

**MINUTES OF THE 25<sup>th</sup> EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) MEETING  
HELD DURING 5<sup>th</sup> to 7<sup>th</sup> July 2017**

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

Time : Meeting to be held at 10: 00 AM

25.1 Opening Remarks of the Chairman

25.2. Confirmation of the Minutes of the 24<sup>th</sup> Meetings of the EAC (Industry-2) held during 14<sup>th</sup> to 16<sup>th</sup> June 2017 at I. P. Bhawan, New Delhi.

**25.2. 1. Correction in the Minutes of the previous meetings**

**A. For the Proposed Resins and Laminated Sheets Manufacturing Unit of M/s. Ovel Lamine LLPSurvey No. : 128 , Village: Bahadurgadh , Taluka & District : Morbi , Gujarat [J-11011/273/2017-IA-II(I)]**

Member Secretary informed the EAC that the proposal was considered by the EAC (Industry-2) in its 24<sup>th</sup> meeting held during 14<sup>th</sup> to 16<sup>th</sup> June 2017. The PP has now requested for following correction in the Minutes of the meeting

S.No.	Information in MoM	Correction required as
1	During presentation PP informed that they have already collected the baseline data during <b>March-May, 2017</b> and requested to consider the same. The EAC agreed with it and suggested to collect additional one month data of October, 2017.	During presentation PP informed that they have already collected the baseline data during <b>March-May, 2016</b> and requested to consider the same.

The EAC after deliberation has accepted the request of the PP and recommended for correction as “During presentation PP informed that they have already collected the baseline data during March-May, 2016 and requested to consider the same. The EAC agreed with it and suggested to collect additional one month data of October, 2017”.

**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-[J-11011/274/2017-IA-II(I)]**

Member Secretary informed the EAC that the proposal was considered by the EAC (Industry-2) in its 24<sup>th</sup> meeting held during 14<sup>th</sup> to 16<sup>th</sup> June 2017. The PP has now requested for following correction in the Minutes of the meeting, to include details of process emissions and its management:

Details of process emissions generation and its management.

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

The EAC after deliberation has accepted the request of the PP and recommended for correction in the minutes to include the details of process emissions generation and its management.

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

Member Secretary informed the EAC that the proposal was considered by the EAC (Industry-2) in its 24<sup>th</sup> meeting held during 14<sup>th</sup> to 16<sup>th</sup> June 2017. The PP has now requested for inclusion of details of process emissions and its management, as below:

Details of process emissions generation and its management.

Sr. No.	Stack attached to	Stack Height	Expected pollutant	APC System
1	Ducting system attached with Dryer	10	VOC	Condenser followed by Activated carbon filter

The EAC after deliberation has accepted the request of the PP and recommended for correction in the minutes including the details of process emissions generation and its management.

**D. 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 [J-11011/163/2017-IA-II(I)]**

Member Secretary informed the EAC that the proposal was considered by the EAC (Industry-2) in its 24<sup>th</sup> meeting held during 14<sup>th</sup> to 16<sup>th</sup> June 2017. The PP has now requested for following correction in the Minutes of the meeting:

S.No.	Information in MoM	Correction required as
	Capacity of proposed Boiler (flue gas emission through stack)	Capacity of proposed Boiler (flue gas emission through stack)
1	Boiler (1.0 TPH) (Fuel –Natural Gas)	Boiler (1.5 TPH) (Fuel –Natural Gas)

The EAC after deliberation has accepted the request of the PP and recommended for correction in the minutes of the meeting.

**E. Proposed Expansion of Speciality Chemicals, Intermediates & Pesticide Technicals in Existing Unit [10161 MTPM to 34115 MTPM] of M/s. Hemani Industries Ltd. (Unit-III & IV) at Plot No. CH-5 & E-362, GIDC Estate, Dahej-i, Tal: Vagra, Dist: Bharuch, Gujarat by M/s. Hemani Industries Ltd. (Unit-III & IV) [J-11011/177/2017-IA-II(I)]**

Member Secretary informed the EAC that the proposal was considered by the EAC (Industry-2) in its 24<sup>th</sup> meeting held during 14<sup>th</sup> to 16<sup>th</sup> June 2017. The PP has now requested for following correction in the Minutes of the meeting:

S.No	Paragraph	Information in MoM	Correction requested as
1	Para No. I	Production Capacity [10161 MTPM to 36115 MTPM ]	Production Capacity [10161 MTPM to 34115 MTPM ]
2	Para No. XII	Existing Unit has 1,Boiler-2,Thermic Fluid Heater.	Existing Unit has Boiler-1, Boiler-2, Thermic Fluid Heater, Thermic Fluid Heater (8 T/hrs)

The EAC after deliberation has accepted the request of the PP and recommended for correction in the minutes of the meeting.

**F. 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) [J-11011/252/2017-IA-II(I)]**

Member Secretary informed the EAC that the proposal was considered by the EAC (Industry-2) in its 24<sup>th</sup> meeting held during 14<sup>th</sup> to 16<sup>th</sup> June 2017. The PP has now requested for following correction in the Minutes of the meeting:

S.No	Information in MoM	Correction requested as
1	Bifurcation of Waste Water (KL/Day): Total: 15.5 (Ind: 3.5, Dom: 12.0)	Bifurcation of Waste Water (KL/Day): Total:15.5 (Ind: 12.0, Dom: 3.5)

The EAC after deliberation has accepted the request of the PP and recommended for correction in the minutes of the meeting.

**G. 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)]**

Member Secretary informed the EAC that the proposal was considered by the EAC (Industry-2) in its 24<sup>th</sup> meeting held during 14<sup>th</sup> to 16<sup>th</sup> June 2017. The PP has now requested for following correction in the Minutes of the meeting:

Additional ToR Condition as in MoM	Correction Required
(i) Zero Liquid Discharge plan for the proposed expansion shall be submitted	The PP should explore the possibilities of achieving zero liquid discharge in phases over a period of next 6-7 years and such a proposal shall be part of the Environment Impact Assessment (EIA) report
(iv) PP shall not dispose the effluent from the proposed project to the VECL.	To delete this condition

The EAC after deliberation accepted the request of the PP for deleting the Terms of reference at Sr. No. and recommended for correction in the minutes of the meeting.

### 25.3 (Environmental Clearance)

25.3.1	<p><b>Proposed Capacity Enhancement in Existing Molasses Based Distillery from 60 KLPD to 75 KLPD, Sugar Mill from 7500 TCD to 9000 TCD &amp; Co-Generation Power Plant from 30 MW to 32 MW within the existing plant premises by modernization &amp; efficiency improvement at Village Asurle-Porle, Tehsil Panhala, District Kolhapur, Maharashtra by M/s Shri Datta Sakhar Karkhana (A Unit of Dalmia Bharat Sugar &amp; Industries Ltd.) [IA/MH/IND2/58477/2016, J-11011/305/2016- IA II(I)]</b></p> <p>The Project Proponent and the accredited Consultant J. M. EnviroNet Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>The proposal is for Expansion of Molasses Based Distillery from 60 KLPD to 75 KLPD, Sugar Mill from 7500 TCD to 9000 TCD &amp; Co-Generation Power Plant from 30 MW to 32 MW within the existing plant premises by modernization &amp; efficiency improvement at Village Asurle-Porle, Tehsil Panhala, District Kolhapur, Maharashtra by M/s Shri Datta Sakhar Karkhana (<i>A unit of Dalmia Bharat Sugar and Industries Limited</i>).</li> <li>The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 13<sup>th</sup> EAC meeting held during 26<sup>th</sup>-27<sup>th</sup> September, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J 11011/305/2016-IA II (I); dated 21<sup>st</sup> November, 2016.</li> <li>All molasses based distillery and sugar related projects are listed at S.N 5 (g) &amp; 5 (j) (Distillery &amp; Sugar Industry) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>Ministry has issued EC earlier vide letter no. J-11011/277/2013- IA II (I); dated 4<sup>th</sup> February, 2015 and amendment dated 10<sup>th</sup> August, 2016 for Expansion of Sugar Mill (from 4800 TCD to 7500 TCD) and Co-Generation Power Plant (from 14.5 MW to 30 MW) and Setting Up of 60 KLPD Molasses based Distillery at Village Asurle-Porle, Tehsil Panhala, District Kolhapur, Maharashtra by M/s Shri Datta Sakhar Karkhana (<i>A unit of Dalmia Bharat Sugar and Industries Limited</i>).</li> <li>Existing land area is 34.9 Hectares; proposed expansion will be done in existing plant premises, no additional land will be required for the proposed expansion.</li> <li>Industry has already developed greenbelt in an area of 33 % i.e., 11.53 Ha out of 34.9 Ha of area of the project.</li> <li>The estimated project cost is Rs 60 Crores excluding existing investment of Rs. 190 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 5 Crores and the Recurring cost (operation and maintenance) will be about Rs 1 Crore per annum.</li> <li>Total Employment will be 800 persons after expansion.</li> <li>It is reported that as per Form-1 no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10km distance. River/ waterbody i.e. Kasari River and Panchganga River are flowing at a distance of 1.0 &amp; 5.5 km in South East direction.</li> <li>Ambient air quality monitoring was carried out at 8 locations during October to</li> </ol>
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	<p>December, 2016 and submitted baseline data indicates the ranges of concentrations of PM<sub>10</sub>(51.6 to 81.8 µg/m<sup>3</sup>), PM<sub>2.5</sub> (22.9 to 40.6 µg/m<sup>3</sup>), SO<sub>2</sub> (7.2 to 18.9µg/m<sup>3</sup>) and NO<sub>2</sub> (9.2 to 24.8µg/m<sup>3</sup>)respectively. AAQ modeling study for point source emissions was not carried out as there will be no change in the capacity of boiler after the proposed expansion; thus, there will be no increase in air pollution due to the same.</p> <p>x. There will be no additional water required for the proposed expansion project because the same will be done by modernization &amp; efficiency improvement. The existing water requirement is 1250 m3/day during on-season and 1024 m3/day during off-season and the same will suffice for the proposed expansion also. The source is surface water of River Kasari.</p> <p>xi. Treated effluent from Sugar Unit &amp; Co-generation Power Plant is being/will be recycled &amp; reused in process, greenbelt development and ferti-irrigation. Molasses based distillery generated spent wash is being/will be concentrated in MEE and burnt in incinerator boiler and process condensate is being/will be treated in Condensate polishing unit and recycled in process itself. Thus, the distillery unit is/will be based on Zero Liquid discharge system.</p> <p>xii. Power requirement after expansion will be 12 MW including existing 11 MW and is being/will be met from Co-generation Power Plants. Existing unit has four DG sets of 2 x 1000 KVA, 500 KVA &amp; 125 KVA capacities which are kept as standby during grid failure. No additional DG sets are proposed for this expansion.</p> <p>xiii. Existing unit has 3 boilers of capacity 120TPH, 80 TPH (bagasse fired boiler) and 22 TPH (incineration boiler i.e. spent wash fired boiler) which are already installed. The existing boilers are sufficient to cater the needs of existing plant and after proposed expansion also. Electrostatic precipitators with stacks of height 76m, 70m &amp; 62m respectively are already installed for controlling the particulate emissions (within statutory limit of 50 mg/Nm<sup>3</sup>) from boilers of 120, 80 &amp; 22 TPH respectively.</p> <p>xiv. To control boiler emissions (PM, SO<sub>x</sub>), ESPs with adequate stack height have already been installed and will be maintained. The fugitive emissions generated from transportation of material are being/ will be controlled by taking various environment friendly measures like water sprinkling on roads, concreting / cementing of roads, covered transportation, regular sweeping etc. Ash handling is being/ will be done in closed loop. Dust collector has been provided at loading and unloading point.</p> <p>xv. Bagasse generated from sugar mill is being/will be used as fuel for power generation in Co-generation Power Plant. Molasses generated from sugar industry is being used in-house as raw material for distillery. The concentrated Spent Wash from distillery will be consumed in incinerator boiler along with bagasse/ Coal as supplementary fuel. ETP sludge generated after treating waste water generated in sugar unit is being &amp; will continue to be used as organic manure. Press Mud generated from sugar mill is/will be given to the farmers as Make-Up Soil conditioner. Yeast sludge will be mixed with press mud and will be given to farmers for soil amendment or in house manufacturing organic manure (bio-composting). The ash is being / will be utilized in in-house brick manufacturing facility and balance given to brick manufacturers / cement manufacturing units. Used oil &amp; grease generated from plant machinery/Gear boxes as hazardous waste is being burnt in own boiler as per MPCB guidelines.</p> <p>xvi. The Public hearing is exempted as per para 7(ii) of EIA Notification, 2006.</p> <p>xvii. Certified compliance report has been issued by R.O., MoEFCC (Nagpur) vide letter no. EC-280/RON/2017-NGP dated 14<sup>th</sup> March,2017.</p> <p>xix. No litigation pending against the proposal.</p> <p>xx. Following are the list of existing and proposed products:</p>
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Units	Product	Existing Capacity	Proposed Capacity	Total Capacity after Expansion
Distillery	Ethanol/RS/ ENA	60 KLPD	15 KLPD	75 KLPD
Sugar Mill	Sugar	7500 TCD	1500 TCD	9000 TCD
Co-generation Power Plant	Power	30 MW	2 MW* (Incidental generation by Incineration Boiler)	32 MW
<p><b>*Note:</b> There is no proposal to increase power generation capacity. However, only incidental power generation due to spent wash in incineration route as recommended by Honorable Ministry will result into power generation in the tune of 2 MW.</p>				
<p>EAC has deliberated on the proposal. EAC noted that the public hearing is exempted under para 7(ii) of EIA Notification, 2006 for the proposal. EAC has deliberated on the certified compliance report and found it to be satisfactory.</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>All the conditions of existing Environmental clearance shall be followed.</li> <li>10 m wide green belt of perennial trees around periphery of the plant shall be provided.</li> <li>Green belt shall be developed in 33 % i.e., 11.53 Ha out of 34.9 Ha of area of the project.</li> <li>No additional fresh water shall be used for proposed expansion.</li> <li>No additional steam shall be used for proposed expansion.</li> <li>At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for installation of RO plant for drinking water supply and solar panel in nearby villages. Implementation of such program shall be ensured accordingly in a time bound manner. Following activities shall be under taken under ESC activities: <ol style="list-style-type: none"> <li>RO plants shall be installed in nearby villages to ensure safe drinking water availability. The expenditure on maintenance on these RO plants will be owned by the Project proponent.</li> <li>5000 trees/ year shall be planted in 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> </ol> </li> <li>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>No effluent shall be discharge outside the plant premises.</li> <li>Continuous online (24 x7) monitoring to be installed for flow measurement and</li> </ol>				

	<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> <ul style="list-style-type: none"> <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> </ul>
25.3.2	<p><b>Expansion of Synthetic Organic Chemicals Unit at Plot No. 294-296, GIDC Vapi, District Valsad, Gujarat by M/s Rama Pulp and papers Ltd. - regarding EC [IA/MH/IND2/27965/2012, J-11011/255/2012-IA II (I)].</b></p> <p>The Project Proponent and the accredited Consultant S D Engineering Services Pvt. Ltd. Aurangabad., made a detailed presentation on the salient features of the project and informed that:</p> <ul style="list-style-type: none"> <li>i. The project involves expansion of Synthetic Organic Chemicals Unit at Plot No. 294-296, GIDC Vapi, District Valsad, Gujarat by M/s Rama Pulp and papers Ltd.</li> <li>ii. The project proposal was considered by the Expert appraisal committee (Industry 2) in its 4th EAC meeting held during 8<sup>th</sup> to 9<sup>th</sup> January 2013 and recommended Terms of Reference (ToR) for the project. ToR has been issued by Ministry vide letter no.J-11011/255/2012-IA II (I) dated 1<sup>st</sup> March 2013.</li> <li>iii. All Chemical Fertilizers and Synthetic Organic Chemicals Industry are listed at S.N 5(a) &amp; 5 (f) of Schedule of Environment Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>iv. Total proposed land area is 8.89 ha</li> <li>v. Industry will be developed Greenbelt in an area of 33% i.e., 2.83 Ha out of 8.89 Ha of area of the project.</li> <li>vi. The estimated project cost is Rs. 3400 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 37 Lakhs and the Recurring cost (operation and maintenance) will be about Rs. 10 Lakhs per annum.</li> <li>vii. Total Employment will be 40 persons. Industry proposes to allocate Rs. 85 Lac. (a) of 5/2.5 % towards Corporate Social Responsibility.</li> <li>viii. It is reported that Jayakwadi Dam lies within 3 km distance. River water body Godavari is flowing at a distance of 8.5 km in South direction.</li> <li>ix. Ambient air quality monitoring was carried out at 6 locations during Feb. 2013 to May 2013 and submitted baseline data indicates that ranges of concentrations of PM10 (55 µg/m<sup>3</sup>- 29.5 µg/m<sup>3</sup> ), PM 2.5 (30.5µg/m<sup>3</sup> – 24.5µg/m<sup>3</sup> ), SO2 (18 µg/m<sup>3</sup>- 8.5 µg/m<sup>3</sup> )and NOx (22µg/m<sup>3</sup>-11.5 µg/m<sup>3</sup>) respectively.</li> <li>x. Total water requirement is 97m<sup>3</sup>/day of which fresh water requirement of 97m<sup>3</sup>/day and will be met from Irrigation Department.</li> <li>xi. There is no effluent generation from process. The effluent from scrubber will be reused in process.</li> <li>xii. Power requirement will be 1000 KVA will be met from Maharashtra State power Distribution Corporation limited (MSPDCL). DG set are not proposed for this project.</li> </ul>

- xiii. There is no proposed boiler for this project.
- xiv. Process air emission could be hydrogen fluoride & particulate matter. Cyclone, Bag filter and four stage scrubbers shall be used to control Air Pollution.
- xv. Details of Solid waste/Hazardous waste generation and its management is as follows:

Sr. No.	Hazardous waste generated	Quantity	Disposal
1.	Waste Oil	100 LPM	Sale to authorized recycler/CHWTSDf
2.	Discarded containers/barrels/liners used for hazardous waste/chemicals	1080Nos./ annum	Sale to authorized recycler

- xvi. Public Hearing for the proposed project has been conducted by the State Pollution Control Board dated on 20/01/2015.
- xvii. Following are the list of proposed products:

Sr. No.	Product	Quantity MT/Day	Quantity MT/Month
1.	Linear Alkyl Benzene Sulphonic Acid (LABSA)	50	1500
2.	Single Super Phosphate (SSP)	400	12000

EAC has deliberated on the proposal. EAC noted that TOR was issued on dated 1<sup>st</sup> March 2013. Earlier EIA report was submitted on 3<sup>rd</sup> July, 2015 and proposal was considered in its dated 2<sup>nd</sup> EAC meeting held during 18<sup>th</sup>-19<sup>th</sup> January, 2016. Wherein the PP did not attend the meeting and earlier proposal for EC was delisted in the Ministry. Now PP has again submitted the EIA report on 26<sup>th</sup> April, 2017. The EAC noted that as earlier EIA was submitted within validity period of TOR with valid base line data. Ambient air quality monitoring was carried out at 6 locations during February, 2013 to May, 2013. The EAC accepts the EIA report and base line data submitted by the PP. The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding air and water pollution, control of noise during crushing operations. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report. EAC

After deliberations, the Committee sought the following additional information:

- i. Submit Fluoride management plan.
- ii. Hazardous material handling plan especially for Sulphuric acid transportation to be submitted.



	The EAC after critical examination deferred the proposal to submit the above mentioned adequate information.
25.3.3	<p><b>Setting up a new Synthetic Resin Manufacturing Unit within the existing Plyboard Plant located at Survey No. 145, 147 Paiky and 148, Village Motichirai, Taluka Bhachau, Gandhidham, District Kutch, Gujarat by M/s Century Plyboards India Limited. –reg EC[IA/GJ/IND2/27299/2015, J-11011/82/2015-IA-II(I)]</b></p> <p>The Project Proponent and the accredited Consultant M/s. SGS 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>The proposal is for Setting up a new Synthetic Resin Manufacturing Unit within the existing Plyboard Plant located at Survey No. 145, 147 Paiky and 148, Village Motichirai, Taluka Bhachau, Gandhidham, District Kutch, Gujarat by M/s Century Plyboards India Limited.</li> <li>The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 44<sup>th</sup> EAC meeting held during 20-21 July, 2015 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/82/2015-IA II (I); dated 7<sup>th</sup> September 2015.</li> <li>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>Existing land area is 98482.94 m<sup>2</sup> and no additional land will be used for proposed expansion as proposed new synthetic resin manufacturing unit will be located within existing plywood plant covering an area of 254.25 m<sup>2</sup>. Industry has to develop Green belt in an area of 33% <i>i.e.</i>, 32500 m<sup>2</sup> out of 98482.94 m<sup>2</sup> of area of the project .</li> <li>The estimated project cost is Rs 1.05 Crores including existing investment of Rs. 21.51 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 0.18 Crores and the Recurring cost (operation and maintenance) will be about Rs 0.042 Crores per annum.</li> <li>Total Employment will be 20 persons as direct &amp; 100 persons indirect after expansion. Industry proposes to allocate Rs 0.24 Crores @ of 4.6% towards Corporate Social Responsibility.</li> <li>It is reported that as per form-1, no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. lies within 10 km distance. Ramawali Creek and Kodawali Dhorri Creek are situated at a distance of 5 km and 8 Km, respectively in south-east direction.</li> <li>Ambient air quality monitoring was carried out at 8 locations during November, 2015 to February, 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (50 µg/m<sup>3</sup> – 93 µg/m<sup>3</sup>), PM<sub>2.5</sub> (20 µg/m<sup>3</sup> – 54 µg/m<sup>3</sup>), SO<sub>2</sub> (5.5 µg/m<sup>3</sup> – 17.8 µg/m<sup>3</sup>) and NO<sub>2</sub> (9.6 µg/m<sup>3</sup> – 27.3 µg/m<sup>3</sup>), respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.08 µg/m<sup>3</sup>, 0.84 µg/m<sup>3</sup> and 1.02 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>2</sub> at distance of 1.581 km in south direction. The resultant concentrations are within</li> </ol>

the National Ambient Air Quality Standards (NAAQS).

- ix. Total water requirement is 7 m<sup>3</sup>/day and will be met from water supply by Gujarat Water Infrastructure Limited.
- x. 1.8 KLD Effluent of process and washing will be treated through 5 KLD Photo Fenton Process ETP based on Zero Liquid discharge system.
- xi. Power requirement after expansion will be 1100 kVA including existing 1000 kVA and will be met from Paschim Gujarat Vij Company Limited (PGVCL). Existing unit has 2 DG sets of 600 kVA capacity, additionally, which is sufficient for proposed resin plant also. Stacks (height 20 m) has been provided as per CPCB norms to the DG sets of 600 kVA, which are used as standby during power failure.
- xii. Heat requirement for the proposed resin plant will be met through our existing thermic fluid heater. A 30 Lakh Kcal/hr capacity wooden log scrap fired thermic fluid heater is already installed for existing plywood plant. Bag filter with a stack of height of 30 m is already installed for controlling the particulate emission (within statutory limit of 150 mg/Nm<sup>3</sup>).
- xiii. Public Hearing for the proposed project has been conducted by the Gujarat State Pollution Control Board on 21<sup>st</sup> March 2017.
- xiv. The existing plyboard plant does not fall under the purview of EIA Notification 2006. Therefore, environmental clearance for existing plant was not required.
- xv. No litigation is pending against the proposed project.
- xvi. Details of Process emissions generation and its management is given below:

Sl. No	Stack attached to	Height of the stack in meter	Fuel	Expected Pollutant	APC Measures
1.	Thermic Fluid Heater	30 m (H)	Wooden Log scrap (wood waste): 12 ton/month	SPM, NO <sub>2</sub>	30 m high stack will be provided to vent out flue gas emissions into the atmosphere to provide natural dispersion. Bag filter is already fitted with TFH to control dust emissions.
2.	Stand-by D.G.Set-2 No. (600 kVA)	20 m (H)	HSD: 120 Lit/hr	SPM, SO <sub>2</sub> , NO <sub>2</sub>	20 m stack height has been provided as per CPCB guidelines

- xvii. Details of Solid waste/ Hazardous Waste Generation and Its Management  
(There will not be any solid waste generation from proposed resin plant)

Sl. No.	Item	Source	Mode of Disposal
1.	Glue sludge	Process	TSDF Site
2.	Cotton Waste	Process	TSDF Site
3.	Poly Bags	Stores	Outside agency for Recycling
4.	ETP sludge	ETP	TSDF Site
5.	Bottom Ash	TFH	Outside agency for Filling
6.	Used Oil	DG sets	Authorized Recyclers

- xviii. The following are the list of existing and proposed products: The existing plant is engaged in manufacturing ply board. The proposed synthetic resins manufacturing plant, which will be located within the existing ply board plant, will have following production capacities:

Sl. No.	Name of the Product	Total (Ton/Annum)	Storage (Tons)
1.	PF Resin	6000	40
2.	MF Resin	1500	10
3.	UF Resin	1500	10
4.	MUF Resin	3000	20
	<b>Total</b>	<b>12000</b>	<b>80</b>

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding effect on environment, benefits to village and employment. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

After detailed deliberations, the Committee 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:

**A. Specific Conditions:**

- i. Fresh water requirement shall not exceed 7 m<sup>3</sup>/day. Permission shall be obtained from the concerned authority.
- ii. No ground water shall be used for proposed expansion.
- iii. 10 m wide green belt of perennial trees around periphery of the plant shall be provided.
- iv. Green belt shall be developed in 33% *i.e.*, 32500 m<sup>2</sup> out of 98482.94 m<sup>2</sup> of area of the project.
- v. As proposed Rs 24 Lacs (22 %) of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for installation of RO plant for drinking water supply and solar panel in nearby villages. Implementation of such program shall be ensured accordingly in a time bound manner. Following activities shall be under taken under ESC activities:
  - a. RO plants shall be installed in nearby village to ensure safe drinking water availability. The expenditure on maintenance on these RO plants will be owned by the Project proponent.
  - b. 5000 trees 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.
- vi. 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.
- vii. The unit shall adhere to Zero Liquid Discharge (ZLD).
- viii. Continuous online (24 x7) monitoring to be installed for flow measurement and measurement of pollutants within the treatment unit. Data to be uploaded on company's website and provided to the respective RO of MEF&CC, CPCB and SPCB.
- ix. 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.
- x. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xi. Special mask shall be provided to all workers for the protection from the chemical during working.
- xii. All the commitment made regarding issues raised during the Public Hearing/ consultation meeting held on 21<sup>st</sup> March 2017 shall be satisfactorily implemented.
- xiii. The Company should obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans boundary movement) Rules, 2008 for management of hazardous wastes and prior

	<p>permission from SPCB should be obtained for disposal of solid / hazardous waste in the TSDF. The concerned company should undertake measures for fire fighting facilities in case of emergency.</p> <p>xiv. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.</p> <p>xv. 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.</p>
25.3.4	<p><b>Expansion of grain based distillery unit from 60 to 200KLPD at Tepulia morh, Po Dhubi, Nirsa,, Dhanbad-828205 Jharkhand by M/s ANKUR BIOCHEM PVT LTD rg. EC [IA/JH/IND2/29138/2015, J-11011/205/2015-IA-II(I)]</b></p> <p>The Project Proponent <b>M/s. AnkurBiochem Private Limited, Dhanbad, Jharkhand</b> and the accredited consultant <b>Vasantdada Sugar Institute, Pune</b> made a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>The proposal is for Expansion of Grain based Distillery Unit from 60 to 200 KLPD at A/p-Dubhi, P.S. Nirsa, Dist. Dhanbad, Jharkhand by M/s. AnkurBiochem Private Limited.</li> <li>The TOR has been issued by Ministry vide letter no. J 11011/205/2015-IA II (I); dated 7<sup>th</sup> September, 2015.</li> <li>All non molasses based distilleries (<math>\geq 60</math> KLD) are listed at Sl.No. 5(g) (ii) of Schedule of EIA Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>Ministry has issued EC earlier vide letter no. F. No. J-11011/159/2009- IA II (I); dated 1<sup>st</sup> June 2010 for 60 KLPD Distillery Unit to M/s. AnkurBiochem Private Limited.</li> <li>Existing land available with the proponent is 28.11 acre. Out of which, 2.5 acre of land will be used for proposed expansion. Industry has developed Greenbelt in an area of 33% i.e., 6.3 acre.</li> <li>It is reported that as per Form-I, no wildlife sanctuary, National parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Khudia River is flowing at a distance of <math>\sim 0.8</math> km towards south within 10 km study area.</li> <li>The total estimated cost of the project is 11,900 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 1874.0 Lakhs and the Recurring cost (operation and maintenance) will be Rs. 203.50 Lakhs per annum.</li> <li>Total Employment will be <math>\sim 80</math> Persons for Distillery &amp; 150 – 200 contract persons for Bottling operations after expansion.</li> <li>Industry proposes to allocate Rs. 331.0 Lakhs towards Corporate Social Responsibility.</li> <li>Ambient air quality monitoring was carried out at 09 locations during Mid of Oct. 2015 to Mid of Jan. 2016 and submitted baseline data indicates that ranges of concentrations of <math>PM_{10}</math> (<math>32 - 62.5 \mu g/m^3</math>), <math>PM_{2.5}</math> (<math>16 - 33 \mu g/m^3</math>), <math>SO_2</math> (<math>2 - 16 \mu g/m^3</math>) and <math>NO_2</math> (<math>13 - 26.3 \mu g/m^3</math>) <math>CO</math> (<math>0.3 - 1.48 \text{ mg}/m^3</math>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be <math>0.60 \mu g/m^3</math> and <math>0.70 \mu g/m^3</math> with respect to <math>PM_{10}</math>, <math>SO_x</math>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).</li> <li>Total water requirement is <math>1119 \text{ m}^3/\text{day}</math> and will be met from Groundwater, Maithan Reservoir and from Khudia River. Treated effluent of <math>270 \text{ m}^3/\text{day}</math> will be treated through Effluent Treatment Plant will be based on Zero Liquid discharge system.</li> <li>Power requirement after expansion will be 4.0 MW including existing 2.50 MW and</li> </ol>



Proposed products and their capacities for expansion		
SI. No	Products	Quantity(KLPD)
1.	ENA or RS Ethanol	190
2.	Impure Spirit	10
3.	DDGS (TPD)	115

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding control of pollution, education facility; provide medical facility, waste water discharge, controlling methods for air pollutants, vehicular movement, plantation, Electricity, drinking water facility and employment. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report. EAC has deliberated on the certified compliance report and found that 11 specific conditions and 7 general conditions are partially complied. PP informed that now they are complying all conditions and EAC found it to be satisfactory. The committee also suggested to not to use ground water. PP agreed.

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:

**A. Specific Conditions:**

- All the conditions of existing Environmental clearance shall be followed.
- 10 m wide green belt of perennial trees around periphery of the plant shall be provided.
- Green area shall be developed in 33 % area of the total project area.
- No ground water shall be used for proposed expansion.
- No edible grain shall be used for proposed expansion.
- At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for installation of RO plant for drinking water supply and solar panel in three (03) nearby villages. Implementation of such program shall be ensured accordingly in a time bound manner. Following activities shall be under taken under ESC activities:
  - RO plants shall be installed in three (03) nearby villages to ensure safe drinking water availability. The expenditure on maintenance on these RO plants will be owned by the Project proponent.
  - 5000 trees/ 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.
- 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.
- The unit shall adhere to Zero Liquid Discharge (ZLD).
- Continuous online (24 x7) monitoring to be installed for flow measurement and measurement of pollutants within the treatment unit. Data to be uploaded on

	<p>company's website and provided to the respective RO of MEF&amp;CC, CPCB and SPCB.</p> <ul style="list-style-type: none"> <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. 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. 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>
25.3.5	<p><b>Proposed molasses based distillery (45 KLPD) at Village Anandgaon Sarni, Taluka Kaij, District Beed, Maharashtra by M/s Yedeshwari Agro Products Ltd.- reg EC[IA/MH/IND2/29609/2015, J-11011/200/2015-IA II (I)]</b></p> <p>The project proponent and the accredited Consultant M/s. Equinox Environments (I) 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 project involves molasses based distillery of 45 KLPD at Village Anandgaon Sarni, Taluka Kaij, District Beed, Maharashtra by M/s Yedeshwari Agro Products Ltd.</li> <li>ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 46<sup>th</sup> reconstituted EAC meeting held during 20<sup>th</sup>-21<sup>st</sup> August, 2015 and recommended Terms of Reference (ToRs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/175/2015-IA.II (I) dated 13<sup>th</sup> October 2015.</li> <li>iii. All molasses based distilleries are listed at S.N. 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>iv. Proposed molasses based distillery of 45 KLPD will be installed within the existing Sugar unit of 3200 TCD and Co-gen Plant of 10 MW capacity. Total land acquired by YAPL industry is 1,87,200 m<sup>2</sup>, Out of this built-up area for establishment of proposed 45 KLPD distillery will be about 11,700 m<sup>2</sup>. Industry will develop total Green belt area of 40,785 m<sup>2</sup> (21% of total plot area).</li> <li>v. The estimated proposed project cost is Rs. 47.71 Cr. Total capital cost earmarked towards environmental pollution control measures after expansion shall be Rs. 22.45 Crores and the Recurring cost (operation and maintenance) will be about Rs. 2.0 Crores per annum.</li> <li>vi. Total Employment will be 60 persons as 20 skilled &amp; 40 unskilled in proposed unit. Industry proposes to allocate Rs.3.05 Crores towards Corporate Social Responsibility.</li> <li>vii. It is reported that as per Form-I, no presence of any Ecological Sensitive Zones, Reserved /Protected Forest /National Parks/ Wildlife Sanctuary within 10 Km. distance. River Manjara is flowing at a distance of 8 Km from the project site.</li> <li>viii. Ambient air quality monitoring was carried out at six locations during January 2016 to</li> </ul>



	<p>March 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub>( 35.20 - 76.27µg/m<sup>3</sup>), PM<sub>2.5</sub> (9.67 – 22.43µg/m<sup>3</sup>), SO<sub>2</sub> (12.23 - 23.90 µg/m<sup>3</sup>) and NOx (11.93 – 23.57µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 24 µg/m<sup>3</sup> with respect to SO<sub>2</sub>, The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).</p>																
ix.	Total water requirement for proposed 45 KLPD molasses based distillery is 442 m3/day Out of 442 m3/day; 122 m3/day will be fresh water taken from River Manjra. Remaining 320 m3/day (73%) shall be met from treated CPU effluent Recycle.																
x.	Raw spent wash to the tune of 335 m3/day will be bio-methanated and concentrated in to proposed MEE plant. Concentrated spentwash to the tune of 200 m3/day will be used for bio-composting along with other filler material such as yeast sludge, Pressmud etc. Spentlees @ 90 m3/day, MEE condensate @ 130 m3/day and other effluents such as effluent from lab and washing, cooling blow down @ 10 CMD will be treated in to proposed Condensate polishing unit (CPU) plant. This achieves Zero Liquid Discharge (ZLD).																
xi.	Power requirement for existing sugar factory & co-gen plant is 3.5 MW. Distillery power requirement will be 0.5 MW. The same will be met from own co-gen plant. Remaining 5.9 MW electricity will be sold to MSEB Grid. In existing sugar factory & co-gen plant a D.G. Set of 625 KVA is already installed. , Stack of 3 M. above roof level is installed for controlling the particulate matter emissions for same.																
xii.	Existing sugar factory & co-gen plant has 70 TPH bagasse fired boiler. A stack of 70 M height along with Wet scrubber as Air Pollution Control (APC) Equipment is provided to the same to control air pollution. A boiler of 8 TPH will be installed under proposed distillery project. Biogas generated after biomethanation of spentwash will be used as fuel for the same boiler. A stack of 45 M height will be provided to the same.																
xiii.	Carbon dioxide to the tune of 35 MT/Day will be generated as a process emission after fermentation of molasses in distillery. The same will be bottled and supplied to manufactures of beverages.																
xiv.	Yeast sludge to the tune of 10 MT/day will be generated from distillery unit. Same will be consumed during spent wash bio-composting process. No any hazardous waste shall be generated from the proposed 45 KLPD Distillery plant.																
xv.	Public hearing for proposed project has been conducted by Maharashtra Pollution Control Board (MPCB) on 18.02.2017.																
xvi.	No any litigation is pending against the proposal.																
xvii.	Following are the list of proposed products:																
<b>Proposed Product List</b>																	
<table><tr><th>Industrial Unit</th><th>Products</th><th>Quantity</th></tr><tr><td rowspan="6">Distillery (45 KLPD)</td><td>Rectified Spirit</td><td>1,350 KL/M (45 KLPD)</td></tr><tr><td>Ethanol</td><td>1,285 KL/M (43 KLPD)</td></tr><tr><td>Extra Neutral Alcohol (ENA)</td><td>1,269 KL/M (42 KLPD)</td></tr><tr><td>By-products</td><td></td></tr><tr><td>Impure Spirit</td><td>150 KL / Month</td></tr><tr><td>Fuel Oil</td><td>7.5 KL/ Month</td></tr></table>	Industrial Unit	Products	Quantity	Distillery (45 KLPD)	Rectified Spirit	1,350 KL/M (45 KLPD)	Ethanol	1,285 KL/M (43 KLPD)	Extra Neutral Alcohol (ENA)	1,269 KL/M (42 KLPD)	By-products		Impure Spirit	150 KL / Month	Fuel Oil	7.5 KL/ Month	
Industrial Unit	Products	Quantity															
Distillery (45 KLPD)	Rectified Spirit	1,350 KL/M (45 KLPD)															
	Ethanol	1,285 KL/M (43 KLPD)															
	Extra Neutral Alcohol (ENA)	1,269 KL/M (42 KLPD)															
	By-products																
	Impure Spirit	150 KL / Month															
	Fuel Oil	7.5 KL/ Month															

		Carbon Di-oxide	35 MT/Day
		Bio-compost	29,027 MT/Season
	<p>During presentation the EAC noted that PP did not conducted the predictive incremental values for particulate matter and NOx. The EAC suggested to achieve fresh water demand @ 2.5 KL/KL of alcohol production. PP agree with it.</p> <p>The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding social activities, employment, spent wash treatment, operating days of distillery, noise pollution and health status of nearby villagers etc. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final 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>10 m wide green belt of perennial trees around periphery of the plant shall be provided.</li> <li>Green area shall be developed in 33 % area of the project site.</li> <li>Fresh water requirement shall not exceed 2.5 KL/KL of alcohol production from River Manjra. Permission shall be obtained from the concerned authority.</li> <li>No ground water shall be used for proposed expansion.</li> <li>5000 trees/ year shall be planted for 5 years in 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>At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for installation of RO plant for drinking water supply and solar panel in nearby village. Implementation of such program shall be ensured accordingly in a time bound manner. Following activities shall be under taken under ESC activities: <ol style="list-style-type: none"> <li>RO plant shall be installed in nearby village to ensure safe drinking water availability. The expenditure on maintenance on these RO plants will be owned by the Project proponent.</li> <li>Drip irrigation facility shall be provided to nearby villagers.</li> </ol> </li> <li>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>The unit shall adhere to Zero Liquid Discharge (ZLD).</li> <li>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>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</li> </ol>		

	<p>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. 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>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.</p>
25.3.6	<p><b>Setting up of 60 KLPD Grain based Distillery at Sr. No. 126,127,110, Kadwa Mhalungi, Post Valkhed, Taluka Dindori, District Nashik, Maharashtra by M/s Pernod Ricard India Pvt. Ltd. – reg EC [IA/MH/IND2/56408/2016, J-11011/171/2016- IA II(I)].</b></p> <p>The Project Proponent and the accredited Consultant M/s. SMS Envocare Limited, made a detailed presentation on the salient features of the project and informed that:</p> <p>i. The proposal is for proposed 60 KLPD Grain Based Distillery project at Sr. no. 126, 127 &amp; 110 Village KadwaMahalungi, Post Valkhed, Tal. Dindori, Dist. Nashik, Maharashtra by M/s. PernodRicard India (P) Ltd. and located at Sr. no. 126, 127 &amp; 110 Village KadwaMahalungi, Post Valkhed, Tal. Dindori, Dist. Nashik, Maharashtra.</p> <p>ii. The project proposal was considered by the Expert Appraisal Committee (Industry- 2) in its 11<sup>th</sup> EAC meeting held during 20<sup>th</sup>-21<sup>st</sup> July, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/171/2016-IA II (I); dated 7<sup>th</sup> September, 2016.(In case of EC Proposal).</p> <p>iii. All Grain based distillery (&gt; 60 KLPD) are listed at S.N. 5(g) (ii) under category ‘A’ and appraised at Central level.</p> <p>iv. Ministry has issued EC vide letter no J-11011/23/95 dated 18<sup>th</sup> December, 1995 to M/s Oceanic distilleries (P) Ltd., for Malt distillery roject.</p> <p>v. Existing unit of 20 KLPD Grain based Distillery is operating since 1998. The same will be dismantle and unit of 60 KLPD Grain based Distillery will be installed.</p> <p>vi. Total land area is 132709 m<sup>2</sup>. Industry will develop Greenbelt in an area of 33 % i.e.48761 m<sup>2</sup> (36%) out of 132709 m<sup>2</sup> of area of the project.</p> <p>vii. The estimated project cost is Rs.100 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 221 Lakh and the Recurring cost (operation and maintenance) will be about Rs. 38 Lakh per annum.</p> <p>viii. Total Employment will be 230-250 persons as direct &amp; 80-100 persons indirect. Industry proposes to allocate Rs. 2.5 Crore @ of 2.5 % towards Corporate Social Responsibility.</p>

- ix. It is reported that as per form-1 No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10km distance. River Kadwa and River Kolwan is flowing at a distance a distance of 2.5 and 2.55 km in North East and South directions from the project site.
- x. Ambient air quality monitoring was carried out at nine locations during October, 2016 to December, 2016 and submitted baseline data indicates that ranges of concentrations of PM10 (60.2 -79.6  $\mu\text{g}/\text{m}^3$ ), PM2.5 (30.2-51.36  $\mu\text{g}/\text{m}^3$ ), SO2 (6.1-17.2  $\mu\text{g}/\text{m}^3$ ) and NO2 (13.8 – 24.8  $\mu\text{g}/\text{m}^3$ ) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.68  $\mu\text{g}/\text{m}^3$ , 15.93  $\mu\text{g}/\text{m}^3$  and 5.23  $\mu\text{g}/\text{m}^3$  with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- xi. Total water requirement is 1729  $\text{m}^3/\text{day}$  of which fresh water requirement of 597  $\text{m}^3/\text{day}$  and will be met from Karanjwan Dam
- xii. Treated effluent of process condensate will be treated through Condensate Polishing Unit. Plant will be based on Zero Liquid discharge system.
- xiii. Power requirement will be 1230 KW and will be met from in-house 18 TPH Boiler. Proposed unit will have 3 Nos. DG sets of 500 kVA capacities are used as standby during power failure. Stack (8 m) will be provided as per CPCB norms to the proposed DG sets of 3 x 500 kVA which will be used as standby during power failure.
- xiv. Proposed unit has 18 TPH Coal/ Agro husk fired boiler will be installed. ESP with a stack of height of 62.5 m will be installed for controlling the Particulate emissions (within statutory limit of 115  $\text{mg}/\text{Nm}^3$ ).
- xv. The process emissions likely to be generated for manufacturing of ENA/ TA will be from various process like grain cleaning, milling and flour handling will contribute to PM emissions. Liquefaction and distillation will contribute to VOC emissions. Sacchrification & fermentation will contribute to traces of ethanol and CO<sub>2</sub> emissions. Bag filters will be provided for PM emissions. CO<sub>2</sub> scrubber will be provided to scrub CO<sub>2</sub> emissions in water. The whole process will be carried out in closed condition so as to avoid any chances of VOC emissions. The height and diameter of the CO<sub>2</sub> scrubber will be 2.55 m & 0.75 m.

