,4-phenylenedimethyldiyne)bis - 1,1',3,3'-tetraethyl Ester	6337-43-5	
25	2,4-dihydroxy Benzophenone	131-56-6	
26	2-Hydroxyl-4-methoxyBenzophenone	131-57-7	
27	2-Hydroxyl-4-(Octyl)Benzophenone	1843-05-6	
28	2-Hydroxy-3,3,5-trimethyl Cyclohexyl Ester Benzoic Acid	118-56-9	
29	4H-3,1-Benzoxazin-4-one,2,2'-(1,4-phenylene)bis-	18600-59-4	
30	2-(4,6-diphenyl-1,3,5-triazin-2-yl)-5-(hexyloxy)phenol	147315-50-2	
31	2-Hydroxy-4-Methoxy Benzophenone -5- Sulphonic acid	4065-45-6	150
32	Benzoic acid -4-[[[(methylphenylamino)methylene]amino] Ethyl Ester	57834-33-0	
33	2-(5-chloro-2H-benzotriazol-2-yl)-6- (1,1-dimethylethyl)-4-Methyl Phenol	3896-11-5	
34	2-(2H-benzotriazol-2-yl)-4-(1,1-dimethylethyl)-6-(1-methylpropyl)phenol	36437-37-3	
35	2-(2H-benzotriazole-2-yl)-4,6 bis(1-methyl-1-Phenylethyl)phenol	70321-86-7	
36	2-(2H-benzotriazol-2-yl)-4,6-bis (1,1-dimethylethyl)phenol	3846-71-7	
37	2-(2H-benzotriazole-2-yl)-4-methyl phenol	2440-22-4	
38	2-(5-chloro-2H-benzotriazol-2-yl)-4,6-bis (1,1-dimethylethyl)phenol	3864-99-1	
39	2-(2H-benzotriazol-2-yl)-4-(1,1-dimethylethyl)-phenol	3147-76-0	
40	2,2'-methylene bis [6-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol	103597-45-1	
41	2-(2H-Benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)-Phenol	3147-75-9	
42	2- Acetylphenothiazine	66311-94-3	
43	2- Chlorophenothiazine	92-39-7	
44	2- Trifluoromethyl Phenothiazine	92-30-8	



45	2-Methoxy Phenothiazine	1771-18-2	
46	2- Mercaptomethyl Phenothiazine	05-08-7643	
47	Chlopromazine Hydrochloride	50-53-3	
48	Bupropion	34911-55-2	
49	2-(6-Methoxy naphthalen-2-yl) Propionic Acid	22204-53-1	
50	Citalopram Hydro Bromide	59729-33-8	
51	Cyclobenzaprine Hydrochloride	303-53-7	
52	Cyproheptadine Hydrochloride	129-03-3	
53	Tamoxifen Citrate	10540-29-1	
54	Doxepine Hydrochloride	1668-19-5	
55	Doxylamine Succinate	469-21-6	
56	Imatinib Mesylate	152459-95-5	
57	Etoricoxib	202409-33-4	
58	Dothiepin (Dosulepin) Hydrochloride	113-53-1	
59	Flupentixol Dihydrochloride	2413-38-9	
60	Ketamine Hydrochloride	6740-88-1	
61	Losartan Potassium	114798-26-4	
62	Teneligliptin Hydrobromide Hydrate	760937-92-6	
63	Olmesartan Medoxomil	144689-24-7	
64	Keto Loratadine	79794-75-5	
65	Tedizolid Phosphate	856866-72-3	
66	Enzalutamide	915087-33-1	
67	Empagliflozin	864070-44-0	
68	Dapagliflozin	461432-26-8	
<b>Total Production of All Groups (1 to 4)</b>			<b>650</b>

#### List of By Products

<b>By- Products / Hazardous Wastes</b>		<b>CAS No.</b>	<b>(MT/MONTH)</b>
1	24-28 % Aluminum Chloride Solution	7446-70-0	2588
2	28 - 30% Hydrochloric Acid	7647-01-0	439
3	22 - 28% HBr Solution	10035-10-6	538
4	Dilute Sulphuric Acid	7664-93-9	706
5	15 - 20% Sodium Sulphate(Na <sub>2</sub> SO <sub>4</sub> ) Solution	7757-82-6	330
6	Sodium Bromide Salt & Solution	7647-15-6	133
7	Sodium Sulphate Salt & Solution	7757-82-6	175
8	15-20% NaCl Salt & Solution	7647-14-5	1509
9	Potassium Bromide Salt & Solution	7758-02-3	32
10	Potassium Chloride Salt & Solution	7447-40-7	153
11	Aluminum Hydroxide Salt	21645-51-2	152

12	Sodium Bi sulphite Salt & Solution	7631-90-5	3655
13	Ammonium Chloride salt	12125-02-9	24
14	Sodium Acetate Salt	127-09-3	78
15	Ammonium Acetate Salt	631-61-8	550
16	Zink Chloride (ZnCl <sub>2</sub> )Solution	7646-85-7	596
17	Magnesium Sulphate (MgSO <sub>4</sub> )Salt	10034-99-8	61
18	Silica Oxide (SiO <sub>2</sub> )	112926-00-8	110
<b>Total</b>			<b>11829</b>

EAC has deliberated on the proposal. EAC noted that the proposal is located in the notified industrial area. As SEIAA is not functioning, project is considered by EAC. EAC has also considered the request of the PP for utilization of baseline data collected during December, 2016-February, 2017, from the same area, for preparation of EIA/EMP report, considering the monsoon season.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR, for preparation of EIA/EMP report.**

**Additional ToR**

- i. A layout plan earmarking space for development of Green belt of atleast 10 m width along the periphery of the plant, with three layers of trees which can control/reduce the pollutant from the project, shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.
- ii. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.
- iii. Chemical name of the product with CAS No. number and the actual end use shall be provided.
- iv. Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.

24.9.12 **Expansion & Debottlenecking of Petrochemical Plant of Vadodara Manufacturing Division (VMD) of M/s. Reliance Industries Limited –Terms of Reference- reg. [IA/GJ/IND2/64217/2017, IA-J-11011/212/2017-IA-II(I)]**

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

- i. The proposal is for Expansion & Debottlenecking of Petrochemical Plant of Vadodara Manufacturing Division (VMD) of M/s. Reliance Industries Limited.
- ii. All Petro-chemical complexes (industries based on processing of petroleum fractions & natural gas and/or reforming to aromatics) are listed at S.N. 5 (C) of Schedule of Environmental Impact Assessment (EIA) Notification under category ‘A’ and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. The project is located within the declared Petrochemical Complex (PCC) industrial area of GIDC, notified by Govt. of Gujarat in Vadodara District in the state of Gujarat. The units considered in the proposed project includes NCP, EG, EO, VCM, PVC, PP, Butadiene, PBR, Benzene, LAB, CPP. This proposal also includes setting up of new units Chlorinated Poly Vinyl Chloride (CPVC), a 500 TPH (2x250) petcoke based boiler to generate steam & power by creating flexibility in the existing fuel mix of NG, Cracker off gas, FO, LSHS and modernization & replace aged tracks and sleepers in the rail gantry. The proposed project shall utilize the existing utilities (onsite & offsite) during its operation.

- iv. Ministry has issued EC earlier vide letter no. J-11011/13/99-IA.II (I), dated 27<sup>th</sup> September, 1999 to Vadodara Manufacturing Division (VMD) by M/s. Reliance Industries Limited (RIL).
- v. Existing land area is 350 Ha and no additional land will be used for proposed expansion. Industry has already developed Greenbelt in an area of 105 Ha out of 350 Ha. The estimated project cost is Rs. 2270 Crores. The existing manpower is ~ 3000. Existing manpower would be used, as most of the projects are DBN/expansion of existing plants.
- vi. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance of the project site. Mahi River is flowing at a distance of ~3 km in West direction.
- vii. Ambient air quality monitoring was carried out at 12 locations during winter 2016 along with the baseline data for all others parameters such as surface and ground water quality, soil characteristics, flora and fauna, including socio-economic environment. The details of the monitored data along with the maximum incremental GLCs after the proposed project shall be provided in the EIA report.
- viii. Total water requirement after the proposed expansion is ~40,300 m<sup>3</sup>/d will be met from Vadodara Irrigation Division.
- ix. The effluent generated after the proposed expansion is ~18,800 m<sup>3</sup>/d which will be treated in the existing ETP, the treated effluent will be sent to Vadodara Effluent Channel Limited (VECL) for further disposal.
- x. Power requirement will be met through the Captive Power Plant (CPP) as well as from the state grid during excegencies, if any. The existing CPP of 81 MW will be expanded to 95 MW by way of debottlenecking.
- xi. In the proposed project, natural gas is predominant fuel used for combustion, which is a clean fuel along with FO, LSHS in the CPP. The emission such as of SO<sub>2</sub>, NO<sub>x</sub> generated shall be controlled and will be within stipulated standards. PM emission is envisaged from the process plants, although negligible, adequate measures shall be in place to control such emissions within stipulated standards. Adequate systems shall be in place to control fugitive emissions in the form of VOCs envisaged from proposed project. CFBC boiler is proposed to generate steam & power generation by using petcoke as fuel. SO<sub>2</sub> emissions envisaged from this boiler operation shall be controlled within stipulated standards by in-situ lime injection. At the newly proposed CPVC plant, Chlorine scrubbing system will be installed to prevent accidental release of chlorine into atmosphere.
- xii. All Hazardous material are handled as per MSIHC and HWM rules.
- xiii. Public Hearing may be exempted as per Section 7 (i), III Stage (3), Para (i) (b) of EIA 2006 as the project is located in the notified industrial area of GIDC, Petrochemical Complex
- xiv. After the proposed DBN and expansion the capacities of various plants will be as follows:

Plant	Name of Products	Production Capacities (MTM)		
		Existing Capacity	Proposed Addition	Total
GOP	Ethylene	17000	8000	25000
	Propylene	8000	7000	15000
GAP	Ortho xylene	3784	0	3784
	Para xylene	4050	0	4050
	Dimethyl Terephthalate	3333	0	3333
C2 Derivatives including Vinyl	Ethylene Glycol (EG)	1670	470	2140
	Ethylene Oxide (EO)	836	1004	1840
	Low Density Poly Ethylene (LDPE)	13335	0	13335
	Ethylene Dichloride (EDC)	8335	0	8335

	Vinyl Chloride Monomer (VCM)	4750	3020	7770
	Poly Vinyl Chloride (PVC)	4585	3315	7900
	Chlorinated Poly Vinyl Chloride (C-PVC) (New Product)	0	6000	6000
C3 Derivatives	Poly Propylene (PCPP (PP-II))	2085	3255	5340
	Poly Propylene (PP-IV)	6250	7120	13370
	Polypropylene (PP-I)	3000	0	3000
	Acrylonitrile	2500	0	2500
	Methyl Acrylates	170	0	170
	Ethyl Acrylates	250	0	250
	Butyl Acrylates	334	0	334
C4 Derivatives	Butadiene (GOP Plant)	4500	2000	6500
	Poly-Butadiene Rubber (PBR-I)	1670	2260	3930
	Poly-Butadiene Rubber (PBR-II)	4166	1134	5300
C6+ Derivatives	Benzene	4585	2655	7240
	Toluene (New Product)	0	2250	2250
	Normal Paraffin (New Product)	0	5000	5000
	Linear Alkyl Benzene	3625	3295	6920
Mono- component Acrylic fibre	Acrylic Fiber (AF)	1000	0	1000
	Dry Spun Acrylic Fiber (DSAF)	1000	0	1000
Carbon fibre	Carbon Fibre (CF)	1	0	1
PR	Petroleum Resin	417	0	417
Utilities	Steam	620 TPH	96 TPH	716 TPH
	Steam*	0	500 TPH	500 TPH
	Power	81 MW	14	95 MW
By-Products				
GOP	Carbon Black Feed Stock (CBFS)	1585	1415	3000
	Mix C4	10585	0	10585
	Pyrolysis Gasoline (PGH)	18335	0	18335
C2 Derivatives including Vinyls	Di Ethylene Glycol (DEG) (New by-Product)	0	135	135
	Tri Ethylene Glycol (TEG) (New by-Product)	0	15	15
	Poly Ethylene Glycol (PEG) (New by-Product)	0	150	150
	HCL	0	1417	1417
C4 Derivatives	C4 Raffinate	6085	0	6085
C6+ Derivatives	Heavy Normal Paraffin (HNP) (New by-Product)	0	700	700
	Light Normal Paraffin (LNP) (New by-Product)	0	200	200
	Heavy alkylates (New by-Product)	0	400	400

	Naphtha Return Stream (NRS)	13750	0	13750
	Heavy Aromatics (New by-Product)	0	4500	4500

*\*Petcoke fuel based boilers to be used for steam & power generation by creating flexibility in the existing fuel mix*

EAC has deliberated on the proposal. EAC noted that the PP has obtained EC for the existing unit. EAC has considered the request of the PP regarding utilization of baseline data collected during winter season, 2016, from the same locality. However, EAC suggested to supplement the baseline data with data of the year 2017 also. EAC has also suggested the PP to reduce the water requirement. In smaller projects, use of pet coke cannot be recommended as smaller project cannot justify the cost of equipments needed to reduce Sox and Nox. It is an international practice in USA, Europe and Middle East to use pet coke in Refineries, Petrochemical, and Fertilizers as the stacks are designed with emission limit of 100 mg / NM3 for sulphur dioxide (SO2). Also, low NOx emission is achieved by relatively low combustion temperature in the furnace (850-900 degree C). High retention time in CFBC boilers and effective fuel burnt out process and utilization of limestone, desulphurization are efficient processes deployed and thus allows to achieve low Sox emission. Other advantage of pet coke is of very low ash content, the particulate matter emission is less compared to conventional coal fired plants. It is in the national interest to also use pet coke produced in Refineries, otherwise, it is a national wastage. In view of the above stated facts, the EAC recommended to allow the PP to use pet coke but with very very strict Nox and Sox emission standards imposed in EC.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR, for preparation of EIA/EMP report. Public hearing is exempted under the provisions of para 7 (ii) of EIA Notification, 2006.**

**Additional ToR**

- i. Zero Liquid Discharge plan for the proposed expansion shall be submitted.
- ii. PP shall submit the certified compliance report of the existing EC, from the Regional Office of Ministry.
- iii. PP shall reduce the water requirement for the proposed project. Additionally, a maximum of 4000 m<sup>3</sup>/day shall only be used for proposed project in addition to the existing requirement. PP shall submit a revised water balance plan accordingly.
- iv. PP shall not dispose the effluent from the proposed project to the VECL.
- v. A layout plan earmarking space for Green belt of at least 10 m width along the periphery of the plant with three layers of perennial trees, which can control/reduce the pollutant from the project, shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.
- vi. At least 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.
- vii. As agreed, a plan for plantation of 20000 plants/year for five year in the nearby villages to be submitted after consultation with local/village/forest authorities.

24.9.13	<b>Manufacturing of “Silica based Aerogel Insulation Sheet” (1440 m<sup>2</sup>/day) at Plot No. 2921 &amp; 2922, J-Type Area, G.I.D.C., Vapi, Gujarat, India by M/s. Aerogel One Ltd.–Terms of Reference-reg. [IA/GJ/IND2/65045/2017, IA-J-11011/277/2017-IA-II(I)]</b>
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The Project Proponent and the accredited Consultant M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi made a detailed Presentation on the salient features of the project and informed that:

- i. The proposal is for Manufacturing of “Silica based Aerogel Insulation Sheet” (1440 m<sup>2</sup>/day) at Plot No. 2921 & 2922, J-Type Area, G.I.D.C., Vapi, Gujarat, India by M/s. Aerogel One Ltd.
- ii. All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category ‘B’ but due to the applicability of general condition (located within 5 km distance of Critically Polluted Area/interstate boundary), it is considered under Category ‘A’ and is appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. Total land area is 5176.00 sq. m. will be used for proposed project. Industry will be developing greenbelt in area of about 10 % i.e., 517.00 m<sup>2</sup> out of 5176.00 m<sup>2</sup> of area of the project. The estimated project cost is Rs 585.00 Lakhs for the proposed new project. Total capital cost earmarked towards environmental pollution control measures is Rs 10.00 Lakhs and the Recurring cost (operation and maintenance) will be about Rs.7.35 Lakhs per annum. Total Employment will be 30 persons as direct & 10 nos. persons indirect after expansion. Industry proposes to allocate Rs. 2.35 Lacks/annum @ of 2 % towards Corporate Social Responsibility. No National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. lie within 10 km distance from the project site. River Daman Ganga and Kolak is flowing at a distance of 2.28 km in south Direction and 5.48 Km in NE direction respectively.
- iv. Total water requirement is 80.00 m<sup>3</sup>/day of which fresh water requirement of 80.00 m<sup>3</sup>/day and will be met from GIDC water Supply, Vapi.
- v. There is no industrial effluent generation from the proposed process. The waste water generated @13.50 KL/day from Cooling tower blow down will be collected, tested and will be reused for plantation of greenbelt within the premises. Domestic waste water generated @4.50 KL/day will be disposed off through adequate soak pit and septic tank. Plant will be based on Zero Liquid discharge system.
- vi. Power requirement for the proposed project will be 500 KVA which will be met from Dakshin Gujarat Vij. Company Ltd. (DGVCL). Stack (height -11m) will be provided as per CPCB norms to the proposed D.G. set of capacity 200 KVA which will be used as standby during power failure.
- vii. Proposed project will install 1 No. plus 1 No. (as stand by) of Thermic Fluid Heater, each having capacity 10 lakh K. cal./hr, which will run on Natural Gas @ 138 Nm<sup>3</sup>/hr. Adequate Stack height of 30 m and diameter 450 mm will be provided for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>) along with SO<sub>2</sub> and NO<sub>x</sub>.
- viii. There will be no Process emissions from the proposed project.
- ix. Details of Solid waste/Hazardous waste generation and its management.  
Discarded materials Drum, Liners/ Bags/ Carboys (33.1) from raw materials will be generated @ 300 nos./year which will be collected, stored and disposed by sending back to raw material supplier or to registered decontamination facility. Used oil (5.1) from utility will be generated @100 L/year which will be collected, stored and disposed by selling to registered recyclers.
- x. Public Hearing may be exempted as per paragraph 7(i) (III) (i) (b) of the Environment Impact Assessment Notification-2006.
- xi. The list of proposed products are :

S No.	Products	Quantity (TPA)
1.	Silica based Aerogel Insulation Sheet	1440 m <sup>2</sup> /day

	<p>EAC has deliberated on the proposal. EAC noted that the project is located in the notified Industrial area. EAC has noted that the product is an organic metallic compound and covers under S.N. 5(f) of EIA Notification. EAC has noted that aerogel is one of the best thermal insulation. Aerogel is used to conserve energy in high energy consuming industries and in defence applications.</p> <p><b>EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR, for preparation of EIA/EMP report. Public hearing is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate.</b></p> <p><b>Additional ToR</b></p> <ol style="list-style-type: none"> <li>i. A plan for implementation of Zero Liquid Discharge shall be submitted.</li> <li>ii. A layout earmarking space for Green belt along the periphery of the plant, which can control/reduce the pollutant from the project, shall be submitted. Trees shall be selected as per CPCB norms.</li> <li>iii. PP shall take safety precautions for controlling inhaling of gas/toxic materials from the project. PP shall submit a plan regarding inhouse safety measures.</li> <li>iv. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.</li> <li>v. PP shall submit plan for plantation of 1000 trees/year for a period of 5 year in nearby 3 villages, in consultation with local/forest authorities.</li> </ol>
24.9.14	<p><b>Setting up of Resins (Phenol Formaldehyde- 700 MTPM; Melamine Formaldehyde- 400 MTPM; Urea Formaldehyde- 400 MTPM) and Laminated Sheets (2,50,000 Sheets/Month) Manufacturing Unit at Survey No. 98, Opp 66 KV Substation, Before Millennium Tiles, Old Rafaleshwar Road, Village Bhadiyad, Morbi, Gujarat by M/s Welmica Laminates Private Limited–Terms of Reference- reg. [IA/GJ/IND2/65037/2017, IA-J-11011/274/2017-IA-II(I)]</b></p> <p>The project proponent and the accredited consultant M/s T.R. Associates gave a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>xv. The proposal is for Setting up of Resins (Phenol Formaldehyde- 700 MTPM; Melamine Formaldehyde- 400 MTPM; Urea Formaldehyde- 400 MTPM) and Laminated Sheets (2,50,000 Sheets/Month) Manufacturing Unit at Survey No. 98, Opp 66 KV Substation, Before Millennium Tiles, Old Rafaleshwar Road, Village Bhadiyad, Morbi, Gujarat by M/s Welmica Laminates Private Limited.</li> <li>xvi. All Synthetic organic chemicals industry projects, located outside the notified industrial area/estate are listed at S.N5(f) of schedule of Environmental Impact Assessment (EIA) notification under category ‘A’ and are appraised at Central level by the ExpertAppraisal Committee (EAC).</li> <li>xvii. 13456 m<sup>2</sup> land will be used for proposed project.</li> <li>xviii. Industry will develop greenbelt in an area of 33.3 % i.e. 4470 m<sup>2</sup> out of 13456 m<sup>2</sup> of area of the project. The estimated project cost is Rs.1.3 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 42 Lakhs and the recurring cost (operation and maintenance) will be about Rs. 30lakhs per annum. Total employment will be 100 persons.</li> </ol>

- xix. No national parks, wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, wildlife corridors etc. Lies within 10 km distance. Paneli Reserved Forest lies at 4 km in the East Direction from the project site. Machchhu river is flowing at a distance of 1.8 km in W direction.
- xx. Ambient air quality monitoring will be collected from 8 locations during October-December 2017.
- xxi. Total water requirement is 33.7m<sup>3</sup>/day which will be met from Bore well.
- xxii. Treated effluent of 15 m<sup>3</sup>/day will be treated through Effluent treatment plant (including Evaporator followed by R.O.) and will be based on Zero Liquid Discharge system.
- xxiii. Power requirement of proposed project will be 200 KVA and will be met from Paschim Gujarat Vij Company Limited (PGVCL). Stack (height 10mt) will be provided as per CPCB norms to the proposed DG sets of 250 KVA which will be used as standby during power failure.
- xxiv. In Proposed unit 4 TPH coal/briquettes Fired boiler and 15 Lakh Kcal/hr Thermic Fluid Heater will be installed. Cyclone separator followed by Bag filter with a stack height of 30 mt. will be installed for controlling the particulate emissions (within statutory limit of 150mg/Nm<sup>3</sup>).

Sr. No.	Stack attached to	Height of the stack In meter	Fuel & its Consumption	APC System	Expected Pollutant	GPCB Limit
1	Steam Boiler (1 X 4 TPH)	30 m	Briquettes/ Lignite/coal – 4.7 MT/Day	Cyclone Separator followed by Bag Filter	SPM SO <sub>2</sub> NO <sub>2</sub>	As per GPCB Norms SPM ≤ 150 mg/Nm <sup>3</sup>
2	Thermic Fluid Heater (15 Lakh Kcal/hr.)		Briquettes/ Lignite/coal – 3.2 MT/Day			SO <sub>2</sub> ≤ 100 ppm NO <sub>2</sub> ≤ 50 ppm
3	D.G. Set (250 KVA)	10 m	HSD 50 Litre/Hr.	N.A.	SPM SO <sub>2</sub> NO <sub>2</sub>	

- xxv. Details of solid waste/hazardous waste generation and its management.