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

Sr. No.	Waste	Quantity (In TPD)	Treatment	Disposal
1.	CPU sludge	0.5	Treated already	Used as manure
2.	Bottom Ash	25-30	Stored in silos	Sold to brick manufacturer
3.	DDGS/ Wet cake	40-45/ 155-160	Storage	Will be sold as cattle/ fish feed

- xvii. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 26<sup>th</sup> April, 2017.

xviii. No any litigation is pending against the proposal.

xix. Following are the list of proposed products:

Sr. No.	Product	Quantity (KLPD)
1.	Grain Alcohol/ Total Spirit	60
Or		
2.	ENA/ RS	57
3.	TA (5% of Total Spirit)	3

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding base line data collection, water sample collection, earlier water sample analysis, surrounding area, air pollution control measures, type and quantity of fuel, grain consumption, plantation, MPCB work, will industry build school or engineering college and steps to be taken environment protection etc. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

After detailed deliberations, the Committee 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:

**A. Specific Conditions:**

- i. 10 m wide green belt of perennial trees around periphery of the plant shall be provided.
- ii. Industry shall develop green area in an area of 48761 m<sup>2</sup> (36%) out of 132709 m<sup>2</sup> of area of the project.
- iii. Fresh water requirement shall not exceed 1729 m<sup>3</sup>/day from Karanjwan Dam. Prior permission shall be obtained from the concerned authority.
- iv. No ground water shall be used for proposed expansion.
- v. 5000 trees/ year shall be planted during 5 years 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.
- vi. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for installation of RO plant for drinking water supply and solar panel in nearby village. Implementation of such program shall be ensured accordingly in a time bound manner. Following activities shall be under taken under ESC activities:
  - a. RO plant shall be installed in nearby village to ensure safe drinking water availability. The expenditure on maintenance on these RO plants will be owned

	<p>by the Project proponent.</p> <p>b. Solar light shall be provided to the nearby villages.</p> <p>vii. 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>viii. The unit shall adhere to Zero Liquid Discharge (ZLD). No effluent shall be discharge outside the plant premises.</p> <p>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.</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. 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>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.</p>
25.3.7	<p><b>Proposed pesticide manufacturing unit (200 Kg/month) at Village Taloja, Taluka Panvel, District Raigad, Maharashtra by M/s Pest Control (India) Pvt. Ltd.- Reg. EC - [IA/MH/IND2/62070/2017, J-11011/95/2016-IA-II(I)]</b></p> <p>The project proponent and the accredited consultant M/s Sadekar Enviro Engineers Pvt. Ltd. gave a detailed presentation on the salient features of the project and informed that.</p> <p>i. The proposal is for proposed Pesticide manufacturing unit located at plot no: 38 &amp; 39, Taloja MIDC, Navade Village, Taluka Panvel, and District Raigad in Maharashtra State by M/s Pest Control (India) Pvt. Ltd. Located.</p> <p>ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 19<sup>th</sup> EAC Meeting held during 6th -7th February 2017 and recommended Terms of Reference (TORs) for the project. The TOR has been issued by Ministry vide letter no. - J- 11011/95/2016-IA.II (I) dated 24<sup>th</sup> May 2017.</p> <p>iii. All Pesticide Industry &amp; Pesticide Specific Intermediates are listed at S.N. 5(b) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at central level by Expert Appraisal Committee (EAC).</p> <p>iv. Existing unit is producing formulation products since 1996 with valid CTO. Existing land area is 5500 m<sup>2</sup>, no additional Land will be required for proposed activity. Industry will be developed greenbelt of 10 m width along with plot boundary in an area of 2330 m<sup>2</sup> (42.36 % of total plot area) out of 5500 m<sup>2</sup> of area of the project.</p> <p>v. The estimated project cost is Rs 2 Crore. Total capital cost earmarked towards environmental pollution control measures is 77.3 Lakh and the recurring cost (operation</p>

and maintenance) will be about 13.71 Lakh Per annum.

- vi. Total Employment will be 50 persons as direct. Industry proposed to allocate Rs. 5 Lakh @ of 2.5% towards Corporate Social Responsibility.
- vii. It is reported that as per form-1 no national park, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. lies within 10 km distance. Panvel Creek is flowing at a distance of 1.8 Km in SW direction. However Nearest Reserve Forest patches are present at distance of 5.08 km in NW direction & at 8.65 km in east direction and also at 8.85 Km in SSW direction away from the project site. Haji Malang Shrine present at 10 km in NE direction & Prabalmachi (Prabalgahad) is present at 14.9 km in SE direction near the project site is which is used by the public as Recreation/Tourist area. Karnala Bird Sanctuary is located at 15.3 km in south direction & Thane Creek Flamingo Sanctuary is located at 11.6 km in west direction away from the project site.
- viii. Ambient air quality monitoring was carried out at 8 locations during March 2017 to May 2017 and submitted baseline data indicates that range of concentrations of PM<sub>10</sub> (83-105 µg/m<sup>3</sup>), PM<sub>2.5</sub> (31-56µg/m<sup>3</sup>), SO<sub>2</sub> (28-40 µg/m<sup>3</sup>), and NO<sub>x</sub> (33-56 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.00294 µg/m<sup>3</sup>, 0.00212 µg/m<sup>3</sup>, 0.29382 µg/m<sup>3</sup>, and 0.02286 µg/m<sup>3</sup>, with respect to PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub> & NO<sub>x</sub>. The resultant concentrations are within National Ambient Air Quality Standards (NAAQS) except for PM<sub>10</sub> of A1 location.
- ix. Total water requirement is 31.67 m<sup>3</sup>/day of which fresh water requirement of 24.31 m<sup>3</sup>/day will be met from Talaja MIDC, after achieving ZLD.
- x. Treated effluent of 7.1 m<sup>3</sup>/day will be further treated through RO system of 7.5 m<sup>3</sup>/day capacity. Plant will be based on Zero Liquid discharge system
- xi. Power requirement of the proposed project will be 100 KVA and will be met from Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL). D.G set (1 No.) of 82.5 KVA capacity will be used as a standby during power failure. Stack height of 5m height above ground will be provided as per CPCB norms.
- xii. Proposed unit will have 1 No. of 0.5 MT/hr of FO fired boilers. Stack height of 30 m will be installed for controlling the particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>) for proposed 0.5 TPH FO fired steam boiler.
- xiii. One Alkali scrubbers of 3000 CFM will be provided to cater HBr Fumes from manufacturing process.
- xiv. Details of solid waste/ Hazardous waste generation and its management are as follows

Sr. No.	Type of Waste	Category as HW rule	Quantity of H.W. Generation	Mode of Disposal
1	ETP Sludge	35.3	0.66 Tons/A	To CHWTSDF
2	Residue & Waste	29.1	0.39 Tons/M	To CHWTSDF
3	Spent Oil	5.1	50 Liters/A	To MPCB Authorized Vendor
4	MEE Residue	37.3	42 Kg/D	To CHWTSDF

5	Recovered Mix Solvents from Process effluent stream using Stripper MEE	29.4	27 Liter /D	To MPCB Authorized Recycler
6	Empty barrels/containers/liners contaminated with hazardous chemicals /wastes	33.1	150 Drums/M & 8 Sacks /M	To MPCB Authorized Recycler

xv. Public Hearing for the proposed project is exempted as per ToR vide letter No: **J-11011/95/2016-IA.II(I)** dated 24<sup>th</sup> May 2017 7(i) III Stage (3)(i)(b) of EIA Notification, 2006, being the project site is in notified industrial area.

xvi. There is no any litigation pending against the project.

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

Sr.No	Name of Product	Chemical Name	CAS No	Existing MT/month	Proposed, MT/month	Total, MT/month
	Consent no: RONM/NNB/TALOJA/RED/O/CC/C-MPCB/15/52284, dt. 01/05/2015 for R & D Activity.					
1.	Bromadiolone Technical	(3-[3-[4'-bromobiphenyl-1-yl)-3-hydroxyl-1-phenylpropyl]-4-4hydroxycoumarin.	2877 2-56-7	R&D	0.2	0.2
	Total			R&D	0.2	0.2
2.	Formulations					
	Consent no: RONM/NNB/TALOJA/RED/O/CC/C-MPCB/14/10724, dt. 19/11/2014 (Formulation)					
1	Methyl bromide Formulation	-	-	4	--	-
2	Pyrethrum Lindane Formulations	-	-	15	--	-
3	Monocrotophos Formulations	-	-	15	--	-
4	DDVP Formulations	-	-	15	--	-
5	Cypermethrin Formulations	-	-	15	--	-
6	Bromadiolone Formulations	-	-	15	--	-



7	Fenvalerate Formulations	-	-	15	--	-
8	Deltamethrin+ Allethrin Formulations	-	-	15	--	-
9	Endosulfan Formulations	-	-	15	--	-
10	Fipronil Formulations	-	-	15	--	-
11	Propoxure Formulations	-	-	15	--	-
12	Etoxic C Formulation	-	-	10.67	--	-
13	<b>Ethylene Oxide-Pure Formulation</b>	<b>Oxirane</b>	<b>75-21-8</b>	<b>3.63</b>	<b>--</b>	<b>3.63*</b>
14	Imidacloprid Formulations	-	-	15	--	-
15	Malathion Formulations	-	-	15	--	-
16	Chlorpyrifos Formulations	-	-	15	--	-
17	Pyrethrum-Malathion Formulation	-	-	15	--	-
18	Deltamethrin Formulations	-	-	15	--	-
	<b>Total</b>			<b>243.3</b>		<b>3.63*</b>

\*The Formulation would be discontinued for all the other products mentioned in the valid C.T.O RONM/NNB/TALOJA/RED/O/CC/C-MPCB/14/10724, dated 19/11/2014 except for Ethylene Oxide-Pure of capacity 3.63 MT/M.

The EAC has deliberated on the proposal. The EAC noted that public hearing was exempted as per para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006, being the project site is in notified industrial area. 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. 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. Adequate scrubber shall be used to control process emissions.

	<p>iii. For further control of fugitive emissions, following steps shall be followed :</p> <ul style="list-style-type: none"> <li>(a) Closed handling system shall be provided for chemicals.</li> <li>(b) Reflux condenser shall be provided over reactor.</li> <li>(c) System of leak detection and repair of pump/pipeline based on preventive maintenance.</li> <li>(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.</li> <li>(e) Cathodic protection shall be provided to the underground solvent storage tanks.</li> </ul> <p>iv. 10 m wide green belt of perennial trees around periphery of the plant shall be provided.</p> <p>v. Industry shall develop green area in an area of 2330 m<sup>2</sup> (42.36 %) out of 5500 m<sup>2</sup> of area of the project.</p> <p>vi. Fresh water requirement shall not exceed 24.31 m<sup>3</sup>/day from Taloja, MIDC. Prior permission shall be obtained from the concerned authority.</p> <p>vii. No ground water shall be used for proposed expansion.</p> <p>viii. 5000 trees/ year shall be planted during 5 years in 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>ix. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for installation of RO plant for drinking water supply and solar panel in nearby village. Implementation of such program shall be ensured accordingly in a time bound manner. Following activities shall be under taken under ESC activities:</p> <ul style="list-style-type: none"> <li>a. RO plant shall be installed in nearby village to ensure safe drinking water availability. The expenditure on maintenance on these RO plants will be owned by the Project proponent.</li> <li>b. Solar light shall be provided to the nearby villages.</li> </ul> <p>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.</p> <p>xi. The unit shall adhere to Zero Liquid Discharge (ZLD). No effluent shall be discharged outside the plant premises.</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. 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.</p> <p>xiv. Company shall take all the measures in order to protect the machineries and equipments for pesticide producing unit from ageing.</p> <p>xv. Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps.</p> <p>xvi. 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</p>
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	<p>in case of emergency. Membership of TSDF for hazardous waste disposal shall be obtained.</p> <p>xvii. 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>xviii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</p> <p>xix. 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.</p>
25.3.8	<p><b>Expansion of existing API manufacturing unit at 52A, Jarod-Samlaya Road, village Gardhiya, P.O, Taluka Savli, District Vadodara, Gujarat by M/s Kalintis Healthcare Pvt. Ltd. – reg EC [IA/GJ/IND2/51744/2016, J-11011/107/2016- IA II(I)]</b></p> <p>The Project Proponent and the accredited Consultant, M/s. Kalintis Healthcare Pvt. Ltd. and En-vision Enviro Technologies Pvt. Ltd., gave a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>The proposal is for proposed expansion of API &amp; Bulk Drug Manufacturing Unit at 52A, Jarod-Samlaya Road, Gardhiya, P.O., Taluka Savli, District Vadodara, Gujarat by M/s. Kalintis Healthcare Pvt. Ltd.</li> <li>The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 9<sup>th</sup> EAC meeting held during 27<sup>th</sup> to 28<sup>nd</sup> June 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/107/2016-IA II (I); dated 2<sup>nd</sup> August, 2016.</li> <li>All Synthetic Organic Chemicals Industry are located outside the notified industrial area are listed at S.N 5(f), 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>Existing unit is manufacturing API products and operating since 2001 with valid CTO. Existing land area is 11,059 m<sup>2</sup> from 7,136.61 open land 5,071.65 m<sup>2</sup> land area will be used for the proposed expansion project.</li> <li>Industry will be developed greenbelt in an area of 33 % i.e. 3,650 m<sup>2</sup> out of 11,059 m<sup>2</sup> of area of the project</li> <li>The estimated project cost is Rs 12.0 Crore. Total capital cost earmarked towards environmental pollution control measures is 270 Lacs and the Recurring cost (operation and maintenance) will be about Rs. 22.84 Lacs per annum.</li> <li>Total Employment will be 100 persons as direct &amp; 30 persons indirect after expansion. Industry proposes to allocate Rs 30.0 Lacs @ 2.5 % towards Corporate Social Responsibility.</li> <li>It is reported that no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. No major river is exist in the study area but small river called Vishvamitri River is around 0.95 km in south direction. Gulf of Khambhat is at a distance of 97 km in west south-west direction.</li> <li>Ambient air quality monitoring was carried out at 8 locations during 16<sup>th</sup> March to 15<sup>th</sup> June, 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub></li> </ol>

(70.8 - 77.1  $\mu\text{g}/\text{m}^3$ ),  $\text{PM}_{2.5}$  (34.6 – 39.7  $\mu\text{g}/\text{m}^3$ ),  $\text{SO}_2$  (11 – 14.83  $\mu\text{g}/\text{m}^3$ ),  $\text{NO}_2$  (14.8–15.9  $\mu\text{g}/\text{m}^3$ ),  $\text{CO}$  (0.2 – 0.3  $\text{mg}/\text{m}^3$ ),  $\text{HCl}$  (<1.0  $\mu\text{g}/\text{m}^3$ ),  $\text{VOC}$  as isobutyl (<1.0  $\mu\text{g}/\text{m}^3$ ),  $\text{NH}_3$  (<1.0  $\mu\text{g}/\text{m}^3$ ) and  $\text{HBr}$  (<2.0  $\mu\text{g}/\text{m}^3$ ) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.36  $\mu\text{g}/\text{m}^3$ , 1.28  $\mu\text{g}/\text{m}^3$  and 0.45  $\mu\text{g}/\text{m}^3$  with respect to  $\text{PM}_{10}$ ,  $\text{SO}_x$  and  $\text{NO}_x$  and 0.03  $\mu\text{g}/\text{m}^3$ , 0.05  $\mu\text{g}/\text{m}^3$  and 0.25  $\mu\text{g}/\text{m}^3$  with respect to  $\text{HCl}$ ,  $\text{HBr}$  and  $\text{NH}_3$ . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

- x. Total fresh water requirement is 57.75  $\text{m}^3/\text{Day}$  and around 32.7  $\text{m}^3/\text{Day}$  water will be reused and will be met from ground water using bore well. Total industrial effluent of 34.83 KLD will be treated through ETP having Solvent stripper followed by MEE & ATFD and RO & treated water will be reused. Plant will be based on Zero Liquid Discharge system.
- xi. Power requirement after expansion will be 500 KVA including existing 150 KVA and will be met from Madhya Gujarat Vij Company Limited (MGVCL). One DG set of 500 KVA capacity will be used as stand by during power failure. Stack (height 10 m) will be provided as per CPCB norms to the proposed D.G. set of 500 KVA which will be used as standby during power failure.
- xii. Existing unit has 1 No. of 4 Lac Kcal/hr LDO/FO fired Thermopack. Proposed unit will have 1 No. of 2 TPH LDO/FO fired steam boiler which will replace the existing baby boiler. LDO/FO is used as fuel, adequate stack height will be provided.
- xiii. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 21<sup>st</sup> April, 2017.
- xiv. No litigation is pending against the proposal.
- xv. Details of process emissions generation and its management is as follows:

No.	Stack Attached To	Stack Height	Pollution Control System	Final Concentration
<b>EXISTING</b>				
1.	* Reactor	10 meter	Water Scrubber with circulation tank pump	$\text{SO}_2 \leq 40 \text{ mg}/\text{Nm}^3$ $\text{HCl} \leq 20 \text{ mg}/\text{Nm}^3$ $\text{HBr} \leq 30 \text{ mg}/\text{Nm}^3$ $\text{NH}_3 \leq 175 \text{ mg}/\text{Nm}^3$
<b>TOTAL AFTER PROPOSED EXPANSION</b>				
1.	Reactor	20 meter	Alkali Scrubber followed by Water Scrubber	$\text{SO}_2 \leq 40 \text{ mg}/\text{Nm}^3$ $\text{HCl} \leq 20 \text{ mg}/\text{Nm}^3$ $\text{HBr} \leq 30 \text{ mg}/\text{Nm}^3$
2.		20 meter	Acidic Scrubber followed by Water Scrubber	$\text{NH}_3 \leq 175 \text{ mg}/\text{Nm}^3$
3.		20 meter	Alkali Scrubber followed by Water Scrubber	$\text{SO}_2 \leq 40 \text{ mg}/\text{Nm}^3$ $\text{HCl} \leq 20 \text{ mg}/\text{Nm}^3$ $\text{HBr} \leq 30 \text{ mg}/\text{Nm}^3$
4.		20 meter	Acidic Scrubber followed by Water Scrubber	$\text{NH}_3 \leq 175 \text{ mg}/\text{Nm}^3$

\* Note: Reactor in existing facility having a vent with water scrubber. It will be replaced by acidic & alkali scrubber with individual vents.

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

S. No	Name of The Waste	Cat No.	Existing	Proposed	Total	Disposal Method
1.	Used Oil	5.1	400 Lit/Year	400 Lit/Year	800 Lit/Year	Collection, storage and reuse as lubricants in the machineries within the premises only or send to authorized re-processors.
2.	Discarded Containers/Barrels/ plastic	33.3	480 Nos./Year	350 Nos./Year	830 Nos./Year	Collection, storage and send to authorized recycler after decontamination.
3.	ETP Sludge	34.3	0.6 MT/year	49.4 MT/Year	50.0 MT/Year	Collection, storage and transport to TSDF site.
4.	Process Residue & Waste	28.1	1.2 MT/Year	35 MT/Year	36.2 MT/Year	Collection, Storage and send for incineration/co-processing.
5.	Spent Solvent	28.6	--	500 MT/Year	500 MT/Year	Collection, Storage and send to re-processor.
6.	Spent Carbon/Hyflow	28.2	--	0.04 MT/Day	0.04 MT/Day	Collection, Storage and send for incineration/co-processing.
7.	Off Specification Drugs	28.4	---	1.0 MT / Year	1.0 MT / Year	Collection, Storage and send for incineration/co-processing.
8.	MEE salt	--	--	40 MT/Year	40 MT/Year	Collection, storage and transport to TSDF site.
9.	Spent Carbon from ETP	--	--	1.5 MT/Year	1.5 MT/Year	Collection, storage, sent for regeneration

and/or send to  
TSDf site.

Following are the list of existing and proposed products:

**Existing Product list:**

S. No	Products	Quantity (TPA)
1.	3-Methoxyphenethylamine	6.0
2.	4-Methoxyphenethylamine	12.0
3.	3,4-Dimethoxyphenethylamine	12.0
4.	3,4-(Methylenedioxy)phenethylamine	2.4
5.	3 (Trifluoromethyl)phenethylamine	0.6
6.	5-Methoxy-1 Indianone	3.6
7.	5,6-Dimethoxy-1-indianone	3.6
8.	1-[2-(Hydroxyethoxy)ethyl]piperaxine	12.0
9.	1-Piperazinecarboxaldehyde	6.0
10.	1-Phenylcyclopentanecarboxylic Acid	6.0
11.	Cyclopropylmethylamine	2.4
12.	3-(Trifluoromethyl) acetophenone	2.4
13.	4-(2,4-Difluorobenzoyl) piperidine HCl	3.6
14.	1-Benzylpiperidine-4-methanol	2.4
15.	Cyclohexyl methyl ketone	2.4
<b>By-Products</b>		
1.	Ammonium Chloride	1.4
2.	Sodium Bromide	10.4
3.	Methanol	1.8
4.	Carbon Dioxide	2.6
5.	Sodium Chloride	13.4
6.	Ammonium Sulphate	2.1
7.	Cuprous Bromide	1.8
8.	Magnesium Chloride	1.2

**Proposed Product list**

Sl.No	Products	Quantity (TPA)
1.	Activate Pharmaceutical Ingredients (API) in Pilot Plant	12.0 in Pilot Plant
2.	Folic acid	12.0
3.	Frovatriptan	6.0
4.	Isosulfan blue	6.0
5.	Lorazepam	4.8
6.	Oxazepam	4.2
7.	S(+ )Pregabalin	6.6

8.	Levetiracetam	6.6
9.	Teneligliptin hydro bromide hydrate	7.8
10.	Flupirtine Meleate	6.0
11.	2,6-Di-tert-butyl—4-(dimethylaminomethyl) phenol	36.0
<b>By-Products</b>		
1.	Potassium Bromide	27.6
2.	Sodium Sulphate	38.6

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding wastewater discharge, Vishvmitri river, effect on ground water, permission from district panchayat, effect on crops, employment, drinking water etc. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

After detailed deliberations, the Committee 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:

**A. Specific Conditions:**

- i. 10 m wide green belt of perennial trees around periphery of the plant shall be provided.
- ii. Industry shall developed greenbelt in an area of 33 % i.e. 3,650 m<sup>2</sup> out of 11,059 m<sup>2</sup> of area of the project.
- iii. Fresh water requirement shall not exceed 57.75 m<sup>3</sup>/day from ground water using bore well. and prior permission shall be obtained from the CGWA/SGWA.
- iv. As proposed adequate scrubbers shall be provided to all reactors.
- v. 5000 trees/ year shall be planted during 5 years 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.
- vi. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for installation of RO plant for drinking water supply and solar panel in nearby village. Implementation of such program shall be ensured accordingly in a time bound manner. Following activities shall be under taken under ESC activities:
- vii. RO plant shall be installed in nearby village to ensure safe drinking water availability. The expenditure on maintenance on these RO plants will be owned by the Project proponent.
- viii. Solar light shall be provided to the nearby villages.
- 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. The unit shall adhere to Zero Liquid Discharge (ZLD). No effluent shall be discharge outside the plant premises.
- xi. 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.

	<p>xii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</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. 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.</p>
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### **Reconsideration of EC**

25.3.9	<p><b>Proposed Synthetic organic chemical industry at Plot No. 21/2 Dhatav MIDC, Tal. Roha, Dist. Raigad by M/s Ambernath Organics Pvt. Ltd.-Reconsideration of EC [IA/MH/IND2/62401/2016, J-11011/353/2016-IA.II(I)]</b></p> <p>The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 22<sup>nd</sup> meeting held during 17<sup>th</sup> to 18<sup>th</sup> April, 2017 and the committee sought following additional information:</p> <ol style="list-style-type: none"> <li>1. Revised layout plan to be submitted.</li> <li>2. Fresh 3 months base line monitoring report to be submitted.</li> </ol> <p>Now PP has submitted the revised layout plan and the base line data collected during March-May, 2017. Ambient air quality monitoring was carried out at 8 locations during March to May 2017 and submitted baseline data indicates that range of concentrations of PM<sub>10</sub> (48.8 &amp; 80.0 µg/m<sup>3</sup>), PM<sub>2.5</sub> (16.8 – 46.0 µg/m<sup>3</sup>), SO<sub>2</sub> (11.5-30 µg/m<sup>3</sup>), and NO<sub>x</sub> (15.4-48.8 µg/m<sup>3</sup>), respectively. The resultant concentrations are within National Ambient Air Quality Standards (NAAQS).</p> <p>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:</p> <p><b>A. Specific Conditions:</b></p> <ol style="list-style-type: none"> <li>i. 10 m wide green belt of perennial trees around periphery of the plant shall be provided.</li> <li>ii. As proposed industry shall developed greenbelt in an area of 39 % i.e. 3805.75 m<sup>2</sup> area.</li> <li>iii. Fresh water requirement shall not exceed 178.67 m<sup>3</sup>/day and will be met from MIDC and prior permission shall be obtained from the concerned authority.</li> </ol>
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	<ul style="list-style-type: none"> <li>iv. As proposed adequate scrubbers shall be provided to all reactors.</li> <li>v. 5000 trees/ year shall be planted during 5 years in 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>vi. At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for installation of RO plant for drinking water supply and solar panel in nearby village. Implementation of such program shall be ensured accordingly in a time bound manner. Following activities shall be under taken under ESC activities: <ul style="list-style-type: none"> <li>a. RO plant shall be installed in nearby village to ensure safe drinking water availability. The expenditure on maintenance on these RO plants will be owned by the Project proponent.</li> <li>b. Solar light shall be provided to the nearby villages.</li> </ul> </li> <li>vii. 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>viii. As proposed, no effluent from plant shall be discharged outside the plant premises and Zero discharge shall be adopted.</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. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</li> <li>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.</li> <li>xii. 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>
25.3.10	<p><b>Setting up of new Caustic Soda, Chlorine, Hydrogen Peroxide, Synthetic Organic, Inorganic, Specialty Chemicals along with Coal based Captive Power Plant near their existing Unit at Survey no. 169, 170, 175, 190, 191 of Varsana Village, Anjar Taluka, of Kachchh district, Gujarat by M/s Kutch Chemical Industries Limited.-CCR Discussion {J-11011/101/2016- IA II(I) ; IA/GJ/IND2/51468/2016}</b></p> <p>Earlier the EAC in its 17<sup>th</sup> meeting held during 26<sup>th</sup>-29<sup>th</sup> December, 2016 has recommended the proposal for grant of Environmental clearance subject to compliance of suggested conditions. Thereafter the Ministry directed to take the proposal again before the EAC to discuss the compliance report of adjacent unit of M/s Kutch Chemical Industries Limited.</p> <p>The EAC deliberated on the Certified compliance report submitted by RO, MoEF&amp;CC vide letter dated 23.05.2017. The EAC noted that 07 conditions are found not complied and 09 conditions are found partly complied. During presentation PP has submitted the action plan for complying the stipulated conditions. The EAC found it satisfactory.</p> <p>After examining the facts and detailed deliberations the committee decided to recommended the proposal for grant of environmental clearance subject to compliance of following additional conditions along with earlier conditions as mentioned in Minutes of 17<sup>th</sup> EAC meeting held</p>

- i. 5m (in existing unit) to 10 m (proposed unit) wide green belt of perennial trees around periphery of the plant shall be provided to both adjacent units.
- ii. At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for installation of RO plant for drinking water supply and solar panel in nearby village. Implementation of such program shall be ensured accordingly in a time bound manner. Following activities shall be under taken under ESC activities:
  - a. RO plant shall be installed in nearby village to ensure safe drinking water availability. The expenditure on maintenance on these RO plants will be owned by the Project proponent.
  - b. Solar light shall be provided to the nearby villages.
- iii. 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.
- iv. 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.
- v. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vi. 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.
- vii. 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.

The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 22<sup>nd</sup> meeting held during 17<sup>th</sup> to 18<sup>th</sup> April, 2017 and the committee sought following additional information;

1. Revised layout plan to be submitted.
2. Video recording of Public hearing proceedings to be submitted.
3. Clarification w.r.t. closure notice to be submitted.
4. Table of synthetic organic bulk drugs to be submitted.

Now It was noted that PP has submitted the revised layout plan, video recording of Public hearing proceedings, clarification w.r.t. closure notice and table of synthetic organic bulk drugs. During presentation PP clarified that closure notice issued by GPCB has been revoke now. PP has also submitted the table of synthetic organic bulk drugs and non synthetic (Herbal) which is as follows:

Sr. No.	Name of Product	Category	Existing Quantity	Proposed Quantity	Total Proposed
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			(MT/Month )	(MT/Month)	Quantity (MT/Month)
1.	Purification of Spent Potassium Acetate Solution	No Synthesis	40	- 40	0
2.	Acetone Thiosemi Carbazole	Chemical Synthesis	2.5	+43.5	50
3.	2 Mercapto 5-Methoxy Benzimidazole		4		
4.	Nimesulide		0		
5.	Sildenafil Citrate		0		
6.	Quinine Sulphate/ Derivatives	Herbal	2	+18.0	20
7.	Lumefantrine	Chemical Synthesis	0		
8.	Calcium Sennoside	Herbal	0		
9.	Phenyl Ephedrine HCl	Chemical Synthesis	0		
10.	Pentaprozole	Chemical Synthesis	0	4	4
11.	Hyoscine Butyl Bromide/ Derivatives	Herbal	0		
12.	Colchicoside & Thiocolchicoside	Herbal	0		
13.	10-Deacetyl Baccatin-III (10-Dab-III)	Herbal	0		
14.	Yohimbine Hydrochloride	Herbal	0		
15.	Camptothecin	Herbal	0		
16.	Reserpine	Herbal	0		
17.	Digoxin	Herbal	0		
18.	Artemether	Herbal	0		
19.	A,B - Arteether	Herbal	0		
20.	Artesunate	Herbal	0		
21.	Methylcobalamine	Herbal	0		
22.	Nicorandil	Herbal	0		
23.	R & D Products	Chemical Synthesis	0	+10	10
			<b>48.5</b>	<b>+35.5</b>	<b>84.0</b>

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:

**A. Specific Conditions:**

- i. 10 m wide green belt of perennial trees around periphery of the plant shall be provided.

	<ul style="list-style-type: none"> <li>ii. As proposed industry shall developed greenbelt in an area of 50 % of total area.</li> <li>iii. Fresh water requirement shall not exceed 47.75 m<sup>3</sup>/day and will be met from ground water source and prior permission shall be obtained from the concerned authority.</li> <li>iv. As proposed adequate scrubbers shall be provided to control process emissions.</li> <li>v. 5000 trees/ year shall be planted during 5 years in 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>vi. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for installation of RO plant for drinking water supply and solar panel in nearby village. Implementation of such program shall be ensured accordingly in a time bound manner. Following activities shall be under taken under ESC activities: <ul style="list-style-type: none"> <li>a. RO plant shall be installed in nearby village to ensure safe drinking water availability. The expenditure on maintenance on these RO plants will be owned by the Project proponent.</li> <li>b. Solar light shall be provided to the nearby villages.</li> </ul> </li> <li>vii. 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>viii. As proposed, no effluent from plant shall be discharged outside the plant premises and Zero discharge shall be adopted.</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. 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. 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>
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#### **25.4 Terms of Reference (TOR)**

25.4.1	<b>PROPOSED PESTICIDES INTERMEDIATES &amp; SPECIALTY CHEMICALS IN EXISTING INORGANIC CHEMICALS UNIT of M/s. PRAGNA PHARMA PVT. LTD. Plot No. D2/CH/224, GIDC Industrial Estate, Dahej-II, Tal: Vagra, Dist: Bharuch-392130, Gujarat – Reg. TOR [IA/GJ/IND2/65008/2017, IA-J-11011/299/2017-IA-II(I)]-</b>
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The project proponent informed following:-

- i. The project involves proposed Pesticides Intermediates & Specialty Chemicals in Existing Inorganic Chemicals Unit of M/s Pragna Pharma Pvt. Ltd. Plot No. D2/CH/224, GIDC Industrial Estate, Dahej-II, Tal: Vagra, Dist: Bharuch, Gujarat by M/s Pragna Pharma 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'. All Pesticides industry and pesticide specific intermediates (excluding formulations) units producing technical grade pesticides are listed at Sl.No. 5(b) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iii. Total 9,370.47 m<sup>2</sup> land area is available at site; out of this area about 3,100 sq. meter (33 %) area will developed as greenbelt and other forms of greenery.
- iv. The estimated project cost for proposed project activity is Rs. 800 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 100 Lakhs and the recurring cost (operation & maintenance) will be about Rs. 20 Lakhs per annum.
- v. Industry purposes to allocate Rs. 20 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 8 km in N direction.
- vii. Ambient air quality monitoring will be carried out at 8 locations during March -2017 to May -2017.
- viii. Total water requirement will be 271 KL/Day; which will be met from GIDC Water Supply.
- ix. Total wastewater generation will be 135 KL/Day.(130.5 KL/Day Industrial + 4.5 KL/Day Domestic) The existing effluent (44.5 KL/Day) will be sent to ETP consists of primary, secondary, tertiary & advanced treatment facilities. The final treated waste water is sent to GIDC Drain for final disposal. Additional low COD Stream (56 KL/Day) & High COD/TDS stream (30 KL/Day) shall be recycle & reused within premises.
- x. Power requirement will be 1000 KVA and will be met from DGVCL. & D.G.Set of 500 KVA (In Case of Power failure).
- xi. Existing unit has Boiler (600 Kg/hr), Hot Air Generator (3 Nos.) & Furnace (5 Nos.) Proposed unit will have Steam boiler (800 Kg/hr-1 Nos., 2000 Kg/hr.-1 nos., 600 Kg/Hr- Stand By, 800-Kg/hr- 1 nos. stand by) & Thermic Fluid Heater (4 Lac kcal/Hr, 6-Lac.Kcal/Hr) 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>).