Sr. No.	Description	Category	Quantity (MT/Month)	Mode of Disposal
1	ETP Sludge + Evaporation Residue	35.3	57	Collection, storage and disposal at Approved TSDF site
2	Used Oil	5.1	0.004	Collection, storage and used within premises as a lubricant / sold to registered recycler.



3	Discarded Plastic Bags / Barrels	33.1	12	Collection, storage & sold to authorized vendor.
4	Edge Cutting Waste	23.1	1	Collection, storage & disposal at CHWIF site.
5	Spent carbon	54.3	16	Collection, storage, transportation & disposal at CHWIF site / sell to authorized vendor

xxvi. The list of proposed products are:

Sr. No.	Name of Product	Quantity
1	Phenol Formaldehyde Resin	700 MT/Month
2	Melamine Formaldehyde Resin	400 MT/Month
3	Urea Formaldehyde Resin	400 MT/Month
4	Laminated Sheets	2,50,000 Sheets/Month

EAC has deliberated on the proposal. **EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR along with public hearing, for preparation of EIA/EMP report.**

**Additional ToR**

- i. A plan for implementation of Zero Liquid Discharge System shall be submitted.
- ii. No construction activity (other than for securing land) shall be started without obtaining prior EC.
- iii. A layout plan earmarking space Green belt of at least 10 m width along the periphery of the plant with three layers of perennial trees, which can control/reduce the pollutant from the project, shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.
- iv. At least 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.
- v. Public hearing has to be conducted as per the provisions of EIA Notification, 2006.
- vi. PP shall submit the approval from competent authority for ground water extraction.

24.9.15 **Setting up of Synthetic Organic Chemicals Manufacturing Unit (105 MTPM) at Plot No.4, Block No.253, Village Nananpur, Taluka Prantij, District Sabarkantha, Gujarat by M/s Hexane Pharmachem Industries-Terms of Reference-reg. [IA/GJ/IND2/64726/2017, IA-J-11011/232/2017-IA-II(I)]**

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

- i. The proposal is for Setting up of Synthetic Organic Chemicals Manufacturing Unit (105 MTPM) at Plot No.4, Block No.253, Village Nananpur, Taluka Prantij, District Sabarkantha, Gujarat by M/s Hexane Pharmachem Industries.
- ii. All Synthetic organic chemicals industry projects, located outside the notified industrial area/estate are listed at S.N5(f) of schedule of Environmental Impact Assessment (EIA) notification under category 'A' and are appraised at Central level by the Expert Appraisal

Committee (EAC).

- iii. 6077 m<sup>2</sup> land will be used for proposed project. Industry will develop greenbelt in an area of 34.31% i.e. 2085 m<sup>2</sup> out of 6077 m<sup>2</sup> of area of the project.
- iv. The estimated project cost is Rs.3.0 crores. Total capital cost earmarked towards environmental pollution control measures is approximately Rs 40 Lakhs and the recurring cost(operation and maintenance) will be approximately about Rs.33 lakhs per annum. Total employment will be 12 persons
- v. No national parks, wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, wildlife corridors etc. Lies within 10 km distance of the project site. Hathmati canal is flowing at a distance a distance of 0.8 km in NW direction.
- vi. Ambient air quality monitoring will be collected from 8 locations during October to December 2017.
- vii.Total water requirement is 29.5m<sup>3</sup>/day which will be met from bore well.
- viii.Treated effluent of 8.3m<sup>3</sup>/day will be treated through Effluent treatment plant (including Evaporator followed by condenser) and will be based on Zero Liquid Discharge system.
- ix. Power requirement of proposed project will be 100 HP and will be met from Uttar Gujarat Vij Company Limited (UGVCL). Stack (height 10mt) will be provided as per CPCB norms to the proposed DG sets of 60 KVA which will be used as standby during power failure.
- x. In Proposed unit 2 TPH whitecoal/briquettes Fired boiler will be installed. Bag filter with a stack height of 30 mt will be installed for controlling the particulate emissions (within statutory limit of 150mg/Nm<sup>3</sup>).

Sr. No.	Stack attached to	Height of the stack In meter	Fuel & its Consumption	APC System	Expected Pollutant	GPCB Limit
1	Steam Boiler (2 TPH)	30 m	White Coal / Briquettes 4.4MT/Day	Bag Filter	SPM SO <sub>2</sub> NO <sub>2</sub>	As per GPCB Norms
3	D.G. Set (60 KVA)	10 m	Diesel 12Liter/Hr.	N.A.	SPM SO <sub>2</sub> NO <sub>2</sub>	SPM ≤ 150 mg/Nm <sup>3</sup> SO <sub>2</sub> ≤ 100 ppm NO <sub>2</sub> ≤ 50 ppm

xi. Details of solid waste/hazardous waste generation and its management.

Sr. No.	Description	Category	Quantity of waste generated (MT/Month)	Mode of Disposal
1	Discarded Bags/Barrels / Drums / Carboys	33.3	1.8	Collected, stored in storage area & Sell to GPCB authorised recyclers / reusers
2	Used Oil	5.1	0.004	Collected, stored in hazardous waste storage area & Sell to GPCB registered reprocessor.
3	Process waste	28.1	8.2	Collected, packed in bags, stored in hazardous waste storage area & Disposed off at CHWIF
4	Distillation residue	20.3	1.64	Collected, packed in bags, stored in hazardous waste storage area & Disposed off at CHWIF

5	Spent Charcoal + Spent carbon	28.2	2.66	Collected, packed in bags, stored in hazardous waste storage area & Disposed off at CHWIF
6	Off specification products	28.3	3.28	Collected, packed in bags, stored in hazardous waste storage area & Disposed off at approved TSDF site
7	ETP Sludge + Evaporation residue	34.3	5.0	Collected, packed, stored in hazardous waste storage area & Disposed off at approved TSDF site

xii. The list of proposed products are:

Sr. No.	Products List	Quantity (MT/Month)
1	Benzyl TriphenylPhosphoniumChoride	1
2	Cetramide	1
3	Cetramide Strong Solution 40 %	1
4	CetylPyridiniumChoride	1
5	CetylTrimethyl Ammonium Bromide	1
6	CetylTrimethyl Ammonium Chloride 30 %	1
7	Ethyl TriphenylPhosphonium Bromide	1
8	Lauryl Pyridinium Chloride	1
9	Methyl Tributyl Ammonium Chloride 75 %	5
10	Methyl Trioctyl Ammonium Chloride 95 %	1
11	Methyl TriphenylPhosphonium Bromide	3
12	Phenyl Trimethyl Ammonium Chloride	2
13A	Tetra Butyl Ammonium Bromide (Powder)	10
13B	Tetra Butyl Ammonium Bromide (Solution)	25
14	Tetra Butyl Ammonium Chloride	2
15	Tetra Butyl Ammonium Hydrogen Sulphate	2
16	Tetra Butyl Ammonium Iodide	1
17	Tetra Methyl Ammonium Chloride	2
18	Tetra Octyl Ammonium Bromide	2
19	Tetra Ethyl Ammonium Bromide	5
20	Tri Ethyl Benzyl Ammonium Chloride	5
21	Benzalkonium Chloride 50 %	1
22	Benzyl Tri Butyl Ammonium Bromide	1
23	Benzyl Tri Butyl Ammonium Chloride	1
24	Butyl TriphenylPhosphonium Bromide	2
25	Butyl TriphenylPhosphonium Chloride	1
26	Cetyl Dimethyl Benzyl Ammonium Bromide	1
27	Cetyl Dimethyl Benzyl Ammonium Chloride	1
28	Dodecyl Trimethyl Ammonium Chloride	1
29	MesetroniumEthosulphate	1
30	Methyl TriphenylPhosphonium Chloride	2
31	Methyl TriphenylPhosphonium Iodide	1
32	Tetra Phenyl Phosphonium Bromide	1
33	Tri Ethyl Methyl Ammonium Chloride	1
34	Tri Ethyl Butyl Ammonium Bromide	1
35	Benzyl Tri Methyl Ammonium Chloride (Powder)	16
	<b>Total</b>	<b>105</b>

	<p>EAC has deliberated on the proposal. <b>EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR along with public hearing, for preparation of EIA/EMP report.</b></p> <p><b>Additional ToR</b></p> <ol style="list-style-type: none"> <li>i. A plan for implementation of Zero Liquid Discharge Concept shall be submitted.</li> <li>ii. No construction activity (other than for securing land) shall be started without obtaining prior EC.</li> <li>iii. A layout plan earmarking space for Green belt along the periphery of the plant, which can control/reduce the pollutant from the project, shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.</li> <li>iv. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.</li> <li>v. Chemical name of the product with CAS No. number and the actual end use shall be provided.</li> <li>vi. Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.</li> <li>vii. PP shall submit approval from competent authority for ground water extraction</li> <li>viii. Public hearing has to be conducted as per the provisions of EIA Notification, 2006.</li> </ol>
24.9.16	<p><b>Tapti Decommissioning Project (for the Tapti Part B facilities) comprises of safe plugging and abandonment of 38 wells, and safe and environment -friendly decommissioning and disposal of 5 wellhead platforms (STA, STB, STC, STD &amp; MTA) and associated intra-field pipelines in Tapti Field at Mumbai City, Maharashtra by M/s BG Exploration and Production India Ltd- Terms of Reference-reg. [IA/MH/IND2/64681/2017, IA-J-11011/225/2017-IA-II(I)]</b></p> <p>The Project Proponent and the accredited Consultant M/s. ERM India Pvt. Ltd., made 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 Tapti Decommissioning Project (for the Tapti Part B facilities) comprises of safe plugging and abandonment of 38 wells, and safe and environment -friendly decommissioning and disposal of 5 wellhead platforms (STA, STB, STC, STD &amp; MTA) and associated intra-field pipelines in Tapti Field at Mumbai City, Maharashtra by M/s BG Exploration and Production India Ltd-</li> <li>ii. All the projects related to Offshore and Onshore Oil and Gas exploration, Development and Production are listed in S.No. 1(b) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>iii. Ministry has issued EC to PMT JV (no. J-11011/26/96-IA II (I) dated 26.06.1996) for enhanced development at Tapti, Mukta/Panna Oil Fields and (no. J-11011/434/2005-IA II (I) dated 24.05.2006) for Expansion of Tapti Offshore Field operation to augment natural gas production from 250 MMSCFD to 450 MMSCFD.</li> <li>iv. The estimated project cost is Rs. 515 crores.</li> <li>v. It is informed that, the Panna, Mukta and Tapti Joint Venture (PMT JV) comprising of Oil &amp; Natural Gas Corporation Limited (ONGC), Reliance Industries Limited (RIL) and BG Exploration and Production India Limited (BGEPIIL) operates the Mid and South Tapti Contract Areas (admeasuring 1,471 km<sup>2</sup>) located offshore to the south of Gulf of Khambhat, West Coast of India in Arabian Sea under the Production Sharing Contract with the Ministry of Petroleum and Natural Gas (MoPNG), Government of India (Tapti PSC). The development and expansion operations of Mid and South Tapti Contract Areas (Tapti</li> </ol>

Fields) were carried out under the above mentioned Environmental Clearances issued by your Ministry.

- vi. The Tapti Fields went into a phase of decline after 2008 and cessation of production was finally declared in March 2016.
- vii. Certain Facilities at the Mid and South Tapti Fields known as the Tapti Part A Facilities (comprising of platforms TCPP, TPP and TFP and the 18” and 20” export pipelines) were handed over to ONGC pursuant to the directions arising out of a meeting dated 5<sup>th</sup> January 2015, at the Ministry of Petroleum and Natural Gas (MoPNG) under the chairmanship of Joint Secretary (E). ONGC will be using the Tapti Part A Facilities for processing gas from its nearby Daman and C-Series fields.
- viii. Post cessation of production, the remaining facilities in the Tapti Fields (comprising of 38 wells and 5 wellhead platforms (STA, STB, STC, STD and MTA and associated intra-field pipelines)) known as the Tapti Part B Facilities are to be abandoned by the PMT JV as required under the Oilfields Act, 1948, the Petroleum and Natural Gas Rules, 1959 and the Tapti PSC.
- ix. The Tapti Block (admeasuring 1,471 km<sup>2</sup>) is located offshore. The mid Tapti Field is located 35 km from Saurashtra Coast, 75 km from Hazira and 160 km north-west of the city of Mumbai. The Tapti Field lies in approximately 21 m of water depth, on the northeast flank of the Surat Depression.
- x. The Tapti Decommissioning Project ( for the Tapti Part B facilities) comprises of safe plugging and abandonment of 38 wells, and safe and environment-friendly decommissioning and disposal of 5 wellhead platforms (STA, STB, STC, STD & MTA) and associated intra-field pipelines in Tapti Field.
- xi. The platforms within Tapti Field have a nominal water depth of 21m. All facilities to be removed have been flushed and cleaned, and will be disconnected prior to removal.
- xii. There are no ecologically sensitive areas within 15 km radius at the offshore location.

EAC has deliberated on the proposal. EAC noted that the PP has not undertaken enough ground work for the proposed decommissioning project. EAC has suggested the PP to obtain concurrence from the concerned authorities as per National and International norms/guideline with respect to decommissioning of projects, being the site located in the offshore region. EAC observed that the projects involve various Government agencies and departments. EAC observed that any decommissioning activity in the offshore regional shall be initiated with the concurrence of Indian Coast Guard/Navy. EAC noted that the PP shall also obtain recommendation of State Coastal Zone Management Authority for disposal/transport of products.

**EAC after detailed deliberation has deferred the proposal for want of following additional information/documents from the project proponent. EAC desired that the PP shall submit a comprehensive plan after getting the following details.**

- i. PP shall submit the plan in consensus with OISD guidelines.
- ii. Permission/concurrence from the Indian Coast Guard.
- iii. Permission/concurrence from the Indian Navy (Western Command).
- iv. Navigation clearance from DG Shipping.
- v. Action plan to follow the national and international norms for offshore decommissioning projects, transport and disposal.

	vi. Concurrence from the Department of fisheries.												
24.9.17	<p><b>Expansion of Alpha Blue (2 MTPM to 22 MTPM) and Beta Blue (70MTPM) Manufacturing Plant at Plot No. 312, GIDC Estate, Panoli, Bharuch, Gujarat by M/S. Qualitron Chemicals –Terms of Reference-reg. [IA/GJ/IND2/63675/2017, IA-J-11011/158/2017-IA-II(I)]</b></p> <p>The Project Proponent and their consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd., gave a detailed presentation on the salient features of the project &amp; informed that:</p> <ol style="list-style-type: none"> <li>The proposal is for Expansion of Alpha Blue (2 MTPM to 22 MTPM) and Beta Blue (70MTPM) Manufacturing Plant at Plot No. 312, GIDC Estate, Panoli, Bharuch, Gujarat by M/S. Qualitron Chemicals.</li> <li>All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category ‘B’ but due to the applicability of general condition (located in Critically Polluted Area), it is considered under Category ‘A’ and is appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>Existing land area is 1890 m<sup>2</sup>; No additional land will be used for proposed expansion. Industry will develop Greenbelt in an area of 33% i.e. 624 m<sup>2</sup> out of 1890 m<sup>2</sup> of area of the project. The estimated project cost is Rs. 112.77 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 30 Lakhs and the recurring cost (operation &amp; maintenance) will be about Rs. 5 Lakhs per annum. Total employment will be 30 persons as direct &amp; 10 persons indirect for proposed project. Industry purposes to allocate Rs. 2.8 Lakhs @ 2.5 % towards Corporate Social Responsibility.</li> <li>No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance from the project site. Narmada River is flowing at a distance a distance of 14 km in N direction.</li> <li>Ambient air quality monitoring will be carried out at 8 locations during March-2017 to May-2017.</li> <li>Total water requirement will be 48.2 KL/Day; which will be met through GIDC Water Supply.</li> <li>Total 20.4 KL/Day (14.4 KL/Day Industrial + 6 KL/Day domestic) of effluent shall be treated in ETP and then sent to CETP, Panoli (M/s. PETL) for further treatment.</li> <li>Power requirement will be 202 KWH (Existing: 52 KWH &amp; Proposed: 150 KWH) and will be met from Gujarat Gas Co. Ltd.</li> <li>Existing unit has Steam boiler (200 kg/hr) &amp; Hot Air Generator. Unit has proposed Steam boiler (600 kg/hr).</li> <li>Details of Solid waste / Hazardous waste generation and its management.</li> </ol> <table border="1"> <thead> <tr> <th>Cat. No.</th> <th>Hazardous Waste</th> <th>Existing</th> <th>Additional</th> <th>Total</th> <th>Method of Disposal</th> </tr> </thead> <tbody> <tr> <td>5.1</td> <td>Used Oil</td> <td>10 Lit/Year</td> <td>50 Lit/Year</td> <td>60 Lit/Year</td> <td>Collection, Storage, Transportation &amp; disposal by sale to registered reprocessors</td> </tr> </tbody> </table>	Cat. No.	Hazardous Waste	Existing	Additional	Total	Method of Disposal	5.1	Used Oil	10 Lit/Year	50 Lit/Year	60 Lit/Year	Collection, Storage, Transportation & disposal by sale to registered reprocessors
Cat. No.	Hazardous Waste	Existing	Additional	Total	Method of Disposal								
5.1	Used Oil	10 Lit/Year	50 Lit/Year	60 Lit/Year	Collection, Storage, Transportation & disposal by sale to registered reprocessors								

33.1	Discarded Drums/bags	50 Nos./Year	200 Nos./Year	250 Nos./Year	Collection, Storage, Transportation, Decontamination & Sell to authorized vendors
33.1	Discarded liners	2,500 Nos./Year	20,000 Nos./Year	22,500 Nos./Year	Collection, Storage, Transportation, Decontamination & Sell to authorized vendors
35.3	ETP Sludge	25 MT/Year	25 MT/Year	50 MT/Year	Collection, Storage, Transportation & disposal at TSDF Site
C2	Spent Sulphuric Acid	240 MT/Year	2,440 MT/Year	2,680 MT/Year	Collection, Storage, Transportation & sell to end user

xi. The list of existing & proposed products are :

Sr. No.	Name of Products	Existing (MT/Month)	Additional (MT/Month)	Total after Expansion (MT/Month)
1	Pathalocyanine Alpha Blue (CAS No. 147-14-8)	2.0	20.0	22.0
2	Pathalocyanine Beta Blue (CAS No. 147-14-8)	--	70.0	70.0
<b>Total</b>		<b>2.0</b>	<b>90.0</b>	<b>92.0</b>

EAC has deliberated on the proposal. EAC noted that the project is located in the notified Industrial area. EAC has considered the request of the PP regarding utilization of baseline data collected during March- May, 2017, considering the monsoon season.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry for preparation of EIA/EMP report. Public hearing is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate.**

24.9.18 **Setting up of Dyes & Dyes Intermediates Manufacturing Plant (55 MTPM) at Plot No. 3002, GIDC Estate Panoli, Ankleshwar, Bharuch, Gujarat by M/s. Meera Dyes- Terms of Reference- reg. [IA/GJ/IND2/63879/2017, IA-J-11011/178/2017-IA-II(I)]**  
The Project Proponent and their consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd., gave a detailed presentation on the salient features of the project & informed that:

- i. The proposal is for Setting up of Dyes & Dyes Intermediates Manufacturing Plant (55 MTPM) at Plot No. 3002, GIDC Estate Panoli, Ankleshwar, Bharuch, Gujarat by M/s. Meera Dyes
- ii. All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B' but due to the applicability of general condition (located in Critically

Polluted Area), it is considered under Category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).

- iii. Proposed land area is 1000 m<sup>2</sup>. Industry will be developed Greenbelt in an area of 33% i.e. 330 m<sup>2</sup> out of 1000 m<sup>2</sup> of area of the project. The estimated project cost is Rs. 100 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 15 Lakhs and the recurring cost (operation & maintenance) will be about Rs. 5 Lakhs per annum. Total employment will be 15 persons as direct & 5 persons indirect for proposed project. Industry purposes to allocate Rs. 2.5 Lakhs @ 2.5 % towards Corporate Social Responsibility.
- iv. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance from the project site. Narmada River is flowing at a distance of 14 km in N direction.
- v. Ambient air quality monitoring will be carried out at 8 locations during March-2017 to May-2017.
- vi. Total water requirement will be 4.27 KL/Day; which will be met from GIDC Water Supply.
- vii. Total 2.26 KL/Day (1.66 KL/Day Industrial + 0.60 KL/Day domestic) of effluent shall be generated. Industrial effluent 1.66 KL/Day will be treated in ETP and then sent to CETP, Panoli (M/s. PETL) for further treatment.
- viii. Power requirement will be 40 HP and will be met from DGVCL.
- ix. Proposed unit will have 600 kg/hr Steam boiler. Multi cyclone separator with bag filter with a stack of height of 11 m will be installed for controlling the Particulates emissions (within statutory limit of 115 mg/Nm<sup>3</sup>).
- x. Details of Solid waste / Hazardous waste generation and its management.

Sr. No.	Type of waste	Category	Quantity	Disposal Method
1	ETP Sludge	35.1	3 MT/Month	Collection, Storage, Transportation and disposal to nearest TSDF site (M/s. BEIL or M/s. PSWMC)
2	Discarded Containers/Bags/ Liners	33.1	1 MT/Month	Collection, Storage, Transportation, decontamination & sell to GPCB authorized vendors
3	Used oil	5.1	0.05 MT/Month	Collection, Storage, Transportation & Sell to GPCB registered re-processor.
4	Iron Sludge	--	5 MT/Month	Collection, Storage, Transportation & Sell to cement industries

- xi. The list of proposed products are :

S. No.	Name of Products	CAS NO.	Production Capacity (MT/Month)
1	Direct Green 8	5422-17-3	5 MT/Month
2	Direct Black 29	3626-23-1	5 MT/Month
3	Direct Red 31	5001-72-9	5 MT/Month
4	Direct Sky Blue F. F.	2429-74-5	5 MT/Month
5	Basic Bismark Brown	8005-77-4	5 MT/Month



		6	Meta Phenyl Di Amine	108-45-2	5 MT/Month
		7	Standardization (Formulation) of Dyes	--	25 MT/Month
			<b>Total</b>		<b>55 MT/Month</b>

EAC has deliberated on the proposal. EAC noted that the project is located in the notified Industrial area. EAC has considered the request of the PP regarding utilization of baseline data collected during March- May, 2017 from the same locality, considering the monsoon season.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry for preparation of EIA/EMP report. Public hearing is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate.**

24.9.19 **Expansion of Pigments Manufacturing Unit (Beta Blue-6 MTPM to 100 MTPM & Pigment Green 7: 40 MTPM) at Plot No. 3458, 3459, GIDC Industrial Estate, Ankleshwar, Tal: Ankleshwar, Dist: Bharuch, Gujarat M/s. Rushitoya Industries- Terms of Reference- reg. [IA/GJ/IND2/64000/2017, IA-J-11011/189/2017-IA-II(I)]**

The Project Proponent and their consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd., gave a detailed presentation on the salient features of the project & informed that:

- The proposal is for Expansion of Pigments Manufacturing Unit (Beta Blue-6 MTPM to 100 MTPM & Pigment Green 7: 40 MTPM) at Plot No. 3458, 3459, GIDC Industrial Estate, Ankleshwar, Tal: Ankleshwar, Dist: Bharuch, Gujarat M/s. Rushitoya Industries
- All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B' but due to the applicability of general condition (located in Critically Polluted Area), it is considered under Category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).
- Existing land area is 1406 m<sup>2</sup>; No additional land will be used for proposed expansion. Industry will be developed Greenbelt in an area of 300 m<sup>2</sup> out of 1406 m<sup>2</sup> of area of the project. Total costs of the project will Rs. 1.5 Crore. Capital cost of air & water pollution control system and environmental monitoring equipments will be Rs. 30 Lakh. Total employment will be 15 persons as direct & 10 persons indirect for proposed project. Industry purposes to allocate Rs. 75000 @ 2.5 % towards Corporate Social Responsibility.
- No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance.
- Ambient air quality monitoring will be carried out at 8 locations during March-2017 to May-2017.
- Total water requirement will be 31.0 KL/Day; which will be met through GIDC Water Supply.
- Total 11.30 KL/Day (10.30 KL/Day Industrial + 1.0 KL/Day domestic) of effluent shall be treated in ETP and then sent to CETP, Ankleshwar(M/s. ETL) for further treatment.
- Power requirement will be 500 KVA and will be met from DGVCL AND 1 D.G. Set

=250 KVA for emergency only.