#### EXISTING (FLUE GAS EMISSION THROUGH STACK)

Sr. No.	Stack Attached to	Stack Height in meter	Air Pollution Control Measure	Parameter	Permissible Limit
1.	Boiler (Capacity = 600 Kg/Hr)	11	---	SPM SO <sub>x</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm
2.	Hot Air Generator (3 Nos.)	11	---	SPM SO <sub>x</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm

3.	Furnace (5 Unit)	20	Cyclone Separator	SPM SO <sub>x</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm
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**PROPOSED (FLUE GAS EMISSION THROUGH STACK)**

Sr. No.	Stack Attached to	Stack Height in meter	Air Pollution Control Measure	Parameter	Permissible Limit
1.	Steam Boiler (800 Kgs/Hr-1 Nos.) (Fuel –Natural Gas)	15	--	SPM SO <sub>x</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm
2.	Steam Boiler (2000 Kgs/Hr-1 Nos.) (Fuel-Solid Fuel like Agro Waste, Coal)	30	Multi Cyclone Separator with Bag Filter	SPM SO <sub>x</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm
3.	Steam Boiler (600 Kgs/Hr) (Fuel-Natural Gas) Stand by	15	--	SPM SO <sub>x</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm
4.	Steam Boiler (800 Kgs/Hr-1 Nos.) (Fuel – LDO/Furnace Oil) Stand by	30	Multi Cyclone Separator with Bag Filter	SPM SO <sub>x</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm
5.	Thermic Fluid Heater (4.0 LAC K.CAL/Hr) (Fuel-Natural Gas)	15	--	SPM SO <sub>x</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm
6.	Thermic Fluid Heater (6.0 LAC K.CAL/Hr) (Fuel-Solid Fuel)	30	Multi Cyclone Separator with Bag Filter	SPM SO <sub>x</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm
7.	Thermic Fluid Heater (4.0 LAC K.CAL/Hr) (Fuel-LDO/Furnace Oil) Stand By	30	Multi Cyclone Separator with Bag Filter	SPM SO <sub>x</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm

xii. Details of Process emissions generation and its management:

**EXISTING (PROCESS GAS EMISSION THROUGH STACK)**

Sr. No.	Stack Attached to	Stack Height in meter	Air Pollution Control Measure	Parameter	Permissible Limit
1.	Spray Dryer (3 Nos.)	12	Wet Scrubber with ventury	SPM	150 mg/Nm <sup>3</sup>

xiii. Details of Solid waste / Hazardous waste generation and its management:

CAT. NO.	HAZARDOUS WASTE	Existing Quantity	Additional Quantity	Total Quantity	METHOD OF DISPOSAL
33.1	Discarded Containers/Bags /liner	Bags = 167 Nos. /Month Drums = 42 Nos. /Month	Bags = 4,167 Nos./Month Drums = 1,250 Nos./Month	Bags = 4,334 Nos./Year Drums = 1,292 Nos./Month	Collection, Storage, Decontamination, Transportation & Sale to registered recycler or reuse within premises.
5.1	Used Oil	0.167 Kg/Month	12.50 Kg/Month	12.50 Kg/Month	Collection, Storage, Transportation & Sale to GPCB authorized re-processor.
--	Zinc Sludge (Sludge generation during Zinc Salts production)	175 MT/Month	--	175 MT/Month	Collection, Storage, Transportation & send to TSDF Site
--	MnSO <sub>4</sub> (Sludge generation during Manganese Sulphate production)	112.5 MT/Month	-	112.5 MT/Month	Collection, Storage, Transportation and send to TSDF Site
35.3	ETP Sludge	3 MT/Month	41.67 MT/Month	44.67 MT/Month	Collection, Storage, Transportation & sent to TSDF Site
29.1	Solid Waste (Inorganic Waste)	--	45 MT/Month	45 MT/Month	Collection, Storage, Transportation and Disposal at TSDF site
--	MEE Salt	--	150 MT/Month	150 MT/Month	Collection, Storage, Transportation and Disposal at TSDF site

		20.3	Distillation Residues	--	220 MT/Month	220 MT/Month	Collection, Storage, Transportation and Co-processing in Cement Industries or incineration at Common Incineration facility
		29.5	Spent Catalyst	--	10 MT/Month	10 MT/Month	Collection, Storage, Transportation and send to recycler
		29.6	Spent Acid	--	550 MT/Month	550 MT/Month	Collection, Storage, Transportation and Sale to end user
		--	Sodium Hydro sulfide	--	170 MT/Month	170 MT/Month	Collection, Storage, Transportation and Sale to end user
		-	Hydrochloric Acid	--	180 MT/Month	180 MT/Month	Collection, Storage, Transportation and Sale to end user
		-	Formic Acid	--	100 MT/Month	100 MT/Month	Collection, Storage, Transportation and Sale to end user
		-	Acetic Acid	--	10 MT/Month	10 MT/Month	Collection, Storage, Transportation and Sale to end user
		-	Sodium Bromide Solution	--	170 MT/Month	170 MT/Month	Collection, Storage, Transportation and Sale to end user
		28.1	Inorganic Salt	--	60 MT/Month	60 MT/Month	Collection, Storage, Transportation and Send to TSDF site
		-	NaOH (10%)	--	60 MT/Month	60 MT/Month	Collection, Storage, Transportation and Sale to end user
		-	Na <sub>2</sub> SO <sub>4</sub> (25%)	--	250 MT/Month	250 MT/Month	Collection, Storage, Transportation and Sale to end user
		-	HYPO	--	10 MT/Month	10 MT/Month	Collection, Storage, Transportation and Sale to end user
		-	Potassium Chloride Salt	--	25 MT/Month	25 MT/Month	Collection, Storage, Transportation and Sale to end user
		29.3	Date expired & Off-Specification Material	--	2 MT/Month	2 MT/Month	Collection, Storage, Transportation and sent for co-processing in cement industries or incineration in common incineration facility



- xiv. Following are the list of existing & proposed products:  
Existing & Proposed Product List:

Sr. No.	NAME OF PRODUCTS	CAS No.	Exist- ing Quan- tity	Addi- tional Quan- tity	Total Quan- tity after expan-sion
			(MT/Month)		
1	Zinc Sulphate liq.	7733-02-0	1500	--	1500
2	Zinc Sulphate powder	7733-02-0	1000	--	1000
3	Zinc Oxide	1314-13-2	400	--	400
4	Manganese Sulphate liq.	7785-87-7	1500	--	1500
5	Manganese Sulphate powder	7785-87-7	500	---	500
6	Copper sulphate (CUSO <sub>4</sub> .5H <sub>2</sub> O)	7758-98-7	300	--	300
7	Magnesium Sulphate powder	7487-88-9	500	--	500
8	Spray Drying of chemicals on job work basis	--	1000	--	1000
9	2,5 DiChloro Para Phenylene Diamine	20103-09-7		25.0	25.0
10	2 Nitro 4 Methoxy Aniline	96-96-8		25.0	25.0
11	2,5 Dimethyl-P-Phenylenediamine	6393-01-07		25.0	25.0
12	2-Mercapto 5-Methoxy Benzimidazole	37052-78-1		33.3	33.3
13	3-[4-chloro-5-(cyclopentyloxy)-2-fluorophenyl]-5-(propan-2-ylidene)-1,3-oxazolidin-2,4-dione. (PIK)	110956-75-7		29.2	29.2
14	Sodium/Potassium { 2-[2,6 Dichloro Phenyl] Amino } Phenyl } Acetate	15307-79-6		41.7	41.7
15	2 Chlor PPD	615-66-7		25	25
16	2 -{ 2-[2, 6 dichloro phenyl } Amino ] Phenyl Acetyl ] Oxyacetic Acid	139272-67-6		41.7	41.7

	17	2-Chloro 1-Phenoxy Benzene	2689-07-8		41.7	41.7
	18	2,3 Xylil Anthranilic Acid	61-68-7		41.7	41.7
	19	2 Chloro 5 Methyl PPD	5307-03-09		25	25
	20	5 Amino Ortho Toludine	95-53-4		25	25
	21	4-Bromo Anisole	104-92-7		25	25
	22	2 Chloro 4 Flouro 5 Nitro Benzyl Chloride	120890-66-6		33.3	33.3
	23	3 Amino 4 Methoxy Acetanilide	6375-47-9		41.7	41.7
	24	Para Anisidine	104-94-9		41.7	41.7
	25	Para Amino Salicylic Acid	65-49-6		41.7	41.7
	26	Nitro to amino conversion by catalytic hydrogenation	--	--	83.3	83.3
		Benzyl Alcohol	100-51-6			
		P-Hydroxy Benzyl Alcohol	623-05-2			
		P-Chloro Benzyl Alcohol	873-76-7			
		P-nitro Benzyl Alcohol	619-73-8			
		2,4 Di Nitro Benzyl Alcohol etc.	483-66-2			
	27	Aldehyde to alcohol conversion by catalytic hydrogenation	--	--	83.3	83.3
		P-Amino Methyl Benzoate	619-45-4			
		5-Amino Salicylic Acid	89-57-6			
		4-Amino 2-Chloro Aniline	615-66-7			
		2,5 Di Amino Toluene	95-80-7			
		Aniline etc..	62-53-3			
	28	2-Amino Ethane Thiol Hydrochloride	156-57-0		83.3	83.3
	29	Dimethyl CyanoCarbodithiomidia te	10191-60-3		83.3	83.3
	30	4-Chloro 3-ethyl-1-methyl-1H-pyrazole 5-carboxylic acid (PIC-T1)	127892-62-0		25	25
	31	1-[4-(4-methylphenoxy)phenyl] methanamine Hydrochloride (PIC-T2)	262862-66-8		25	25
	<b>TOTAL</b>			<b>6700</b>	<b>945.9</b>	<b>7645.9</b>

	<p>During presentation the EAC noted that PP is proposing to send the waste water to GIDC drain but the committee suggested to send the wastewater to CETP for treatment. The EAC also noted that PP has started ambient air quality monitoring at 8 locations since March, 2017. EAC agreed with it.</p> <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 being the project site is located in notified industrial area.</li> <li>ESR plan for 5 year @ 5 % of the project cost with the consultation of nearby villagers to be submitted.</li> <li>Plan for 10 m wide green belt around periphery of the plant to be submitted.</li> <li>A plan for planting of 1000 trees /year till 5 years in identified 3 villages.</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>
25.4.2	<p><b>Enhancement of Captive Power Plant by installing 20 MW captive cogeneration plant of proposed turbine located at Birlasagar, Village: Chhaya, Taluka&amp; District: Porbandar, Gujarat. By M/s Saurashtra Chemicals (Division of Nirma Ltd.)- reconsideration of TOR [IA/GJ/IND2/62748/2017, IA-J-11011/115/2017-IA-II(I)]</b></p> <p>Proposal was earlier considered in 21<sup>st</sup> EAC meeting held during 27-29<sup>th</sup> March, 2017. Wherein the EAC was recommended for EC with exemption from EIA and public hearing process. Ministry did not accept the recommendations of EAC and again referred to the EAC for consideration for grant of Term of references.</p> <p>EAC after detailed deliberation has recommended the project with the following additional TOR along with Standard TOR and public hearing, for preparation of EIA/EMP report.</p> <p><b><u>Additional TOR</u></b></p> <ol style="list-style-type: none"> <li>Zero Liquid Discharge plan to be submitted.</li> <li>Green belt of 10 m width shall be planted along the periphery of the unit. Total 33 % of the area of the unit shall be ensured for green cover with perennial trees. The list of plant species and the survival rate shall be mentioned in the EIA report.</li> <li>Draft EIA/EMP report shall be submitted to SPCB for conduct of Public hearing. The points raised during the Public hearing/Public consultation shall be properly addressed in the final EIA/EMP report.</li> <li>The existing plant does not have Environmental Clearance, therefore, cumulative Environment Impact Assessment shall be carried out which includes existing Manufacturing Plant &amp; Captive Power Plant and proposed enhancement of Captive Power Plant.</li> <li>A map be submitted showing the project location and Porbandar Bird Sanctuary along with</li> </ol>

	<p>it's Eco-sensitive Zone (if notified) duly authenticated by Chief Wildlife Warden and the recommendations or comments of Chief Wildlife Warden, if any.</p> <p>vi. Recommendations of Standing Committee of National Board for Wildlife (NBWL) shall be submitted as the project is located at 1.1 km from Porbandar Bird Sanctuary. Location and impact with respect to ESZ shall be clearly indicated.</p> <p>vii. As the project is located at 1.5 km from CRZ, a map showing project location with respect to CRZ boundaries on Approved Coastal Zone Management Plan duly authenticated by Gujarat State Coastal Zone Management Authority (GCZMA) shall be submitted. Though project is not located in CRZ area, however sea water intake systems required for the plant falls in CRZ area. Recommendations from GCZMA as per CRZ Notification, 2011 shall be submitted.</p> <p>viii. Study on migratory birds and biodiversity shall be carried out for one season.</p> <p>ix. Flyash utilisation plan and MoUs with other companies for utilising flyash shall be submitted.</p> <p>x. As the Environmental Clearance is not available for the plant under operation, certified RO compliance report on Consent to Operate (CTO) &amp; Hazardous Waste Authorisation shall be submitted. Concerned Regional Office of MoEFCC along with Regional Officer of GSPCB may visit the site and review the compliance status.</p> <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>
25.4.3	<p><b>Proposed Food Colours and Lake Colours Manufacturing Plant at Plot No. 22/1 - B, Dhatav, Roha MIDC, Tal.: Roha, Dist.: Raigad, Maharashtra State by M/s. Arjun Food Colourant Mfg. Pvt. Ltd. -reg. TOR [IA/MH/IND2/64409/2017, IA-J-11011/216/2017-IA-II(I)]</b></p> <p>The project proponent informed following:-</p> <ol style="list-style-type: none"> <li>The project involves proposed Food Colours and Lake Colours Manufacturing Plant at Plot No. 22/1 - B, Dhatav, Roha MIDC, Tal.: Roha, Dist.: Raigad, Maharashtra State by M/s Arjun Food Colourant Mfg. Pvt. Ltd.</li> <li>All Synthetic organic chemicals industry (Dyes &amp; dye Intermediates; bulk) located in notified industrial area are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'B'. However, since village Dhatav wherein the Roha MIDC is setup have appeared in the list of ESA village of Western Ghats (Ecological Sensitive Area village) draft notification dated 14.03.2014 , 04.09.2015 and 27.02.2017 hence due to applicability of general condition project will be treated as category 'A' and are appraised at central level Expert appraisal committee (Industry-II).</li> <li>Proposed land area is 1.79 Ha. Industry will develop green belt in an area of 0.29 Ha. out of 1.79 Ha., of area of the project.</li> <li>The estimated project cost is Rs. 8.3 Crores. Total capital cost earmarked towards environmental pollution control measures for proposed project shall be Rs. 162 Lakhs and the Recurring cost (Operation and maintenance) will be about Rs. 22.75 Lakhs per annum.</li> <li>Total Employment will be 75 persons as 50 skilled &amp; 25 unskilled in proposed unit. Industry proposes to allocate Rs. 45 Lakhs @ of 5.2 % towards Corporate Social Responsibility.</li> <li>It is reported that as per Form-I, The proposed Eco-sensitive zone of Western Ghats as per ESZ notification dated 130.3.2014, 04.09.2015, is located within 5 Km of study area. No any national parks, wildlife sanctuaries, biosphere Reserves, Tiger/Elephants Reserve, Wildlife corridors lies within 10 Km distance. Kundalika River is flowing at a distance of 800 M to</li> </ol>

the North Side of the project.

vii. Total water requirement in proposed project will be 375 m<sup>3</sup>/day, out of which fresh water requirement shall be 227 m<sup>3</sup>/day and remaining 148 is recycled water from MEE condensate. The fresh water requirement will be met from MIDC water Supply Scheme.

viii. Effluent of 172 m<sup>3</sup>/day will be treated through Neutralization, MEE plant to achieve Zero Liquid discharge system.

ix. Details of Boilers :

Sr. No.	Description	Details				Remarks / Details
1	Source	Boiler	THF	THF	D.G.Set	• D.G. Set is operated only during power failure.
2	Capacity	3 TPH	10 Lakhs/ Kcal / Kg	4Lakhs/ Kcal / Kg	500 KVA	
3	Fuel	Imported Coal	Imported Coal	Imported Coal	HSD	
4	Quantity	20 MT/D	6 MT/D	2.5 MT/D	60 Lit/Hr.	
5	Stack Height	33 M	35 M	30 M	5 M ARL	
6	APC Equipment	Pulse Jet type Bag Filter	Pulse Jet type Bag Filter		--	

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

#### Details of Solid Wastes

Sr. No.	Type of Waste	Quantity	Disposal
1.	Boiler ash	1.5 MT/D	Landfill / Sale to bricks manufacturers or used for compost production

#### Details of Hazardous Wastes

Sr. No.	Type of Waste	Quantity	Disposal
2.	Process Residue	2 MT/M	To be forwarded to CHWTSDF
3.	Chemical Sludge from Wastewater treatment	150MT/M	

4.	Discarded Containers	2200 Nos/M	Sold to Authorized Reprocessor
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- xi. No any litigation is pending against the proposal.  
xii. Following are the list of proposed products:

**Proposed Product List**

**1. Food Colours: 9.5 MT/Day**

Sr. No.	Name of Product	Quantity (Kg/ Batch)
1	Ponceau 4R	2020
2.	Sunset Yellow FCF	2300
3.	Tartrazine	1800
4.	• Green Solvent Green 7(Green 8)	2000
5.	Red	
	a. Pigment Red 57 (Red 6)	1100
	b. Red 7	400
	c. Solvent Red 43(Red 21)	900
	d. Acid Phloxine B (Red 27)	770
	e. Acid Red 92(Red 28)	480
	f. Acid Red 33 (Red 33)	1350
6.	• Violet a. Acid Violet 49 (Violet 2)	1470
7.	• Yellow a. C.I.Solvent Yellow 172 (Yellow172)	2250

**2. Lake Colours: 2.5 MT/Day**

Sr. No.	Name of Product	Quantity (Kg/ Batch)
<b>Lake Colours</b>		
1.	Ponceau 4R Aluminium	670
2.	Sunset yellow Aluminium	
3.	Tartrazine Aluminium	
4.	Red	
	a. Pigment Red 57(Red 6 Barium Lake)	192
	b. Red 7 calcium lake	165
	c. Acid Phloxine B (Red 27 Aluminium)	500
	d. Acid Red 92(Red 28	590

		Aluminium)	
	e. Acid Red 33(Red 33 Aluminium)	610	
5.	Yellow		
	Yellow 6 Aluminium	600	

**3. Intermediates: 7 MT/Day**

Sr. No.	Name of Product	Quantity (Kg/ Batch)
	<b>Intermediates</b>	
1	Sulphanilic Acid	1750

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 being the project site is located in notified industrial area.
- Chemical name of the products with CAS number to be submitted.
- Toxicity of chemicals w.r.t. LD-50 and LD-90 to be submitted.
- A map be submitted showing the project location w.r.t. Western Ghats (Ecological Sensitive Area) along with it's Eco-sensitive Zone (if notified) duly authenticated by Chief Wildlife Warden and the recommendations/permission of Chief Wildlife Warden, if any.
- ESR plan for 5 year @ 2.5 % of the project cost with the consultation of nearby villagers to be submitted.
- Plan for 10 m wide green belt around periphery of the plant to be submitted.
- A plan for planting 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. Public hearing is exempted under the provisions as per para 7 (i) III. Stage (3)(i)(b)of the EIA notification, 2006.

| 25.4.4 | **Proposed expansion of synthetic organic chemicals and bulk drugs intermediates in existing unit of M/s. Nandolia Organic Chemicals pvt. Ltd. Plot No. 2920, Phase-III, GIDC Industrial Estate, Panoli-394 116, Taluka: Ankleshwar, Dist: Bharuch (Guj) – TOR reg. [IA/GJ/IND2/64523/2017, IA-J-11011/239/2017-IA-II(I)]**  The project proponent informed following:-   - The project involves proposed Expansion of Synthetic Organic Chemicals and Bulk Drugs Intermediates in Existing Unit of M/s Nandolia Organic Chemicals Pvt. Ltd. Plot No. 2920, Phase-III, GIDC Industrial Estate, Panoli, Taluka: Ankleshwar, Dist: Bharuch, Gujarat by M/s |  |  |

- Nandolia Organic Chemicals 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. Ministry has issued EC earlier vide letter no. J-11011/499/2007-IA-II-(I); dated 26<sup>th</sup> December, 2007 for Bulk Drug Intermediates manufacturing unit to M/s. Nandolia Organic Chemicals Pvt. Ltd.
  - iv. Total 5,000 m<sup>2</sup> land area is available at site; out of this area about 1,000 m<sup>2</sup> area is covered as greenbelt and other forms of greenery.
  - 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 & maintenance) is about Rs. 2 Lakhs per annum.
  - vi. Industry purposes to allocate Yes we are ready to comply with the condition of CSR expenses @ 2 % of project cost, if deemed necessary as a part of statutory compliances. The CSR investments will be carried out over a period of 5 years pro rata to the project cost invested towards Corporate Social Responsibility.
  - vii. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. lies within 10 km distance.
  - viii. Total water requirement will be 95.5 KL/Day, which will be met from GIDC Water Supply.
  - ix. Total Treated Effluent 45.0 KL/Day. After primary 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 (4.0 KL/Day) will be disposed of through septic tank & soak pit.
  - x. Power requirement will be 300 KVA and will be met from DGVCL and D.G. Set (1 No.) - 380 KVA capacity (emergency standby)
  - xi. Unit has Boiler (1 no.) & DG Set (1 No.). Additional Thermic Fluid Heater (1 no.) will be installed. Natural is and will be used as fuel in Boiler and TFH. Stack of height of 30 m, 11 m & 10 m respectively is and will be installed for controlling the Particulates emissions.
  - xii. Details of Process emissions generation and its management is as follows:

Sr. No.	Stack/Vent attached to	Stack Height (meter)	Stack Diameter (meter)	Fuel name & Quantity	Type of Emission	APCM
<b>Existing</b>						
1	Boiler (3 TPH)	30	0.45	Natural Gas (800 Nm <sup>3</sup> /hr)	PM SO <sub>2</sub> NO <sub>x</sub>	--
2	D.G. Set* (380 KVA)	11	0.15	Diesel 80 Liter/hr.	PM SO <sub>2</sub> NO <sub>x</sub>	--
<b>Proposed</b>						
3	Thermic Fluid Heater (10 Lac KL/hr.)	10	0.15	Natural Gas (150 Nm <sup>3</sup> /hr)	PM SO <sub>2</sub> NO <sub>x</sub>	--

\* To be used in emergency only.



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

SR. NO.	TYPE OF WASTE	CATEGORY NO.	QUANTITY		MODE OF DISPOSAL
			EXISTING	TOTAL AFTER PROPOSED EXPANSION	
1	Used / Spent Oil	5.1	0.016 MT/Month	0.016 MT/Month	Collection, Storage, Transportation and sell to registered re-refiners.
2	Discarded Containers/ barrels/liners	33.3	250 Nos./Month 4,000 Nos./Month	250 Nos./Month 6,500 Nos./Month	Collection, Storage, Transportation and reuse after Decontamination.
3	Chemical sludge from waste water treatment	34.3	31 MT/Month	52 MT/Month	Collection, Storage, Transportation and sent to common TSDF site of M/s. BEIL, Ankleshwar for disposal.
4	Process Waste	26.1	364 MT/Month	583 MT/Month	
5	Distillation Residues	36.4	2.84 MT/Month	4 MT/Month	
6	Palladium Charcoal for Regeneration	--	0.21 MT/Month	0.21 MT/Month	Collection, Storage, Transportation and Sent/Sold for regeneration and reused in process.
7	Spent Nickel Catalyst	--	0.21 MT/Month	1.36 MT/Month	

xiv. Following are the list of proposed products:

Sr. No.	Products	CAS No.	Production Capacity (MT/Month)	
			Existing	Total after Proposed Expansion
1	Para Anisic Aldehyde	123-11-5	125	200

2	Para Anisic Alcohol	105-13-5	23	173
3	4-Methoxy Phenyl Acetone	122-84-9	21	21
	Para Anisyl Acetone	104-20-1		
	2,5-Dichloroaniline (2,5 DCA)	95-82-9		
4	Meta Phenoxy Benzyl Alcohol	13286-35-2		150
Total			169	544

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 being the project site is located in notified industrial area.
- LC-50 and LD-50 to be submitted.
- ESR plan for 5 year @ 5 % of the project cost with the consultation of nearby villagers to be submitted.
- Plan for 10 m wide green belt around periphery of the plant to be submitted.
- A plan for planting 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. Public hearing is exempted under the provisions as per para 7 (i) III. Stage (3)(i)(b)of the EIA notification, 2006.

**25.4.5 Manufacturing of Bulk Drugs, Intermediates & Allied Products at Plot No. F-25, MIDC Chincholi, Taluka: Mohol, Distt.: Solapur, Maharashtra by M/s. Tetrahedron Laboratories Pvt Ltd. – TOR Reg. [IA/MH/IND2/64545/2017, IA-J-11011/218/2017-IA-II(I)]**

The Project Proponent M/s. Tetrahedron Laboratories Pvt. Ltd. and the accredited Consultant M/s. Green Circle, Inc. (High court stay order No. C/SCA/5312/2016), made a detailed presentation on the salient features of the project and informed that:

- The proposal is for manufacturing of Bulk Drugs, Intermediates & Allied Products at Plot No. F-25, MIDC Chincholi, Taluka: Mohol, Distt.: Solapur, Maharashtra by M/s. Tetrahedron Laboratories Pvt Ltd. and located at MIDC Industrial area.
- All Synthetic organic chemicals industry (bulk drugs and intermediates etc.) are located inside the notified industrial area are listed at S.N. 5 (f) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 under 'B' category but due to applicability of general condition i.e. Great Indian Bustard sanctuary, Nannaj is located 3.5 Km from project site hence proposal will be treated as category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- Total 6000 square meters land area at proposed site; out of this 1980 Sq.m. will be used for development of green belt.
- The estimated project cost is Rs. 4.75 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 69 Lakhs and the Recurring cost (operation

- and maintenance) will be about Rs. 16 Lakhs per annum.
- v. Total Employment will be 25 persons as direct & 10 persons as indirect. Industry proposes to allocate Rs. 2.0 Lakhs towards Corporate Social Responsibility.
  - vi. The Great Indian Bustard sanctuary, Nannaj (3.5 Km) lies within 10 km distance. There are no national parks, Biosphere Reserves, Tiger/Elephant Reserves etc. present within 10 Km distance. River Sina is flowing at a distance a distance of 6.73 Km in SSW direction.
  - vii. Total water requirement is 51.9 m<sup>3</sup>/day of which fresh water requirement of 51.9 m<sup>3</sup>/day and will be met from MIDC water supply.
  - viii. The total wastewater generation from industrial process will be 34.30 KLD, which will be segregated into high COD and low COD streams. High COD stream will be treated in MEE and condensate will be sent to ETP for further treatment, while low COD stream will be directly treated in ETP and sent to CETP for further treatment. 1.12 KLD domestic effluents will be disposed through septic tank & soak pit.
  - ix. Power requirement will be 250 KVA and will be met from Maharashtra State Electricity Distribution Corporation Limited (MSEDCL). Additionally, 1 No. of 250 KVA DG sets will be used as standby during power failure. Stack (height-13m) will be provided as per CPCB norms to the proposed DG sets of 250 KVA.
  - x. Briquette fired boiler (1.5 TPH) will be installed. Multi cyclone separator followed by bag filter with a stack of height of 30 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>) for proposed briquette fired boilers respectively.
  - xi. Adequate process emission control facilities like wet scrubber (3 Nos. x 3000 CFM) will be installed to control gaseous emission.
  - xii. Hazardous waste: ETP Sludge (10 kg/day) and MEE salts (600 kg/day) will be disposed-off to CHWTSDF site. Discarded containers/barrels/liners (25 Nos./Month) will be returned back to raw material supplier. Used Oil (5 Litres/Month) will be sold to authorized re-processor. Process/bottom residues (318 kg/day) will be sold to authorized vendor. Non-hazardous waste: Activated carbon (44.5 kg/day) and Ash (600 kg/day) will be sold to brick manufacturer. Paper waste (10 kg/day) will be sold to authorized vendor.
  - xiii. Following are the list of proposed products:

**Proposed Products and their Capacities:**

Sr. No.	Product Name	Qty. (MT/M)
1	Cyano Acetic Acid	80.00
2	Cyclohexanyle Acetonitrile (Alkyl Nitrile)	30.00
3	Caffeine	3.00
4	Theophylline	3.00
5	Theobromine	5.00
6	Ethyl Cyano Acetate	6.50
7	Methyl Cyano Acetate	5.80
8	Cyano Acetamide	2.034
9	Metformin Hydrochloride	10.50
<b>Total</b>		<b>145.834</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**

	<ul 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 being the project site is located in notified industrial area.</li> <li>ii. Toxicity of chemicals w.r.t. LD-50 and LC-50 to be submitted.</li> <li>iii. ESR plan for 5 year @ 2.5 % of the project cost with the consultation of nearby villagers to be submitted.</li> <li>iv. Commitment to use 30% of Solar power out of total power demand.</li> <li>v. Plan for 10 m wide green belt around periphery of the plant to be submitted.</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>
25.4.6	<p><b>Proposed expansion for manufacturing of specialty chemicals in existing unit at plot no. C-1b/407/4, GIDC estate, Panoli, Tal: Ankleshwar, District: Bharuch, Gujarat by M/s World Chem Industries - TOR reg. [IA/GJ/IND2/64582/2017, IA-J-11011/240/2017-IA-II(I)]</b></p> <p>The Project Proponent and accredited 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 for manufacturing of specialty chemicals in existing unit at plot no. C-1b/407/4, GIDC estate, Panoli, Tal: Ankleshwar, District: Bharuch, Gujarat by M/s World Chem Industries.</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> <li>iii. Existing unit has got Consolidated Consent &amp; Authorisation from GPCB, Gujarat for Formulation/Blending/mixing only.</li> <li>iv. Proposed land area is 1462 m<sup>2</sup>. Industry will developed greenbelt in an area of 17 % i.e. 250 m<sup>2</sup> out of 1462 m<sup>2</sup> of area of the project.</li> <li>v. The estimated total project cost is Rs. 150 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. 3 Lakhs per annum.</li> <li>vi. Total employment will be 15 persons as direct &amp; 8 persons indirect for project. Industry purposes to allocate Rs. 2.5 Lakhs @ 2.5 % towards Corporate Social Responsibility.</li> <li>vii. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km radius of the project site. Narmada river is flowing at a distance a distance of 13 km in N direction.</li> <li>viii. Ambient air quality monitoring has been carried out at 8 locations during March-2017 to May-2017.</li> <li>ix. Total water requirement will be 6.0 KL/Day; which will be met from GIDC Water Supply.</li> <li>x. Total 6.0 KL/Day ( 2.5 KL/Day Industrial + 2.5 KL/Day domestic) of effluent shall be generated. Industrial effluent Low COD stream = 1.0 KLD will be treated in ETP &amp; finally sent to CETP (M/s. PETL, Panoli, Bharuch), High COD stream = 0.333 KLD will be sent to</li> </ul>

- Common spray dryer (M/s. PETL, Panoli, Bharuch),
- xi. Power requirement will be 60 HP and will be met from DGVCL.
- xii. Unit will have N.G. based Thermo pack (4 LKC/Hr.) Adequate stack height will be provided.
- xiii. There will be no Process Gas Emission.
- xiv. Details of Solid waste / Hazardous waste generation and its management is as follows:

S. No.	Type of Hazardous Waste	Hazardous Waste Category	Existing Qty. MT/Month	Total proposed Qty. MT/MONTH	Mode of disposal
1.	Discarded Containers/ Bags/Liners	33.1	5 Nos 45 Nos.	50 Nos 200 nos.	Collection, Storage, Transportation, Reuse/ Sale to Authorized Vendor.
2.	Used Oil/Spent Oil	5.1	0.09 KL	0.200 KL	Collection, Storage, Transportation, Reuse or sale to authorized reprocessors.
3.	ETP Sludge	35.3	--	1.0	Collection, Storage, Transportation, disposal at nearest TSDF site.
4	Process Waste		--	6.35	Collection, Storage, Transportation, disposal at nearest CHWIF site or send to Cement Industries for Co Processing.

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

Sr. No.	Product name	Existing Quantity MT/Month	Total Proposed Quantity MT/Month
1	Penta Erythritol Tetra Oleate	20	--
2	Turkey red oil (CAS No. 8002-33-3)	65	60
3	Glycerol monostearate (CAS No. 31566-31-1)	20	
4	Sorbitan Mono Sterate (CAS No. 1338-41-6)	30	
5	Sorbitan Mono Oleate (CAS No. 1338-43-8)	30	
6	Sorbitan Tri Streate (CAS No. 26658-19-5)	20	
7	Sorbitan Monolaurate (CAS No. 1338-39-2)	20	

8	Anti Foam- Polyol Fatty Acid Ester (CAS No. 65381-09-1)	20	
9	CADAPA- Coco Amido Propyl Amine	--	300
10	Coco Amido Propyl Betaine (CAPB) ( CAS No.61789-40-0)	--	
11	Coco Mono Ethanol Amide (CMEA ) (CAS No. 68140-00-1)	--	
12	Coco Diethanolamide (CDEA) (CAS No. 68603-42-9)	--	
<b>Total</b>			360

**Note: Product No. 1 shall be discontinued after expansion.**

**Note:** In Existing scenario unit has got Consolidated Consent & Authorisation- Gandhinagar-Gujarat for Formulation/Blending/mixing only.

Unit shall manufacture listed products after getting Environmental Clearance (MoEF-Delhi)& Consolidated Consent & Authorization- SPCB-Gujarat.

The EAC suggested to conduct fresh baseline data. PP agreed to 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. Toxicity of chemicals w.r.t. LD-50 and LD-90 to be submitted.
- iii. ESR plan for 5 year @ 5 % of the project cost with the consultation of nearby villagers to be submitted.
- iv. Plan for 10 m wide green belt around periphery of the plant 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.

25.4.7	<p><b>Proposed expansion of bulk drug products in existing unit at plot No. 3102/C to 3109/A, GIDC Estate, Ankleshwar, Distt. Bharuch, Gujarat of M/s Glenmark pharmaceuticals limited - reg. TOR [IA/GJ/IND2/64836/2017, IA-J-11011/289/2017-IA-II(I)]</b></p> <p>The Project Proponent and accredited Consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd., gave a detailed presentation on the salient features of the project &amp; informed that:</p>
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- i. The proposal is for expansion of bulk drug products in existing unit at plot No. 3102/C to 3109/A, GIDC Estate, Ankleshwar, Distt. Bharuch, Gujarat of M/s Glenmark pharmaceuticals limited.
- 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, 2006 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. Total 1,51,589.38 sq. meter land area is available at site; out of this area about 77,000 sq. meter (50 %) area is covered as greenbelt and other forms of greenery.
- iv. The estimated project cost is Rs. 151.55 Crores (Proposed).
- v. Industry purposes to allocate Rs. 3.775 Crores @ 2.50 % 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. waterbody –sea Narmada River is flowing at a distance of 8 km & Amla Khadi is flowing at a distance of 4 km.
- vii. Ambient air quality monitoring is carrying out at 8 locations during March-2017 to May-2017.
- viii. Total water requirement will be 1098 m<sup>3</sup>/day and will be met from GIDC Water Supply.
- ix. Treated Effluent (332 KL/Day) will be sent to GIDC drain for deep sea disposal.
- x. Power requirement will be 5 MW (Existing) and 7 MW (Proposed) and will be met from DGVCL
- xi. Unit have total 3 No of Boiler (Existing), 4 Nos. of D. G. Set in Existing unit and additional total 1 No of Boiler (Existing), 2 Nos. of D. G. Set and 1 Nos. of Thermopack in Proposed unit.
- xii. There is 5 no. of process vent in existing and 8 no. of process vent in proposed scenario.

**Process Stack \*\* Existing - As per CCA and NOC**

SR. NO .	PROCESS STACK ATTACHED TO	HEIGHT FROM GROUND (m)	DIAMETER (mm)	AIR POLLUTION CONTROL SYSTEM	POLLUTANTS
1	PO-1 – Reaction Vessel - HCl	11	100	Acid Scrubber	HCl
2	PO-2 – Reaction Vessel – NH <sub>3</sub>	11	100	Ammonia Scrubber	NH <sub>3</sub>
3	PO-2 – Reaction Vessel - HCl	11	100	Acid Scrubber	HCl
4	PO-3 – Reaction Vessel - HCl	11	100	Acid Scrubber	HCl
5	PO-5 – Reaction Vessel - HCl	11	100	Acid Scrubber	HCl

**Process Stack: Additional Proposed will be as below**

SR. NO .	PROCESS STACK ATTACHED	HEIGHT FROM GROUND	DIAMETER (mm)	AIR POLLUTION CONTROL SYSTEM	EXPECTED POLLUTANTS
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	TO	(m)			
1	Plant 06	15	200	Adequate Blower with Scrubber system	HCL, Ammonia, Br, Cl <sub>2</sub> , SO <sub>2</sub>
2	Plant 15 – 2 no.	20	200	Adequate Blower with Scrubber system	HCL, Ammonia, Br, Cl <sub>2</sub> , SO <sub>2</sub>
3	Plant 16	15	200	Adequate Blower with Scrubber system	HCL, Ammonia, Br, Cl <sub>2</sub> , SO <sub>2</sub>
4	Plant 17	20	200	Adequate Blower with Scrubber system	HCL, Ammonia, Br, Cl <sub>2</sub> , SO <sub>2</sub>
5	Acid Store Area	9	200	Caustic Scrubber followed by Blower	General Acids
6	Gas Cylinder Yard	9	200	Caustic Scrubber followed by Blower	HCL, Ammonia, Cl <sub>2</sub>
7	Plant-18	20 m	300	Adequate Blower with Scrubber system	HCL, Ammonia, Br, Cl <sub>2</sub> , SO <sub>2</sub>
8	Plant-19	20 m	300	Adequate Blower with Scrubber system	HCL, Ammonia, Br, Cl <sub>2</sub> , SO <sub>2</sub>

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

Sr. No	Type of Hazardous waste	Category No	Existing Qty MT/Year	Proposed Qty MT/Year	Method of Disposal
1	ETP Sludge	35.3	548	6000	Collection, Storage, Transportation and disposal to Approved TSDF site
2	MEE Salt	35.3	1380		Collection, Storage, Transportation and disposal to approved TSDF site
3	Plastic Waste	33.1	--	120	Collection, Storage, Transportation and disposal to to approved TSDF site or authorized scrap dealer or actual end user
4	Insulation Waste	X02	--	80	Collection, Storage, Transportation and disposal to approved TSDF site



	5	Discarded Plastic liners and containers	33.1	6,000 Nos./Year	15,000 Nos./Year	Reuse within premises or Collection, Storage, Transportation and After In House decontamination sell to GPCB Approved vendor
	6	Process Residue & Waste	28.1	268.2	720	Collection, Storage, Transportation and disposal to approved Common Incineration facility or Co-Processing
	7	Used Oil	5.1	300 Liter/Year	3,000 Liter/Year	Collection, Storage, transportation and sell to authorized Recycler
	8	Spent Carbon	28.2	8	96	Collection, Storage, Transportation and disposal to approved Common Incineration facility or Co-Processing at Cement Industry
	9	Distillation Residue	20.3	24	600	Collection, Storage, Transportation and disposal to approved Common Incineration facility and Co-Processing at Cement Industry
	10	Spent Solvent	28.6	648	1,500	Collection, Storage, Transportation and sell to Authorized Distillation unit or sell to actual end user directly.
	11	Solvent from Stripper	28.5	--	1320	Collection, Storage, Transportation and disposal to approved Common Incineration facility or authorized Distillation unit or Co-Processing at Cement Industry or sell to actual end user directly.
	12	Used Hand gloves and contaminated cotton waste	33.2	--	50	Collection, Storage, Transportation and disposal to approved Common Incineration facility or Co-Processing at Cement Industry

	13	Waste/Residue containing oil to accommodate the oil soaked cotton waste	5.2	--	40	Collection, Storage, Transportation and disposal to approved Common Incineration facility or Co-Processing in Cement Industries
	14	Spent catalyst	28.3	8	45	Collection, Storage, Transportation and disposal to approved Common Incineration facility or Co-Processing
	15	Off-specification drugs / product /RMs	28.4	-	20	Reuse or Collection, Storage, Transportation and disposal to approved Common Incineration facility or Co-Processing at Cement Industry
	16	Date expired, discarded and RMS Drugs/products	28.5	12	20	Collection, Storage, Transportation and disposal to approved Common Incineration facility or Co-Processing at Cement Industry
	17	Resin from DM Plant	34.2	--	12	Collection, Storage, Transportation and disposal to approved Common Incineration facility or Co-Processing at Cement Industry
	18	Membrane from RO Plant	35.3	--	12	Collection, Storage, Transportation and disposal to approved Common Incineration facility or Co-Processing
	19	Aqueous ML from process – MEE		--	1560	Collection, Storage, Transportation and disposal to approved Common MEE facility Or Co-Processing in Cement Industries
<b>xiv. Following are the list of proposed products:</b>						
	<b>SR. NO.</b>	<b>PRODUCT NAME</b>	<b>EXISTING CAPACITY</b>	<b>TOTAL PROPOSED CAPACITY</b>	<b>CAS No.</b>	

		( Kg/Annum )	(Kg/Annum)	
1	Butanifine HCl	72,000 (Sr No. 1 to 6)	0	101827-46-7
2	Esomeprazole pellets 22.5%		0	217087-09-7
3	Esomeprazole pellets 8.5%		0	217087-09-7
4	Fluconazole		12,000	86386-73-4
5	Trandolapril		200	87679-37-6
6	Tropism chloride		2,000	10405-02-04
7	Alfuzosin HCl	48,000 (Sr No. 7 to 27)	0	201530-41-8
8	Loratidine		0	217087-09-7
9	Bupropion HCl		20,000	100643-71-8
10	Perindopril Erbumine		7,000	8068-28-8
11	Amiodarone HCl		30,000	145202-66-0
12	Esomeprazole Base		0	119141-88-7
13	Deferosirox		0	84625-61-6
14	Esomeprazole Mg. Trihydrate		0	139264-17-8
15	Desloratadine		2,000	82586-52-5
16	Topiramate		20,000	144598-75-4
17	Zolpidem tartrate		1,500	145202-66-0
18	Glimepiride		3,500	171596-29-5
19	Colisomethate		0	81403-68-1
20	Ramipril		0	79794-75-5
21	GRC-15300		0	905818-69-1
22	Iitraconazole		0	107133-36-8
23	Zolmitriptan		100	19774-82-4
24	Moexipril HCl		250	119141-88-7
25	Paliperidone		0	97240-79-4
26	Rizatriptan		700	99294-93-6
27	Tadalafil		1,000	93479-97-1
28	Olmesartan Medoxomil	36,000 (Sr. No. 28 to 40)	20,000	1744-22-5
29	Riluzole		1,000	115256-11-6
30	Dofetilide		0	145463-14-6
31	Gemifloxacin		0	674773-15-0
32	Strontium Ranelate		0	202409-33-4
33	GPL-820C – Etoricoxib		8,000	78628-80-5
34	Terbinafine HCl		2,000	084625-61-6
35	Rosuvastatin Calcium		12,000	265121-04-8
36	GRC-10693		0	130018-87-0
37	Zonisamide		16,000	106685-40-9
38	Fosaprepitant		250	144689-63-4

39	Levocetirizine 2HCl	7,200 (Sr No. 41 to 55)	300	147098-20-2
40	Adapalene		500	68291-97-4
41	Oxcarbazepine		60,000	73963-72-1
42	Linezolid		3,600	163222-33-1
43	Frovatriptan Succinate		150	95233-18-4
44	Cilazapril		150	132866-11-6
45	Atovaquone		24,000	28721-07-5
46	Cilostazol		20,000	144701-48-4
47	Solifenacine Succinate		500	242478-38-2
48	Ezetimibe		2,000	155141-29-0
49	Rosiglitazone Malate		0	135729-62-3
50	Palonosetron HCl		100	157212-55-0
51	Bosentan Monohydrate		100	133099-07-7
52	Lercandapine HCl		20,000	165800-03-3
53	Derifenacin Hydrobromide		100	158930-17-7
54	Telmisartan		30,000	92077-78-6
55	Aprepitant		400	170729-80-3
56	Imiquimod	4,800 (Sr No. 56 to 64)	400	099011-02-6
57	Voriconazole		2,000	148465-45-6
58	GRC-4039		0	138729-47-2
59	Ropinirole Hydrochloride		600	145040-37-5
60	Crofelmer		500	118292-40-3
61	GRC-17536		0	99011-02-6
62	Eszopiclone		150	137234-62-9
63	Candesartan Cilexetil		0	91374-20-8
64	Tazarotene		100	118292-40-3
65	Esomeprazole Magnesium Dihydrate	0	24,000	217087-10-0
66	Dronedarone HCl	0	1,000	141625-93-6
67	Vildagliptin	0	2,600	274901-16-5
68	Lurasidone	0	2,000	367514-88-3
69	Lornoxicam	0	1,200	70374-39-9
70	Luliconazole	0	1,000	187164-19-8
71	Milanacipran	0	1,000	92623-85-3
72	Perindopril Arginine	0	425	612548-45-5
73	Prasugrel HCL	0	250	389574-19-0
74	Eso Sodium	0	150	161796-78-7
75	Lacosamide	0	2,000	175481-36-4
76	Canagliflozin Hemihydrate	0	100	928672-86-0
77	Ivacaftor	0	100	873054-44-5
78	Vilazodone	0	250	163521-08-2
79	Sitagliptin Anhydrous	0	150	654671-77-9
80	Sitagliptin Monohydrate	0	150	654671-77-9
81	Fingolimod	0	100	162359-55-9
82	Linagliptin	0	200	668270-12-0

	83	Saxagliptin	0	1,000	361442-04-8
	84	Tofacitnib Citrate	0	100	540737-29-9
	85	Rasagiline Mesylate	0	100	161735-79-1
	86	Rasagiline Phosphate	0	100	161735-79-1
	87	Rasagiline Tartrate	0	100	136236-52-7
	88	Apixaban	0	100	503612-47-3
		<b>Total</b>	<b>1,68,000</b>	<b>3,63,325</b>	
	89	R & D Products at Pilot Plant for development	<b>6,000</b>	<b>12,000</b>	
		<b>Grant Total (KG/Annum)</b>	<b>1,74,000</b>	<b>3,75,325</b>	
		<b>By Products</b>			
	90	<b>Recovered Solvent / Distilled Solvent (MT/Annum)</b>	<b>5,400</b>	<b>20,736</b>	
	91	<b>Sulphuric Acid (KL/Annum)</b>	<b>--</b>	<b>1,159.2</b>	
	<p>The EAC noted that PP has started ambient air quality monitoring at 8 locations since March, 2017. EAC agreed with it.</p> <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>Detailed plan for water recycling and reuse to be drawn.</li> <li>ESR plan for 5 year @ 5 % of the project cost with the consultation of nearby villagers to be submitted.</li> <li>Explore the possibility to achieve Zero Liquid discharge.</li> <li>Plan for 10 m wide green belt around periphery of the plant 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>				
25.4.8	<p><b>Expansion of present distillery of capacity 120 KLPD to 150 KLPD and 5 MW power generation at Sy Nos. 18 and 19, Malapur Village, Mudhol Taluk, Bagalkot District, Karnataka by M/s Nirani Sugars Ltd. – Reg. TOR [IA/KA/IND2/64821/2017, IA-J-11011/290/2017-IA-II(I)]</b></p>				

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

- i. The proposal is for expansion of existing distillery of capacity 120 KLPD to 150 KLPD and 5 MW power generation at Sy Nos. 18 and 19, Malapur Village, Mudhol Taluk, Bagalkot District, Karnataka State by M/s. Nirani Sugars Ltd.
- ii. All molasses based distillery are listed at S.N 5(g)(i) of Schedule of Environmental Impact Assessment (EIA) notification, 2006 under category (A) and are appraised at Central Level by Expert Appraisal Committee (EAC)
- iii. Ministry has issued EC earlier vide letter no. J-11011/130/2008 – IA II (I); dated 04.12.2009 for the establishment of 120 KLPD distillery unit to M/s Nirani Sugars Ltd.
- iv. Existing land area is 29 Acres; No additional land will be required for proposed expansion.
- v. Industry has already developed Greenbelt in an area of 5.92 Acres and will now develop in 4.08 Acres, total 33 % i.e., 10 Acres( 4.046 Ha) out of 29 Acres (11.736 Ha) of area of the project
- vi. The estimated project cost is Rs. 126.92 Crores including existing investment of Rs. 96.92 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 15 Crores and the Recurring cost (operation and maintenance) will be about Rs.50 Lakhs per annum
- vii. Total Employment will be 25 persons as directly & indirectly for the expansion (Total employment will be 125). Industry proposes to allocate Rs 72 Lakhs/year @ of 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. Ghataprabha River is flowing at a distance of 3.5Km in North Western direction.
- ix. Total water requirement is 1865 m<sup>3</sup>/day (Fresh water 1200 m<sup>3</sup>/day) for distillery section and will be met from Ghataprabha River.
- x. Effluent will be treated in ETP Plant of 1000 KLD, CPU is provided for the treatment of condensate and spentlees is recycled back to cooling tower. Spentwash will be concentrated and used as fuel in the incineration boiler. The plant will be Zero Liquid discharge system
- xi. Power requirement after expansion will be 2100 kwh including existing 1500 kwh and will be met from own incineration boiler. Existing unit has 1000 KVA DG set with stack height of 30 m AGL. Additional DG set is not required.
- xii. Existing unit has 32 TPH spent wash incineration boiler with coal as supporting fuel and installed ESP with a stack of height of 80 m installed for controlling the Particulate emissions (within statutory limit of 150 mg/Nm<sup>3</sup>). No additional Boiler required for expansion project
- xiii. Process emissions generation from proposed 32 TPH spent wash incineration boiler with coal as supporting fuel is being managed by the installation of ESP.
- xiv. Details of Solid waste/ Hazardous waste generation and its management is as follows:

Sl No	Solid waste	Quantity TPD	Method of collection	Method of Storage	Mode of disposal
1	Boiler- Ash	5	Mechanical conveyor into common silo for further	Ash storage yard	Sent to Brick and Cement manufacturing units.

			disposal		
2	Sludge from ETP	0.05	Sludge drying beds	Bio compost yard	Dried and mixed with pressmud for composting purpose.
3	Domestic solid waste	6.25 Kg/d	Collection bins	Segregated. Domestic organic solid waste will be composted, while the inorganic solid waste will be handed over to Mudhol Gram Panchayath.	Nearby municipal agencies & recyclers.
4	Yeast Sludge	7			
<b>Hazardous waste, KL/A</b>					
5	Used oil from DG sets	Nil	Stored in leak proof sealed barrels	Hazardous waste storage area	Used as lubricants within the industry

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

**Existing Product list:**

Sl. No.	Particulars	Quantity, TPD
<b>Product</b>		
1	RS/EA/AA/ENA	120 KLPD

**Proposed Products and their Capacities for Expansion**

Sl. No.	Particulars	Quantity, TPD
<b>Products</b>		
1	RS/EA/AA/ENA	150 KLPD
2	Power	5 MW/hr

EAC after detailed deliberation has recommended the project with the following additional TOR along with Standard TOR and public hearing, for preparation of EIA/EMP report.

**Additional TOR**

	<ul style="list-style-type: none"> <li>i. Green belt of 10 m width shall be planted along the periphery of the unit. Total 33 % of the area of the unit shall be ensured for green cover with perennial trees. The list of plant species and the survival rate shall be mentioned in the EIA report.</li> <li>ii. Draft EIA/EMP report shall be submitted to SPCB for conduct of Public hearing. The points raised during the Public hearing/Public consultation shall be properly addressed in the final EIA/EMP report.</li> <li>iii. Fresh baseline data to be collected.</li> <li>iv. A separate chapter on status of compliance of Environmental Conditions granted by Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA-EMP report</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>
25.4.9	<p><b>Proposed expansion of developer and azocolorants dyes in existing unit at plot no. 8001 &amp; 8001A, Phase-vi, G.I.D.C., Ankleshwar, Dist: Bharuch, Gujarat by M/s BASF India Ltd. (Unit-II) - Reg. TOR [IA/GJ/IND2/64866/2017, IA-J-11011/291/2017-IA-II(I)]</b></p> <p>The project proponent informed following:</p> <ul style="list-style-type: none"> <li>i. The project involves proposed Expansion of Developer and Azocolorants Dyes in Existing Unit of M/s BASF India Ltd. (UNIT-II) at Plot No. 8001 &amp; 8001 A, Phase-VI, G.I.D.C., Ankleshwar, Dist: Bharuch, Gujarat by M/s BASF India Ltd. (UNIT-II).</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, 2006 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. Proposed land area is 71,040.9 m<sup>2</sup>.</li> <li>iv. Industry will developed greenbelt in an area of 33 % i.e. 23,443 m<sup>2</sup> out of 71,040.9 m<sup>2</sup> of area of the project.</li> <li>v. The estimated project cost is Rs. 125.2 Crores (Existing - Rs. 123.7 Crores + Proposed – Rs. 1.5 Crores ).</li> <li>vi. Industry purposes to allocate Rs. 0.075 Crores @ 5.0 % 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. waterbody –sea Narmada River is flowing at a distance of 8 km &amp; Amla Khadi is flowing at a distance of 4 km.</li> <li>viii. Ambient air quality monitoring is carrying out at 8 locations during March-2017 to May-2017.</li> <li>ix. Total water requirement will be 500 m<sup>3</sup>/day and will be met from GIDC Water Supply.</li> <li>x. Treated Effluent (415 KL/Day) will be sent to GIDC drain for deep sea disposal.</li> <li>xi. Power requirement will be 3383 KW (Existing) and 2117 KW (Proposed) and will be met from DGVCL.</li> <li>xii. Unit will have total 2 No of Boiler (Existing), 1 No. of Vapour Absorption Machina (VAM) (Existing) &amp; 2 Nos. of D. G. Set (Existing).</li> <li>xiii. Details of Process emissions generation and its management – There is 9 no. of process vent in existing and 3 no. of process vent in proposed scenario.</li> </ul>



	<table><tr><th>Sr. No.</th><th>PCB ID Of Stack</th><th>Stack Attached To</th><th>Name of Process Plant</th><th>Air Pollution Control Measure (APCM)</th><th>Stack Height in Meter (From G.L.)</th><th>Parameter &amp; Permissible Limit</th></tr><tr><td>1</td><td>55785</td><td>Reaction Vessels</td><td>Exhaust of process vessels attached to alkali scrubber</td><td>Alkali Scrubber</td><td>30</td><td>HCl &lt; 20 mg/Nm<sup>3</sup></td></tr><tr><td>2</td><td>39372</td><td>Reaction Vessels</td><td>Exhaust of process vessels (attached to alkali scrubber &amp; Regenerative Thermic Oxidiser)</td><td>Alkali Scrubber</td><td>30</td><td>HCl &lt; 20 mg/Nm<sup>3</sup></td></tr><tr><td>3</td><td>39398</td><td>Reaction Vessels</td><td>Exhaust of process vessels attached to acid scrubber</td><td>Acidic Scrubber</td><td>30</td><td>PM &lt; 150 mg/Nm<sup>3</sup> SO<sub>2</sub> &lt; 40 mg/Nm<sup>3</sup> Ammonia &lt; 175 mg/Nm<sup>3</sup></td></tr><tr><td>4</td><td>39400</td><td>Process Emission Vessel</td><td>Stack attached to dust collector-I</td><td>Bag Filter</td><td>32</td><td>PM &lt; 150 mg/Nm<sup>3</sup></td></tr><tr><td>5</td><td>93429</td><td>Process Emission Vessel</td><td>Stack attached to dust collector-II</td><td>Bag Filter</td><td>32</td><td>PM &lt; 150 mg/Nm<sup>3</sup></td></tr><tr><td>6</td><td>93430</td><td>Process Emission Vessel</td><td>Stack attached to dust collector-III</td><td>Bag Filter</td><td>32</td><td>PM &lt; 150 mg/Nm<sup>3</sup></td></tr><tr><td>7</td><td>93431</td><td>Process Emission Vessel</td><td>Stack attached to dust collector-IV</td><td>Bag Filter</td><td>32</td><td>PM &lt; 150 mg/Nm<sup>3</sup></td></tr><tr><td>8</td><td>39399</td><td>Process Emission Vessel</td><td>Exhaust of storage tanks attached to alkali scrubber</td><td>Alkali Scrubber</td><td>9</td><td>HCl &lt; 20 mg/Nm<sup>3</sup></td></tr><tr><td>9</td><td>Proposed</td><td>Process Emission Vessel</td><td>Stack attached to chemical charging hopper</td><td>Bag Filter</td><td>32</td><td>PM &lt; 150 mg/Nm<sup>3</sup></td></tr><tr><td>10</td><td>Proposed</td><td>QA Lab hood</td><td>Vent attached to QA Laboratory fume hood blower</td><td>--</td><td>9</td><td>HCl &lt; 20 mg/Nm<sup>3</sup></td></tr><tr><td>11</td><td>Proposed</td><td>PD Lab hood</td><td>Vent attached to PD Laboratory fume hood blower</td><td>--</td><td>9</td><td>HCl &lt; 20 mg/Nm<sup>3</sup></td></tr></table>	Sr. No.	PCB ID Of Stack	Stack Attached To	Name of Process Plant	Air Pollution Control Measure (APCM)	Stack Height in Meter (From G.L.)	Parameter & Permissible Limit	1	55785	Reaction Vessels	Exhaust of process vessels attached to alkali scrubber	Alkali Scrubber	30	HCl < 20 mg/Nm <sup>3</sup>	2	39372	Reaction Vessels	Exhaust of process vessels (attached to alkali scrubber & Regenerative Thermic Oxidiser)	Alkali Scrubber	30	HCl < 20 mg/Nm <sup>3</sup>	3	39398	Reaction Vessels	Exhaust of process vessels attached to acid scrubber	Acidic Scrubber	30	PM < 150 mg/Nm <sup>3</sup> SO <sub>2</sub> < 40 mg/Nm <sup>3</sup> Ammonia < 175 mg/Nm <sup>3</sup>	4	39400	Process Emission Vessel	Stack attached to dust collector-I	Bag Filter	32	PM < 150 mg/Nm <sup>3</sup>	5	93429	Process Emission Vessel	Stack attached to dust collector-II	Bag Filter	32	PM < 150 mg/Nm <sup>3</sup>	6	93430	Process Emission Vessel	Stack attached to dust collector-III	Bag Filter	32	PM < 150 mg/Nm <sup>3</sup>	7	93431	Process Emission Vessel	Stack attached to dust collector-IV	Bag Filter	32	PM < 150 mg/Nm <sup>3</sup>	8	39399	Process Emission Vessel	Exhaust of storage tanks attached to alkali scrubber	Alkali Scrubber	9	HCl < 20 mg/Nm <sup>3</sup>	9	Proposed	Process Emission Vessel	Stack attached to chemical charging hopper	Bag Filter	32	PM < 150 mg/Nm <sup>3</sup>	10	Proposed	QA Lab hood	Vent attached to QA Laboratory fume hood blower	--	9	HCl < 20 mg/Nm <sup>3</sup>	11	Proposed	PD Lab hood	Vent attached to PD Laboratory fume hood blower	--	9	HCl < 20 mg/Nm <sup>3</sup>
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							expansion		
	1	Spent Solvents	I	20.2	4800	00	4800	Collection, Disposal, Reuse, Recovery, Storage, Transportation	Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste or send for job work to authorized distillation unit such as M/s. Daxesh Petrochem P. Ltd., Ankleshwar
	2	Spent Solvents	I	20.2	2021	00	2021	Collection, Incineration, Disposal, Storage, Transportation	Disposal by incineration in common incinerator of BEIL, Ankleshwar / SEPPL, Ankleshwar or sent for co-processing in cement industries.
	3	Process Wastes, Residues and sludge	I	21.1	12	00	12	Collection, Incineration, Disposal, Storage, Transportation	Tar Waste: Disposal by incineration in common incinerator of BEIL, Ankleshwar / SEPPL, Ankleshwar or sent for co-processing in cement industries.
	4	Process Waste Sludge/Residues Containing Acid, Toxic	I	26.1	10	10	20	Collection, Incineration, Disposal, Storage,	Disposal by incineration in common incinerator of BEIL, Ankleshwar /

		Metals, Organic Compounds						Transportation	SEPPL, Ankleshwar or sent for co-processing in cement industries.
	5	Off Specification Products	I	28.4	150	00	150	Collection, Incineration, Disposal, Storage, Transportation	Disposal by incineration in common incinerator of BEIL, Ankleshwar / SEPPL, Ankleshwar or sent for co-processing in cement industries.
	6	Non-recyclable Plastic Waste, insulation material, Used PPE, Filter Cloth, Filter Cartridge & Broken Glasswares	I	33.1	21.4	28.6	50	Collection, Disposal, Reuse, Storage, Transportation	Disposal to TSDF of M/s. BEIL, Ankleshwar.
	7	Empty barrels /containers /liners Contaminated with hazardous chemicals /wastes	I	33.1	170	180	350	Collection, Decontamination, Disposal, Reuse, Storage, Transportation	Disposal by sending to authorized decontamination facility / recycler or reuse or send back to supplier.
	8	Chemical sludge from waste water treatment	I	35.3	1400	600	2000	Collection, Disposal, Storage, Transportation	ETP Waste & MEE Salt: Disposal by sending to TSDF of M/s. BEIL, Ankleshwar.
	9	Used or Spent Oil	I	5.1	2	13	15	Collection, Disposal, Reuse, Storage, Transportation	Disposal by Reuse in plant & machinery as lubricant or sell it to

							tation	authorized re- refiners / recycler.
10	e-Waste			0	20	20	Collection, Disposal, Reuse, Storage, Transportation	Disposal by sell it to authorized recycler or reuse
11	Spent Carbon	I	28.3	0	10	10	Collection, Incineration, Disposal, Storage, Transportation	Disposal by incineration in common incinerator of BEIL, Ankleshwar / SEPPL, Ankleshwar or sent for co- processing in cement industries.
12	Salts of Per- Acids	II	B36	125	0	125	Collection, Disposal, Reuse, Storage, Transportation	Sodium Acetate Crystal: Reuse or sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
13	Salts of Per- Acids	II	B36	75	0	75	Collection, Disposal, Reuse, Storage, Transportation	Sodium Acetate Solution (on 100% basis): Reuse or sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.

xv. Following are the list of proposed products:

Sr. No.	NAME OF PRODUCTS	CAS No.	Existing Quantity (MT/ Month)	Additional Quantity (MT/ Month)	Total After Proposed Expansion Quantity (MT/Month)
1.	Developer – (Pergafast 201)	232938-43-1	140	1678	1818
2.	Azocolorants (Pergasol) paper dyes	--			
a.	Pergasol Yellow 3GN-Z	35342-16-6			
b.	Pergasol Yellow 6VHC-Z	72705-24-9			
c.	Pergasol Yellow 6VHC	72705-26-1			
d.	Pergasol Yellow GA-Z	55067-15-7			
e.	Pergasol Yellow GA	55067 -12-4			
f.	Pergasol Yellow G-Z	114565-65-0			
g.	Pergasol Yellow G-E	28706-25-4			
h.	Pergasol Yellow RN-Z	130201-55-7			
i.	Pergasol Red 2B-Z	6300-50-1			
j.	Pergasol Red 2G-Z	28706-25-4			
k.	Pergasol Red 2G-E	28706-25-4			
l.	Pergasol Red 3B-Z	68201-95-6			
m.	Pergasol Orange 6R-Z	65072-27-7			
n.	Pergasol Blue 2R-Z	75173-68-1			
o.	Pergasol Blue R	124605-82-9			
p.	Pergasol Yellow S-Z OR Direct Yellow 11	1325-37-7			
q.	Pergasol Brown T Liq	Mixing & Blending of Below CAS No. 1325-37-7 28706-25-4 124605-82-9 And/or 65072-27-7	--		
r.	Pergasol Brown KP Liq		--		
s.	Pergasol Brown BP Liq		--		
t.	Pergasol Brown BZB Liq		--		
u.	Pergasol Brown RT Liq		--		
v.	Pergasol Brown		--		

	ZB Liq				
w.	Pergasol Brown RB		--		
x.	Pergasol Brown RBP Liq		--		
3.	Microencapsulation Product (Lupasol)	35641-59-9	--		
4.	Irgalite Violet	1310-73-2			
5.	R & D Products on Pilot Plan Scale	--	--	2	2
<b>TOTAL</b>			<b>140</b>	<b>1680</b>	<b>1820</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. Detailed plan for water recycling and reuse to be drawn.
- iii. ESR plan for 5 year @ 5 % of the project cost with the consultation of nearby villagers to be submitted.
- iv. Explore the possibility to achieve Zero Liquid discharge.
- v. Chemical formula of each product list with CAS number to be submitted.
- vi. Toxicity of chemicals w.r.t. LC-50 and LD-50 to be submitted.
- vii. Plan for 10 m wide green belt around periphery of the plant 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.

## 25.5 (Environmental Clearance)

25.5.1	<b>Setting up of Bulk Drugs and Intermediates Manufacturing Unit (135.3 TPM) at Sy. No. 45/1 to 45/54 and 46/1 to 46/22 Kovvada Agraharam Village, Pusapatirega Mandal Vizianagaram District, Andhra Pradesh by M/s SVL Life Science Pvt. Ltd.- reg EC</b>
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The Project Proponent and the accredited Consultant M/s Team Labs and Consultants., made a detailed presentation on the salient features of the project and informed that:

- i. The Proposal is for setting up of Bulk Drugs and Intermediates Manufacturing Unit (135.3 TPM) at Sy. No. 45/1 to 45/54 and 46/1 to 46/22 Kovvada Agraharam Village, Pusapatirega Mandal Vizianagaram District, Andhra Pradesh by M/s SVL Life Science Pvt. Ltd.
- ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 7<sup>th</sup> EAC meeting held during 28-29<sup>th</sup> April, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/83/2016-IA II (I); dated 21<sup>st</sup> June, 2016.
- iii. 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, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iv. The proposed unit acquired 17.67 acres of land for proposed unit.
- v. Industry will develop Greenbelt in an area of 33% i.e., 5.9 acres out of 17.67 acres of area of the project site.
- vi. The estimated project cost is Rs 25 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 8.4 crores and the Recurring cost (operation and maintenance) will be about Rs 8.06 crores Per annum.
- vii. Total Employment will be 80 persons as direct and 30 persons indirect. Industry proposes to allocate 2.5 % i.e., Rs. 62.5 lakhs capital cost towards Corporate Social Responsibility.
- viii. No National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 Km distance. There are three reserve forests in the study area; Kumili RF at a distance of 1.6 km in north-west direction, Amarsingi RF at a distance of 7.6 km in west direction and Konada RF at a distance of 7.8 km in south direction. Bay of Bengal is at a distance of 8 km in south direction. There are no national parks, sanctuaries within 10 km radius of the site.
- ix. Ambient air quality monitoring was carried out at 08 locations during March 2016 to June 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (32-56 µg/m<sup>3</sup>), PM<sub>2.5</sub> (14-26 µg/m<sup>3</sup>), SO<sub>2</sub> (9-14 µg/m<sup>3</sup>) and NO<sub>2</sub> (9-14 µg/m<sup>3</sup>) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLC<sub>s</sub> after the proposed project would be 2.26 µg/m<sup>3</sup>, 7.98 µg/m<sup>3</sup>, and 9.3 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- x. The total water requirement is 257.7 KLD out of which 146.7 KLD will be fresh water and 111 KLD is recycled water. Fresh water requirement shall be met from ground water.
- xi. Total effluent of 115.2 m<sup>3</sup>/day will be treated through "Zero Liquid Discharge" based effluent treatment system. The high COD/TDS stream of 90.7 m<sup>3</sup>/day is segregated and sent to stripper followed by multiple effect evaporators (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 and domestic wastewater of 24.5 KLD in biological treatment plant followed by Reverse Osmosis. The treated wastewater is reused for cooling towers, boilers make-up.			
xii.	Total Power requirement will be met by AP Transco. DG sets of capacity 2 x 1000 kva and 1 x 500 kva proposed to cater to the energy requirement during load shut down by Transco. Stack (height 10 m and 5 m) will be provided based on CPCB formulae for proposed DG sets of 2 x 1000 kva and 1 x 500 kva.			
xiii.	It is proposed to establish 1 x 10 TPH and 1 x 6 TPH coal fired boiler. It is proposed to keep 1 x 6 TPH boiler as standby. Bag filters with a stack of height of 35m and 30m height stack for 10 TPH and 6 TPH Coal fired boilers respectively will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm3) for proposed 1 x 10 TPH and 1 x 6 TPH.			
xiv.	The process emissions contain Ammonia, Carbon dioxide Hydrogen, Hydrogen Bromide, Hydrogen Chloride, Nitrogen, Oxygen and Sulfur dioxide. Ammonia, Hydrogen chloride, Hydrogen Bromide and Sulphur dioxide are sent to scrubber in series. Ammonium Chloride from ammonia scrubbing, Sodium chloride from HCl scrubbing, Sodium bromide from HBr Scrubbing and Sodium Bisulfite from Sulphur dioxide Scrubbing are sent to ETP. The other gases Carbon dioxide, Oxygen and Nitrogen are let out into atmosphere following a standard operating procedure, while Hydrogen gas is let out into atmosphere through a water column.			
xv.	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.			
xvi.	Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 08.02.2017 at 11.00 AM near Ramalayam temple, opposite Pradamika Patasala, Kovvada Agraharam Village, Pusapatirega Mandal, Vizianagaram.			
xvii.	Following are the list of proposed manufacturing capacities:			
<b>Manufacturing Capacity</b>				
<b>S. No</b>	<b>Name of the Product</b>	<b>CAS No.</b>	<b>Capacity</b>	
			<b>Kg/day</b>	<b>TPM</b>
<b>I. Bulk Drugs</b>				
1	Losartan Potassium	124750-99-8	200	6.0
2	Pregablin	148553-50-8	250	7.5
3	Flucanazole	86386-73-4	100	3.0
4	Ketorolac	74103-06-3	200	6.0
5	Ondansetron	99614-02-5	50	1.5
6	Atrovastatin Calcium	134523-03-8	100	3.0
7	Olanzapine	132539-06-1	70	2.1



8	Linezolid	165800-03-3	60	1.8
9	Sumatriptan Succinate	103628-46-2	100	3.0
10	Quetiapine Fumerate	111974-72-2	100	3.0
11	Dronedarone HCl	141625-93-6	30	0.9
<b>Total - I (Worst case 6 Products on campaign basis)</b>			<b>950</b>	<b>28.5</b>
<b>II. Drug Intermediates</b>				
12	Cis Hydroxy Lactum	42399-49-5	200	6.0
13	Pramipexole HCl	104632-25-9	60	1.8
<b>Total - II</b>			<b>260</b>	<b>7.8</b>
<b>III. Fine Chemicals</b>				
14	Sodium Methoxide	124-41-4	3000	90
<b>Total - III</b>			<b>3000</b>	<b>90</b>
<b>IV. Nano Carbons</b>				
16	Kantera	13815-90-2	150	4.5
17	Graphene Oxide	7782-42-5	150	4.5
<b>Total - IV</b>			<b>300</b>	<b>9</b>
<b>Grand Total (I+II+III+IV)</b>			<b>4510</b>	<b>135.3</b>

#### List of By-Products

S.No	Name of Product	Stage	Name of By- product	Capacity	
				Kg/day	TPM
1	Pregablin	II	Sodium Methoxide	58.4	1.75
2		III	Ethyl Alcohol	44.2	1.32
3	Cis Hydroxy Lactum	III	2-phenyl ethyl amine	94.7	2.84
4	Pramipexole HCl	I	Acetic Acid	33.4	1.67
5	Kantera	III	Pyridine HCl	56.7	1.7

#### List of Utilities

S.No	Description	Capacity
1	Coal Fired Boilers (TPH)	1 x 10 1 x 6*
2	DG Sets (KVA)#	2 x 1000 1 x 500

\* Boiler shall be kept as standby.

#DG sets will be used during load shut down by APTRANSCO

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding employment, effect on agriculture and health, CSR activities, employment to the schedule caste and tribe people, green belt, Skill development, Health camps, road and drinking water facility etc. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report. EAC

After detailed deliberations, the Committee based on the documents furnished and presentation made recommended the project for environmental clearance and stipulated the

	<p>following specific conditions along with other environmental conditions while considering for accord of environmental clearance:</p> <ol style="list-style-type: none"> <li>i. 10 m wide green belt of perennial trees around periphery of the plant shall be provided.</li> <li>ii. Industry shall developed greenbelt in an area of 33 % i.e., 5.9 acres out of 17.67 acres of area of the project.</li> <li>iii. Fresh water requirement shall not exceed 146.7 m<sup>3</sup>/day from ground water using bore well and prior permission shall be obtained from the CGWA/SGWA.</li> <li>iv. As proposed adequate scrubbers shall be provided to all reactors. The efficiency of scrubbers shall be more that 99.9 %.</li> <li>v. Indoor monitoring shall be carried out twice in a year.</li> <li>vi. 5000 trees/ year shall be planted during 5 years in 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 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for installation of RO plant for drinking water supply and solar panel in nearby village. Implementation of such program shall be ensured accordingly in a time bound manner. Following activities shall be under taken under ESC activities: <ol style="list-style-type: none"> <li>a. RO plant shall be installed in nearby village to ensure safe drinking water availability. The expenditure on maintenance on these RO plants will be owned by the Project proponent.</li> <li>b. Solar light shall be provided to the nearby villages.</li> </ol> </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. The unit shall adhere to Zero Liquid Discharge (ZLD). No effluent shall be discharge outside the plant premises.</li> <li>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&amp;CC, CPCB and SPCB.</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. 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. 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> </ol>
25.5.2	<p><b>Expansion of Ketonic Resins (20 MTPM to 100 MTPM) at Plot No. C-1/46, 100 shed area, GIDC, Vapi, District Valsad, Gujarat by M/s Resins &amp; Allied Chemicals Industries (Bombay) Pvt. Ltd.-reg EC[IA/GJ/IND2/56804/2016, J-11011/178/2016- IA II(I)]</b></p> <p>The Project Proponent and the accredited Consultant M/s Aqua-Air Environmental Engineers Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:</p>

	<p>i. The project involves expansion of Ketonic Resins (20 MTPM to 100 MTPM) at Plot No. C-1/46, 100 shed area, GIDC, Vapi, District Valsad, Gujarat by M/s Resins &amp; Allied Chemicals Industries (Bombay) Pvt. Ltd.</p> <p>ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 12<sup>th</sup> EAC meeting held during 23<sup>rd</sup> – 24<sup>th</sup> August, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/178/2016-IA II (I); dated 25<sup>th</sup> October, 2016.</p> <p>iii. All Synthetic organic chemicals located inside the notified industrial area/estate are listed at S.N. 5(f) under category 'B' and appraised at State Level. However, due to applicability of general condition (Interstate boundary) and CPA, the project is treated as 'A' category and appraised by Expert Appraisal Committee (I).</p> <p>iv. The existing unit was established since 1981. Existing land area is 855 m<sup>2</sup>, no additional land will be used for proposed expansion. Industry has already developed greenbelt in an area of 25 % i.e., 215 m<sup>2</sup> out of 855 m<sup>2</sup> of area of the project.</p> <p>v. The estimated project cost is Rs. 20.00 Lac including existing investment of Rs. 1.00 crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 2.0 Lac and the Recurring cost (operation and maintenance) will be about Rs. 2.75 Lac per annum.</p> <p>vi. Total Employment will be 9 persons as direct &amp; indirect after expansion. Industry proposes to allocate Rs. 50000 @ of 5/2.5 % towards Corporate Social Responsibility.</p> <p>vii. 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 2.5 km in SW direction.</p> <p>viii. Ambient air quality monitoring was carried out at 8 locations during October 2016 to December 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (59.1-92.8 µg/m<sup>3</sup>), PM<sub>2.5</sub> (38.9-59.6 µg/m<sup>3</sup>), SO<sub>2</sub> (15.6-38.5 µg/m<sup>3</sup>) and NO<sub>x</sub> (14.2-25.2 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 92.838 µg/m<sup>3</sup>, 38.571 µg/m<sup>3</sup> and 25.224 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).</p> <p>ix. Total fresh water requirement after proposed expansion will be 35.97 KL/day (Ind.: 26.97 KL/day &amp; Dom: 3 KL/day) which will be met through GIDC water supply.</p> <p>x. The Industrial Effluent-low COD and low TDS (13.67 KL/day) will be treated in to existing ETP consists of primary &amp; secondary treatment units and then sent to CETP-Vapi for further treatment. The Ind. Effluent- High COD and High TDS (9.45 KL/day) will be treated in primary treatment then it will be sent to common MEE of Vapi Green Enviro, Vapi.</p> <p>xi. Power requirement after expansion will be 60 HP including existing 60 HP and will be met from Dakshin Gujarat Vij Company Limited (DGVCL). Existing unit has 1 DG sets of 82.5 KVA capacity, No additional DG set is required for proposed expansion as standby during power failure. Stack (height 11 m) is provided to existing DG set as per CPCB norms.</p> <p>xii. Existing unit has 600 kg/hr gas fired boiler. Stack of height of 11 m is provided for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>) and no proposed boiler for the expansion.</p> <p>xiii. No Process gas emissions. Only flue gas emission through Tray dryer. The Natural gas shall be consumed after proposed expansion in tray dryer. Stack of</p>
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- height of 11 m shall be provided for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>).
- xiv. Details of Solid waste/ Hazardous waste generation and its management is as follows:

Sr. No.	Types of Waste	Category	Source of Generation	Quantity			Method of Disposal
				Existing	Proposed	Total after expansion	
1.	ETP Waste, MT/month	34.1	From ETP	0.5	0	0.5	Sent to TSDF Site of M/s. VWEMCL through Vapi Waste & Effluent Mgt. Co. Ltd. for final disposal
2.	Discarded containers, Nos/month	33.1	Raw material cons.	100	0	100	Returned back to the supplier / Sold to authorized scrap vendor.
3.	Used Oil, lit/year	5.1	D.G. Set	100	0	100	Sold to registered refiners.
4.	Resin Cake	--	Process	0	21.5	21.5	Reuse in next batch

- xv. Public Hearing is exempted as per para 7 (i) III stage (3) (i) (b) of EIA Notification, 2006 for preparation of EIA-EMP report, being site is located in the Notified Industrial Area.