- ix. Existing unit has Steam boiler (600 kg/hr). Unit has proposed Steam boiler (800 kg/hr), Thermic Fluid Heater (2 lac kcal) & D.G. Set (250 KVA).
- x. The list of existing & proposed products are.

S. No.	Product	Existing Quantity (MT/M)	Proposed Quantity (MT/M)	Total Quantity (MT/M)
1	Beta Blue	6	94	100
2	Pigment Green 7	--	40	40
Total		6	134	140

EAC has deliberated on the proposal. EAC noted that the project is located in the notified Industrial area. EAC has considered the request of the PP regarding utilization of baseline data collected during March- May, 2017 from the same locality, considering the monsoon season.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry for preparation of EIA/EMP report. Public hearing is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate.**

24.9.20 **Manufacture of Synthetic Organic Chemicals (1320 TPA) in the existing unit at Plot. No 80/7/2, Phase I, G.I.D.C Estate, Vatva, Ahmedabad, Gujarat by M/s Amidhara Enterprise- Terms of Reference- reg. [IA/GJ/IND2/65017/2017, IA-J-11011/281/2017-IA-II(I)]**

The Project Proponent gave a detailed presentation on the salient features of the project & informed that:

- i. The proposal is for Manufacture of Synthetic Organic Chemicals (1320 TPA) in the existing unit at Plot. No 80/7/2, Phase I, G.I.D.C Estate, Vatva, Ahmedabad, Gujarat by M/s Amidhara Enterprise.
- ii. All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B'. However, due to non functioning of SEIAA, Gujarat, the project has been considered under category 'B' and appraised at Central level by Expert Appraisal Committee (EAC).
- iii. Existing land area is 1650 m<sup>2</sup>. No additional land will be used for proposed expansion.
- iv. Industry will develop Greenbelt in an area of 10 % i.e. 165 m<sup>2</sup> out of 1650 m<sup>2</sup> of area of the project. The estimated project cost is Rs. 1.4 Cr. including existing investment of Rs. 0.60. Cr. Total capital cost earmarked towards environmental pollution control measures is Rs 0.15 Cr. and the Recurring cost (operation and maintenance) will be about Rs 0.10 Cr. per annum. Total Employment will be 15 persons as direct & 10 persons indirect after expansion. Industry proposes to allocate Rs 0.01 Cr. @ of 5/2.5 % towards Corporate Social Responsibility.
- v. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance from the project site. Sabarmati river is flowing at about 9.15 km from the project site.
- vi. Ambient air quality monitoring carried out at 8 locations during March- May, 2017 may be considered for EIA/EMP report preparation.
- vii. Total water requirement is 47.8 m<sup>3</sup>/day and will be met from GIDC Supply.

- viii. Total Industrial Waste water generation will be 29.0 m<sup>3</sup>/day. After segregation of stream it will be discharged as follows: (i). Industrial process waste water @ 5.0 m<sup>3</sup>/day will be discharged to MEE, Vatva; (ii). Washing and other diluted streams after treatment @ 24.0 m<sup>3</sup>/day will be discharged to the CETP, Vatva, Ahmedabad and (iii). Domestic Sewage waste water is discharged to soak pit.
- ix. Power requirement after expansion will be 200 kw including existing 99.488 kw and will be met from Torrent Power Ltd. Existing unit has no DG sets, additionally one DG sets are used as standby during power failure. Stack (height 3m) will be provided as per CPCB norms to the proposed DG sets of 10 kw which will be used as standby during power failure.
- x. Existing unit has one 0.3 TPH wood fired boiler, one HAG attached to the Spray Dyer. The unit is proposing one more spray dryer with attaching HAG system, 2 nos. of 0.5 TPH wood/white coal fired boilers and one DG set of 10 KVA capacity.

Sr. No.	Stack Attached to	Stack Height (m)	Fuel Used	Quantity of Fuel	APCM	Pollutants
1.	Steam Boiler (1 Existing + 2 proposed)	11	Wood/White Coal	2.8 MT/day	-	PM 150 mg/Nm <sup>3</sup> SO <sub>2</sub> 100 ppm NO <sub>x</sub> 50 ppm
2	Spray Dryer (with HAG system) (1 Existing + 1 proposed)	20	PNG	2000 MMBTU/Month	-	
3.	D.G. Set (10 KVA) (Stand by)	5	Diesel	10 Lit/Hr.	-	

**Flue Gas Emission after Proposed**

- xi. Details of Process emissions generation and its management.

**Process Gas Emission:(After Proposed)**

Sr. No.	Stack Attached to	Stack Height (m)	APCM System	Expected Pollutant	Pollutants
1.	Reactor	7	(Water Scrubber or Alkali Scrubber)	SO <sub>2</sub> HCl	SO <sub>2</sub> <40 mg/Nm <sup>3</sup> HCl<20 mg/Nm <sup>3</sup>

2.	Spray Dryer (1 Existing+1 proposed)	20	Two Stage (Water Scrubber )	PM SO <sub>2</sub> NO <sub>x</sub>	PM 150 mg/Nm <sup>3</sup> SO <sub>2</sub> 100 ppm NO <sub>x</sub> 50 ppm
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xii. Details of Solid waste/ Hazardous waste generation and its management.

### HAZARDOUS WASTE MANAGEMENT AND STORAGE

Sr. No.	Types of Waste	Category	Quantity Existing	Quantity Proposed	Quantity After Proposed	Mode of Disposal
1.	Waste ETP Sludge	34.3	0.024 MT/Year	199.976 MT/Year	200 MT/Year	Collection, Storage, Transportation and disposal to TSDF site.
2	Process/Iron sludge	26.1	--	200 MT/Year	200 MT/Year	Collection, Storage, Transportation and disposal to TSDF site.
3.	Used Oil/ Spent Oil	5.1	40 Lit/Year	60 Lit/Year	100 Lit/Year	Collection, Storage, Transportation and Sold to Recycler, Re processor or used as Lubricants for Machineries.
4.	Discarded Container / Drum	33.3	10 MT/Year	25 MT/Year	35 MT/Year	Collection, Storage, Transportation and Sold to Registered Recycler Or Send back to Raw Material supplier Or Use for ETP sludge packing
	Bags					

xii. The list of products with production capacity are:

S. No.	Name of Product	Production Capacity (TPA)		
		Existing	Proposed	After Expansion
1	Silicon Emulsion	24	-24	<b>1320TPA (S.O. Dyes) &amp; 1200TPA Job Work Of Spray Drying &amp; 1200TPA Blending &amp; Mixing of S.O Dyes</b>
2	Co. Polymer Emulsion (Binder)	60	-60	
3	PVA (Leveling, Penetrating & Scouring Agent)	24	-24	
4	Job Work of Spray Drying	1200	-	
5	Blending & Mixing of S.O Dyes	1200	-	
1	Reactive Black 5/8/39		<b>1320</b>	
2	Reactive Blue 13/19/49/171/198/220/221/250			
3	Reactive Brown 11			
4	Reactive Violet 46			
5	Reactive Orange 2R/12/13/16/W3R 35/84/107/122			
6	Reactive Red			

	3.1/24.1/31/45/111/120/195/198/218/245/278			
7	Reactive Yellow 15/18/42/57/84/85/86/95/135/145/186/210			
<b>Total</b>		-	<b>1320.0</b>	<b>1320TPA (S.O. Dyes) &amp; 1200 MT/M Job Work Of Spray Drying &amp; 1200 MT/M Blending &amp; Mixing of S.O Dyes</b>

EAC has deliberated on the proposal. EAC has noted that the project is located in the notified Industrial area. EAC has also considered the request of the PP regarding utilization of baseline data collected during March-May, 2017, for preparation of EIA/EMP report.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR, for preparation of EIA/EMP report. Public hearing is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate.**

**Additional ToR**

- i. A layout plan earmarking space for Green belt of at least 5 m width along the periphery of the plant with perennial trees, which can control/reduce the pollutant from the project, shall be submitted. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.
- ii. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.

24.9.21 **Expansion of S.O. Dyes Manufacturing Unit (42 TPA to 1320 TPA) at Plot No. 1319 & 1320, Phase-III, GIDC, Vatva, Ahmedabad, Gujarat by M/s Shreeji Bapa Dye Chem-Terms of Reference- reg. [IA/GJ/IND2/65024/2017, IA-J-11011/283/2017-IA-II(I)]**

The Project Proponent gave a detailed presentation on the salient features of the project & informed that:

- i. The proposal is for Expansion of S.O. Dyes Manufacturing Unit (42 TPA to 1320 TPA) at Plot No. 1319 & 1320, Phase-III, GIDC, Vatva, Ahmedabad, Gujarat by M/s Shreeji Bapa Dye Chem.
- ii. All Synthetic Organic Chemicals Industry located in a notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'B'. However, due to non functioning of SEIAA, Gujarat, the project has been considered under category 'B' and appraised at Central level by Expert Appraisal Committee (EAC).
- iii. The existing land area is 703 m<sup>2</sup>. Additional, 703 m<sup>2</sup> land will be used for the proposed

expansion. Industry will develop Greenbelt in an area of 10 % i.e.141 m<sup>2</sup> out of 1406 m<sup>2</sup> area of the project. The estimated project cost is Rs. 1.4 Cr. including existing investment of Rs. 0.60. Cr. Total capital cost earmarked towards environmental pollution control measures is Rs 0.15 Cr. and the Recurring cost (operation and maintenance) will be about Rs 0.10 Cr. per annum. There will be employment opportunity for 15 persons as direct &10 persons as indirect after expansion. Industry proposes to allocate Rs 0.01 Cr. towards Corporate Social Responsibility.

- iv. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Sabarmati river is flowing at a distance of 9.15 km from the project site.
- v. Ambient air quality monitoring was carried out at 8 locations during March 2017 to May 2017. The same may be considered for EIA/EMP report preparation.
- vi. Total water requirement is 47.8 m<sup>3</sup>/day and will be met from GIDC Supply.
- vii. Total Industrial Waste water generation will be 31.8 m<sup>3</sup>/day. After segregation of stream it will be discharged as follows: (i). Industrial process waste water @ 7.3 m<sup>3</sup>/day will be discharged to MEE, (ii). Washing and other diluted streams after treatment @ 24.5 m<sup>3</sup>/day will be discharged to the CETP, Vatva, Ahmedabad and (iii). Domestic Sewage waste water is discharged to soak pit.
- viii. Power requirement after expansion will be 200 kw including existing 99.607kw and will be met from Torrent Power Ltd. Existing unit has no DG sets, additionally one DG sets will be used as standby during power failure. Stack (height 3m) will be provided as per CPCB norms to the proposed DG set.
- ix. Existing unit has one 0.3 TPH wood fired boiler & one HAG. The unit is proposing spray dryer attaching HAG system, 2 nos. of 0.5 TPH wood/white coal fired boilers and one DG set of 10 KVA capacity.
- x. Flue gas emission after proposed expansion:

Sr. No.	Stack Attached to	Stack Height (m)	Fuel Used	Quantity of Fuel	APCM	Pollutants
1.	Steam Boiler (1 Existing +2 proposed)	11	Wood/ White Coal	2.8 MT/day	-	PM 150 mg/Nm <sup>3</sup> SO <sub>2</sub> 100 ppm NO <sub>x</sub> 50 ppm
2	Spray Dryer (with HAG system) (1 Nos.)	20	PNG	1800 MMBTU/Month	-	
3.	D.G. Set (10 KVA) (Stand by)	5	Diesel	10 Lit/Hr.	-	

- xi. Details of Process emissions generation and its management.

Process Gas Emission after expansion

Sr.	Stack	Stack	APCM	Expected	Pollutants
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No.	Attached to	Height (m)	System	Pollutant	
1.	Reactor	7	(Water Scrubber or Alkali Scrubber)	SO <sub>2</sub> HCl	SO <sub>2</sub> <40 mg/Nm <sup>3</sup> HCl<20 mg/Nm <sup>3</sup>
2.	Spray Dryer	20	Two Stage (Water Scrubber)	PM SO <sub>2</sub> NO <sub>x</sub>	PM 150 mg/Nm <sup>3</sup> SO <sub>2</sub> 100 ppm NO <sub>x</sub> 50 ppm

xii. Details of Solid waste/ Hazardous waste generation and its management.

Sr. No.	Types of Waste	Category	Quantity Existing	Quantity Proposed	Quantity After Proposed	Mode of Disposal
1.	ETP Sludge	34.3	1.8 MT/Year	198.2 MT/Year	200 MT/Year	Collection, Storage, Transportation and disposal to TSDF site.
2	Process/Iron sludge	26.1	--	200 MT/Year	200 MT/Year	Collection, Storage, Transportation and disposal to TSDF site.
3	Used Oil/ Spent Oil	5.1	10 Lit/Year	90 Lit/Year	100 Lit/Year	Collection, Storage, Transportation and Sold to Recycler, Re processor or used as Lubricants for Machineries.
4	Discarded Container / Drum	33.3	6 MT/Year	29 MT/Year	35 MT/Year	Collection, Storage, Transportation and Sold to Registered Recycler Or Send back to Raw Material supplier Or Use for ETP sludge packing
	Bags					

xiii. The list of existing and proposed products are:

Sr. No.	Name of Product	Production Capacity (TPA)		
		Existing	Proposed	After expansion
1	Reactive Orange-2R	42	1278	1320
2	Reactive Golden Yellow R			
3	Reactive Red H7B			
1	Reactive Black 5/8/39	-		
2	Reactive Blue 13/19/49/171/198/220/221/250			
3	Reactive Brown 11			
4	Reactive Violet 46			
5	Reactive Orange 2R/ 12/13/16/W3R			

	35/84/107/122			
6	Reactive Red 3.1/24.1/31/45/111/120/195/198/218/245/278			
7	Reactive Yellow 15/18/42/57/84/85/86/95/135/145/186/210			
<b>Total</b>		<b>42</b>	<b>1278</b>	<b>1320</b>

EAC has deliberated on the proposal. EAC has noted that the project is located in the notified Industrial area. EAC has also considered the request of the PP regarding utilization of baseline data collected during March-May, 2017, for preparation of EIA/EMP report.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR, for preparation of EIA/EMP report. Public hearing is exempted as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification as the project is located in the notified Industrial area/estate.**

**Additional ToR**

- i. A playout plan earmarking space for Green belt of atleast 5 m width along the periphery of the plant with perennial trees which can control/reduce the pollutant from the project. At least 33 % of the area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.
- ii. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.
- iii. A plan for plantation of 10000 trees/year for five years in nearby identified villages shall be submitted.

**24.9.22 Augmentation of Chennai-Trichy- Madurai Pipeline by M/s Indian Oil Corporation Limited-Terms of Reference –reg [IA/TN/IND2/62945/2017 , J-11011/235/2017-IA-II(I) ]**

The project proponent made a detailed presentation on the project and informed the following:

- i. The proposal is for Augmentation of Chennai-Trichy- Madurai Pipeline by M/s Indian Oil Corporation Limited.
- ii. All Oil & gas transportation pipe line (crude and refinery/ petrochemical products), passing through national parks /sanctuaries/coral reefs /ecologically sensitive areas including LNG Terminal are listed at S. No. 6(a) considered as category ‘A’ and appraised at Central level by Expert Appraisal Committee.
- iii. The PP has obtained EC for the existing unit vide letter no. J-11011/61/2000-IA.II(I) dated 21<sup>st</sup> March, 2001.
- iv. The proposed project is expansion of the existing project and hence the EC is mandatory.
- v. The PP has informed that, for transportation of petroleum products viz. MS, SKO and HSD from Chennai refinery of CPCL (A GROUP COMPANY OF IOCL) to various consumption centres in Tamil Nadu, Chennai-Trichy-Madurai pipeline (CTMPL) was commissioned by IOCL in the year 2005 for a design capacity of 3.3 MMTPA. The pipeline has 3 delivery locations at Trichy, Madurai and Sankari.
- vi. The demand of consumer base linked to Marketing ToPs attached with CTMPL continued to increase consistently. For last 3 years, capacity of the pipeline has saturated.



In this regard, a study on augmentation requirements of existing pipelines was carried out, which, indicated long-term throughput requirement of 3.87 MMTPA in 2021-22 for CTMPL.

- vii. The products will be sourced from CPCL Chennai refinery and coastal inputs. In view of stretched operation of the existing CTMPL pipeline facilities and long term throughput projections also exceeding the design capacity, augmentation of CTMPL has been envisaged.
- viii. It is proposed to augment capacity of CTMPL to 3.9 MMTPA. No work is involved in the right of way as only augmentation of existing facilities and construction of one intermediate pumping station is envisaged.
- ix. The capacity of various sections proposed in CTMPL-augmentation is as below:

Sections	Proposed Capacity (MMTPA)
Chennai-Asanur	3.90
Asanur-Trichy	2.08
Asanur-Sankari	1.60
Trichy-Madura	1.70

- x. The scheme for augmentation of CTMPL broadly involves the following activities.
  - i) Replacement of existing 3 motor-driven MLPUs with MLPUs of higher capacity at Chennai pump station
  - ii) Construction of a green-field intermediate pumping station (IPS) at Padalam-Uthiramerur SH (about 110 km from Chennai) with 3 motor driven MLPUs and associated facilities
  - iii) Shifting of existing 3 motor-driven MLPUs from Chennai station to Asanur for dedicated service of pumping in Asanur-Trichy section of CTMPL. Existing MLPUs of Asanur to be retained for pumping in Asanur-Sankari-section.
  - iv) Installation of 3 new motor-driven MLPUs at Trichy (Trichy station to operate as a delivery-cum-pumping station).
  - v) Modifications in existing delivery and associated facilities at Madurai, Trichy and Sankari station
- xi. No additional land is required under this Project for mainline work as no work involved in Right of user (RoU) for mainline. Acquisition of land is being done intermediate pumping station (IPS) at Padalam-Uthiramerur. The augmentation work is involved only at the existing station and new IPS station. The owner ship of the land is entirely of IOCL.
- xii. The proposal of augmentation of CTMPL from to 3.9 MMTPA is estimated to cost Rs.228 crore.
- xiii. The additional manpower requirement would be 17 during construction and 19 for operation of the pipeline.

EAC has deliberated on the proposal. EAC noted that the PP proposes to undertake augmentation of existing pipeline. EAC has also noted that no additional land is required for the mainline work.

**EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry in addition to following additional ToR, for preparation of EIA/EMP report. Public hearing is exempted under the provisions of para 7 (ii) of EIA**

	<p><b>Notification, 2006.</b></p> <p><b>Additional ToR</b></p> <ol style="list-style-type: none"> <li>i. PP shall submit the certified compliance report from the Regional office of the Ministry for the existing EC.</li> <li>ii. Atleast 2.5 % of the total project cost may be earmarked towards Enterprise Social Commitment (ESC). PP shall submit a five year plan for ESC.</li> </ol>
24.9.23	<p><b>Setting up of Integrated Refinery-cum-Petrochemical Complex (60 MMTPA) on West Coast at Babulwadi (Rajapur), Ratnagiri, Maharashtra by M/s Indian Oil Corporation Limited-Terms of Reference-reg. [IA/MH/IND2/65093/2017; J-11011/285/2017-IA-II(I)]</b></p> <p>The project proponent and the accredited consultant M/s Engineers India Limited made a detailed presentation on the project and informed that:</p> <ol style="list-style-type: none"> <li>i. The proposal is for Setting up of Integrated Refinery-cum-Petrochemical Complex (60 MMTPA) on West Coast at Babulwadi (Rajapur), Ratnagiri, Maharashtra by M/s Indian Oil Corporation Limited.</li> <li>ii. All Petro-chemical complexes (industries based on processing of petroleum fractions &amp; natural gas and/or reforming to aromatics) are listed at S.N. 5 (C) 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 PP has informed that, M/s Indian Oil Corporation Limited (IOCL), M/s Hindustan Petroleum Corporation Limited (HPCL) and M/s Bharat Petroleum Corporation Limited (BPCL) intend to jointly set up a 60 MMTPA integrated refinery-cum-petrochemical complex on the West Coast.</li> <li>iv. The land area for the proposed project is 15000 acres. The project shall be located at Babulwadi in Ratnagiri district of Maharashtra.</li> </ol> <p>EAC has deliberated on the proposal. EAC noted that the proposed location is adjacent to the areas declared as Eco-Sensitive Area based on High Level Working Group report on Western Ghats. The proposed project location, though not connected each other, is falling adjacent to the villages declared as ESA, as per Ministry’s OM. Various developmental activities are regulated in these areas. EAC has also observed that, the PP proposes to undertake construction of jetties and ports for collection and transportation of products. EAC suggested PP to get the jetty/port projects appraised through the concerned EAC. EAC has also observed that land is not in possession of the PP.</p> <p><b>EAC after detailed deliberation has deferred the proposal for want of following information/documents:</b></p> <ol style="list-style-type: none"> <li>i. PP shall submit a letter from the concerned authority that the project does not fall in the ESA and the proposed activities are permitted in the area.</li> <li>ii. Details of structure/pipeline connecting Plot 1 &amp; Plot 2.</li> <li>iii. Land ownership certificate from the concerned authority/letter from MSIDC.</li> <li>iv. PP shall submit details of site selection analysis and also the details of studies conducted for alternate site analysis.</li> <li>v. Video coverage of the area to understand the real habitat.</li> <li>vi. Construction of jetties and ports shall be submitted to the concerned EAC for appraisal. PP shall also obtain the recommendation of SCZMA for CRZ clearance.</li> </ol>