xvi. **No Litigation pending.**

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

S. No.	Name of the Product	Production Capacity, MT/Month		
		Existing	Proposed	Total after expansion
1.	Ketonic Resin	20	80	100

		<b>By-Product</b>			
	1.	Resin Cake	0	21.5	21.5
	<p>The EAC deliberated on the proposal and suggested to PP to adopt Zero Liquid discharge technique. PP agreed. 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> <p><b>A. Specefic Conditions:</b></p> <ol style="list-style-type: none"> <li>10 m wide green belt of perennial trees around periphery of the plant shall be provided.</li> <li>Industry shall developed greenbelt in an area of 33 % area of the project site.</li> <li>Fresh water requirement shall not exceed 35.97 KL/day from GIDC water supply and prior permission shall be obtained from the concerned authority.</li> <li>As proposed adequate scrubbers shall be provided to all reactors. The efficiency of scrubbers shall be more that 99.9 %.</li> <li>1000 trees/ year shall be planted during 5 years in 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>At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for installation of RO plant for drinking water supply and solar panel in nearby village. Implementation of such program shall be ensured accordingly in a time bound manner. Following activities shall be under taken under ESC activities: <ol style="list-style-type: none"> <li>RO plant shall be installed in nearby village to ensure safe drinking water availability. The expenditure on maintenance on these RO plants will be owned by the Project proponent.</li> <li>Solar light shall be provided to the nearby villages.</li> </ol> </li> <li>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>The unit shall adhere to Zero Liquid Discharge (ZLD). No effluent shall be discharge outside the plant premises.</li> <li>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>Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</li> <li>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>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> </ol>				
25.5.3	<b>Proposed expansion of Pharma Intermediate &amp; Bulk Durgs (8.71 MTPM to 26 MTPM) at Plot no. 911, 912 &amp; 922 G.I.D.C., Phase-III, Tehsil Vapi, District Valsad, Gujarat by M/s</b>				

**Megafine Pharma Pvt. Ltd.- reg EC [IA/GJ/IND2/50238/2016, J-11011/72/2016- IA II(I)].**

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 proposed expansion of Pharma Intermediate & Bulk Durgs (8.71 MTPM to 26 MTPM) at Plot no. 911, 912 & 922 G.I.D.C., Phase-III, Tehsil Vapi, District Valsad, Gujarat by M/s Megafine Pharma Pvt. Ltd.
- ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 9<sup>th</sup> EAC (Industry-2) meeting held during 27<sup>th</sup> June 2016 and recommended Terms of References (TORs) for the project. The TOR has been issued by Ministry vide letter no. J-11011/72//2016-IA II(I); dated 2<sup>nd</sup> August 2016.
- iii. All Synthetic Organic Chemicals Industry (Bulk drug and intermediate) located inside the notified industrial area/estate are listed at S.N. 5(f) under category 'B' but due to applicability of general condition i.e. Inter-state boundary and Critically Polluted area (GIDC, Vapi) treated as 'A' and appraised by Expert Appraisal Committee (I).
- iv. Existing unit was established prior to EIA, Notification 2006 and a copy of consent order vide no. PC/AIR-VSD-509/18358 dated 16.07.1996 issued by GSPCB. Existing land area is 3992.00 Sq.m., no additional land will be used for proposed expansion. Industry has already developed greenbelt in area of 15% i.e., 598.80 m<sup>2</sup> out of 3992.00 m<sup>2</sup> of area of the project. Company is always involved in green belt developing activity with local NGOS like VIA, Lions club, Rotary clubs, schools etc... Further the company has procured a plot and area for the green belt development from the notified office and VIA (Vapi Industrial Association).
- v. The estimated project cost is Rs 24 Crores including existing investment of Rs 15.15crores. Total capital cost earmarked towards environmental pollution control measures is Rs0.98 Crores and the Recurring cost (operation and maintenance) will be about Rs. 41.80 Lakhs per annum.
- vi. Total Employment will be 208 persons as direct & considerable number persons indirect after expansion. Industry proposes to allocate Rs. 0.48 Crores @ of 2 % towards Corporate Social Responsibility.
- vii. 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 7 Km in SW direction.
- viii. Ambient air quality monitoring was carried out at 6 locations during October to December 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (40-96 ug/m<sup>3</sup>), PM<sub>2.5</sub> (15-39ug/m<sup>3</sup>), SO<sub>2</sub> (14-29.3 ug/m<sup>3</sup>), NO<sub>2</sub> (14.4–27.5ug/m<sup>3</sup>) and CO (1.0– 2.0 mg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.00445ug/m<sup>3</sup>, 0.01843ug/m<sup>3</sup> and 0.13559 ug/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards(NAAQS).
- ix. Total water requirement is 89.0 KL/day of which fresh water requirement of 89.00

	KL/day and will be met from GIDC Water Supply Dept., Vapi.
x.	The domestic waste water generated after proposed expansion @12 KL/day (Existing- 6 KL/day and Additional- 6 KL/day) will be treated in adequate STP. The treated sewage will be utilised as irrigation water.
xi.	After proposed expansion the waste water generated from industrial activity will be 31.17 KL/Day (Existing- 8.15 KL/day and Additional- 23.02 KL/day) of which the dilute effluent stream of 4.15 KL/day will be treated using adequate in-house ETP then, will be disposed off through underground drainage to CETP, Vapi. The company has obtained membership and NOC for common effluent treatment plant by VGEL for CMEE, Vapi.
xii.	The CMEE is recovering the condensate which is being reused in CETP for various usages. Power requirement after expansion will be 1000 HP including existing 300 HP and will be met from Dakshin Gujarat Vij Co. Ltd. Existing unit has two DG sets of 250 & 25 KVA capacity and additionally one DG set of 250 KVA is proposed which will be used as standby during power failure. Stack (height 6m) will be provided as per CPCB norms to the proposed DG sets of 250 KVA in addition to the existing DG sets of 250 & 25 KVA.
xiii.	Existing unit has 2 nos. of boilers with capacity 1120 Kgs/day & 850 Kgs/day running on PNG/LDO. Stack height of 11m will be installed for controlling the Particulate emissions (within statutory limit of 15 mg/Nm <sup>3</sup> ) for proposed PNG fired boilers of capacity 1120 Kgs/day.
xiv.	Existing unit has one Thermic Fluid heater (Capacity- 4 lac Kcal/hr) PNG/LDO fired with stack height of 11m. Additional one Thermic Fluid heater (Capacity- 4 lac Kcal/hr) PNG/LDO fired with stack height of 11 m will be installed.
xv.	One Pulverizer is attached to dust collector with a stack height of 9 m, used as an air pollution control system.
xvi.	ETP waste (35.3) generated from ETP @ 15 MT/Year will be collected and stored at designated place and disposed off at TSDF Vapi. Used Oil (5.1) generated from machinery @ 500 L/Year will be disposed by selling to registered recyclers. Discharged Container/Bags/Liners (33.1) generated from raw materials @ 8000 Nos/Year minimum or as generated will be collected, stored, decontaminated and Disposal by selling to GPCB authorized scrap dealers. Used filter Cloth (32.2) from Mfg. process @ 0.50 MT/Year Collection, Storage, transportation, Disposal at TSDF-VGEL, Vapi. Spent Solvent (28.6) generated from Mfg. process @ 75 MT/Year will be stored and reused within premises or sale to registered distillation facilities. Distillation Residue (28.1) generated from Mfg. process @ 100 MT/Year will be Collected, stored and disposal at SEPPL-Kutch and disposal by selling to registered end users. Spent Carbon (28.3) generated from Mfg. process @ 6 MT/Year will be disposed at SEPPL-Kutch and selling to registered end users.
xvii.	Public Hearing for the Proposed Project is exempted (as per paragraph 7(i) (III) (i) (b) of the Environment Impact Assessment Notification-2006), since the project site is located in the Notified Industrial Zone of GIDC, Vapi.
xviii.	As the existing unit was established in the year 1997, before the implementation of EIA Notification -2006 (S.O. 1533 dated 14-09-2006) and since inception, manufacturing capacity of the unit is not changed thus environmental pollution load is not increased; hence prior Environmental Clearance for existing unit is not applicable.)
xix.	There is no Litigation pending against the proposal.

	<p>EAC has deliberated on the proposal. EAC has noted that the PP has not mentioned the CAS number and specific quantity of each product in the proposed product list. The EAC also noted that PP has done the monitoring of only one river from one location instead of two rivers.</p> <p>EAC after detailed deliberation has deferred the proposal for want of following information/documents:</p> <ol style="list-style-type: none"> <li>Specific quantity of each product with CAS number to be submitted.</li> <li>Surface water quality monitoring report of Rati river to be submitted.</li> <li>Ground water monitoring report for another 2 or 3 locations to be submitted.</li> <li>Commitment to adopt ZLD.</li> <li>Commitment to use 50 % power from solar power only.</li> </ol> <p>The proposal was deferred till the desired information is submitted through online. The above information shall be provided with the uploading of minutes on the website.</p>
25.5.4	<p><b>Expansion of Multiple Grades of NPK Fertilizers Manufacturing at DFPCL complex, Plot K1-K5, MIDC Industrial Area, Talaja, Distt. Raigad, Maharashtra by M/s Deepak Fertilisers and Petrochemicals Corporation Limited-regarding EC [IA/MH/IND2/53379/2016, J-11011/167/2016- IA II(I)]</b></p> <p>The Project Proponent and the accredited Consultant M/s Kadam Environmental Consultants made a detailed Presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>The project involves expansion of Multiple Grades of NPK Fertilizers Manufacturing at DFPCL complex, Plot K1-K5, MIDC Industrial Area, Talaja, Dist. Raigad, Maharashtra by M/s Deepak Fertilizers and Petrochemicals Corporation Limited.</li> <li>The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 11<sup>th</sup> EAC meeting held during 20<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-11011/167/2016- IA II (I); dated 21<sup>st</sup> September, 2016.</li> <li>All Chemical Fertilizer units are listed at S.N. 5(a) under category 'A' and appraised at Central level.</li> <li>Ministry has issued EC earlier vide letter no. J-11011/320/2012-IA II (I); dated 12<sup>th</sup> October, 2016 for Expansion of NPK Fertilizer (6 LMTA) Manufacturing unit to M/s DFPCL.</li> <li>Existing land area is 3,03,619.4 m<sup>2</sup> within MIDC, no additional land will be used for proposed expansion.</li> <li>Industry already having well developed greenbelt in an area of ~20 % i.e., 60,562 m<sup>2</sup> out of 3,03,619.40 m<sup>2</sup> of area of the project.</li> <li>The estimated project cost for expansion unit is Rs. 190 crores Total capital cost earmarked towards environmental pollution control measures is Rs. 1.975 Crores and the Recurring cost (operation and maintenance) will be about Rs. 0.19 Crores per annum.</li> <li>Total Employment will be 35 Persons as direct &amp; 20 persons indirect after expansion. Industry proposes to allocate Rs 4.75 Crores @ of 5/2.5 % towards Corporate Social Responsibility.</li> <li>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.</li> </ol>



River Karsadi is flowing at a distance a distance of 1.0 Km in SW direction.

- x. Ambient air quality monitoring was carried out at Eight (8) locations during 15<sup>th</sup> March, 2016 to 14<sup>th</sup> June, 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (56 – 185 µg/m<sup>3</sup>), PM<sub>2.5</sub> (26 – 81 µg/m<sup>3</sup>), SO<sub>2</sub> (09 – 28 µg/m<sup>3</sup>), NO<sub>x</sub> (19 – 60 µg/m<sup>3</sup>) and NH<sub>3</sub> (15 – 72 µg/m<sup>3</sup>) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 7.01 µg/m<sup>3</sup>, 0.007 µg/m<sup>3</sup>, 3.50 µg/m<sup>3</sup> and 7.01 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> & NH<sub>3</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- xi. Total water requirement for the overall complex after the expansion is 20,346 m<sup>3</sup>/day of which fresh water requirement of 19,196 m<sup>3</sup>/day and will be met from MIDC.
- xii. Total effluent generated from the overall NPK & ANP plants will be 2,876 CMD including domestic sewage and it will be treated in existing ETP followed by RO of capacity 4,800 m<sup>3</sup>/day. Permeate water from the RO will be reused in plant while RO reject will be discharged into CETP. Part of RO reject as Brackish water will be reused in NPK & existing plants.
- xiii. Power requirement after expansion will be 315.5 MW including existing 314.65 MW and will be met from MSDECL. Existing unit has 7 DG sets of 5,710 KVA capacity used as standby during power failure. No additional DG sets are required. Adequate Stack height varying from 3 m upto 30 m is provided as per CPCB norms to various existing DG sets will be used as standby during power failure.
- xiv. Existing unit has various boilers. Adequate APCM like ESP/Multi cyclone separator/ bag filter with adequate stack of heights are installed for controlling the Particulate emissions (within statutory limit). No new boiler is required for the expansion unit, Process steam / fresh steam from existing facilities will be used for NPK.
- xv. Details of Proposed Process emissions generation and its management is tabulated as follows:

S. No.	Stack Attached to	Fuel Used	Quantity of Fuel	APCM	Expected Pollutants	Stack Height (m)	Exit Velocity (m/s)
1	NPK Unit (2 Nos.) (2 LMTPA)	NG	5,000 Sm <sup>3</sup> /Day	Adequate Stack Ht. & Scrubbers	Dust < 50 mg/m <sup>3</sup> NH <sub>3</sub> < 50 mg/m <sup>3</sup> CO <sub>2</sub> < 6,000 Sm <sup>3</sup> /day Also, traces of SO <sub>2</sub> & NO <sub>x</sub>	60	10
(Existing ANP Plant 3.25 LMTPA which needs to be revived)							
2	ANP Cyclone Separator	-	-	Cyclone Separator	TPM < 50 mg/m <sup>3</sup> NOx < 50 ppm Ammonia < 50 mg/m <sup>3</sup>	30	5.5
3	ANP Prilling Tower	-	-	Adequate Stack Height		84	20
4	ANP Vacuum Pump	-	-	Adequate Stack Height		27.8	2.5

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

Sr. No.	Cat No	Type	Unit	Quantity			Method of Collection, Reception & Storage	Method of disposal
				Existing (Consented)	Proposed	Total		
1	5.1	Used/spent oil	MTPA	126.5	3.49	130	Collected in Drums	Sale to Authorized party approved by MPCB / CPCB
2	5.2	Wastes/residue containing oil	MTPA	50.1	4.878	55	Collected in Bags	CHWST DF
3	17.2	Spent catalyst	MTPA	110	0	110	Collected in Bags	Sale to recycler / CHWST DF
4	17.2	Spent catalyst	MTPA	48.3	0	48.3	Collected in Bags	Sale to Authorized party approved by MPCB / CPCB
5	28.3	Date-expired, discarded and off-specification product	MTPA	734	0	734	Collected in Bags	Sale to recycler
6	31.1	Residues and wastes	MTPA	38	2	40	Collected in Bags	Sale to recycler / CHWST DF
7	33.3	Discarded containers/ barrels / liner	Numbers	346	0	346	Collected in Designated Area	Sale to authorized party for decontamination
				3,012	0	3,012	Collected in Designated Area	CHWST DF
				800	100	900	Collected in Bags	CHWST DF

- xvii. Public Hearing for the proposed project has been conducted by the Maharashtra Pollution Control Board on 31<sup>st</sup> January, 2017 at 11.30 hrs at Conference Hall of Taloja Manufactures Association, MIDC Taloja, Tal. Panvel, Dist. Raigad, Maharashtra.
- xviii. Details of Certified compliance report submitted by RO, MoEF&CC - DFPCL has already received Environmental Clearances from MoEFCC, New Delhi & SEIAA, Maharashtra. Details of the same are tabulated below:

S. No.	Letter No.	For	From	Dated
1	J-11011/218/2004-IA II(I)	Iso Propyl Alcohol (70,000 MTPA)	MoEF	24.02.2006
2	SEAC 2010/CR.656/TC-2	Gas based power project (2 x 5.2 MW & 1 x 7.5 MW)	SEIAA	11.05.2011
3	J-11011/320/2012-IA II(I)	NPK Fertilizer Manufacturing Unit (6.0 Lac MTPA)	MoEFC C	12.10.2015

Site visit was carried out by RO-MoEFCC, Nagpur (WCZ) on 28<sup>th</sup> December, 2016. Certified Monitoring & Compliance report was received from Regional Office (WCZ) of MoEFCC, Nagpur vide letter F.No:5-93/2015 (ENV)/ on 11<sup>th</sup> April, 2017.

- xix. There are no litigation pending against the proposal.
- xx. Following are the list of existing and proposed products:

S. No.	Name of Product	Production Capacity (MTPA) unless mentioned		
		Existing	Proposed	Total
	<b>Proposed Expansion</b>			
<b>1.</b>	<b>NPK fertilizers</b>	<b>6.0 Lakh*</b>	<b>3.25** +2 Lakh</b>	<b>11.25 Lakh</b>
	<b>Existing Products</b>			
1	Liquid CO <sub>2</sub>	72,000	-	72,000
2	Ammonia	1,40,400	-	1,40,400
3	Methanol	99,996	-	99,996
4	Weak Nitric Acid	4,45,500	-	4,45,500
5	Concentrated Nitric Acid	1,29,600	-	1,29,600
6	** Ammonium Nitrate Phosphate	3,24,900	-	3,24,900
7	Low Density Ammonium Nitrate Plus Ammonium Nitrate Melt	1,44,000	-	1,44,000
8	Iso Propyl Alcohol (IPA)	70,200	-	70,200
9	Electric Power	9.4 MW	-	9.4 MW
10	Steam	1,056	-	1,056
11	Bentonite Sulphur Pastilles	25,000	-	25,000
12	Ammonium Nitrate Prills (Low Density)	2,00,000	-	2,00,000

13	Ammonium Nitrate Prills (High Density)	1,00,000	-	1,00,000
14	Iso Propyl Alcohol (For drum filling operation) – Packaging operation only	15,000	-	15,000
15	Di Iso Propyl Ether (DIPE) (For drum filling operation Packaging operation only)	15,000	-	15,000
16	Gas Based Power Generation (Excluding DG Sets)	17.9 MW	-	17.9 MW
	<b>BY – PRODUCT</b>			
1	Propane	33,000	-	33,000
2	Calcium Phosphate	210	-	210
3	Crude DIPE	1,440	-	1,440
4	Hydrogen Gas	960	-	960
5	Crude IPA/NPA Mixture	1,080	-	1,080

\* EC for 6 Lakh MTPA multiple grades NPK fertilizer (granulation) received on 12.10.2015.

\*\* Existing 3.25 Lakh MTPA ANP (Prilling) operating plant to be considered for continuous operation.

The EAC deliberated upon the issues raised during the public hearing. The concerns were raised regarding misleading information contained in the EIA report, company has dug unauthorized 20-30 bore wells, water scarcity, employment, pollution control measures, medical facility, smell problem, noise pollution and CSR benefits etc. The Committee noted during public hearing many issues have been raised regarding pollution and local people complaining that inside the premises there are 20-30 bore wells in this regard PP has submitted an affidavit that there are no bore wells within the plant premises. The EAC found public hearing report satisfactory.

During presentation the committee noted that PP has collected the baseline data prior to ToR application i.e. 15<sup>th</sup> March to 14<sup>th</sup> June, 2016. The EAC accepted the base line data collected by the PP.

The EAC deliberated on the certified compliance report issued by RO, MoEF&CC, Nagpur vide letter F.No:5-93/2015 (ENV)/ on 11<sup>th</sup> April, 2017. The EAC noted that Two (02) specific condition and two (02) general conditions are found not complied. Three (03) specific condition and Four (04) general conditions are found partially complied. The EAC was not satisfied with the compliance status; however, in view of importance of project for Country's need of Fertilizers, the EAC directed the PP for immediate compliance of all the non-complied/partly complied conditions as reported by the RO, MoEF&CC and submit the action taken report duly certified from RO, MoEF&CC. The EAC suggested the PP to use 30 % of total power requirement from solar power and to use closed cooling system for cooling tower. PP agreed with it. The EAC in view of high fresh water demand suggested to limit the fresh water requirement upto 17000 m3/day. The EAC also recommended that only 1500 m3/day wastewater to be sent to CETP. PP agreed with it.

	<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> <p><b>A. Specific Conditions:</b></p> <ol style="list-style-type: none"> <li>10 m wide green belt of perennial trees around periphery of the plant shall be provided.</li> <li>Industry shall developed greenbelt in an area of 33 % area of the project site.</li> <li>Fresh water requirement shall not exceed 17000 m3/day from MIDC water supply and prior permission shall be obtained from the concerned authority.</li> <li>Only 1500 m3/day waste water shall be sent to CETP.</li> <li>Closed cooling system shall be provided to the cooling towers.</li> <li>As proposed adequate scrubbers shall be provided to all reactors. The efficiency of scrubbers shall be more that 99.9 %.</li> <li>1000 trees/ year shall be planted during 5 years in 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>At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for providing laptops to the school student through school management.</li> <li>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>Scrubbers shall be provided to all emissions sources.</li> <li>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>Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</li> <li>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>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> </ol>
25.5.5	<p><b>Expansion of existing Partially Oriented Yarn (45000MT/M); Fully Drawn Yarn (15000 MT/M); Polyester Texturized Yarn (47000 MT/M); Captive Co-gen Heat &amp; Power Plant (50 MW) at Survey no. 342, Village Kharadpada, Naroli, Dadra &amp; Nagar Haveli, UT by M/s Reliance Industries Ltd. Reg. EC [ IA/DN/IND/27325/2015, J-11011/97/2015-IA-II(I)]</b></p> <p>The Project Proponent and the accredited consultant M/s. Precitech Laboratories Pvt. Ltd. made a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>The proposal is for expansion of existing polyester complex' at Silvassa, Dadra and Nagar Haveli, U.T., by M/s Reliance Industries Limited, Silvasa Manufacturing Division (RIL, SMD).</li> <li>The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 40<sup>th</sup> Reconstituted EAC meeting held during 18<sup>th</sup> – 19<sup>th</sup> May, 2015 and recommended Terms of Reference (TOR) for the Project. The TOR has been issued by Ministry vide</li> </ol>

letter no. J-11011/97/2015-IA II(I); dated 13<sup>th</sup> July 2015.

- iii. All manmade fibres manufacturing other than rayon are listed at S.N. 5(d) under category 'B', however due to location of the project within 5 km of the interstate boundary (Gujarat) and applicability of general condition, proposal is appraised at Central level.
- iv. Ministry has issued EC earlier vide letter no. F.No. J-11011/429/2010-IA-II (I); dated 08.06.2011, for 'Expansion of Partially Oriented Yarn (POY), Fully Drawn Yarn (FDY) & Polyester Textured Yarn (PTY) alongwith Gas based Captive Co-generation Heat and Power Plant by RIL, SMD and exempted public hearing as it is located in Notified Industrial Zone, Sy. No. 342, Village Kharadpada, Naroli, Dadra & Nagar Haveli, U.T.
- v. Existing plot area of RIL (Silvassa) is 6,05,900 m<sup>2</sup>. The proposed expansion will be established within the existing plot and additional land will not be required to be acquired.
- vi. Industry has already developed greenbelt in an area of 28.34% i.e. 1, 71,733 m<sup>2</sup> out of 6, 05,900 m<sup>2</sup> of the plot area. The greenbelt in and around will be further strengthened further to meet 33%.
- vii. The estimated CAPEX of the proposed expansion is INR 180 crores. The CAPEX for the RIL SMD is about INR 4,076 crores, including earlier approved projects. Total capital cost earmarked towards environmental pollution control measures is INR 61 crores and the recurring cost (operation and maintenance) will be about INR 12.15 per annum.
- viii. Total additional employment will be 550 persons during construction & 200 persons during operation phase. Industry proposes to allocate INR 4.5 crores @ of 2.5 % towards Enterprise/Corporate Social Responsibility.
- ix. It is reported that D&NH Wildlife Sanctuary is about 2.4 kms from the RIL site boundary. River Damanganga is flowing at a distance of 4.2 km in NE direction.
- x. Ambient air quality monitoring was carried out at 8 locations during Summer 2016 and submitted baseline data indicates that range of concentrations of PM<sub>10</sub> (44 – 93 µg/m<sup>3</sup>), PM<sub>2.5</sub> (22 – 43 µg/m<sup>3</sup>), SO<sub>2</sub> (10 -21 µg/m<sup>3</sup>) and NO<sub>2</sub> (7 – 23 µg/m<sup>3</sup>). AAQ modelling study for point source emissions predicting the maximum incremental GLC's for different fuels is as follows:

Parameters	Scenario 1: LSHS		Scenario 2: NG		Scenario 3: FO		Scenario 4: Coal		Scenario 5: Petcoke	
	Max. GLC's	Aerial dist. (km) & direction from Site	Max. GLC's	Aerial dist. (km) & direction from Site	Max. GLC's	Aerial dist. (km) & direction from Site	Max. GLC's	Aerial dist. (km) & direction from Site	Max. GLC's	Aerial dist. (km) & direction from Site

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	PM <sub>10</sub>	0.761	1.80 km (SW)	--	--	0.207	1.0 km (S)	2.78	2.12 km (SW)	0.009	2.1 2 km (S W)
	SO <sub>2</sub>	16.76	0.71 km (SE)	--	--	23.3	1.0 km (S)	18.8	2.12 km (SW)	17.68	2.1 2 km (S W)
	NO <sub>x</sub>	18.0	1.12 km (SE)	16.4	2.12 km (SW)	23.7	1.0 km (S)	24.1	2.12 km (SW)	26.2	2.1 2 km (S W)

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

- xi. Total fresh water requirement after proposed expansion will be 10,402 m<sup>3</sup>/day and will be met from allocation made from Damanganga Canal by Narmada Water Resources, Water Supply & Kalpasar Dept.
- xii. Treated effluent of 3,700 m<sup>3</sup>/day will be treated in the existing ETP and recycled for cooling tower make up and for horticulture. The boiler blowdown, CTBD and DM plant rejects will be treated in RO plant and will be used as cooling water make-up. The RIL-SMD site will have a Zero Liquid Discharge System.
- xiii. Overall power requirement after expansion will be 1,93,000 KVA and will be met from D&NH Power Distribution Corporation Ltd., Silvassa. Existing unit has one DG set of 125 kVA capacity, additionally 500 & 2000 kVA DG sets will be used as standby during power failure. Adequate stack height as per norms will be provided.
- xiv. In coal/pet coke based HTM heaters/boilers, Electrostatic Precipitator (ESP) with 99.9% PM capture efficiency will be installed and lime slurry injection will be adopted for reducing SO<sub>2</sub> emissions. In pet coke based HTM heaters/boilers, the SO<sub>2</sub> emissions will be further reduced in Flue Gas Desulphurisation (FGD) system. Stacks of adequate height (as per CPCB guidelines) will be provided for efficient dispersion of emissions.
- xv. Preventive maintenance will be carried out for all valves, joints, glands, pumps etc. to prevent leakages. Fugitive emissions at all the probable sources will be monitored regularly. Any leakages noticed shall be attended based on LDAR protocol.

- xvi. The hazardous waste will mainly consist of used oil, ETP/RO evaporation waste, used candle elements or slurry filters, oil filters, used batteries etc. The waste generated will be disposed at TSDF facility or incinerated at Gujarat Enviro Protection and Infrastructure Limited (GEPIL) in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Fly ash utilization will be as per provisions of Fly Ash Notification 2009 as amended in 2016.
- xvii. Public hearing is exempted by the EAC as per Section 7 (i), III Stage (3), Para (i) (b) of EIA Notification 2006, as the proposed project is located within the Notified Industrial Zone.
- xviii. Regional Office, MoEF&CC (Bhopal) visited RIL-SMD site on 19<sup>th</sup> October, 2016 for certifying EC compliance. The RO issued certified monitoring and EC compliance report on dated 26<sup>th</sup> October, 2016 and the compliance was found to be generally good.
- xix. There are no litigations pending against the project.
- xx. Following is the list of existing and proposed products/utilities:

Sr. No.	Product/ Utilities	Units	Existing Project Capacity	Proposed Project Capacity	Total Capacity
1.	Partially Oriented Yarn	TPM	22,500	22,500*	45,000
2.	Fully Drawn Yarn	TPM	7,500	7,500*	15,000
3.	Polyester Texturized Yarn	TPM	17,000	30,000*	47,000
4.	Captive Co-gen Heat & Power Plant (CCHPP)	MW	-	50*	50
5.	Polyester Chips	TPM	-	60,000	60,000
6.	HTM heaters	MkCal/hr	12 x 4 nos. (NG/LSHS)	12 x 4 nos. (NG/LSHS/FO)	12 x 4 nos. (NG/LSHS/FO)
7.	HTM Heaters	MkCal/hr	-	12 x 4 nos.* (NG/LSHS/FO)	12 x 4 nos. (NG/LSHS/FO)



				O)	
8.	HTM heaters	MkCal/hr	-	20 x 4 nos. (Petcoke/Coal)	20 x 4 nos. (Petcoke/Coal)
9.	Steam Boilers	TPH	-	6.5 x 2 nos. (NG/LSHS/FO)	6.5 x 2 nos. (NG/LSHS/FO)
10.	Steam Boilers	TPH	-	6.5 x 2nos. (Coal/Petcoke)	6.5 x 2 nos. (Coal/Petcoke)
11.	DG Sets	kVA	125 kVA	500 kVA & 2000 kVA	125 kVA, 500 kVA & 2000 kVA.
* Projects that have been granted EC in 2011 and yet to be implemented (proposed project).					

The EAC has deliberated on the Certified compliance report issued by RO, MoEF&CC. The EAC noted that six (06) conditions are partly complied and one (01) general conditions is found not complied. PP has submitted the action taken report in this regard. The EAC found action taken report on non compliance point to be satisfactory. The EAC noted that fresh water requirement seems high and EAC suggested to reduce the fresh water requirement. The PP agreed with it and confirmed that fresh water requirement will be 9000 m<sup>3</sup>/day instead of 10,402 m<sup>3</sup>/day. The EAC also suggested to produce solar power upto 2 MW. PP agreed with it.

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. 10 m wide green belt of perennial trees around periphery of the plant shall be provided.
- ii. Industry shall develop 33 % green area in and around project site.
- iii. Fresh water requirement shall not exceed 9000 m<sup>3</sup>/day from Damanganga Canal by Narmada Water Resources, Water Supply & Kalpasar Dept. Prior permission shall be obtained from the concerned authority.
- iv. No ground water shall be used for proposed expansion.
- v. Mix Fuel (Coal/ Natural gas/ LSHS/Furnace oil and Pet coke) shall be used only.
- vi. Adequate pollution control measures shall be used to control particulate pollutants.
- vii. No ground water shall be used for proposed expansion.
- viii. 5000 trees/ year shall be planted during 5 years 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.
- ix. At least 3 % (Rs. 6 Crores) of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall include giving scholarship of Rs. 1000/ month to the tribal girl students through schools within the district.

	<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. The unit shall adhere to Zero Liquid Discharge (ZLD). No effluent shall be discharge outside the plant premises.</li> <li>xii. Continuous online (24 x7) monitoring to be installed for flow measurement and measurement of pollutants power plant unit. Data to be uploaded on company's website and provided to the respective RO of MEF&amp;CC, CPCB and SPCB.</li> <li>xiii. Only LED Lights shall be used in the plant premises.</li> <li>xiv. Solar power generation will be not less than 2 MW.</li> <li>xv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</li> <li>xvi. 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>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>
25.5.6	<p><b>Setting up of pesticide chemical production facilities (Capacity 22750 MT/Annum) at Plot No.C-393 to 396, GIDC-Estate, Taluka Vagra, Sayakha, District Bharuch, Gujarat by M/s Gharda Chemicals Limited-reg. EC [IA/GJ/IND2/64577/2015, J-11011/09/2016-IA II (I)]</b></p> <p>The Project Proponent and the accredited Consultant M/s. Siddhi Green Excellence Pvt. Ltd., Ankleshwar, 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 proposed new unit for agrochemicals &amp; specialty chemicals by M/s. Gharda Chemicals Ltd. and located at At Plot no. C-393 to 396, Sayakha Industrial Estate, Ta. Vagra, District Bharuch - 393 130 Gujarat State, India.</li> <li>ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in it's 4<sup>th</sup> EAC meeting held during 11<sup>th</sup>-12<sup>th</sup> February, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no. J-11011/09/2016-IA II (I); dated 29-04-2016 (In case of EC Proposal).</li> <li>iii. All units producing technical grade pesticides are listed at S.N. 5(b) under category 'A' and appraised at Central level.</li> <li>iv. Existing land area is 75433.56 sq.m. The estimated project cost is Rs. 320 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs 50.75 Crore and the Recurring cost (operation and maintenance) will be about Rs 1 Crore per annum.</li> <li>v. Total Employment will be 200 nos. persons as direct &amp; 500 nos. persons indirect after expansion. Industry proposes to allocate Rs 8 Crore @ of 2.5 % towards Corporate Social Responsibility.</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. Bhukhi river is flowing at a distance of 0.79 Km in SEE direction.</li> <li>vii. Ambient air quality monitoring was carried out at 11(including project site) locations during March 2016 to May 2016 and submitted baseline data indicates that ranges of</li> </ul>

	<p>concentrations of PM10 (79-95 µg/m<sup>3</sup>), PM2.5 (16-44 µg/m<sup>3</sup>), SO<sub>2</sub> (13-29 µg/m<sup>3</sup>) and NO<sub>2</sub> (15-26 µg/m<sup>3</sup>) (98th percentile values) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.65 µg/m<sup>3</sup>, --µg/m<sup>3</sup> and -- µg/m<sup>3</sup> with respect to PM10, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).</p> <p>viii. Total water requirement is 2360 m<sup>3</sup>/day of which fresh water requirement of 2360 m<sup>3</sup>/day and will be met from GIDC.</p> <p>ix. For proposed project power requirement will be 4000 KVA from DGVCL / Torrent Energy Ltd. or from Captive power plant @ 3 MWH. DG sets (1150 KVA of each)- 2 Nos.- HSD-300 lit/hr (each) are proposed as standby during power failure.</p> <p>x. Details of Process emissions generation and its management is as follows:</p>				
Stack No.	Stack Attached to	Stack Height in Meter	Parameter	Permissible Limits	Air Pollution Control System
1	Chloranil	20	HCl Cl <sub>2</sub> SO <sub>2</sub>	20 mg /Nm <sup>3</sup> 09 mg /Nm <sup>3</sup> 40 mg /Nm <sup>3</sup>	Caustic scrubber, Ventury scrubber
2	PDCB	20	HCl Cl <sub>2</sub>	20 mg /Nm <sup>3</sup> 09 mg /Nm <sup>3</sup>	Caustic scrubber, Ventury scrubber
3	Hexaconazole	20	HCl Cl <sub>2</sub> SO <sub>2</sub>	20 mg /Nm <sup>3</sup> 09 mg /Nm <sup>3</sup> 40 mg /Nm <sup>3</sup>	Caustic scrubber, Ventury scrubber
4	Dicamba	20	Methyl Chloride	Sent to Co-incineration	
5	Profenophos	20	HBr Br <sub>2</sub> HCl Cl <sub>2</sub>	30 mg/Nm <sup>3</sup> 2 mg /Nm <sup>3</sup> 20 mg /Nm <sup>3</sup> 09 mg /Nm <sup>3</sup>	Caustic scrubber, Ventury scrubber
6	Lambda Cyhalothrin	20	HCl Cl <sub>2</sub> SO <sub>2</sub>	20 mg /Nm <sup>3</sup> 09 mg /Nm <sup>3</sup> 40 mg	Caustic scrubber, Ventury scrubber

				/Nm <sup>3</sup>	
7	Difenthiuron	20	HBr Br <sub>2</sub> HCl Cl <sub>2</sub>	30 mg /Nm <sup>3</sup> 2 mg /Nm <sup>3</sup> 20 mg /Nm <sup>3</sup> 09 mg /Nm <sup>3</sup>	Caustic scrubber, Ventury scrubber
8	Metalaxyl	20	HCl Cl <sub>2</sub> SO <sub>2</sub>	20 mg /Nm <sup>3</sup> 09 mg /Nm <sup>3</sup> 40 mg /Nm <sup>3</sup>	Caustic scrubber, Ventury scrubber
9	Incinerator	30	PM with pesticide compound NH <sub>3</sub> Cl <sub>2</sub> CH <sub>3</sub> Cl HBr P <sub>2</sub> O <sub>5</sub>	20 mg /Nm <sup>3</sup> 30 mg /Nm <sup>3</sup> 05 mg /Nm <sup>3</sup> 20 mg /Nm <sup>3</sup> 05 mg /Nm <sup>3</sup> 10 mg /Nm <sup>3</sup>	Caustic scrubber
xi. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 26-April-2017.					
xii. Proposed product list is as follows:					
Sr. No.	Name of Product	Total Production MT/Annum	CAS No.	End Use	
1	Para dichloride benzene (PDCB)	6000	106-46-7	Pesticide Intermediate	
2	O- Phenylenediamine (OPDA)	1000	95-54-5	Pesticide Intermediate	
3	Amino Ethyl Carbazole (AEC)	150	132-32-1	Intermediate for pigment	
4	Chloranil	150	118-75-2	Intermediate for pigment	

	5	Meta Phenoxy Benzaldehyde (MPB) alcohol	100	13826-35-2	Specialty chemical	
	6	Poly Ether Ketone (PEK) OR Poly Ether Ketone Ketone (PEKK) OR Polybenzimidazole (ABPBI)	500	PEK :- 27380-27-4 PEKK :- 74970-25-5 ABPBI :- 25928-81-8	Speciality Polymer	
	7	Poly Ether Imide (PEI)	5000	61128-46-9	Speciality Polymer	
	8	Hexaconazole	300	79983-71-4	Fungicide	
	9	Propiconazole	500	60207-90-1	Fungicide	
	10	Dicamba	5000	1918-00-9	Herbicide	
	11	Profenofos	1000	41198-08-7	Insecticide	
	12	Bifenthrin	200	82657-04-3	Pyrethroid	
	13	Lambda Cyhalothrin	100	91465-08-6	Pyrethroid	
	14	Thiamethoxam	500	153719-23-4	Insecticide	
	15	Diafenthiuron	500	80060-09-9	Insecticide	
	16	Metaxyl	1000	57837-19-1	Fungicide	
	17	Buprofezin	250	69327-76-0	Insecticide	
	18	Carbendazim	500	10605-21-7	Insecticide	
		<b>TOTAL</b>	<b>22750</b>			
	<p>During presentation the EAC noted that water balance chart is not adequate w.r.t. fresh water requirement. PP need to rework on the waste water management and submit the revised water balance chart.</p> <p>The EAC defer the proposal for want of above mentioned additional information.</p>					
25.5.7	<p><b>Setting up of LPG bottling plant, (3x600 MT capacity, horizontal mounded bullet) by IOCL at Plot no. 6A, SIDCUL Industrial Area, Sector – 01, SIDCUL, Sitarganj, District Udham Singh Nagar, Uttarakhand by M/s IOCL SITARGANJ –EC reg. (IA/UK/IND2/61790/2017, IA-J-11011/21/2017-IA-II(I))</b></p> <p>PP vide email dated 03.07.2017 has informed that they will not attend the meeting and requested to defer the proposal. The EAC accepts the request of PP and decided to defer the proposal.</p>					
25.5.8	<p><b>Setting up of resin manufacturing unit at S. No. 84/1 paiki 2 Plot No.1, Nr. National Highway (Bharudi toll gate), Village Ardoi, Taluka Kotda Sangani, District Rajkot, Gujarat M/s Harmony Ply Lam Ltd.-EC reg. {IA/GJ/IND2/48348/2016, J-11011/63/2016-IAII(I)}</b></p> <p>The project proponent and the accredited Consultant M/s. San Envirotech Pvt. Ltd., Ahmedabad gave a detailed presentation on the salient features of the project and informed that:</p> <p>i. The proposal is for proposed resin manufacturing facility [(Phenol Formaldehyde Resin</p>					

	<p>(400 MT/month), Melamine Formaldehyde Resin (150 MT/month) and Urea Formaldehyde Resin (200 MT/month)] at S. No. 84/1 paiki 2 Plot No. 1, Nr. National Highway (Bharudi toll gate), Village: Ardoi, Taluka: Kotda Sangani, Dist: Rajkot, Gujarat by Harmony Ply Lam Ltd.</p>				
ii.	The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 9 <sup>th</sup> meeting held during 27 <sup>th</sup> – 28 <sup>th</sup> June, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter no- J-11011/63/2016-IA II (I), dated 02.08.2016.				
iii.	All Synthetic Organic Chemicals Industry located outside the notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).				
iv.	The land area for proposed project is 8802.0 m <sup>2</sup> . Industry will develop greenbelt in an area of 33 % i.e., 2900 m <sup>2</sup> area.				
v.	The estimated project cost is 12 crores, out of which 0.6 crores will be used for Resin plant for which EC is required. Total capital cost earmarked towards environmental pollution control measures is Rs. 1.0 crore and the Recurring cost (operation and maintenance) will be about Rs. 25.0 Lakhs per annum.				
vi.	Total direct & indirect employment will be 50 persons. Industry proposes to allocate Rs. 25.00 lakhs which is around 5.0 % of Resin plant towards Corporate Social Responsibility.				
vii.	It is reported that no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within the 10 km distance of the project site.				
viii.	Ambient air quality monitoring was carried out at 8 locations during October, 2016 to December, 2016 and submitted baseline data indicates that ranges of concentrations of P <sub>M10</sub> (60.9–69.1 µg/m <sup>3</sup> ), P <sub>M2.5</sub> (30.7–40.9 µg/m <sup>3</sup> ), SO <sub>2</sub> (15.6– 21.1 µg/m <sup>3</sup> ) and NO <sub>x</sub> (17.7–23.9 µg/m <sup>3</sup> ) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs from the existing project would be 1.507µg/m <sup>3</sup> , 0.505µg/m <sup>3</sup> and 0.491µg/m <sup>3</sup> with respect to P <sub>M10</sub> , SO <sub>2</sub> and NO <sub>x</sub> . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).				
ix.	Total water requirement is 23.0 m <sup>3</sup> /day of which fresh requirement of 20.0 m <sup>3</sup> /day and will be met from bore well.				
x.	Total effluent of 3.45 m <sup>3</sup> /day will be treated through Effluent Treatment Plant followed by evaporator. Condensate of evaporator will be utilized for cooling. No effluent will be discharged outside the plant premises. Generated sewage of 4.0 KL/day will be discharged to soak pit followed by septic tank.				
xi.	Power requirement will be 650 kVA will be made from PGVCL. One DG set of 500 kVA will be installed as standby during power failure. Stack height of 11 meters will be provided as per CPCB norms to the DG set which will be used as standby during power failure.				
xii.	Coal fired boiler of 5 TPH and 15 lakhs kcal/hr. thermic fluid heater will be used. Cyclone & bag filter with a stack of height of 30 m will be installed for controlling the particulate emissions.				
xiii.	There will no process emissions generation from the unit operations.				
xiv.	Details of Solid waste/Hazardous waste generation and its management is as follows:				
	<b>Sr. No.</b>	<b>Type of waste</b>	<b>Category as per HWM rules, 2016</b>	<b>Quantity</b>	<b>Method of Disposal</b>

1.	ETP waste	35.3	100 kg/month	Collection, storage & disposal at TSDF site approved by GPCB.
2.	Discarded containers/ barrels/ liners	33.1	Barrels-150 nos./Annum Liner-500 kg/month	Collection, storage and use for packing of ETP sludge in case of excess it will be sold to approved recycler or traders.
3.	Used Lubricating Oil	5.1	500 lit/year	Collection, storage & use within premises as a lubricant/sell to registered recycler.
4.	Evaporation Residue	35.3	0.300 MT/month	Collection, storage & disposal at CHWIF approved by GPCB.

xv. Public Hearing for the proposed expansion project has been conducted by the State Pollution Control Board on 05.05.2017.

xvi. Following are the list of proposed products:

Sr. No.	Name of Products	Production capacity
1.	Phenol Formaldehyde Resin	400 MT/month
2.	Urea Formaldehyde Resin	200 MT/month
3.	Melamine Formaldehyde Resin	150 MT/month

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding wastewater generation, employment, noise pollution, safety measures etc. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

After detailed deliberations, the Committee 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:

#### A. Specific Conditions:

- 10 m wide green belt of perennial trees around periphery of the plant shall be provided.
- Industry shall develop green area in an area of 33 % i.e., 2900 m<sup>2</sup>.
- Fresh water requirement shall not exceed 20.0 m<sup>3</sup>/day from bore well. Prior permission shall be obtained from the CGWB/SGWA.
- Ground water recharge shall be double than the withdrawal.
- Rain water harvesting pits shall be constructed to catch the rain water.
- 1000 trees/ year shall be planted during 5 years 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.
- At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for installation of RO plant for drinking water supply and solar panel in nearby village. Implementation of such program shall be ensured accordingly in a time bound manner. Following activities shall be under taken under ESC activities:

	<ul style="list-style-type: none"> <li>a. RO plant shall be installed in nearby village to ensure safe drinking water availability. The expenditure on maintenance on these RO plants will be owned by the Project proponent.</li> <li>b. Solar light shall be provided to the nearby villages.</li> </ul> <p>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.</p> <p>ix. The unit shall adhere to Zero Liquid Discharge (ZLD). No effluent shall be discharge outside the plant premises.</p> <p>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&amp;CC, CPCB and SPCB.</p> <p>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.</p> <p>xii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</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. 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.</p>
25.5.9	<p><b>Expansion of Molasses based Distillery (capacity 50 KLPD to 150 KLPD) at Gut No.398, 399, 400, 423, 424, Village Chitali, Tehsil Rahata, District Ahamadnagar, Maharashtra by M/s John Distilleries Pvt. Ltd.– regarding EC [IA/MH/IND2/51626/2014, J-11011/289/2014-IA II (I)]</b></p> <p>The Project Proponent and the accredited Consultant M/s sd engineering services pvt ltd, gave a detailed presentation on the silent features of the project and informed that:</p> <ul style="list-style-type: none"> <li>i. The proposal is for expansion of 50 KLPD to 150 KLPD Molasses based Distillery Plant at Gut no. 398, 399,420, 423 &amp; 424 At Post Chitali, Tal. Rahata, Dist. Ahmednagar (MS) by M/s John Distilleries Pvt. Ltd.</li> <li>ii. The project proposal was considered by the Expert appraisal committee (Industry 2) in its 28<sup>th</sup> EAC meeting held during 1<sup>st</sup>-2<sup>nd</sup> December, 2014 and recommended Terms of Reference (ToR) for the project. ToR has been issued by Ministry vide letter no. J-11011/289/2014-IA II (I) Dated 5<sup>th</sup> February 2015 and J-11011/289/2014-IA II (I) dated 31<sup>st</sup> January 2017.</li> <li>iii. Ministry has issued amendment in ToR vide letter dated 31<sup>st</sup> January, 2017.</li> <li>iv. 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 level by Expert Appraisal Committee.</li> <li>v. Regarding earlier EC Issue. Since the company was started in the year 1960; EC is not applicable.</li> <li>vi. Existing land area is 226.36 acres, Expansion will be on existing land.</li> <li>vii. Industry has already developed Greenbelt on an area of 51.64 acres out of total 33% i.e., 74.69 acres of the total area 226.36 acres project.</li> <li>viii. The estimated project cost is Rs.169.92 Cr. (Rs. 90 Cr.-Proposed Expansion) including existing investment of Rs. 79.92 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs.635 lacs and the Recurring cost (operation and maintenance) will be about Rs.63.5 lacs per annum.</li> </ul>





		m <sup>3</sup> /day			
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xvi. CO<sub>2</sub> will be bottled and sold.

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

**Non Hazardous Solid Waste**

Sr. No.	Waste	Quantity kg/day	Treatment	Disposal	Remark
1.	Canteen	20	Compost	Own garden	Organic
2.	Garden Trash	114	Compost	Land filling	--
3.	Office waste paper	70	Collection	Sales	For recycle
4.	Boiler Ash	20000	Collection	Sales	Brick Manufacturers

**Hazardous Solid Waste**

Sr. No.	List of Processes Generating Hazardous Waste	Waste stream	Quantity
1.	Every action relating to and every use of lubricating and system oil	Spent oil Wastes/residues containing oil	230 lit /year

xviii. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 30<sup>th</sup> September, 2016 at factory site Rangmanch of M/s. John Distilleries Pvt. Ltd, At post-Chitali, Tal. Rahata Dist- Ahmednagar.

xix. No litigation is pending.

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

Existing Product List:

Sr. No.	Products	Quantity
1.	Alcohol(RS/ENA/A A)	50 KLPD

Proposed Products and their Capacities for Expansion

Sr. No.	Products	Quantity (TPA)
1.	Alcohol(RS/ENA/A A)	100 KLPD

The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding pollution due to construction, employment, ladies supporting works, discharge of spent wash on the farmers farm, irrigation facility, industrial pollution, etc. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in

	<p>the final 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> <p><b>A. Specific Conditions:</b></p> <ol style="list-style-type: none"> <li>10 m wide green belt of perennial trees around periphery of the plant shall be provided.</li> <li>Industry shall develop green area in an area of 33% i.e., 74.69 acres.</li> <li>Fresh water requirement shall not exceed 1077 m<sup>3</sup>/day from Godavari Right Bank canal. Prior permission shall be obtained from the concerned authority.</li> <li>Rain water harvesting pits shall be constructed to catch the rain water.</li> <li>Peizometer shall be installed around the spent wash storage area.</li> <li>25000 trees/ year shall be planted during 5 years in 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>At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) and shall be used only for installation of RO plant for drinking water supply and solar panel in nearby village. Implementation of such program shall be ensured accordingly in a time bound manner. Following activities shall be under taken under ESC activities: <ol style="list-style-type: none"> <li>RO plant shall be installed in nearby village to ensure safe drinking water availability. The expenditure on maintenance on these RO plants will be owned by the Project proponent.</li> <li>Scholarship of Rs. 500/month shall be given to all girls through school.</li> <li>Solar lights shall be provided to the nearby villages.</li> </ol> </li> <li>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>The unit shall adhere to Zero Liquid Discharge (ZLD). No effluent shall be discharge outside the plant premises.</li> <li>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>Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</li> <li>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>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> </ol>
25.5.10	<p><b>Expansion of bulk drug manufacturing unit ( from 103.83 MTPA to 189.03 MTPA) at Plot No. 1482- 1486, Trasad Road, Taluka Dholka, District Ahmedabad, Gujarat by M/s Concord Biotech Limited.- reg EC[ IA/GJ/IND2/31732/2015, J-11011/268/2015-IA II (I)]</b></p> <p>The project proponent and the accredited Consultant M/s. San Envirotech Pvt. Ltd., Ahmedabad</p>

	<p>gave a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>The proposal is for expansion of existing capacity of bulk drugs with addition of new products from 103.83 MTPA to 189.03 MTPA at Plot No. 1482-1486, Trasad Road, Taluka: Dholka, District: Ahmedabad, Gujarat by Concord Biotech Ltd.</li> <li>The project proposal was considered by the Expert Appraisal Committee (Industry2) in its 2<sup>nd</sup> meeting held during 16<sup>th</sup> – 17<sup>th</sup> December, 2015 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter dated 28.01.2016.</li> <li>All Synthetic Organic Chemicals including bulk Drugs 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>Ministry has earlier issued EC vide letter no. J-11011/124/2003-IA.II (I) dated 08.12.2003 and second EC vide letter no. J-11011/188/2007-IA.II (I) dated 10.08.2007 for expansion of bulk drugs manufacturing to M/s. Concord Biotech Ltd.</li> <li>Existing land area is 112302 m<sup>2</sup>; No additional land will be used for proposed expansion.</li> <li>Industry has already developed Greenbelt in an area of 23653 m<sup>2</sup> out of 112302 m<sup>2</sup> of project area, after expansion unit will increase the greenbelt area to 93000 m<sup>2</sup> hence it will be more than 33% of the total area.</li> <li>The estimated project cost after proposed expansion will be Rs. 192.0 crore including existing investment of Rs. 172.0 crore. Total capital cost earmarked towards environmental pollution control measures after proposed expansion will be Rs. 3.0 crore and the Recurring cost (operation and maintenance) will be about Rs. 3.25 crore per annum.</li> <li>Total employment including direct and indirect will be 719 persons &amp; additional 100 persons will be employed after expansion. Industry proposes to allocate Rs. 100.00 lakhs of 5.0% towards Corporate Social Responsibility.</li> <li>It is reported that no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within the 10 km distance of the project site. River Sabarmati is flowing at a distance of 7.16 km.</li> <li>Ambient air quality monitoring was carried out at 8 locations during March, 2016 to May, 2016 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (58.9 - 70.0 µg/m<sup>3</sup>), PM<sub>2.5</sub> (35.1 - 42.8 µg/m<sup>3</sup>), SO<sub>2</sub> (16.5- 22.1 µg/m<sup>3</sup>) and NO<sub>x</sub> (19.3 - 25.1 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs from the existing project would be 0.434 µg/m<sup>3</sup>, 0.173 µg/m<sup>3</sup> and 0.182 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).</li> <li>Total water requirement is 955 m<sup>3</sup>/day of which fresh water requirement of 556 m<sup>3</sup>/day will be met from bore well.</li> <li>Total effluent of 399 m<sup>3</sup>/day will be treated through Effluent Treatment Plant with RO treatment along with MVR/MEE. Treated effluent will be used for greenbelt. Condensate of MEE &amp; RO reject will be utilized for cooling. No effluent will be discharged outside the plant premises.</li> <li>Power requirement after expansion will be 4000kVA including existing 3400 kVA will be made from UGVCL. Existing unit has two DG sets of 1000 kVA &amp; 680 kVA capacity, additionally three D.G. Sets with capacity of 1000 kVA will be added and used as standby during power failure. Stack (height 30 meters) will be provided as per CPCB norms to the proposed DG sets. D G set of 680 kVA will be dismantled after expansion.</li> <li>Existing unit has 8 TPH FO fired (820 kg/hr.) boiler (2 nos.- one stand by) and after proposed expansion, working hours of boiler will increase resulting to increase the fuel consumption from 820 kg/hr to 1100 kg/hr. Boilers are connected with stacks of adequate stack height.</li> </ol>
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xv. There will no process emissions generation from the unit operations.						
xvi. Details of Solid waste/Hazardous waste generation and its management.						
Sr. No.	Type of Solid Waste	As per HWM Rules, 2016	Quantity (MTPM)			Disposal method
			Existin g	Proposed	Total	
1	ETP Sludge& MEE salt	35.3	60.0	50.0 + 27.0 (MEE salt)	137.0	Collection, Storage, decontamination, Transportation, Disposal at SEPPL-TSDF site Kutch.
2	Distillation residue	20.3	12.00	8.0	20.0	Collection, Storage, decontamination, Transportation, Disposal by Incineration at CHWIF of SEPPL-Kutch. Or Co-process at RSPL-Panoli
3	Spent Carbon	28.3	7.234	4.766	12.0	Collection, Storage, decontamination, Transportation, Disposal by Incineration at CHWIF of SEPPL-Kutch Or Co-process at RSPL-Panoli/Co-processing at Ambuja Cement Ltd.
4	Discarded Container	33.1	3000 Nos./ month	2000 Nos./month	5000 Nos./ month	Collection, Storage, decontamination, Transportation, Disposal by selling to authorized recycler or reuse.
5	Used oil	--	1.596 MT/yr.	1.404 MT/yr.	3.00 MT/yr.	Collection, storage, transportation, disposal by selling registered recycler.
6	Off specification Product & date expire product	28.4 & 28.5	--	Whatever generated	Whatever generated	Collection, Storage, decontamination, Transportation, Disposal of SEPPL-Kutch or Co-process at RSPL-Panoli.
xvii. Public Hearing for the proposed expansion project has been conducted by the State Pollution Control Board on 27.04.2017.						
xviii. The PP has submitted the copy of certified compliance report of the earlier EC by Ministry's Regional Office at Bhopal vide letter no. 5-30/2007 (ENV)/285, dated 16.08.2016.						
xix. Following are the list of existing and proposed products:						
Sr. No.	Name of Products	Quantity (MTPA)				
		Existing	Proposed	Total		
A	Enzyme - 25.0 MTPA					

1	Penicillin G Amidase Enzyme	15.00	10.00	<b>25.00</b>
<b>B</b>	<b>Antibiotic - 23.1 MTPA</b>			
2	Vancomycin	3.00	1.0	<b>4.0</b>
3	Teicoplanin	1.00	1.0	<b>2.0</b>
4	Daptomycin	0.50	0.0	<b>0.50</b>
5	Fidaxomycin	3.00	0.0	<b>3.0</b>
6	Mupirocin& salts	6.00	2.50	<b>8.50</b>
7	Fosfomycin	1.00	0.0	<b>1.0</b>
8	Dalbavancin	0.50	0.0	<b>0.50</b>
9	Telavancin	0.50	0.0	<b>0.50</b>
10	Capreomycin	0.10	0.0	<b>0.10</b>
11	Tobramycin sulphate	2.50	0.0	<b>2.50</b>
12	Oritavancin	0.0	0.50	<b>0.50</b>
<b>C</b>	<b>Antiparasitic- 1.90 MTPA</b>			
13	Milbemycinoxime	1.00	0.9	<b>1.90</b>
<b>D</b>	<b>Antifungal- 1.98 MTPA</b>			
14	Pneumocandin Bo	0.20	0.0	<b>0.20</b>
15	Caspofungin	0.20	0.0	<b>0.20</b>
16	Micafungin	0.93	0.0	<b>0.93</b>
17	Anidulafungin	0.65	0.0	<b>0.65</b>
<b>E</b>	<b>Immunosuppressant-122 MTPA</b>			
18	Tacrolimus	1.00	0.0	<b>1.00</b>
19	Mycophenolic Acid	0.50	0.0	<b>0.50</b>
20	Cyclosporine	7.00	0.0	<b>7.00</b>
21	Rapamycin	0.30	0.20	<b>0.50</b>
22	MycophenolateMofetil&Mycophenolate sodium	45.00	68.00	<b>113.00</b>
<b>F</b>	<b>Onco products-4.05 MTPA</b>			
23	Ixabepilone	0.10	0.0	<b>0.10</b>
24	Romidepsin	0.10	0.0	<b>0.10</b>
25	Temsirolimus	0.05	0.0	<b>0.05</b>
26	Everolimus	0.60	0.40	<b>1.0</b>
27	Ridaforolimus	0.05	0.0	<b>0.05</b>
28	Pimecrolimus	0.50	0.0	<b>0.50</b>
29	Doxorubicin	0.60	0.25	<b>0.85</b>
30	Daunorubicin	0.45	0.15	<b>0.60</b>
31	Epirubicin	0.20	0.0	<b>0.20</b>
32	Idarubicin	0.10	0.0	<b>0.10</b>
33	Bleomycin	0.10	0.0	<b>0.10</b>
34	Geldanamycin	0.10	0.0	<b>0.10</b>
35	Mitomycin	0.0	0.10	<b>0.10</b>
36	Dactinomycin	0.0	0.10	<b>0.10</b>
37	Trabectedin	0.0	0.10	<b>0.10</b>
<b>G</b>	<b>Statin - 9 MTPA</b>			

38	Lovastatin	7.00	-1.0	<b>6.00</b>
39	Pravastatin	1.00	0.0	<b>1.00</b>
40	Orlistatin	2.00	0.0	<b>2.00</b>
<b>H</b>	<b>R &amp; D Products</b>	1.00	1.0	<b>2.00</b>
<b>Total</b>		<b>103.83</b>	<b>85.20</b>	<b>189.03</b>

The EAC deliberated on the proposal and noted that PP is withdrawing fresh water from ground water but as per the report of Central ground water board it is mentioned that “Dholka taluka needs immediate attention of the authorities to safeguard the groundwater scenario. These areas need conservation and augmentation measures of the groundwater resources. The declining trend of the groundwater level over the years has resulted to near complete desaturation of the aquifers in certain parts of the region”. The EAC is not agree to use ground water and suggested to submit the permission from CGWB first.

The EAC after detailed deliberation deferred the proposal for want of following additional information:

- Revised water balance chart with emphasizing to fresh water requirement by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- Submit permission from CGWB for ground water withdrawal.

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

## 25.6 Terms of Reference (TOR)

25.6.1	<p><b>Expansion for Manufacturing of API Intermediates (190.0 MT/Month to 538 MT/Month) at Plot No. 906 /23, GIDC Panoli, Ankleshwar-393002 District: Bharuch, Gujarat by M/s. Kalyani Corporation. Reg. TOR [IA/GJ/IND2/64933/2017, IA-J-11011/293/2017-IA-II(I)]</b></p> <p>The Project Proponent and their consultant M/s. Jyoti Om Chemical Research Centre Private Limited gave a detail presentation on the salient features of Project and informed that:</p> <ol style="list-style-type: none"> <li>The proposal is for Expansion for Manufacturing of API Intermediates (190.0 MT/Month to 538 MT/Month) at Plot No. 906 /23, GIDC Panoli, Ankleshwar-393002 District: Bharuch, Gujarat by M/s M/s. Kalyani Corporation.</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 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>The existing unit doesnot required EC. Now, unit has applied for expansion on the basis of existing CCA: AWH-62500.</li> <li>Existing Land area is 780 Square meter. Industry will develop green belt in an area of 20 %, i.e. 0.016 Ha out of 0.078 Ha of area of the project. The estimated cost of project is Rs. 1.10 crore except the existing investment. Total capital cost earmarked toward environmental pollution control measures is Rs. 0.3 crore and recurring cost (operation and maintenance) will be about Rs. 0.1 crore per annum. Total employment</li> </ol>
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will be 12 persons as direct and 5 persons indirect after expansion. Industry proposed to allocate Rs. 0.055crore @ of 5% towards corporate social responsibility. It is reported that there is no national parks, wildlife sanctuaries, Biosphere Reserves, Tigers/Elephants Reserves, Wildlife Corridors lies within 10 km distance from the project site.

- v. Total water requirement will be 25 m<sup>3</sup>/day of which fresh water requirement of 22 m<sup>3</sup>/day and will be met from GIDC, Ankleshwar. Treated effluent of 4 m<sup>3</sup>/day will be treated through Effluent Treatment Plant and recover water will be reused.
- vi. Power requirement after expansion will be 80 KVA including existing 45 KVA and will be met from Daxin Gujarat Vij Company Ltd. Existing unit has no Diesel Engine Generators and additionally one D.G. set (100 KVA) will be used as standby during power failure. Stack (height 11) will be provided as per CPCB Norms to the proposed D.G. set .
- vii. Existing unit has Natural Gas fired boiler installed with stack height of 11 m for controlling the particulate emission. Unit will install 1TPH Boiler and 2,50,000 Kcal/Hr Thermic Fluid heater with stack height of 30 m & 11 m respectively for controlling the particulate emission (with statutory limit of 115 mg/Nm<sup>3</sup>).
- viii. Process emission will be from three numbers of stacks (height 30, 30 & 25 m) attached to Fluid Bed Dryer, Tray Dryer and Reactor Vessel respectively. Bag Filter and alkali Scrubber is attached as APCM.
- ix. Detail of solid waste/Hazardous waste and its management is given below

Sr . No.	Name of Hazardous Waste	Category	Existing Quantity as per CCA 62500 MT/Year	Proposed Quantity MT/Year	Total Quantity after proposed expansion MT/Year	Mode of Disposal
1.	Effluent Treatment Plant Sludge	35.3	0	12 MT/Y	12 MT/Y	Collection, Storage, Transportation & disposal at TSDF site.
2.	Used Oil	5.1	0	0.2 MT/Y	0.2 MT/Y	Collection, Storage, Transportation & sale to authorized vendor.
3.	Empty Barrels/ Containers/ Liners Contaminated with hazardous chemicals/ wastes	33.1	2.00	2.00 MT/Y	4.00 MT/Y	Disposal by reuse or incineration in common incinerator of BEIL, Ankleshwar

- x. The existing and proposed product are:

Sr.	Product Name	Existing as per	Proposed	Total Quantity
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No.		CCA AWH- 62500 Quantity MT/M	Quantity MT/M	after proposed expansion MT/M
1.	Ammonium Chloride	190	0	190
2.	Sodium 2 ethyl Hexanoate	0	10	10
3.	CocamidopropylBetanine	0	50	50
4.	Glycerol Monostearate	0	50	50
5.	SorbitonMonooleate	0	50	50
6.	1 H 1,2,4 Triazole	0	10	10
7.	4 Amino 1,2,4 Triazole	0	10	10
8.	SorbitonMonostearate	0	50	50
9.	Sulphanilic Acid	0	100	100
	<b>Total</b>	<b>190</b>	<b>330</b>	<b>520</b>
	<b>By Products</b>			
1.	Titanium Dioxide	8	0	18
	<b>Total</b>	<b>198</b>	<b>330</b>	<b>528</b>

EAC has deliberated on the proposal. EAC desired that PP shall develop atleast 5 m wide green belt around the periphery of the plant. The **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. EAC has recommended to exempt Public hearing 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**

- Plan for Green belt development in the periphery of the project site. The width of the greenbelt area shall be a minimum of 5 m with two layers of trees which can control/reduce the pollutant from the industry. 33% of the total area shall be developed as green area with trees. Trees shall be selected as per CPCB norms.
- Plan for installing energy conservation equipments (like LED/solar light) in the factory and premises.
- Plan for generating 30 % of the total energy requirement from solar/renewable energy sources.
- Zero Liquid Discharge (ZLD) plan.
- The actual end use of the product shall be provided.
- Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.
- Five year plan for Enterprise Social Commitment (ESC) with atleast 5 % of the total project cost.

25.6.2 **Expansion of specialty chemicals, bulk drugs, bulk drug intermediates manufacturing and pesticides formulation unit (1436 MTPM to 1726 MTPM) at Plot No. 518, GIDC Industrial Estate, Panoli - 394 116, Taluka: Ankleshwar, Dist. Bharuch, Gujarat by M/s. Wanksons Chemical Industries Pvt. Ltd -Reg. TOR [IA/GJ/IND2/64875/2017, IA-J-11011/292/2017-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:

- xvi. The proposal is for Expansion of specialty chemicals, bulk drugs, bulk drug intermediates manufacturing and pesticides formulation unit (1436 MTPM to 1726 MTPM) at Plot No. 518, GIDC Industrial Estate, Panoli - 394 116, Taluka: Ankleshwar, Dist. Bharuch, Gujarat by M/s. Wanksons Chemical Industries Pvt. Ltd.
- xvii. 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).
- xviii. Proposed land area is 10,290 m<sup>2</sup>. Industry has developed Greenbelt in an area of 20 % i.e. 1000 m<sup>2</sup> out of 5000 m<sup>2</sup> of area of the project. The estimated project cost is Rs. 350 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 35 Lakhs and the recurring cost (operation & maintenance) is about Rs. 3.5 Lakhs per annum. Industry purposes to allocate 2 % of project cost for CSR activities. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. lies within 10 km distance.
- xix. Total water requirement will be 156.5 KL/Day and will be met from GIDC Water Supply. Total Treated Effluent 27.0 KL/Day. After primary 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. Total Domestic effluent (23.5 KL/Day) will be disposed of through septic tank & soak pit.
- xx. Power requirement will be 1000 KVA and will be met from DGVCL and D.G. Sets (3 Nos.) - 350 KVA, 380 KVA and 250 KVA capacity (emergency standby)
- xxi. Unit has Boiler (1 no.), DG Set (1 no.) and Process Vents (2 nos.). Additional Thermic Fluid Heater (1 no.) and DG Sets (2 nos.) will be installed. Natural is and will be used as fuel in Boiler and TFH. Stack of height of 30 m, 13 m & 20 m respectively is and will be installed for controlling the Particulates emissions.
- xxii. Details of Process emissions generation and its management

Sr. No.	Stack/Vent attached to	Stack Height (meter)	Stack Diameter (meter)	Fuel name & Quantity	Type of Emission	APCM
<b>Existing</b>						
1	Boiler (3 TPH)	30 #	0.406	Natural Gas 2290 SM <sup>3</sup> /day* (206 SM <sup>3</sup> /day)**	PM SO <sub>2</sub> NO <sub>x</sub>	--
2	Process Vent (Chlorinator & Distillation Reactor)	13	0.15	--	HCl Cl <sub>2</sub>	<b>Existing</b> Water Scrubbers (4 Nos.) + Caustic Scrubber (1 Nos.) +

						<b>Additional (Proposed)</b> Water Scrubber (1 Nos.) + Caustic Scrubber (1 Nos.)
3	Dust Collector (Power – Formulation Unit)	20	0.15	--	PM SO <sub>2</sub> NO <sub>x</sub>	--
4	D.G. Set (350 KVA) (Use in emergency only.)	--	--	Diesel 90 Liter/hr.* (20 Liter/hr.)**	PM SO <sub>2</sub> NO <sub>x</sub>	--
<b>Proposed</b>						
5	Thermc Fluid Heater (4 Lac Kcal/hr)	30 #	0.406	Natural Gas (200 SM <sup>3</sup> /day)		--
6	D.G. Set (380 KVA) (To be use in emergency only.)	--	--	Diesel 90 Liter/hr.	PM SO <sub>2</sub> NO <sub>x</sub>	--
7	D.G. Set (250 KVA) (To be use in emergency only.)	--	--	Diesel 55 Liter/hr.	PM SO <sub>2</sub> NO <sub>x</sub>	--

\* Actual quantity used.

\*\* Typographic error in current CC&A valid up to 4/4/2019.

# Common stack between existing boiler and proposed thermic fluid heater.

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

SR N O.	TYPE OF WASTE	CATEG ORY NO.	QUANTITY		MODE OF DISPOSAL
			EXISTING (As per current CC&A)	TOTAL AFTER PROPOS ED EXPANS ION	
1	Used oil	5.1	0.008 MT/Month	0.092 MT/Month	Collection, Storage & sell to MoEF/GPCB approved vendor.
2	Discarded Drums/Carboy s/HDPE Bags/liners	33.1	1.6 MT/Month (30 #/Month)	92 Nos./Month	Collection, Storage, Decontamination & sell to GPCB authorized vendor.
3	ETP sludge	34.3	0.41 MT/Month	2.91 MT/Month	Collection, Storage & send to common TSDf site of M/s.

					BEIL, or M/s. SEPPL.
4	Distillation Residue	36.4	--	9.16 MT/Month	Collection, Storage & send to CHWIF of M/s. BEIL or M/s. SEPPL.
xxiv. Following are the list of proposed products:					
Sr. No.	Products	CAS No.	Production Capacity (MT/Month)		
			Existing	Total after Proposed Expansion	
1	Chloral (Trichloro Acetaldehyde)	75-87-6	213	400	
2	Meta Chloro Propio Phenone (3-cpp)	936-59-4	10	15	
3	Dichlorovos Technical (DDVP)	62-73-7	20	50	
4	3-(Bromo ethyl)-2-chloro-4-(methyl sulfonyl) Benzoic Acid (PIA-4)	53250-83-2	25	Nil	
5	S-Benzyl O, O Diisopropyl Phosphorothioate (PIZ)	26087-47-8	10	Nil	
6	Dimethyl Amine Hydrochloride (DMA - HCl)	506-59-2	10	25	
7	Iso Propyl Alcohol Hydrochloride (IPA HCL)	7647-01-0			
8	Methanolic Hydrochloride	9004-54-0			
9	Ethyl Acetate Hydrochloride	5407-04-5			
10	Ethyl Alcohol Hydrochloride	9004-54-0	-		
11	Propionyl chloride	79-03-8	-	24	
12	Propiophenone	93-55-0	-	30	
13	2-Bromo 3-Chloro Propiophenone	34911-51-8	-	4	
14	3-Methoxy Propiophenone	37951-49-8	-	4	
15	3-Hydroxy Propiophenone	13103-80-5	-	4	
16	Cyano Acetic Acid	372-09-8	-	10	
17	7-Ethyl Tryptophol (7-ETP)	41340-36-7	-	5	
18	Closantel Amine	57808-65-8	-	5	
<b>Total</b>			<b>286</b>	<b>576</b>	
<b>Formulations</b>					
19	Fanvalrate 20% EC	51638-58-1	100	100	
20	Chloropyriphos 20% EC	2921-88-2	100	100	
21	Chloropyriphos 48% EC	2921-88-2	100	100	
22	Cypermetherin 25% EC	52315-07-8	100	100	
23	Monocrotophos 36% EC	6923-22-4	100	100	

24	Cypermetherin 10% EC	52315-07-8	100	100
25	Dichlorovos Technical (DDVP) 76% EC	62-73-7	100	100
26	2,4,D Ethyl Ester 38% EC	94-75-7	100	100
27	Imida Chlopride 17.8% SL	138261-41-3	100	100
28	Methyl Parathion 50 % EC	298-00-0	100	100
29	Mancozeb 75 % WP	8018-01-7	75	75
30	Acephate 75 % SP	30560-19-1	75	75
<b>Total</b>			<b>1150</b>	<b>1150</b>

#### LIST OF BY-PRODUCTS WITH THEIR PRODUCTION CAPACITY

Sr. No.	By-Products	CAS No.	Production Capacity (MT/Month)	
			Existing	Total after Proposed Expansion
1	Regenerated Sulfuric Acid (72%)	7664-93-9	283.75	533
2	Dilute Hydrochloric Acid (30-32%)	7647-01-0	656*	1200*
	Dilute Hydrochloric Acid (20%)		0.723**	1.257**
3	Ethyl Chloride	75-00-3	95.83	180
4	Methyl Chloride	74-87-3	2.29 <sup>#</sup>	4.58 <sup>#</sup>
5	HBr	10035-10-6	6.45	6.45
6	Poly Aluminium Chloride (PAC) – 100%	1327-41-9	7.5	46
7	Sodium Hypochlorite (10%)	7681-52-9	90	120
8	Spent H <sub>2</sub> SO <sub>4</sub>	7664-93-9	90	120
<p>* <b>Existing:</b> (656 - 11.5 = 644.5 MT). 11.5 MT converts to HCl gas &amp; Consumes as raw material in existing products i.e. DMA – Hydrochloride, IPA HCL and Methaonolic Hydrochloride.</p> <p>* <b>Total after Proposed Expansion:</b> (1200 – 25 = 1175 MT). 25 MT will be converted to HCl gas &amp; Consumed as raw material in existing products i.e. 3-CPP, DMA – Hydrochloride, IPA HCL and Methaonolic Hydrochloride and Propiophenone.</p> <p>** HCl (20%) converts and to be converted to HCl (30-32%) and sell to actual user.</p>				

EAC has deliberated on the proposal. EAC also accepted the request of the PP for utilization of baseline data collected during March- May, 2017 for preparation of EIA/EMP report, in view of the monsoon season. The **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. EAC has recommended to exempt Public hearing 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

- Plan for Green belt development in the periphery of the project site. The width of the greenbelt area shall be a minimum of 5 m (leaving the existing building area) with two layers of trees which can control/reduce the pollutant from the industry. 33% of the total area shall be developed/compensated as green area with trees. Trees shall be selected as per CPCB norms.

	<ul style="list-style-type: none"> <li>ii. Plan for installing energy conservation equipments (like LED/solar light) in the factory and premises.</li> <li>iii. Plan for generating 30 % of the total energy requirement from solar/renewable energy sources.</li> <li>iv. Water requirement shall be reduced and a revised water balance plan to be submitted.</li> <li>v. The actual end use of the product and CAS No. 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. Five year plan for Enterprise Social Commitment (ESC) with atleast 5 % of the total project cost.</li> <li>viii. Plantation plan for 5000 trees/year for five year in the identified villages.</li> </ul>
25.6.3	<p><b>Expansion of bulk drugs &amp; bulk drug intermediates in existing unit (270 MTPM to 355 MTPM) at Plot no. 9107/02, G.I.D.C Estate, Ankleshwar, Tal: Ankleshwar, Dist: Bharuch (GUJ.) by M/s. Innovative Lifescience –Reg. TOR [IA/GJ/IND2/64997/2017, IA-J-11011/295/2017-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 bulk drugs &amp; bulk drug intermediates in existing unit (270 MTPM to 355 MTPM) at Plot no. 9107/02, G.I.D.C Estate, Ankleshwar, Tal: Ankleshwar, Dist: Bharuch (GUJ.) by M/s. Innovative Lifescience.</li> <li>i. 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>ii. Existing land area is 999 m<sup>2</sup>; No additional land will be used for proposed expansion. Industry will develop Greenbelt in an area of 33% i.e. 330 m<sup>2</sup> out of 999 m<sup>2</sup> of area of the project. The total cost of proposed expansion will be Rs. 3 Crores. Total employment will be 80% persons as direct &amp; 20% persons indirect for proposed project. Industry purposes to allocate Rs. 7.5 Lakhs @ 2.5 % towards Corporate Social Responsibility. 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 9 km in N direction.</li> <li>iii. Total water requirement will be 27.0 KL/Day; which will be met through GIDC Water Supply.</li> <li>iv. Total waste water generations will be 12.05 KL/Day (10.0 KL/Day Industrial +2.5 KL/Day Domestic).Industrial effluent 10.00 KL/Day in which Low COD Streams effluent 5.0 KL/Day will be treated in ETP consists of primary treatment then it will be sent to CETP (M/s. ETL) for further treatment and disposal &amp; High COD Streams effluent 5.0 KL/Day will be treated in MEE or it will be sent to CMEE (M/s. ACTPCL) for further treatment &amp; disposal.</li> <li>v. Power requirement will be 375 HP (Existing: 125 HP &amp; Proposed: 250 HP ) and will be met from DGVCL</li> <li>vi. Existing unit has Furnace (2 Nos). Unit has proposed boiler.</li> <li>vii. Details of Solid waste / Hazardous waste generation and its management.</li> </ul>

CAT. NO.	HAZARDOUS WASTE	Existing Quantity	Additional Quantity	Total Quantity	METHOD OF DISPOSAL
33.1	Discarded Containers/Bags	0.5 MT./Month	1.25 MT/Month	1.75 MT/Month	Collection, Storage, Transportation, reuse /sale to authorized recycler.
5.1	Used /Spent Oil	41.67 gm/Month	125 gm/Month	166.67 gm/Month	Collection, Storage, Transportation & reuse/ Sale to authorized traders.
28.6	Spent Solvent	--	1,250 MT/Month	1,250 MT/Month	Collection, Storage, recovered through in house distillation or sent for distillation job work to authorized recycler then reuse in process.
28.1	Distillation Residue	--	15 MT/Month	15 MT/Month	Collection, Storage, Transportation & sent to cement industries for co-processing or Sent for incineration at common incinerator of M/s. BEIL.

viii. Following are the list of existing & proposed products.