## 24.10 Any other

24.10.1	<p><b>Exploratory drilling of 11 wells for shale oil/shale gas in Cambay basin, at districts Mehsana, Ahemabad , Bharuch, Gujarat by M/s ONGC Ltd. – reg TOR Amendment [IA/GJ/IND2/64773/2016, J-11011/46/2016-IA II (I)]</b></p> <p>The PP has made detailed presentation on the proposal and requested for amendment in the TOR letter based on the following information:</p> <ol style="list-style-type: none"><li>i. The proposal is for Amendment in the Terms of Reference(TOR) regarding Exploratory Drilling of 11 shale oil/gas wells by M/s Oil and Natural Gas Corporation Limited (ONGC) in Cambay Basin, Gujarat, for conducting PH in the district of Gandhinagar.</li><li>ii. Terms of Reference(TOR) has been granted to carry out EIA study and conduct PH for EC to drill 11 exploratory shale oil/gas wells in 11 ML blocks of Western Onshore Basin, in the districts of Mehsana, Ahmedabad, Bharuch and Kheda, Gujarat, vide TOR letter No. J-11011/46/2016-IA II (I) dated 06.12.2016.</li><li>iii. Environmental Impact Assessment Studies (EIA) are ongoing in the 11 ML blocks, as per stipulations in TOR, including Gandhinagar district. However, during baseline data collection for EIA studies and stacking of locations, it was observed that 2 (two) locations (as listed below) are falling within the district of Gandhinagar:<ol style="list-style-type: none"><li>a. PLSGA in Palyad-Kalol-Limbodra ML block (mentioned at sl no. 8 of TOR letter)</li><li>b. NL-4 in Kalol West Ext. I ML block (mentioned at sl no.9 of TOR letter)</li></ol></li></ol> <p><b>EAC has deliberated on the proposal. EAC after deliberation has recommended for amendment in TOR letter no. J 11011 /46 /2016 IA(II) I, dt: 06.12.2016, by including the district Gandhinagar (along with the districts of Mehsana, Ahmedabad, Bharuch and Kheda), for conducting Public Hearing.</b></p>
24.10.2	<p><b>Expansion of Manufacturing Capacity of existing products and manufacturing new pesticides and intermediates at E51-1&amp;2, E52, MIDC Notified Industrial Estate, Tarapur, Boisar, Dist: Palghar, Maharashtra by M/S. UPL LIMITED UNIT # 10- TOR amendment reg. [IA/MH/IND2/61495/2017, IA-J-11011/7/2017-IA-II(I)]</b></p> <p>The PP and their accredited consultant M/s Shivalik Solid Waste Management Ltd., has made detailed presentation on the proposal and requested for amendment in the TOR letter based on the following information:</p> <ol style="list-style-type: none"><li>i. The proposal is for amendment of TOR to exempt Public hearing, ZLD conditions and to include corrected product list in the TOR letter no. J-11011/7/2017-IA-II(I) dated 29.04.2017 regarding Expansion of Manufacturing Capacity of existing products and manufacturing new pesticides and intermediates at E51-1&amp;2, E52, MIDC Notified Industrial Estate, Tarapur, Boisar, Dist: Palghar, Maharashtra by M/S. UPL LIMITED UNIT # 10.</li><li>ii. It is informed that the project site is located in the notified Industrial of Maharashtra Industrial Development Corporation (MIDC).</li><li>iii. The Unit is having various infrastructure facilities to take care of effluent generated and control air pollution. The facilities include effluent treatment plant with primary and secondary treatment. The treated effluent from the unit is discharged to the common effluent treatment plant (CETP), Tarapur for further treatment and disposal. The solid/hazardous waste generated is sent to TSDF Facility operated by Mumbai Waste</li></ol>

Management Limited Taloja for Treatment and disposal.

- iv. The Company had obtained Environmental Clearance for Agro Chemicals. & intermediate Chemicals dated April 15, 2008 in the name of M/s Punjab Chemicals and Crop Protection Ltd vide Environmental Clearance No.: J-11011/712/2007-IA-II (I). Now, the Company proposes to enhance the production of existing 11 products & also plans to add 14 new products at the site. UPL has expertise in the manufacturing and marketing various pesticides and it is proposed to manufacture 25 pesticides and intermediate chemicals at the existing unit.
- v. The PP has informed that the product list is as below:

S. No.	Product	Existing Capacity	Proposed Additional Capacity	Total Capacity After Exp.
<b>(A) Existing Products &amp; Expansions</b>				
<b>Intermediate Chemicals – Existing and Proposed capacity</b>				
1	Phosphorous Trichloride	75	350	425
2	Phosphorous Oxychloride	50	50	100
3	Phosphorous Acid Crystals	10	65	75
4	Phosphorous Acid (60% solution)	4	21	25
5	Di-Potassium Hydrogen Phosphate (DPHP)	5	45	50
6	Tri Phenyl Phosphite (TPPI)	20	130	150
7	Ammonium Sulphate	300	950	1250
8	Potassium Chloride	125	-125	0
<b>Pesticide Technical – Existing and Proposed capacity</b>				
9	Metribuzin	135	415	550
<b>Pesticide Formulations – Existing capacity</b>				
10	Glyphosate 41% SL	75	-75	0
11	Metribuzin 70% WDG	150	100	250
TOTAL – A		949	1926	2875
<b>(B) New Proposed Products</b>				
<b>Intermediate Chemicals</b>				
12	Ammonium Chloride	0	250	250
13	Triazinone (proposed)	0	600	600
14	Tri Phenyl Phosphate (TPPA)	0	150	150
<b>Pesticide Technical</b>				

15	Acephate (Technical)	0	500	500
16	Di Chlorvos (DDVP)	0	100	100
17	Glyphosate (Technical)	0	100	100
18	Clomazone	0	200	200
19	Sulfosulfuron (SF-10)	0	10	10
20	Pyrazosulfuron Ethyl	0	50	50
21	Bensulfuron Ethyl	0	50	50
22	Metsulfuron Methyl	0	50	50
23	Asulam	0	400	400
24	Azoxystrobin	0	150	150
25	Devrinol	0	100	100
<b>Pesticide Formulations –Proposed capacity</b>				
26	Asulox	0	1000	1000
<b>TOTAL – B</b>		<b>0</b>	<b>3710</b>	<b>3710</b>
<b>GRAND TOTAL – A+B</b>		<b>949</b>	<b>5636</b>	<b>6585</b>

**By Products (Existing, proposed additional & Total after expansion) in MT/Month**

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

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

EAC has deliberated on the proposal. EAC noted that the project is located in the notified Industrial area. Public Hearing is exempted under the provisions as per para 7 III. Stage (3) (b) of the EIA Notification, 2006. In view of the submissions of the PP the EAC also accepted the request to allow discharge of treated effluent from the unit to the common effluent treatment plant (CETP) Tarapur for further treatment and disposal.

**EAC after deliberation has recommended for amendment in TOR letter no. J-11011/7/2017-IA-II(I) dated 29.04.2017, exempting public hearing, removing the ZLD condition and to include the corrected product/by-product list.**

24.10.3 **Proposal for manufacture pesticides and its intermediate at Plot No. SPM-29, Sterling SEZ & Infrastructure Ltd. At & Po: Sarod-392180, Tal: Jambusar, District: Bharuch M/s. PI Industries Limited (Unit II)- TOR amendment reg. [IA/GJ/IND2/61491/2017, IA-J-11011/6/2017-IA-II(I)]**

The PP and their consultant M/s San Envirotech Pvt. Ltd., has made detailed presentation on the proposal and requested for amendment in the TOR letter based on the following information:

- i. The proposal is for amendment of TOR to exempt public hearing and ZLD condition in the TOR letter no. J-11011/6/2017-IA-II(I) dated 28.04.2017 regarding Proposal for manufacture pesticides and its intermediate at Plot No. SPM-29, Sterling SEZ & Infrastructure Ltd. At & Po: Sarod-392180, Tal: Jambusar, District: Bharuch M/s. PI Industries Limited (Unit II).
- ii. It is informed that, in the proposed project, estimated wastewater generation will be tune around 1385 kl/day. Unit has considered ZLD for the effluent generated from reaction processes. Out of the total estimated process effluent, 60 kl/day of organic effluent having pesticide contamination will be incinerated and 292 kl/day of effluent containing high TDS will be evaporated in MEE equipped with stripper.
- iii. Remaining lean streams with low TDS and low COD, mainly from utilities, are proposed to be sent for treatment in effluent treatment plant. Unit will utilize RO and reduce treated effluent discharge from earlier proposed 1172 KL/day to 500 m<sup>3</sup>/day. Unit will utilize Environmental facilities of our adjoining unit, which is at the adjacent plot, which has excess capacity of overall EMS including ETP, MEE and incinerator.
- iv. The unit proposes to discharge Low TDS and low COD effluent with reduced quantity of 500 m<sup>3</sup>/day into Gulf of Cambay after treatment through approved channel of VECL.
- v. PP has also informed that, the proposed location is in the notified Industrial Area of Sterling SEZ & Infrastructure Ltd. and it is developed after obtaining Environmental

	<p>Clearance and passing through Public Hearing process as per the EIA Notification, 2006.</p> <p>EAC has deliberated on the proposal. EAC noted that the project is located in the notified Industrial area. Public Hearing is exempted under the provisions as per para 7 III. Stage (3) (b) of the EIA Notification, 2006. EAC has also noted that the PP proposed to discharge the effluent into Gulf of Cambay after treatment through VECL.</p> <p><b>EAC after deliberation has recommended for amendment in TOR letter no. J-11011/6/2017-IA-II(I) dated 28.04.2017, exempting from public hearing and ZLD conditions.</b></p>
24.10.4	<p><b>Pesticides industry and pesticide specific intermediates (excluding formulations) with Proposed Production Capacity: 2469 MT/month and byproducts capacity : 5837 MT/month at Plot no- K-2/1/2, Additional MIDC Mahad , Mahad, Raigad, Maharashtra by M/s Sanjivani Paranteral Limited. –reg. TOR amendment [IA/MH/IND2/62425/2017, IA-J-11011/40/2017-IA-II(I)]</b></p> <p>The PP and their consultant M/s Sadekar Enviro Engineers Pvt. Ltd., has made detailed presentation on the proposal and requested for amendment in the TOR letter based on the following information:</p> <ol style="list-style-type: none"> <li>i. The proposal is for amendment of TOR to exempt public hearing and to include the details of consent to operate obtained for formulation in the TOR letter no. J-11011/40/2017-IA-II(I) dated 29.04.2017 regarding proposed Pesticides industry and pesticide specific intermediates (excluding formulations) with proposed Production Capacity: 2469 MT/month. and byproducts capacity : 5837 MT/month at Plot no- K-2/1/2, Additional MIDC Mahad , Mahad, Raigad, Maharashtra by M/s Sanjivani Paranteral Limited.</li> <li>ii. It is informed that, the project is located in the notified Industrial area.</li> <li>iii. The PP has also informed that, they have obtained Consent to establish vide No. MPCB/16/10263 dated 24.10.2016 for Cefolasporin (pharmaceutical formulation) for a capacity of 1500 kg/M, which is not covered under EIA Notification.</li> </ol> <p>EAC has deliberated on the proposal. EAC noted that the project is located in the notified Industrial area. Public Hearing is exempted under the provisions as per para 7 III. Stage (3) (b) of the EIA Notification, 2006. EAC has also noted that the PP has obtained Consent to establish for Cefolasporin (pharmaceutical formulation) from SPCB, which is not covered under EIA Notification.</p> <p><b>EAC after deliberation has recommended for amendment in TOR letter no. J-11011/40/2017-IA-II(I) dated 29.04.2017, exempting public hearing and to include the details of Consent to establish for Cefolasporin (pharmaceutical formulation) obtained from SPCB.</b></p>
24.10.5	<p><b>Proposed Synthetic Organic, Drugs, Drug Intermediates and Excipients Manufacturing Unit of M/s Balaji Greentec Products Ltd. At Sy. No: 472,644,647,648(A), 649(A), 649(B), 650,651 &amp; 652, Nandikandi (V), Sadasivapet (M), Medak District, Telangana State- Amendment of TOR reg.- [IA/TG/IND2/58975/2016, J - 11011/326/2016 – IA II (I)]</b></p> <p>The PP and their consultant M/s Rightsource Industrial Solutions Pvt. Ltd., has made detailed presentation on the proposal and requested for amendment in the TOR letter based on the following information:</p> <ol style="list-style-type: none"> <li>i. The proposal is for amendment of TOR for changes in product list and total production,</li> </ol>

change in water requirement and effluent generation in the TOR letter no. J-11011/326/2016-IA-II (I) dated 14<sup>th</sup> February 2017 regarding Proposed Synthetic Organic, Drugs, Drug Intermediates and Excipients Manufacturing Unit of M/s Balaji Greentec Products Ltd. At Sy. No: 472,644,647,648(A), 649(A), 649(B), 650,651 & 652, Nandikandi (V), Sadasivapet (M), Medak District, Telangana State.

- ii. The Project Details of earlier granted TOR
  - (a). Production quantity as per granted TOR is 8240 TPM
  - (b). Total water requirement as per granted TOR is 361 KLD
  - (c). Effluent generated quantity as per granted TOR is 352.64 KLD
  - (d). Coal fired Boilers of 10 TPH & 5TPH as per granted TOR
  - (e). D.G sets of 750 KVA & 1500 KVA as per granted TOR
- iii. Compliance status of the EC from the Regional Office of MoEF&CC is not applicable as the project is a Greenfield project.
- iv. The PP proposed for amendment in TOR letter as below:

Table: Proposed Products and Production Capacities for ToR Amendment

S. No	Product Name	Production capacity As per Proposed Amendment	
		Tonnes/Month	Tonnes /Day
Group-A			
1	Choline Chloride	900	30
2	Trimethyl Amine HCl (TMA HCl)	900	30
3	Methyl Amine ( Mono/Di/Tri)	3750	125
4	Crospovidone	150	5.00
5	Povidone Iodine	750	25.00
6	N-Vinyl Pyrrolidone (NVP)	680	22.67
7	Polyvinyl Pyrrolidone K-30	650	21.67
8	Dimethyl amine Hydrochloride (DMA HCl)	1800	60.00
9	Propylene Glycol	900	30.00
10	Propylene Carbonate	235	7.83
11	Dimethyl carbonate	900	30.00
	Group-A Grand Total	11615	387.17
Group-B			
12	Polyvinyl Pyrrolidone K-25 (PVP K-25)	30.00	1.00
	Polyvinyl Pyrrolidone K-12(PVP K-12)	30.00	1.00
	Polyvinyl Pyrrolidone K-17(PVP K-17)	30.00	1.00
	Polyvinyl Pyrrolidone K-90(PVP K-90)	30.00	1.00
	Polyvinyl Pyrrolidone K-75(PVP K-75)	30.00	1.00
	Polyvinyl Pyrrolidone K-60(PVP K-60)	30.00	1.00
	We will manufacture any One product or together with TOTAL production capacity	30.00	1.00
Group-C			



13	Methyldiethanol Amine (MDEA)	1500	50
14	Di Methyl Amino Ethanol (DMAE)	1500	50
15	Di Ethyl Amino Ethanol (DEAE)	1500	50
	We will manufacture any One product or together with TOTAL production capacity	1500	50
	Grand Total (Group-A + Group-B + Group-C)	13145	438.17

Table: Water Consumption Details as per Granted ToR & Proposed Amendment

S. No	Purpose	Water Requirement in KLD	
		As per Granted ToR	Proposed for ToR Amendment
1	Process	251.00	197.31
2	Washings	7.00	7.00
3	Boiler make up	60.00	175.00
4	Cooling towers make up	17.00	347.50
5	DM Plant	5.00	10.00
6	Scrubbing system	5.00	5.00
7	Domestic	6.00	6.00
8	Gardening	10.00	10.00
	Total	361.00	757.81

Table: Effluent Generation details as per Granted ToR & Proposed Amendment

S. No	Purpose	Effluent Generation in KLD	
		As per Granted ToR	Proposed for ToR Amendment
1	Process	313.84	127.75
2	Washings	7.00	7.00
3	Boiler Blow down	15.00	25.00
4	Cooling towers Blow down	2.00	37.50
5	DM Plant	5.00	10.00
6	Scrubbing system	5.00	5.00
7	Domestic	4.80	5.00
8	Gardening	0.00	0.00
	Total	352.64	217.25

Table: Solid & Hazardous Waste details as per Granted ToR & Proposed ToR Amendment

S. No	Name of the Waste	Quantity Kg/Day		Disposal Method
		As per Granted ToR	As per Proposed Amendment	
1	Organic waste	2823	580	Sent to Cement Industries
2	Spent Carbon	26	--	Sent to Cement Industries

3	Inorganic Waste	26	--	Sent to TSDF
4	MEE Salts	13600	5900	Sent to TSDF
5	ETP Sludge	50	100	Sent to TSDF
6	Used Oils	150 Ltrs/annum	500 Ltrs/annum	SPCB Authorized Agencies for Reprocessing/Recycling
7	Detoxified Containers	50 No's/Month	500 No's/Month	After Detoxification sent back to suppliers/SPCB authorized parties.
8	Used Lead Acid Batteries	4 No's/ Annum	4 No's/ Annum	Send back to suppliers for buyback of New Batteries
9	Ash from boiler	17625	26250	Sent to Brick Manufacturers

Table : Utilities Details as per Granted ToR and Proposed for ToR Amendment

S. No	Description	As per Granted ToR	Proposed for ToR Amendment
1	Coal/ Fuel Briquettes fired Boiler	10.0 TPH & 5.0TPH Boilers	30.0TPH Boiler
		*10 TPH boiler will be kept as stand by	*20 TPH boiler will be kept as stand by
2	DG Sets	750 KVA & 1500 KVA Capacity DG Sets	2 X 1000 KVA Capacity DG Set

- v. PP has informed that, baseline data has been collected from Dec 10<sup>th</sup> 2016 – March 10<sup>th</sup> 2017, after the EAC meeting for TOR and requested to consider the same for EIA preparation.

**EAC has deliberated on the proposal. EAC after detailed deliberation has recommended for amendment in TOR letter as proposed by the PP. EAC has desired that PP shall obtain permission for ground water extraction from concerned authority/CGWA.**

24.10.6 **Grain based Distillery (2x45 KLPD) and Cogeneration Power Plant (2x3 MW) and IMFL/IMIL bottling (2x8000 cases/day) at Survey No.244, 249 to 251, 253 to 262, 295 to 298, 300 to 302, 314, 317, 319, 322, 327, 331, 334, 337, 339, 340 at Village Goud Sargiguda, Taluka Junagarh, District Kalahandi, Odisha by M/s Starlight Energy Pvt. Ltd.–reg. amendment of TOR. [IA/OR/IND2/64190/2014, J-11011/298/2014 IA II (I)]**

The PP made detailed presentation on the proposal and requested for amendment in the TOR letter based on the following information:

- i. PP has obtained TOR vide letter no. J-11011/298/2014 IA II (I) dated 23.01.2015 for Grain based Distillery (2x45 KLPD) and Cogeneration Power Plant (2x3 MW) and IMFL/IMIL bottling (2x800 day) at Survey No.244, 249 to 251, 253 to 262, 295 to 298, 300 to 302, 314, 317, 319, 322, 327, 331, 334, 337, 339, 340 at Village Goud Sargiguda, Taluka Junagarh, District Kalahandi, Odisha by M/s Starlight Energy Pvt. Ltd.
- ii. It is informed that in the title 'IMFL/IMIL bottling (2x800 day)' shall be as IMFL/IMIL bottling (2x8000 cases/ day)'. The details are in accordance with Form I and PFR.

**EAC after detailed deliberation has recommended for correction of typographical mistake as proposed by PP. The project name shall be "Grain based Distillery (2x45 KLPD) and**

	<p><b>Cogeneration Power Plant (2x3 MW) and IMFL/IMIL bottling (2x8000 cases/day) at Survey No.244, 249 to 251, 253 to 262, 295 to 298, 300 to 302, 314, 317, 319, 322, 327, 331, 334, 337, 339, 340 at Village Goud Sargiguda, Taluka Junagarh, District Kalahandi, Odisha by M/s Starlight Energy Pvt. Ltd”.</b></p>
24.10.7	<p><b>Proposed Expansion in Existing Production Capacity &amp; Addition of New Products of Pesticides &amp; Intermediates within Existing Premises of M/s UPL Limited, Plot No. 3–11, A–2/1, A–2/2, A–2/6 &amp; A–1/2, Phase – I, GIDC Notified Industrial Estate, Vapi –396195, Dist: Valsad, Gujarat. [IA/GJ/IND2/59852/2016, J- 11011/330/2016-IA.II(I)]</b></p> <p>The project proponent and their consultant M/s Eco Chem Sales and Services made a detailed presentation on the project and requested for amendment in TOR as per the following:</p> <ol style="list-style-type: none"> <li>i. The PP has obtained standard TOR vide letter no. J- 11011/330/2016-IA.II(I) dated 9<sup>th</sup> December, 2016 for Proposed Expansion in Existing Production Capacity &amp; Addition of New Products of Pesticides &amp; Intermediates within Existing Premises of M/s UPL Limited, Plot No. 3–11, A–2/1, A–2/2, A–2/6 &amp; A–1/2, Phase – I, GIDC Notified Industrial Estate, Vapi –396195, Dist: Valsad, Gujarat.</li> <li>ii. The project is located in the notified Industrial area and hence public hearing may be exempted.</li> <li>iii. PP has membership in CETP for effluent discharge. Accordingly ZLD condition may be removed.</li> </ol> <p><b>EAC has deliberated on the proposal. EAC has recommended for amendment/correction in the TOR as proposed by the PP, exempting public hearing and ZLD condition. Public Hearing is exempted under the provisions as per para 7 III. Stage (3) (b) of the EIA Notification, 2006.</b></p>
24.10.8	<p><b>Expansion of Bulk Drugs &amp; Intermediates Manufacturing Facility at Plot no 5, Phase-IV, GIDC, PANOLI, Bharuch, Gujarat by M/s Unique Chemicals (A Div of J B Chemicals &amp; Pharma Ltd.) [F. No. J- 11011/323/2016-IA.II(I)]- reg. TOR correction.</b></p> <p>The PP made a presentation on the proposal and requested for correction as per information below:</p> <ol style="list-style-type: none"> <li>i. PP has obtained TOR vide letter no. J- 11011/323/2016-IA.II(I) dated 28<sup>th</sup> February, 2017, for Expansion of Bulk Drugs &amp; Intermediates Manufacturing Facility at Plot no 5, Phase-IV, GIDC, PANOLI, Bharuch, Gujarat by M/s Unique Chemicals (A Div of J B Chemicals &amp; Pharma Ltd.).</li> <li>ii. The PP has requested for correction in the TOR letter by including the following, in accordance with Form I/PFR/presentation. <ol style="list-style-type: none"> <li>(a). The existing and proposed power requirement is 2500 KVA.</li> <li>(b). Natural gas of capacity 25000 SCM/Day will be used as fuel for boiler and thermopac.</li> <li>(c). ETP sludge will be sent to TSDF site. Distillation residue, expired drugs and used charcoal will be sent to cement industry/RSPL for co-processing at cement plant or common incinerator for incineration. Used oil will be sold to authorized recycler.</li> </ol> </li> </ol> <p><b>EAC has deliberated on the proposal. EAC has recommended for amendment/correction in the TOR as proposed by the PP.</b></p>

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**List of the Chairman and Members of the Expert Appraisal Committee (EAC) for Industry-2 who attended the 24<sup>th</sup> EAC 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: jpglobalconsultinggroup@gmail.com	Chairman
2.	<b><u>Sh. R. K. Singh</u></b> 301, Tulsi Meadows Building, St. Anthony's Road, Near Uttam Society, Chembur, Mumbai-400071, Maharashtra E-mail: rksingh7854@gmail.com	Member
3.	<b><u>Prof. J.R. Mudakavi</u></b> 1128, Adarsha Layout, West of Chord Road, III Stage, I Block, Basaveshwar Nagar, Bangalore- 560079 E-mail: mudakavijr@gmail.com	Member
4.	<b><u>Dr. Ajay Gairola</u></b> 123 Thomsan Marg IIT, Roorkee campus E-mail: garryfce@iitr.ernet.in	Member
5.	<b><u>Dr. Shashank Shekhar</u></b> 378 (First Floor), Sector-5, Vaishali, Ghaziabad, Uttar Pradesh. E-mail: shashankshekhar01@gmail.com	Member
6.	<b><u>Shri Sanjay Bist</u></b> Scientist- D Indian Meteorological Department, MausamBhawan, Lodhi Road, New Delhi- 110003 E-mail: sanjay.bist@imd.gov.in	Member
7.	<b><u>Sh. Paritosh Kumar</u></b> Additional Director, Central Pollution Control Board, New Delhi Email: 45pkumar@gmail.com	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, JorBagh Road, New Delhi-110003 E-mail: yogendra78@nic.in Tele-fax : 01124695365	Member Secretary