Sr. No.	NAME OF PRODUCTS	CAS NO.	LD50	LC50	Existin g Quantit y	Addition al Quantity	Total after Propose d expansi on
			mg/kg	mg/kg	(MT/Month)		
GROUP-1							
1	Calcium Chloride	10043-52-4	ORAL (LD50): Acute: 1000 mg/kg [Rat].  1940 mg/kg [Mouse]	(LC50) : 100 mg/l 96 hours [Fish].	50	-	50
2	EDTA	60-00-4	ORAL (LD50): Acute: 30 mg/kg	NA	20	-	20

			[Mouse]				
3	Di-Sodium Sulphate	7767-82-6	--	NA	50	-	50
4	Ammonium Nitrate	6484-52-2	ORAL (LD50): Acute: 2217 mg/kg [Rat].	NA	50	-	50
5	Sodium Acetate	127-09-3	Acute oral toxicity (LD50): 3530 mg/kg [Rat]. Acute dermal toxicity (LD50): >10000 mg/kg [Rabbit].	Acute toxicity of the dust (LC50) : >30000 mg/m 1 hours [Rat]. 3	50	-	50
6	Ammonium Chloride	12125-02-9	ORAL (LD50): Acute: 1650 mg/kg [Rat]. 1300 mg/kg [Mouse]	NA	50	-	50
7	L2 [(4R-cis)-1,1-dimethylethyl-6-[2-[2-(4-fluorophenyl)-3-phenyl-4[(phenylamino)carbonyl]-1H-pyrrol-1-yl]ethyl]-2,2-dimethyl-1,3-dioxane-4-acetate]	125971 - 95-1	NA	NA	-	5	5
8	L3 /[(4R-cis)-1,1-dimethylethyl-6-[2-[2-(4-fluorophenyl)	125971 - 95-1	NA	NA			



		-3-phenyl-4 [(phenylamin o)carbonyl]- 1H-pyrrol-1- yl]ethyl]-2,2- dimethyl-1,3- dioxane-4- acetate]						
	9	Phenylbutazo ne	50 -33-9	ORAL (LD50): Acute: 245 mg/kg [Rat]. 238 mg/kg [Mouse]	NA			
	10	Metoprolol base	37350 -58- 6	2090				
	11	Pregabalin	148553-50- 8	5050	1.00			
	12	Racemic	181289 - 15-6	NA	NA			
	13	RCMH [ R(- )-3- (Carbamoylm ethyl)-5- methyl hexanoic acid]	181289-33- 8	NA	NA			
	14	Phenylephrin e HCl	61-76-7	ORAL (LD50): Acute: 350 mg/kg [Rat]. 120 mg/kg [Mouse]	NA			
	15	Phenylephrin e base	59-42-7	NA	NA			
	<b>GROUP-2</b>							
	16	Polyallylami ne HCl	71550-12-4	NA	NA	-	20	20
	17	Polyallylami ne	30551-89-4	NA	NA	-	20	20

	18	Allylamine HCl	10017-11-5	Oral - rat - 150 mg/kg	NA	-	20	20
	19	2-(2-chloro ethoxy) acetic acid	14869-41-4	NA	NA	-	20	20
	<b>TOTAL</b>					<b>270</b>	<b>85</b>	<b>355</b>
	<p>EAC has deliberated on the proposal. EAC also accepted the request of the PP for utilization of baseline data collected during March- May, 2017 for preparation of EIA/EMP report, in view of the monsoon season. The <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. EAC has recommended to exempt Public hearing 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>Plan for Green belt development in the periphery of the project site. The width of the greenbelt area shall be a minimum of 5 m (leaving the existing building area) with two layers of trees which can control/reduce the pollutant from the industry. 33% of the total area shall be developed/ compensated as green area with trees. Trees shall be selected as per CPCB norms.</li> <li>Plantation plan for 5000 trees/year for five year in the identified villages.</li> <li>Five year plan for Enterprise Social Commitment (ESC) with atleast 5 % of the total project cost.</li> <li>Plan for installing energy conservation equipments (like LED/solar light) in the factory and premises.</li> <li>Plan for generating 30 % of the total energy requirement from solar/renewable energy sources.</li> <li>Water requirement shall be reduced and a revised water balance plan to be submitted.</li> </ol>							
25.6.4	<p><b>Expansion of Bulk Drug and Bulk Drug Intermediates Plant in Existing Premises (928 MTPM to 978 MTPM) at Plot No. 7516, GIDC Estate, Ankleshwar, District: Bharuch, Gujarat by M/s. S. R. Chemicals - Reg. TOR [IA/GJ/IND2/64999/2017, IA-J-11011/296/2017-IA-II(I)]</b></p> <p>The Project Proponent and accredited 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 Bulk Drug and Bulk Drug Intermediates Plant in Existing Premises (928 MTPM to 978 MTPM) at Plot No. 7516, GIDC Estate, Ankleshwar, District: Bharuch, Gujarat by M/s. S. R. 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</li> </ol>							

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 980 m<sup>2</sup>. Industry will develop Greenbelt in an area of 33 % i.e. 325 m<sup>2</sup> out of 980 m<sup>2</sup> of area of the project. The estimated project cost is Rs. 4.0 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 40 Lakhs and the recurring cost (operation & maintenance) will be about Rs. 10 Lakhs per annum. Industry purposes to allocate Rs. 10 Lakhs @ 2.5 % towards Corporate Social Responsibility. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. waterbody –sea Narmada River is flowing at a distance a distance of 9 km.
- iv. Total water requirement will be 14 m<sup>3</sup>/day and will be met from GIDC Water Supply. Treated Effluent (5 KL/Day) will be sent to GIDC drain for deep sea disposal.
- v. Power requirement will be 27 HP (Existing), 98 HP (Proposed) and 125 KVA = 1 DG Set (in emergency case only) and will be met from DGVCL.
- vi. Unit will have total 2 No of Boiler (Existing+Proposed), 1 No. of Furnace (Proposed) , 1 No. of Thermic Fluid Heater (Proposed) & 1 Nos. of D. G. Set. Multi cyclone separator and Bag Filter with a stack of height of (9 m+ 13 m), 9 m, 13 m & 11 m respectively will be installed for controlling the Particulates emissions.
- vii. Details of Process emissions generation and its management

**EXISTING:**

Sr. No.	Stack attached to	Stack Height	Air Pollution Control System	Parameter	Permissible Limit
1	Reaction vessel	10 m	Scrubber	NO <sub>x</sub>	25 mg/Nm <sup>3</sup>
<b>PROPOSED</b>					
1	Process Vent - 1	15 m	Two Stage Scrubber	HCl	20 mg/Nm <sup>3</sup>
2	Process Vent - 2	15 m	Two Stage Scrubber	SO <sub>2</sub>	40 mg/Nm <sup>3</sup>
3	Process Vent - 3	15 m	Two Stage Scrubber	Cl <sub>2</sub>	9 mg/Nm <sup>3</sup>
4	Process Vent - 4	15 m	Two Stage Scrubber	NO <sub>x</sub>	25 mg/Nm <sup>3</sup>

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

Sr. No	Category No.	Type of waste	Existing	Proposed	Total	Disposal Method
1	33.1	Discarded Containers	17 Nos/Month	43 Nos/Month	60 Nos/Month	Collection, Storage, Transportation, Disposal by selling to registered recycler

		2	5.1	Used/Spent Oil	4.2 Kg/ Month	54.2 Kg/ Month	58.4 Kg/ Month	Collection, Storage, Transportation, Disposal by selling to registered recycler
		3	--	Sodium Nitrate	40 MT/ Month	--	40 MT/ Month	Collection, Storage, reuse in manufacturing process within plant.
		4	--	Sodium Acetate	30 MT/ Month	--	30 MT/ Month	Collection, Storage, Transportation, Disposal by selling to registered re-refiners.
		5	--	Potassium chloride sol.	200 MT/ Month	--	200 MT/ Month	Reception (From-Gujarat Insecticide Ltd. Ankleshwar), storage, reuse in manufacturing process within plant.
		6	20.3	Distillation Residue	--	5 MT/ Month	5 MT/ Month	Collection, Storage, Transportation and dispose to common incineration Site or co-processing in cement industries
		7	35.3	ETP sludge	--	10 MT/ Month	10 MT/ Month	Collection, storage, transportation and dispose common TSDF site
		8	--	Dilute Nitric Acid (25% to 30%)	--	105 MT/ Month	105 MT/ Month	Collection, Storage and reuse in plant premises and Sell to Registered Party / End User
		9	--	Liquor Ammonia	--	240 MT/ Month	240 MT/ Month	Collection, Storage and reuse in plant premises and Sell to Registered Party / End User
		10	--	Aqueous Aluminium Chloride	--	70.8 MT / Month	70.8 MT / Month	Collection, Storage and reuse in plant premises and Sell to Registered Party / End User
		11	26.3	Spent HCL	--	8.3 MT / Month	8.3 MT / Month	Collection, Storage and reuse in plant premises and Sell to Registered Party / End User

	12	--	Sodium Nitrate/ Nitrite 20 to 30%	--	50 MT/ Month	50 MT/ Month	Collection,Storage, reuse in manufacturing process within plant or sell to end user.			
ix. Following are the list of proposed products:										
	Sr No	Product	Cas No.	Existing Capacity (MT/Mont h)	Additional Capacity (MT/Mont h)	Total Capacity (MT/Mont h)				
	Existing Products									
	1.	Sodium Acetate	127-09-3	210	--	210				
	2.	Sodium Nitrite	7632-00-0	210	--	210				
	3.	Di Sodium Phosphate / Mono Sodium Phosphate / Tri- Sodium Phosphate or/and	7558-79-4 7558-80-7 7601-54-9	200	--	200				
	4.	Di Ammonium Phosphate/ Mono Ammonium Phosphate/ Tri-Ammonium Phosphate or/and	7783-28-0 7722-76-1 10361-65-6							
	5.	Di Calcium Phosphate or/and	7757-93-9							
	6.	Pottasium Chloride/ Pottasium Nitrate/ Pottasium Sulphate	7447-40-7 7757-79-1 7778-80-5							
	7.	Calcium Nitrate/ Calcium Chloride or/and	10124-37-5 10043-52-4							
	8.	Sodium Sulphate or/and	7757-82-6							
	9.	Boric Acid or/and	10043-35-3 11113-50-1							
	10	Zinc Sulphate / Copper Sulphate/ Ferrous Sulphate or/and	7733-02-0 7758-98-7 7720-78-7							
	By-Product									
		Sodium Nitrate (92%)	7631-99-4				308	--	308	

Proposed Products				
11.	Para Chloro Benzoic Acid	74-11-3	--	50
12.	Para Nitro Benzoic Acid	62-23-7		
13.	Ortho Chloro Benzoic Acid	118-91-2		
14.	Di Chloro Benzoic Acid	50-84-0		
15.	Para Bromo Benzoic Acid	586-76-5		
16.	4-Chloro,3-Nitro Benzoic Acid	96-99-1		
17.	2-Chloro,5-Nitro Benzoic Acid	2516-96-3		
18.	2-Chloro 5-Nitro Benzoic Acid – Pure	2516-96-3		
19.	3-Nitro,4-Methoxy Benzoic Acid	89-41-8		
20.	Phenoxy Acetic Acid	122-59-8		
21.	5 Chloro Salicylic Acid	321-14-2		
22.	Di Methyl Amino Ethyl Chloride Hydro Chloride	4584-46-7		
23.	Phenyl Acetic Acid	103-82-2		
24.	Di Methyl Urea	96-31-1		
25.	Mono Methyl Urea	598-50-5		
26.	Nitro Chloro Benzo Phenone (NCBP)	56107-02-9		
27.	Nitro Amino Benzo Phenone (NABP)	31431-19-3		
28.	3,4-Di Amino Benzo Phenone	39070-63-8		
<b>Total</b>			<b>928</b>	<b>50</b>
				<b>978</b>

EAC has deliberated on the proposal. EAC also accepted the request of the PP for utilization of baseline data collected during March- May, 2017 for preparation of EIA/EMP report, in view of the monsoon season. The 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. EAC has recommended to exempt Public hearing 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**

	<ul style="list-style-type: none"> <li>i. Plan for installing energy conservation equipments (like LED/solar light) in the factory and premises.</li> <li>ii. Plan for generating 30 % of the total energy requirement from solar/renewable energy sources.</li> <li>iii. Water requirement shall be reduced and a revised water balance plan to be submitted.</li> <li>iv. Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.</li> <li>v. Plan for Green belt development in the periphery of the project site. The width of the greenbelt area shall be a minimum of 5 m (leaving the existing building area) with two layers of trees which can control/reduce the pollutant from the industry. 33% of the total area shall be developed/ compensated as green area with trees. Trees shall be selected as per CPCB norms.</li> <li>vi. Plantation plan for 5000 trees/year for five year in the identified villages.</li> <li>vii. Five year plan for Enterprise Social Commitment (ESC) with atleast 5 % of the total project cost.</li> </ul>
25.6.5	<p><b>Expansion of organic intermediates manufacturing In existing unit (9 MTPM to 150 MTPM) at Plot No. 506, GIDC Estate, Panoli-394116, Tal: Ankleshwar, Dist: Bharuch, Gujarat by M/s. Shreeji Chemicals Industries (Unit-1) - Reg. TOR [IA/GJ/IND2/65002/2017, IA-J-11011/297/2017-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 organic intermediates manufacturing In existing unit (9 MTPM to 150 MTPM) at Plot No. 506, GIDC Estate, Panoli-394116, Tal: Ankleshwar, Dist: Bharuch, Gujarat by M/s. Shreeji Chemicals Industries (Unit-1).</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 1575 m<sup>2</sup>; No additional land will be used for proposed expansion. Industry will develop Greenbelt in an area of 33% i.e. 520 m<sup>2</sup> out of 1575 m<sup>2</sup> of area of the project. The estimated project cost is Rs. 2 Crores. 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. Total employment will be 15 persons as direct &amp; 8 persons indirect for proposed project. Industry purposes to allocate Rs. 5 Lakhs @ 2.5 % towards Corporate Social Responsibility. 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.</li> <li>iv. Total water requirement will be 22.3 KL/Day; which will be met through GIDC Water Supply. Total 1.5 KL/Day (0.6 KL/Day Industrial + 0.9 KL/Day domestic) of effluent shall be treated in ETP and then sent to CETP, Panoli (M/s. PETL) for further treatment.</li> <li>v. Power requirement will be 400 KVA (Existing: 300 KVA &amp; Proposed: 100 KVA) and</li> </ul>

will be met from Gujarat Gas Co. Ltd.

vi. Existing unit has Steam boiler (300 kg/hr). Unit has proposed Steam boiler (600 kg/hr).

vii. Two Stage Scrubber system will be provided to control HCl & SO<sub>2</sub> gas emission.

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

Cat. No.	Hazardous Waste	Existing	Total after proposed expansion	Method of Disposal
5.1	Used Oil	12 Lit/Year	20 Lit/Year	Collection, Storage, Transportation & disposal by sale to registered reprocessors
33.1	Discarded Container/ Bags/Liners	120 Nos./Year	2400 Nos./Year	Collection, Storage, Transportation, Decontamination & Sell to authorized vendors
35.3	ETP Sludge	1.2 MT/Year	24 MT/Year	Collection, Storage, Transportation & disposal at nearest TSDF Site (M/s. BEIL)
20.3	Distillation Residue	NIL	3 MT/Year	Collection, Storage, Transportation & disposal at common incineration site (M/s. BEIL) or given for co-processing in cement industries
--	Hydrochloric Acid (25% to 30%)	NIL	1200 MT/Year	Collection, Storage, Transportation & sell to end user
--	Sodium Sulphite (20% to 25%)	NIL	3600 MT/Year	Collection, Storage, Transportation & sell to end user

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

Sr. No.	Name of Products	CAS No.	Existing	Additional	Total After Proposed Expansion
1	Cetyl Chloride	4860-03-1	9 MT/Month	141 MT/Month	150 MT/Month
2	Lauryl Chloride	112-57-1			
3	Stearyl Chloride	3386-33-2			
4	Decyl Chloride	1002-69-3			
5	Myristyl Chloride	2425-54-9			
6	Lauroyl Chloride	112-16-3	--		
7	Phenyl Acetyl Chloride	103-80-0	--		
8	Palmitoyl Chloride	112-67-4	--		

EAC has deliberated on the proposal. EAC also accepted the request of the PP for utilization of baseline data collected during March- May, 2017 for preparation of EIA/EMP report, in view of the monsoon season. The **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. EAC has recommended to exempt Public**



	<p><b>hearing 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>Plan for Green belt development in the periphery of the project site. The width of the greenbelt area shall be a minimum of 5 m (leaving the existing building area) with two layers of trees which can control/reduce the pollutant from the industry. 33% of the total area shall be developed/ compensated as green area with trees. Trees shall be selected as per CPCB norms.</li> <li>Plan for installing energy conservation equipments (like LED/solar light) in the factory and premises.</li> <li>Plan for generating 30 % of the total energy requirement from solar/renewable energy sources.</li> <li>Water requirement shall be reduced and a revised water balance plan to be submitted.</li> <li>The actual end use of the product shall be provided.</li> <li>Toxicity study (LC<sub>50</sub>/LD<sub>50</sub>) of the products shall be undertaken.</li> <li>Plantation plan for 5000 trees/year for five year in the identified villages.</li> <li>Five year plan for Enterprise Social Commitment (ESC) with atleast 5 % of the total project cost.</li> </ol>
25.6.6	<p><b>Expansion of bulk drugs &amp; bulk drug intermediates in existing unit (8 MTPM to 218 MTPM) at Plot NO. 5901, Kakoria Chemicals Road, Nr. Par Drugs, G.I.D.C ESTATE, Ankleshwar, Tal: Ankleshwar, Dist: Bharuch-393002 (GUJ.) by M/s. Reine Lifescience – reg. TOR [IA/GJ/IND2/65004/2017, IA-J-11011/298/2017-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 bulk drugs &amp; bulk drug intermediates in existing unit (8 MTPM to 218 MTPM) at Plot NO. 5901, Kakoria Chemicals Road, Nr. Par Drugs, G.I.D.C ESTATE, Ankleshwar, Tal: Ankleshwar, Dist: Bharuch-393002 (GUJ.) by M/s. Reine Lifescience.</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 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>Existing land area is 5800 m<sup>2</sup>; No additional land will be used for proposed expansion. Industry will develop Greenbelt in an area of 33% i.e. 1900 m<sup>2</sup> out of 5800 m<sup>2</sup> of area of the project. The total cost of the project after proposed expansion will be Rs. 5 Crores . Total employment will be 80% persons as direct &amp; 20% persons indirect for proposed project. Industry purposes to allocate Rs. 12.5 Lakhs @ 2.5 % towards Corporate Social Responsibility. 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.</li> <li>Total water requirement will be 143 KL/Day; which will be met through GIDC Water Supply.</li> </ol>

- v. Total waste water generations will be 125 KL/Day [120 KL/Day Industrial + 5 KL/Day Domestic] Industrial effluent 120 KL/Day in which low COD Stream 115 KL/Day will be treated in ETP consists of primary, secondary & tertiary treatment , then it will be sent to CETP (M/s. ETL) for further treatment and Disposal and High COD Stream 5 KL/Day will be treated in MEE or it will be sent to CMEE (M/s. ACPTCL) for Disposal.
- vi. Power requirement will be 625 KW (Existing: 125 KW & Proposed: 500 KW ) and will be met from DGVCL
- vii. Fuel: Natural Gas- 50 m<sup>3</sup>/day (Boiler- 0.6 TPH) ; Agro waste- 2 Ton/Day (Boiler- 1 TPH).
- viii. Details of Solid waste / Hazardous waste generation and its management.

CAT. NO.	HAZARDOUS WASTE	Existing Quantity	Additional Quantity	Total Quantity	METHOD OF DISPOSAL
33.1	Discarded Containers/Barr els /liner	300 Nos./Year	3,500 Nos./Year	3,800 Nos./Year	Collection, Storage, Transportation, Decontamination & given registered vendors.
5.1	Used Oil	0.005 KL/Year	8.5 KL/Year	8.505 KL/Year	Collection, Storage, Transportation and Sale to authorized traders.
35.3	Spent Carbon	0.48 MT/Year	900 MT/Year	900.48 MT/Year	Collection, Storage, Transportation & given for co-processing cement industries or Disposal by incineration at common incinerator of BEIL
28.6	Spent Solvent	--	8400 MT/Month	8400 MT/Month	Collection, Storage, recovered through in house distillation or sent for distillation job work to authorized recycler then reuse in process.
28.1	Distillation Residue	--	5 MT/Month	5 MT/Month	Collection, Storage, Transportation & sent to cement industries for co-processing or incineration at common incinerator of BEIL.

ix. Following are the list of existing & proposed products.

Sr.	NAME OF	CAS	LD50	LC50	Existing	Additiona	Total
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	No.	PRODUCTS	No.			Quantit y	l Quantity	Quantity after Proposed expansio n
				mg/kg	mg/kg	(MT/Month)		
Group-1								
	1	Pyrazinamide	98-96-4	--	--	3	--	3
	2	Phenyl Butazone	50-33-9	ORAL (LD50): Acute: 245 mg/kg [Rat]. 238 mg/kg [Mouse]	--	5	70	75
	3	L2 OR (4R-cis)-1,1-dimethylethyl-6-[2-[2-(4-fluorophenyl)-3-phenyl-4[(phenylamino) carbonyl]-1H-pyrrol-1-yl]ethyl]-2,2-dimethyl-1,3-dioxane-4-acetate	125971 - 95-1	--	--	--		
	4	L3 OR [(4R-cis)-1,1-dimethylethyl-6-[2-[2-(4-fluorophenyl)-3-phenyl-4[(phenylamino) carbonyl]-1H-pyrrol-1-yl]ethyl]-2,2-dimethyl-1,3-dioxane-4-acetate]	125971 - 95-1	--	--			
	5	Phenyl Butazone Calcium	70145 - 60-7	ORAL (LD50): 997 mg/kg [Rat]. 600 mg/kg [Mouse]	--			
	6	Bumadizone	69365 -					

		Calcium	73-7						
7		Metoprolol Tartrate	56392 - 17-7	Acute oral toxicity (LD50): 1090 mg/kg [Dog]	--				
8		Metoprolol succinate	98418-47-41	--	--				
9		Metoprolol base	37350 - 58-6	--	--				
10		Rosuvastatin Calcium	147098-20-2	--	--				
11		Racemic	181289 - 15-6	--	--				
12		Sevelamer Carbonate	845273-93-0	ORAL (LD50): 980 mg/kg [Rat]. 300 mg/kg [Mouse]. ORAL 3200 mg/kg [Rabbit].	--				
13		Benzocaine	94 -09-7	ORAL (LD50): Acute: 1150 mg/kg [Rabbit]	--				
14		Erdosteine	84611-23-4	--	--				
15		Montelukast Sodium	151767-02-1	--	--				
16		Cosevelam HCl	9064-91-9	--	--				
17		Diclofenac Sodium	15307-79-6	ORAL (LD50): Acute: 53 mg/kg [Rat]. 95 mg/kg [Mouse]. 157 mg/kg [Rabbit].	--				

18	Ambroxol HCl	23828-92-4	Acute oral toxicity (LD50): 1180 mg/kg [Guinea pig].	--			
<b>Group-2</b>							
19	Atovastatin calcium	344423-98-9	--	--	--	20	20
20	Pregabalin	148553-50-8	5050	1.00			
21	RCMH [R (-)-3-(Carbamoylmethyl)-5-methyl hexanoic acid]	181289-33-8					
22	Sevelamer HCl	152751-57-0	--	--			
23	Phenylephrine HCl	61-76-7	ORAL (LD50): Acute: 350 mg/kg [Rat]. 120 mg/kg [Mouse]	-			
24	Phenylephrine base	59-42-7	-	--			
25	AAPA [(2S)-2-Amino-3-(4-aminophenyl)propanoic acid]	943-80-6					
<b>Group-3</b>							
26	Polyallylamine HCl	71550-12-4	--	--	--	40	40
27	Polyallylamine	30551-89-4	--	--	--	40	40
28	Allylamine HCl	10017-11-5	LD50 Oral - rat - 150 mg/kg	--	--	40	40
<b>TOTAL</b>					<b>8</b>	<b>210</b>	<b>218</b>
The EAC has deliberated on the proposal. Considering the monsoon season, the EAC has accepted the request of the PP for utilization of baseline data collected during March- May,							

	<p>2017 for preparation of EIA/EMP report. <b>The 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. EAC has recommended to exempt Public hearing 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>Plan for Green belt development in the periphery of the project site. The width of the greenbelt area shall be a minimum of 5 m (leaving the existing building area) with two layers of trees which can control/reduce the pollutant from the industry. 33% of the total area shall be developed/ compensated as green area with trees. Trees shall be selected as per CPCB norms.</li> <li>Plan for installing energy conservation equipments (like LED/solar light) in the factory and premises.</li> <li>Revised water balance plan to be submitted.</li> <li>Plantation plan for 5000 trees/year for five year in the identified villages.</li> <li>Plan for generating 30 % of the total energy requirement from solar/renewable energy sources in the project site.</li> <li>Five year plan for Enterprise Social Commitment (ESC) with atleast 5 % of the total project cost.</li> </ol>
25.6.7	<p><b>Additional storage of 2 x 900 MT capacity Mounded Storage Vessels and bottling capacity of 60TMTPA in the existing facility situated at Gaisinghpur (V), Farrukhabad (D), Uttar Pradesh by M/s Indian Oil Corporation Limited (IOCL)- reg. Environmental Clearance [IA/UP/IND2/65556/2017, IA-J-11011/329/2017-IA-II(I)]</b></p> <p>The Project Proponent and their Consultant M/s. SV Enviro Labs &amp; Consultants 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 Additional storage of 2 x 900 MT capacity Mounded Storage Vessels and bottling capacity of 60TMTPA in the existing facility situated at Gaisinghpur (V), Farrukhabad (D), Uttar Pradesh by M/s Indian Oil Corporation Limited (IOCL).</li> <li>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>The plant was commissioned in 1993 prior to EIA Notification.</li> <li>The Existing land area is 32.9 Acres, no additional land will be used for proposed expansion. Industry will develop Greenbelt in an area of 33% i.e., 48562.27 m<sup>2</sup> out of 133141.57 m<sup>2</sup> of area of the project. The estimated project cost is Rs 26.43 crores including existing investment of Rs. 10.20/- Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 1.0 Crore and the Recurring cost (operation and maintenance) will be about Rs. 1 Lac (Rs. One Lac Only) per annum. Total employment will be remain same (as existing 33 Direct Employees and 77 Contract Employees) i.e. 110 persons as direct &amp; indirect after expansion. Industry proposes to allocate Rs. 0.66crores @ of 5/2.5% towards corporate social responsibility.</li> </ol>

No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/elephant Reserves, wildlife corridors etc. lies within 10km distance. No River/water body is flowing at a distance of 10km radius.

- v. There will be no chemical process involved and the operation carried out will be receipt of LPG in Bulk form in road tankers, storage in mounded bullets from Mathura, Loni and Madanpur Khadar and filling of LPG into cylinders using carousel and associated systems. The cylinders filled will be checked for quality and then dispatched by Cylinder stake Trucks.
- vi. The water requirement is fulfilled with existing 3nos of tube well within plant premises. During operation water consumption will be 9.0 KLD for domestic & cylinder washings. For fire mock drills the water requirement is 15KL/ 6Months

***Water Requirement & Wastewater Generation***

S.No	Domestic water requireme	Industrial Water requirement(KLD)	Domestic sewage generation	Waste water from process/ cylinder washing (KLD)
1	6.0	3.0	4.8	1.6
<b>Total</b>	<b>9.0</b>		<b>6.4</b>	

- vii. The total power requirement is 270 KW and will be met from Uttar Pradesh Power Corporation Limited, Dakshinanchal Vidyut Vitran Nigam Ltd. (UPPCL, DVVNL). 2x500 KVA DG for operation and 1x250 KVA DG for lighting purpose will be maintained as standby during power failure.

- viii. The details of products and proposed capacity are :

<b>LPG Storage Facility (Existing)</b>	<b>LPG Bottling capacity (Existing)</b>
2 x 150 MT (Above ground two bullets), 1 x 660 MT (Horton Spheres)	Approx. (5500 to 6500) MT per month
<b>LPG Storage Facility (Expansion)</b>	<b>LPG Bottling capacity (Expansion)</b>
2 x 900 MT (Mounded storage vessels)	Approx. (5500 to 6500) MT per month

EAC has deliberated on the proposal. EAC has noted that the project was a Category B project and as SEIAA, UP is not in functional stage, it is appraised at Central Level. EAC noted that the proposed storage facility is important for the nation and in the safety point of view. Considering the same, EAC has recommended to consider the proposal under Category B2. **The EAC after detailed deliberation has recommended the project for environmental clearance under category B2 exempting EIA/EMP report and public hearing, subject to compliance of following specific and other general conditions.**

**Specific conditions**

- (i). Green belt shall be developed along the periphery of the plant with trees. At least 33 % of the area shall be developed as green area with trees.
- (ii). Zero Liquid Discharge system shall be ensured.
- (iii). Regularly monitoring of VOC and HC in the work zone area in the plant premises should be carried out and data be submitted to Ministry's Regional Office, CPCB and State Pollution Control Board. Quarterly monitoring for fugitive emissions should be

	<p>carried out as per the guidelines of CPCB and reports submitted to Ministry's Regional Office at Chennai.</p> <p>(iv). Necessary approvals from Chief Controller of Explosives must be obtained before commission of project, if applicable. Requisite On-site and Off-site Disaster Management Plans will be prepared and implemented.</p> <p>(v). The company should obtain all requisite clearances for fire safety and explosives and should comply with the stipulation made by the respective authorities.</p> <p>(vi). Emergency Response Plan should be based on the guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once in a month.</p> <p>(vii). Additional safety measures should be taken by using remote operated shut off valve, double block &amp; bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.</p> <p>(viii). Unit should carry out safety audit and report submitted to the Regional Office.</p> <p>(ix). Occupational health surveillance of worker should be done on a regular basis and records maintained as per the Factory Act.</p> <p>(x). PP shall strictly comply with Government of India's Gas Cylinder Rules and its amendments.</p> <p>(xi). PP shall strictly follow Oil Industry Safety Directorate (OISD) norms/guidelines for installation and design of equipments and operation of the LPG Bottling Plants.</p> <p>(xii). 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.</p> <p>(xiii). Cylinder filling operations should be carried out in accordance with a reputable technical standard or code such as ISO 10691 .</p> <p>(xiv). 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.</p> <p>(xv). 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.</p> <p>(xvi). 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.</p> <p>(xvii). 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.</p> <p>(xviii). High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.</p> <p>(xix). Adequate stack height has to be provided to the DG sets as per CPCB norms.</p> <p>(xx). Acoustic enclosure shall be provided to DG set for controlling the noise pollution.</p> <p>(xxi). Water sprinkling has to be undertaken on regular basis to control the polluting particles.</p> <p>(xxii). Hazardous Waste shall be handled and disposed as per the provisions of the Hazardous</p>
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	and Other Wastes (Management and Transboundary Movement) Rules, 2016 and necessary permissions shall be obtained under the said rules.
25.6.8	<p><b>Construction of 3 x 1450 MT Mounded Storage Vessel at Bhitoni LPG Plant at Jabalpur, Madhya Pradesh by M/s BHARAT PETROLEUM CORP. LTD. BHITONI LPG- Reg. TOR [IA/MP/IND2/64940/2017, IA-J-11011/335/2017-IA-II(I)]</b></p> <p>The PP has not attended the EAC meeting. The EAC decided to defer the proposal.</p>
25.6.9	<p><b>Expansion of LPG Mounded Storage Facility (2100 MT to 4200 MT) at Chakenhalli, Tumkur, Opp Bangalore Hassan National Highway, Yediyur - 572142, Karnataka by M/s HPCL- Environmental Clearance-Reg. [IA/KA/IND2/64492/2017, IA-J-11011/327/2017-IA-II(I)]</b></p> <p>The Project Proponent and their Consultant M/s. EQMS India 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 LPG Mounded Storage Facility (2100 MT to 4200 MT) at Chakenhalli, Tumkur, Opp Bangalore Hassan National Highway, Yediyur - 572142, Karnataka by M/s HPCL.</li> <li>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, Karnataka, the project is considered under category 'B' and appraised at Central level by Expert Appraisal Committee (EAC).</li> <li>The PP had obtained EC earlier vide letter no. SEIAA-37 IND 2009; dated 5<sup>th</sup> February 2011 for M/s HPCL LPG Bottling Plant.</li> <li>Existing land area is 75.0 acres, additional No land will be used for proposed expansion. Industry has already developed Greenbelt in an area of 33 % i.e., 75000 M<sup>2</sup> (18.5 Acres) out of 75.0 acres of area of the project. The estimated project cost is Rs 45 Cr. Total Employment is 60 persons as direct &amp; additional three manpower will be required in persons indirect after expansion. Industry proposes to allocate Rs 1.12 cr @ of 2.5 % towards Corporate Social Responsibility. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Shimsha River is flowing at a distance of 2.95 km, West direction and Markonahalli Reservoir (1.33 km, S) and Mangala Reservoir (1.63 km, SE) is located within 10 m distance from the project site</li> <li>Total water requirement is 20 m<sup>3</sup>/day and will be met from Bore well.</li> <li>Treated effluent of washing and waste water will be treated through 10 KLD ETP. Plant will be based on Zero Liquid discharge system</li> <li>Power requirement after expansion will be 250 KVA including existing 500 KVA and will be met from Karnataka State Electricity Distribution Company Ltd (KSEDCL). Existing unit has 2 DG sets of 750 &amp; 380 KVA capacity. No additional DG will required. DG sets are used as standby during power failure. Stack (height 3mt) will be provided as per CPCB norms.</li> </ol>

viii. There is no process involved, only storage and distribution of product.

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

Existing Product list (In case of Expansion proposals):

Sl. No	Products	Quantity(TPA)
1.	3 Mounded Storage Vessels	3X700=2100 MT

Proposed Products and their Capacities for Expansion

Sl. No	Products	Quantity(TPA)
1.	3 Mounded Storage Vessels	3X700=2100 MT

The PP has requested EAC to consider the proposal under Category B2 and exempt EIA and public hearing for the expansion project, considering that the storage facility will not lead to generation of any air emission, waste water discharge and hazardous waste generation. PP also submitted that the mounded storage facility has the minimum risk compared to other form of storage.

EAC has deliberated on the proposal. EAC has deliberated on the compliance of existing EC conditions and found it satisfactory. However, EAC desired that PP shall submit the certified compliance report from the Regional Office of Ministry. The EAC has noted that the project was a Category B project and as SEIAA, Karnataka is not in functional stage, it is appraised at Central Level. EAC noted that the proposed storage facility is important for the nation and in the safety point of view. Considering the same, **the EAC after detailed deliberation and due diligence has recommended the project for environmental clearance under the provisions of Para 7 (ii) of EIA Notification, 2006, exempting EIA/EMP report and public hearing, subject to compliance of following specific and other general conditions.**

**Specific conditions**

- (i). Green belt shall be developed along the periphery of the plant with trees. At least 33 % of the area shall be developed as green area with trees.
- (ii). Zero Liquid Discharge system shall be ensured.
- (iii). Regularly monitoring of VOC and HC in the work zone area in the plant premises should be carried out and data be submitted to Ministry's Regional Office, CPCB and State Pollution Control Board. Quarterly monitoring for fugitive emissions should be carried out as per the guidelines of CPCB and reports submitted to Ministry's Regional Office at Chennai.
- (iv). Necessary approvals from Chief Controller of Explosives must be obtained before commission of project, if applicable. Requisite On-site and Off-site Disaster Management Plans will be prepared and implemented.
- (v). The company should obtain all requisite clearances for fire safety and explosives and should comply with the stipulation made by the respective authorities.
- (vi). Emergency Response Plan should be based on the guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once in a month.
- (vii). Additional safety measures should be taken by using remote operated shut off valve, double block & bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.
- (viii). Unit should carry out safety audit and report submitted to the Regional Office.
- (ix). Occupational health surveillance of worker should be done on a regular basis and

	<p>records maintained as per the Factory Act.</p> <ul style="list-style-type: none"> <li>(x). PP shall strictly comply with Government of India's Gas Cylinder Rules and its amendments.</li> <li>(xi). PP shall strictly follow Oil Industry Safety Directorate (OISD) norms/guidelines for installation and design of equipments and operation of the LPG Bottling Plants.</li> <li>(xii). 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.</li> <li>(xiii). Cylinder filling operations should be carried out in accordance with a reputable technical standard or code such as ISO 10691 .</li> <li>(xiv). 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.</li> <li>(xv). 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.</li> <li>(xvi). 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.</li> <li>(xvii). 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.</li> <li>(xviii). High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.</li> <li>(xix). Adequate stack height has to be provided to the DG sets as per CPCB norms.</li> <li>(xx). Acoustic enclosure shall be provided to DG set for controlling the noise pollution.</li> <li>(xxi). Water sprinkling has to be undertaken on regular basis to control the polluting particles.</li> <li>(xxii). 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.</li> </ul>
25.6.10	<p><b>Installation of additional tankages (750 KL) and other facilities at IOCL Sidhpur, Patan District, Gujarat Petroleum Storage Terminal by M/s IOCL- Environmental Clearance-Reg. [IA/GJ/IND2/65218/2017, IA-J-11011/309/2017-IA-II(I)]</b></p> <p>The Project Proponent and their Consultant M/s. Engineers India 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 Installation of additional tankages (750 KL) and other facilities at IOCL Sidhpur Petroleum Storage Terminal by M/s IOCL.</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, Gujarat, the project is considered under category 'B' and appraised at Central level by Expert Appraisal Committee (EAC).</li> </ul>

- iii. Existing land area is 71 acre. No additional land will be used for proposed Expansion. Industry has already developed a Greenbelt in an area of 9.8 acre. The same will be maintained. The estimated Project cost is Rs. 2.51 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 5 lakhs and the recurring cost (operation and maintenance) will be about Rs 2 lakhs per annum. Total employment will be 10-20 persons as contract (indirect construction phase) and additional persons are not required after expansion. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10Km distance from the project site
- iv. Ambient air quality monitoring was carried out at 3 locations during March 2017 and submitted baseline data indicates that ranges of concentrations of PM10 (85.70 µg/m<sup>3</sup>), SO<sub>2</sub> (39.70 µg/m<sup>3</sup>) and NO<sub>2</sub> (30.50 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions is not applicable for the proposed tankages project as there is no emission envisaged. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). (Not Applicable)
- v. No additional water is required for the proposed expansion. Treated Effluent of 0.5 m<sup>3</sup>/day (intermittently) will be treated through existing ETP.
- vi. Power requirement after expansion will be 350 KVA. Existing terminal has 2 DG sets of 320 KVA capacity for emergency power failure.
- vii. There will be no process emissions as the proposed project is storage of Ethanol.
- viii. There will be marginal waste generation (200 kg/year) on operation phase during tank cleaning. However, in construction phase the waste will be disposed as per the existing practice adopted by IOCL. Used oil (50/litre) generated during processing will be reused in plant and machineries as a lubricant.
- ix. The following tanks are existing at Sidhpur Terminal.

S.No	Tank No	Products	Nominal Qty (KL)
1	201A	MS	1924
2	201B	MS	1924
3	201C	MS	1924
4	201D	MS	6562
5	202A	SKO	2037
6	202B	SKO	2037
7	202C	SKO	2037
8	203A	HSD	6285
9	203B	HSD	6285
10	203C	HSD	6285
11	203D	HSD	12320
12	TE01	Ethanol	70
13	TE02	Ethanol	70

- x. The proposed product and capacity are :

S.No	Products	Quantity (KL)
1	Ethanol	1 x 750

	<p>The PP has requested EAC to consider the proposal under Category B2 exempting EIA and public hearing for the expansion project, considering that the storage facility will not lead to generation of any air emission, waste water discharge and hazardous waste generation.</p> <p>EAC has deliberated on the proposal. The EAC has noted that the project was a Category B project and as SEIAA, Gujarat is not in functional stage, it is appraised at Central Level. EAC noted that the proposed storage facility is important for the nation and in the safety point of view. Considering the same, <b>the EAC after detailed deliberation and due diligence, has recommended the project for environmental clearance under Category B2, exempting EIA/EMP report and public hearing, 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). Green belt shall be developed along the periphery of the plant with trees. At least 33 % of the area shall be developed as green area with trees.</li> <li>(ii). Zero Liquid Discharge system shall be ensured.</li> <li>(iii). Regularly monitoring of VOC and HC in the work zone area in the plant premises should be carried out and data be submitted to Ministry's Regional Office, CPCB and State Pollution Control Board. Quarterly monitoring for fugitive emissions should be carried out as per the guidelines of CPCB and reports submitted to Ministry's Regional Office at Chennai.</li> <li>(iv). Necessary approvals from Chief Controller of Explosives must be obtained before commission of project, if applicable. Requisite On-site and Off-site Disaster Management Plans will be prepared and implemented.</li> <li>(v). The company should obtain all requisite clearances for fire safety and explosives and should comply with the stipulation made by the respective authorities.</li> <li>(vi). Emergency Response Plan should be based on the guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once in a month.</li> <li>(vii). Additional safety measures should be taken by using remote operated shut off valve, double block &amp; bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.</li> <li>(viii). Unit should carry out safety audit and report submitted to the Regional Office.</li> <li>(ix). Occupational health surveillance of worker should be done on a regular basis and records maintained as per the Factory Act.</li> <li>(x). PP shall strictly comply with Government of India's Gas Cylinder Rules and its amendments.</li> <li>(xi). PP shall strictly follow Oil Industry Safety Directorate (OISD) norms/guidelines for installation and design of equipments and operation of the LPG Bottling Plants.</li> <li>(xii). 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.</li> <li>(xiii). Cylinder filling operations should be carried out in accordance with a reputable technical standard or code such as ISO 10691 .</li> <li>(xiv). 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.</li> </ol>
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	<p>(xv). 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.</p> <p>(xvi). 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.</p> <p>(xvii). 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.</p> <p>(xviii). High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.</p> <p>(xix). Adequate stack height has to be provided to the DG sets as per CPCB norms.</p> <p>(xx). Acoustic enclosure shall be provided to DG set for controlling the noise pollution.</p> <p>(xxi). Water sprinkling has to be undertaken on regular basis to control the polluting particles.</p> <p>(xxii). 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>
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## 25.7 **(Environmental Clearance)**

25.7.1	<p><b>Expansion of Inorganic Chemical Manufacturing unit to Active Pharmaceutical Ingredients (APIs) &amp; Inorganic Chemical Manufacturing Unit with R&amp;D facility (26645 TPA) at Village Saggonda, Mandal Gopalapuram, District West Godavari, Andhra Pradesh by M/s Bhagyanagar Chlorides Pvt. Ltd. – reg EC [IA/AP/IND2/49857/2016, J-11011/70/2016- IA II(I)].</b></p> <p>The Project Proponent and the accredited Consultant M/s. KKB Envirocare Consultants Pvt. Ltd., Hyderabad, made a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>The proposal is for Environmental Clearance for Expansion of Inorganic Chemical Manufacturing unit to Active Pharmaceutical Ingredients (APIs) &amp; Inorganic Chemical Manufacturing Unit with R&amp;D facility (26645 TPA) at Village Saggonda, Mandal Gopalapuram, District West Godavari, Andhra Pradesh by M/s Bhagyanagar Chlorides Pvt. Ltd.</li> <li>The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 7<sup>th</sup> meeting held during 29<sup>th</sup> April, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter dated 21.06.2016.</li> <li>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</li> </ol>
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Committee (EAC).

- iv. EC for the existing unit is not applicable, as the unit is permitted to manufacture Inorganic chemicals and EC is not applicable as per EIA Notification 2006.
- v. Existing land area is 1.85 Ha. Additional 2.4517 Ha. Land will be required for the expansion. The total land area after expansion is 4.3017 Ha. Industry will develop Greenbelt in an area of 2.29 Ha (53%) out of 4.3017 Ha of area of the project. The estimated project cost is Rs. 54 Crores including existing investment of Rs.14 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 6.92 crores and the Recurring cost (operation and maintenance) will be about Rs. 6 crores per annum. Total Employment will be 110 persons as direct & 20 persons indirect after expansion. Industry proposes to allocate Rs. 100 Lakh@ of 2.5 % towards Corporate Social Responsibility. No National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10km distance from the project site. Godavari river is flowing at a distance of 5 km in E direction and waterbodies viz., Canal near Rampalem – 4.2 km (W); Pond near Kommygudem – 6.3 km (N); Pond near Bhimolu– 4.8 km (SW); Canal near Bhimolu – 3.4 km (S); KovvadaKalva (Canal) - 4.3 km (N) are situated within 10 km distance from the project site.
- vi. Ambient air quality monitoring was carried out at 9 locations during March to May 2016 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> 39 - 53µg/m<sup>3</sup>, PM<sub>2.5</sub> 15-29µg/m<sup>3</sup>, SO<sub>2</sub> 6.6 – 8.8µg/m<sup>3</sup> and NO<sub>2</sub> BDL-6.1µg/m<sup>3</sup>. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 54.5µg/m<sup>3</sup>, 20.73µg/m<sup>3</sup> and 18.55µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). Total water requirement is 250m<sup>3</sup>/day of which fresh water requirement of 163 m<sup>3</sup>/day and will be met from ground water through bore wells.
- vii. Treated effluent of 99 KLD will be treated through Effluent Treatment plant will be based on Zero Liquid discharge system.
- viii. Power requirement after expansion will be 1120 KVA including existing 120 KVA and will be met from Andhra Pradesh State Power Distribution Corporation limited (APEPDCL). Existing unit has 2 DG sets of 62.5 KVA & 20 KVA capacity, additionally 3 DG sets of 500 KVA and 2x250 KVA are used as standby during power failure. Stack height 8 to 9 m will be provided as per CPCB norms to the proposed DG sets of 2x250 KVA and 500 KVA in addition to the existing DG sets of 62.5 KVA & 20 KVA which will be used as standby during power failure.
- ix. Existing unit has no boiler. Multi cyclone separator & bag filter with a stack of height of 30 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>) for Proposed 2 x 5 TPH coal fired boilers respectively.
- x. Details of Process emissions generation and its management.

Sl. No.	Process Emission	Maximum Quantity on various combinations (kg/day)	Treatment Method
1.	HCl	2686.5	•Scrubber with water & caustic solution
2.	NH <sub>3</sub>	7.17	Scrubbed by using Chilled water
3.	H <sub>2</sub>	23.77	•Diffused with flame arrestor
4.	CO <sub>2</sub>	252.73	•Dispersed into atmosphere
5.	SO <sub>2</sub>	49	•Scrubber using caustic solution
6.	N <sub>2</sub>	6.67	•Dispersed into atmosphere

7.	Cl <sub>2</sub>	312	3 stage scrubber with water / caustic sol.
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xi. Details of Solid waste/ Hazardous waste generation and its management.

Sl. No.	Source	*Proposed Quantity (TPD)	Handling Method	Disposal
1.	Organic residue	2.02	HDPE Drums	Sent to SPCB Authorized Cement industries / CWMP-TSDF
2.	Spent Carbon	0.12		
3.	Distillation Bottom Residue (1% of spent solvents)	0.4		
4.	Inorganic & Evaporation salt (Process)	3.13	HDPE Bags	
5.	Evaporation salt (Non-Process)	0.5		
6.	ETP Sludge with 50% moisture	0.6		
7.	Boiler Ash	16	Stored in covered area	Sold to Cement Brick Manufacturers
Other Hazardous Waste generation from the Plant				
8.	a) Detoxified Container / Liners drums b) HDPE Carboys c) Fiber Drums d) PP Bags	300 Nos./ month  100 Kg/month	Designated covered area	Disposed to SPCB Authorized agencies after complete detoxification
9.	Spent solvents (with moisture) (solvents 35.5+water 1.5)	37 KLD	Stored in Drums / Tanks	Recovery within the premises duly sending the residue to Authorized agencies
10.	Recovered Solvents from spent solvents	32 KLD	Stored in Drums / Tanks	Reuse in process / Send to authorized recyclers
11.	Spent Mixed solvents (3.5 from SRS + 1 from ETP)	4.5 KLD	Stored in Drums / Tanks	Sent to SPCB Authorized agencies
12.	Waste oils & Grease	1.5 KL/A	Stored in Drums	Sent to SPCB Authorized agencies for reprocessing / recycling.
13.	Used Lead acid Batteries	50 Nos. / annum	Designated covered area	Sent to suppliers on buy-back basis.
14.	Spent Catalyst (Raney Nickel)	24 TPA	Stored in Drums	Sold to suppliers on buy-back basis / authorized re-



15	Spent PiperazineHCl	1405 TPA		processors
16	Misc. Waste (spill control waste)	12 TPA	Stored in Drums	CWMP-TSDF
17	Rejects	L.S.		
18	E-waste	L.S.	Designated covered area	CWMP-TSDF / Authorized recycler
19	Bio-medicial waste from OHS / QC Lab	L.S		APPCB Authorized agency
20	Waste papers & other types of packing scrap	L.S		Sold to scrap venders
21	Canteen waste	L.S		Composted on site and reused for green belt

\*Solid waste quantities maximum on various combinations i.e., Total 5 products (2 regular and 3 campaign products) out of 10 products at a point of time with R&D activity.

xii. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 19-01-2017.

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

#### Existing Product list

Sl. No.	Product	Quantity(TPA)
1.	Aluminum Chloride anhydrous	10,800
<b>By-products</b>		<b>(KLPA)</b>
1.	Hydro Chloric Acid	360
2.	Sodium Hypo Solution	360

#### Proposed Products and their Capacities

Sl. No.	Product name	Quantity (TPA)	Therapeutic Intermediate / Category Chemical
<b>Regular Products</b>			
1.	Aluminum Chloride anhydrous	<b>21600</b>	Inorganic raw material
2.	BenzoTrichloride	<b>2400</b>	Raw Material for Acetyl Chloride &Chloro acetyl chloride
<b>Campaign Products (any 3 products)</b>			
3.	Fluconazole	120	Antifungal
4.	Pantoprazole Sodium	84	Anti-ulcerative
5.	Ciprofloxacin Hydrochloride	<b>240</b>	Antibacterial
6.	Salbutamol Sulfate	120	Bronchodilator
7.	Ramipril	108	Antihypertensive
8.	N,N-Diethyl cyanoacetamide	72	Entacapone intermediate
9.	Acetyl chloride	<b>1200</b>	Raw material for APIs
10.	Chloro acetyl chloride	<b>1200</b>	Raw material for APIs
<b>Production(Max5 Products at a time)</b>		<b>26640</b>	

	<b>R&amp;D</b>	<b>5</b>	
	<b>Total Production with R&amp;D (Maximum 5 Products at a time)</b>	<b>26645</b>	
<b>List of By-products</b>			
<b>Sl. No.</b>	<b>Name of the By-Product</b>	<b>Quantity (KL/A)</b>	<b>Name of the Product</b>
1.	Hydro Chloric Acid (25%)	3240	Aluminum Chloride anhydrous Benzotrichloride, Fluconazole, Salbutamol Sulfate, Chloro acetyl chloride
2	Sodium Hypo Solution	720	Aluminum Chloride anhydrous
3	Benzyl Chloride	2660	Acetyl Chloride, Chloro acetyl chloride & Benzotrichloride
4	Selenium	102	Salbutamol Sulphate
<p>The EAC has deliberated on the proposal and public hearing report. EAC noted that there are several public hearing issues. EAC desired that PP shall submit a recommendation letter from concerned local Panchayat. EAC also desired to have details of recovery of spent solvent. The EAC after detailed deliberation has suggested the following:</p> <ol style="list-style-type: none"> <li>The PP shall install chlorine sensor in the factory and in the village.</li> <li>Undertake Aluminum monitoring in the soil.</li> <li>Groundwater extraction only after getting approval from the concerned authority.</li> <li>Existing green belt shall be maintained and atleast 10 m wide green belt with three layer of trees around the factory periphery shall be developed. 33% of the total area shall also be developed as green area with trees.</li> <li>Organic waste/spent carbon shall not be sent to TSDF. It may be incinerated or send to cement/bricks factory.</li> <li>COD in the effluent shall be reduced and arrested at the source.</li> </ol> <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>Issues, response and proposed action with respect to public hearing report.</li> <li>Recommendation letter from concerned local Panchayat regarding permission for operation of proposed unit.</li> <li>Details of recovery of spent solvent.</li> <li>Worst case scenario of products.</li> <li>Plan for arresting/reducing COD in the effluent.</li> </ol>			
25.7.2	<p><b>Expansion of production capacity of Carbon Di-Sulphide (CS<sub>2</sub>) (50,000 TPA to 75,000 TPA) and Steam export capacity (45,000 TPA to 65,000 TPA) at Plot No: Z-7/1, SEZ-1, GIDC Dahej, Taluka – Vagra, Dist: Bharuch, Gujarat by M/s Indo Baijin Chemicals Pvt. Ltd.-reg EC [IA/GJ/IND2/60907/2016, J- 11011/361/2016-IA.II(I)]</b></p> <p>The Project Proponent and the accredited Consultant M/s. Eco Chem Sales &amp; Services, Surat, gave a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>The proposal is for Environmental Clearance for Expansion of production capacity of Carbon Di-Sulphide (CS<sub>2</sub>) (50,000 TPA to 75,000 TPA) and Steam export capacity (45,000 TPA to 65,000 TPA) at Plot No: Z-7/1, SEZ-1, GIDC Dahej, Taluka – Vagra,</li> </ol>		

Dist: Bharuch, Gujarat by M/s Indo Baijin Chemicals Pvt. Ltd.

- ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 17<sup>th</sup> meeting held during 26<sup>th</sup> – 29<sup>th</sup> December, 2016 and recommended Terms of References (ToRs) for the Project. The TOR has been issued by Ministry vide letter dated 13<sup>th</sup> February, 2017.
- iii. 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).
- iv. Ministry had issued EC to the existing unit vide letter no. F No. J -11011/301/2011-IA II (I)], dated 24<sup>th</sup> December, 2012 for pesticide products unit to Indo Baijin Chemicals Pvt. Ltd.
- v. Existing land area is 50,000 m<sup>2</sup>. Open spare land of 220 m<sup>2</sup> will be utilized for the proposed expansion. The PP has already developed greenbelt in an area of 33% i.e 16,501 m<sup>2</sup> area out of the total land of 50,000 m<sup>2</sup> of area of the project. Total estimated project cost is Rs.15 Crores including existing investment of Rs. 178 Crores. The total capital cost will be Rs. 1 Crore for EMP and the recurring cost will be Rs. 1.5 Crores/annum. Total Employment will be 12 nos. person as direct & 15 nos. persons indirect after expansion. Industry proposes to allocate Rs. 37,50,000 @ 2.5 % towards Corporate Social Responsibility. No National parks, wildlife corridors, Biosphere Reserve, 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 3.0 km in S direction.
- vi. Ambient air quality monitoring was carried out at 8 locations during 1<sup>st</sup> December 2016 to 28<sup>th</sup> Feb 2017 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub>(61.5 – 96.6 µg/m<sup>3</sup>), PM<sub>2.5</sub>(25.9 – 52.9 µg/m<sup>3</sup>), SO<sub>x</sub>(14.1 – 19.5 µg/m<sup>3</sup>) and NO<sub>x</sub>(17.2 – 28.5 µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 96.4900 µg/m<sup>3</sup>, 22.0263 µg/m<sup>3</sup>, 26.7748 µg/m<sup>3</sup>, 4.1000 µg/m<sup>3</sup> and 6.1000 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, Sox and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- vii. Total water requirement after expansion is 750 KLD and unit has obtained permission for 750 KLD water for the existing unit and no additional water will be required for the expansion which will be met from GIDC Water Supply.
- viii. Treated effluent of 505 KLD will be treated through combination cooling tower system, plant will be based on zero liquid discharge system.
- ix. Power requirement after expansion will be 1900KVA including existing 1520KVA and will be met from Torrent Energy Ltd. Existing unit has one DG set of 1650 KVA x 1 nos.(no additional D.G.Set will be installed) to be used as standby during power failure. Stack (height 11 meters) will be provided as per CPCB norms to the proposed DG set.
- x. Existing unit has 1 no. of stack attached to Tail Gas Treatment Unit and & flue gas from reaction heating furnace. Sulfur Recovery Unit has been attached to the stack for control of emissions and sulfur recovery. Unit also has 1 no. of emergency flare stack having a stack with 30 m height.

Description	Capacity / Quantity / Details
<b>Stack No: 1</b>	
Stack	1

Stack attached to	Tail Gas Treatment Unit & Flue Gas from Reaction heating Furnace
Stack height from GL	80 m
Temperature	270°C
Expected Pollutants	SO <sub>2</sub> , NO <sub>x</sub> and PM
Air Pollution Control Devices	Sulfur Recovery Unit
<b>Stack No: 2</b>	
Stack	1 (Emergency Flare Stack)
Stack attached to	Emergency system venting
Stack height from GL	30 m
Expected Pollutants	SO <sub>x</sub> , NO <sub>x</sub> and PM
Air Pollution Control Devices	--
<b>Stack No: 3 &amp; 4</b>	
Stack	1 (Emergency back-up power Generator - DG )
Stack attached to	D G Set, capacity 1650 kVA
Stack height from GL	11 m
Expected Pollutants	SO <sub>x</sub> , NO <sub>x</sub> , PM
Air Pollution Control Devices	Adequate Stack height

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

S. No.	Name of Waste	Waste category	Existing quantity	Total after Proposed expansion	Solid waste Disposal / Management
1	Furnace slag from furnace pipe and reactor cleaning	1.1	55 TPA	55 TPA	Collection, Storage, Transportation & Disposal at common incineration facility.
2	Used spent Oil	5.1	1.0002 TPA	1.0002 TPA	Collection, Storage, Transportation & Disposal by selling to register refiners
3	Discarded Container/Barrels/Liners	33.1	100 TPA	100 TPA	Collection, Storage, Transportation & Disposal by GPCB approved scrap dealer
4	Evaporation salt	37.3	144 TPA	144 TPA	Collection, Storage, Transportation & Disposal at TSDF, BEIL.
5	Sludge from sulfur filter	--	55 TPA	78 TPA	Collection, Storage, Transportation & Disposal at common incineration facility.

**Solid waste**

1	STP Sludge		30 kg/day	--	Used as manure
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xii. PP has submitted the certified compliance report issued by Ministry's RO at Bhopal vide letter no. 5-9/2013 (ENV) dated 18.04.2017.

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

S. No.	Product	Existing Quantity (TPA)	Proposed Quantity (TPA)	Total Quantity (TPA)
1	Carbon Di-sulphide	50,000	25,000	75,000
2	Steam Export	45,000	20,000	65,000

The EAC has deliberated on the proposal and certified compliance report. EAC noted that the certified compliance report is satisfactory.

**The 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 shall be ensured.
- (ii). Continuous online (24 x7) monitoring system to be installed in the unit. Data to be uploaded on company's website and provided to the respective RO of MEF&CC, CPCB and SPCB.
- (iii). PP shall undertake occupational health analysis.
- (iv). Smart energy conservation equipments (like LED/solar light) shall be installed in the factory and premises.
- (v). 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.
- (vi). 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.
- (vii). Solid Waste shall be handled as per the provisions of the Solid Waste Management Rules, 2016 and necessary permissions shall be obtained under the said rules.
- (viii). Unit shall have an environment management cell with full fledged laboratory and an Environmental Manager having post graduate/graduate qualification in Environmental Sciences/Environmental Engineering.
- (ix). Green belt of 10 m width shall be developed along the periphery of the plant with three layer of trees. At least 33 % of the area shall be developed as green area with trees.
- (x). PP shall plant and maintain at least 10000 native trees/year for five year in the nearby villages.
- (xi). Enterprises Social Commitment (ESC) plan shall be implemented with atleast 5 % of the expansion cost. PP shall develop and maintain RO drinking water facility with modern

	facilities in the nearby villages (Suva, Jolva, Ambheta) and solar light on streets, for at least five years.
25.7.3	<p><b>Expansion of Specialty Chemicals, Pesticide, Fluoro Chemicals (175000 MTPA to 587177 MTPA) &amp; Captive Power Plant (25 MW to 75 MW) in existing unit at Plot No. D-2/1, Village: Suva, GIDC Phase II, Dahej, Taluka: Vagra, District: Bharuch (Gujarat) by M/s. SRF Limited -EC reg.[ IA/GJ/IND2/60725/2016, J-11011/379/2016-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 environmental clearance for Expansion of Specialty Chemicals, Pesticide, Fluoro Chemicals (175000 MTPA to 587177 MTPA) &amp; Captive Power Plant (25 MW to 75 MW) in existing unit at Plot No. D-2/1, Village: Suva, GIDC Phase II, Dahej, Taluka: Vagra, District: Bharuch (Gujarat) by M/s. SRF Limited.</li> <li>All synthetic organic chemicals industries are listed at S.N. 5(f) and Chlor-alkali industry are listed at S.N. 4(d) of EIA Notification. 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>The PP had obtained EC for the existing unit vide letter no. J-11011/1261/2007-IA-II(I) &amp; SEIAA/GUJ/EC/5(f),4(d),1(d)/633/2016; dated May 7,2008 &amp; October 29,2016 respectively for Setting up Chemical Manufacturing Plant to M/s. SRF Ltd.</li> <li>Proposed land area is 1181776 m<sup>2</sup>. Industry will develop Greenbelt in an area of 33 % i.e. 389986 m<sup>2</sup> out of 1181776 m<sup>2</sup> of area of the project. The estimated project cost is Rs. 4800 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 100 Crores and the recurring cost (operation &amp; maintenance) is about Rs. 2.74 Crores per annum. Industry purposes to 5% of project cost towards Corporate Social Responsibility. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. lies within 10 km distance from the project site.</li> <li>Total water requirement will be 36393 KL/Day (Existing 12798 KL/Day + Additional Proposed 23595 KL/Day) of which fresh water requirement of 17933 KLD and will be met from GIDC Water Supply. Daily water consumption shall be 36393 KL/Day (Existing 12798 KL/Day + Additional Proposed 23595 KL/Day) out of which assuming 85 % efficiency of UF &amp; RO Treatment for the Utilities Effluent stream, it gives 18460 KLD of treated water which will be reused and 3258 KLD reject. 18460 KLD of water will be recovered after UF &amp; RO treatment and taken back to the raw water collection tank. Hence, 17933 KLD of fresh water will be consumed for the proposed expansion project.</li> <li>Treated Effluent is 25199 KL/Day (Existing 6646 KL/Day + Additional Proposed 18553 KL/Day). Assuming 85 % efficiency of UF RO Treatment for the Utilities Effluent stream, it gives 18460 KLD of treated water which will be reused and 3258 KLD reject. From 3258 KLD reject, 100 KLD reject utilization for Ash quenching &amp; dust suppression. We shall explore the possibility to recover water from 3158 KLPD reject of RO. It will give 1263 KLPD (40 %) recovered water for reuse and rest quantity 1895 KLPD along with treated waste water of 2614 KLPD, total 4509 KLPD will be discharge to GIDC drain. 650 KLD After its treatment in STP, it will be used for greenbelt development with drip irrigation system, 100 % Domestic effluent will be</li> </ol>

reused in greenbelt development with drip irrigation system. Hence, 4509 KLPD of waste water will be finally discharged to Sea through GIDC Sewer. (It includes the 1895 KLPD UF & RO reject & 2614 KLPD from Biological Treatment).

xxvi. Power requirement will be Power Plant = 75 MW & DG-500 KVA X 2 Nos., DG-840 KVA X 2 Nos., DG-4200 KVA X 3 Nos & 12500 KVA Grid Power and will be met from Grid Power

xxvii. Unit will have stack attach to Steam Boiler (Existing & Proposed), Thermic Fluid Heater (Existing & Proposed), DG Sets (Existing & proposed) & Process Vents. Adequate Stack Height & Electro Static Precipitator will be installed as air pollution control devices. With a stack of height respectively will be installed for controlling the Particulates emissions.

xxviii. Public Hearing for the proposed project has been conducted by the State Pollution Control Board. Public Hearing was held on 28/08/2015.

xxix. PP has submitted the Certified Compliance Report issued by RO, MoEF Bhopal on 16/01/2016 & Compliance Status w.r.t. report was submitted on 26/09/2016

xxx. Following are the list of proposed products:

Sr. No.	Name of Product	Existing Capacity (MT/Ann num)	Addition al Capacity (MT/Ann num)	Proposed Capacity (MT/Ann um)	CAS No.
1	Trifluoro Acetic Acid	0	2000	2000	76-05-1
2	Parabromofluorobenzene	0	500	500	460-00-4
3	<b>Specialty Product</b>				
i	Tetrafluorobenzyl Alcohol	10000	15100	25100	4084-38-2
ii	Ethyl difluoroacetate				454-31-9
iii	Ethyl trifluoroacetate				383-63-1
iv	Ethyl trifluoroacetoacetate				372-31-6
v	Amino crotonate				14205-39-1
vi	Trifluoroacetic anhydride				407-25-0
vii	Pentafluorobenzoic Acid				602-94-8
viii	Pyrazole Acid				288-13-1
ix	Chlorotrichloro Methyl - Cyclopentene				--
x	2-methyl-4- (1,1,1,2,3,3,3-heptafluoro-2-propyl aniline				238098-26-5
xi	Fluoromethyl ester				80474-14-2
xii	Diphenylphenol				2432-

						11-3
	xiii	Tetrafluoropropene - 1234yf				754-12-1
	xiv	Isobutyl Acetophenone				38861-78-8
	xv	2-Bromo-5-fluorobenzotrifluoride				40161-55-5
	xvi	2,2-Difluoroethylamine				430-67-1
	xvi i	2,3-Dichloro-5-trifluoromethyl-pyridine				69045-84-7
	xvi ii	N[1-{6-Chloro-3-pyridinyl)methyl}-2(1H)-pyridinylidene]-2,2,2-trifluoroacetamide				--
	xix	(1-(3-Chloropyridine-2-yl)-3-((5-(trifluoromethyl)-2H-tetrazol-2-yl)methyl)-1H-pyrazol-5-carboxylic acid)				--
	xx	(N-(4-fluorophenyl)-2-hydroxy-N-isopropyl-acetamide				--
	4	1,1,2,2-Tetrafluoroethyl Methyl Ether	0	4000	4000	425-88-7
	5	Hexafluoropropylene	0	1000	1000	116-15-4
	6	Ethyl Difluoroacetoacetate	0	1000	1000	352-24-9
	7	Difluoromethanesulphonylchloride	0	1000	1000	1512-30-7
	8	Triflic Acid	0	1000	1000	1493-13-6
	9	Trifluoromethanesulfonic Anhydride	0	1000	1000	358-23-6
	10	Trimethylsilyltrifluoromethanesulfonate	0	520	520	27607-77-8
	11	3-Trifluoromethylacetophenone	0	1000	1000	349-76-8
	12	2,6-Dichloro-4-(trifluoromethyl) aniline	0	1000	1000	24279-39-8
	13	Cyanopyrazole	0	2000	2000	--
	14	Trifluoromethylbenzamide	0	2000	2000	360-64-5
	15	Trifluoroacetyl chloride	0	1000	1000	354-32-5
	16	Sulphur Tetrafluoride	0	500	500	7783-60-0
	17	2-Trifluoromethylbenzoylchloride	0	1000	1000	312-94-7
	18	TrifluoroMethyl-2-EthoxyVinyl Ketone	0	1000	1000	--



19	2-(2-Methoxy-ethoxymethyl)-6-trifluoromethyl-nicotinic acid ethyl ester	0	2000	2000	--
20	Mefenamic Acid	0	1000	1000	61-68-7
21	Hexafluoropropylene oxide	0	500	500	428-59-1
22	Pentafluorophenol	0	500	500	771-61-9
23	Monomethylhydrazine	0	4000	4000	60-34-4
24	[3-(4,5-dihydro-1,2-oxazol-3-yl)-4-mesyl-o-tolyl](5-hydroxy-1-methylpyrazol-4-yl)methanone (Topramezone)	0	500	500	210631-68-8
25	Tri Fluoro acetone	0	500	500	421-50-1
26	Methyl tri Fluoro acetate	0	500	500	431-47-0
27	Chlorodifluoroacetic Anhydride	0	100	100	2834-23-3
28	Bromopentafluorobenzene	0	500	500	344-04-7
29	4-Chlorobenzotrichloride	0	600	600	5216-25-1
30	4-Chlorobenzotrifluoride	0	600	600	202-681-1
31	Methyl HydroxyPyrazole	0	100	100	33641-15-5
32	6-Fluoro methyl indole	0	100	100	40311-13-5
33	Difluoroethoxy ethanol	0	200	200	148992-43-2
34	5-Bromo-2,2-difluoro-1,3-benzodioxole	0	1000	1000	--
35	Difluorobenzodioxole methyl ester	0	20	20	--
36	2-Fluoro-5-nitrobenzoic acid	0	30	30	7304-32-7
37	5-Chloro-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxaldehyde	0	500	500	--
38	3-Difluoromethyl-5-fluoro-1-methyl-1H-pyrazole-4-carboxaldehyde	0	500	500	--
39	2,5-Dichloro-4-(1,1,2,3,3,3-hexafluoropropoxy)benzenamine	0	500	500	103015-84-5
40	2,4,5-Trifluorophenyl acetic acid	0	50	50	209995-38-0
41	3-Aminobenzotrifluoride	0	1000	1000	98-16-8
42	2,4-Dichloro-3,5-dinitrobenzotrifluoride	0	1000	1000	--
43	3-phenoxy Benzaldehyde	0	4000	4000	39515-

					51-0
44	3-phenoxy toluene	0	200	200	3586-14-9
45	Methyl-2- Fluoroacrylate	0	700	700	2343-89-7
46	Lithium Tetrakis (pentafluorophenyl) borate	0	100	100	155543-02-5
47	2-fluoro-5-bromobenzonitrile	0	50	50	179897-89-3
48	Ethyl-Trifluoropyruvate	0	200	200	13081-18-0
49	Isoflurane	0	250	250	26675-46-7
50	Desflurane	0	100	100	57041-67-5
51	Sevoflurane	0	200	200	28523-86-6
52	Trichloroacetyl chloride	0	2000	2000	76-02-8
53	<b>Chlorinated Compound</b>				
i	Trichloroethylene	80000	10000	90000	79-01-6
ii	Perchloroethylene				127-18-4
iii	Methylene dichloride				75-09-2
iv	Chloroform				67-66-3
v	Carbon tetrachloride				56-23-5
54	<b>Caustic Chlorine Plant</b>				
	Chlorine	60000	56725	72000	7782-50-5
	Caustic lye 47.5 %		147485	187200	1310-73-2
	Hydrochloric Acid (30-33%)		17018	21600	7647-01-0
	Hydrogen		1588	2016	1333-74-0
55	Anhydrous Hydrofluoric acid	15000	25000	40000	7664-39-3
56	Chlorotrifluoroethane (HCFC 133a)	0	500	500	75-88-7
57	<b>HFC Refrigerant</b>				
i	1,1,1,2 Tetrafluoroethane (HFC 134a)	10000	52000	62000	811-97-2
ii	Pentafluoroethane (HFC 125)				354-33-6
iii	Difluoromethane (HFC - 32 )				75-10-5
iv	1,1 difluoroethane (HFC - 152a)				75-37-6
v	Refrigerant blend of Difluoromethane (HFC-32) + Pentafluoroethane (HFC-125) (R410a)				--
vi	Refrigerant blend of Pentafluoroethane (HFC-125)				--



	1	Succinimide (C <sub>4</sub> H <sub>5</sub> NO <sub>2</sub> )	0	31	31
	2	Mix of Ethane + n-Butane + Isobutane (R600a) + Propane (R290)	0	7327	7327
	3	Calcium Chloride	0	176	176
<p>The EAC has deliberated on the proposal, public hearing report and certified compliance report. EAC has noted that, the PP has addressed the issues raised in the public hearing and incorporated in the EIA/EMP report. EAC noted that, there are non complied points in the certified compliance report. EAC desired that, PP shall submit action taken report to comply with the non complied points. EAC also desired to have the details of baseline data and GLC after proposed expansion. EAC has also deliberated on the ESC component. EAC opinioned that, as the project cost is more, the ESC for the expansion project may be fixed at 2.5% of cost of expansion project instead of 5 %. However, PP has objected to the 2.5 % cost suggested by the PP, and informed that, as the ESC amount is more, the amount would be finalized after getting the concurrence from the management.</p> <p><b>The EAC after detailed deliberation has deferred the proposal based on the request of the PP and also desired to have the following additional information.</b></p> <ol style="list-style-type: none"> <li>Enterprise Social Commitment (ESC) plan for five years with 2.5 % of the project cost.</li> <li>Action taken report on non complied points in the certified compliance report.</li> <li>Details of baseline data collected and GLC.</li> </ol>					
25.7.4	<p><b>Expansion of Synthetic Organic Chemicals Manufacturing Unit (2540 MTPM) at Plot No. 21 &amp; 22, Block No. 395/4 &amp; 396/P, Village Moraiya, Taluka Sanand, District Ahmedabad, Gujarat by M/s Macro Polymers Pvt. Ltd. (Unit-3)- reg. EC [IA/GJ/IND2/32208/2015, J-11011/272/2015-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>The proposal is for environmental clearance for Expansion of Synthetic Organic Chemicals Manufacturing Unit (2540 MTPM) at Plot No. 21 &amp; 22, Block No. 395/4 &amp; 396/P, Village Moraiya, Taluka Sanand, District Ahmedabad, Gujarat by M/s Macro Polymers Pvt. Ltd. (Unit-3).</li> <li>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>The project proposal was considered by the expert appraisal committee (Industry 2) in its 2<sup>nd</sup> EAC meeting held during 16-17 December, 2015 and recommended terms of references (TORs) for the project. The TOR has been issued by Ministry vide letter dated 27.01.2016</li> <li>The unit was established before 2006 and unit had valid consent to establish for all existing products.</li> <li>Existing land area is 4770m<sup>2</sup>. No additional land will be acquired for proposed expansion. Industry will develop greenbelt in an area of 16 % i.e.0.0765Ha (765m<sup>2</sup>) out of 0.477Ha(4770m<sup>2</sup>) of area of the project. The estimated project cost is Rs. 7.09 Crore including the existing investment of Rs.5.91 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.68 Lakhs and the recurring</li> </ol>				

cost(operation and maintenance) will be about Rs. 36.5 Lakhs per annum. Total employment will be 18 persons as a direct & 12 Person indirect after expansion. Industry proposes to allocate 2.5%.of project cost towards Corporate social responsibility. 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 a distance a distance of 8.9 Kms in west direction.

- v. Ambient air quality monitoring was carried out at 9 locations during December, 2015 to February 2016 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> -68 to 82.3( $\mu\text{g}/\text{m}^3$ ), PM<sub>2.5</sub>- 22.1 to34.8( $\mu\text{g}/\text{m}^3$ ),SO<sub>2</sub>-4.8to12.8 ( $\mu\text{g}/\text{m}^3$ ) and NO<sub>2</sub>-4.3 to 20.1( $\mu\text{g}/\text{m}^3$ ). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 84.8  $\mu\text{g}/\text{m}^3$ , 20.0  $\mu\text{g}/\text{m}^3$  and 21.0  $\mu\text{g}/\text{m}^3$  with respect to PM<sub>10</sub>,Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- vi. Total water requirement is 59 m<sup>3</sup>/day of which fresh water requirement of 9m<sup>3</sup>/day will be met from Bore well/Estate water.
- vii. Treated effluent of 56.5 m<sup>3</sup>/day will be treated through ETP (containing primary, secondary, tertiary treatment) plant. It will be based on Zero Liquid Discharge system.
- viii. Power requirement after expansion will be 450 KW including existing 200 KW and will be met from Uttar Gujarat Vij Company Ltd.(UGVCL) state power distribution corporation limited(SPDCL). Existing unit has 1 D.G.set of 200 KVA capacity, Additional D. G. Set of 160 KVA is proposed for expansion. Both D.G.set will be used as standby during power failure.
- ix. Existing unit has 1 TFH of 15 Lacs Kcal/hr and same will be used after proposed expansion. For existing production, unit is using 7 MT/Day of Imported Steam coal/Briquettes and for proposed expansion additional fuel consumption will be 8 MT/Day and thus total 15 MT/Day of Imported Steam Coal/Briquettes will be consumed after expansion. Multi cyclone followed by bag filters has been provided with stack height of 33m to existing TFH: 1.
- x. Details of solid waste/hazardous waste generation and its management.

S. No.	Description	Category	Quantity (MT/Year)			Management
			Existing	Proposed	Total	
1	Waste/Resin Generated by Resin manufacturing	21.1	5	245	250	Collection, storage and reused in process / disposal at common hazardous waste incinerator facility or disposal by co-processing at cement plant.
2	Used Oil	5.1	0.115	19.885	20	Collection, storage and used within premises as a lubricant / sold to registered recycler.
3	Discarded Containers/bags	33.1	3	45	48	Collection, storage & sell to authorized vendor

4	Wasteand residue (Formedduring formulation)	21.1	Nil	1.5	1.5	Collection, storage and disposal at approved TSDF Site / common hazardous waste incinerator facility or disposal by co-processing at cement plant.
5	Fillersresidues	21.2	Nil	15	15	
6	Chemical sludge from effluent treatment	35.3	Nil	50	50	
7	Inorganic process Sludge	36.2	Nil	50	50	

xi. Public hearing for the proposed project has been conducted by the state pollution control board on **08.03.2017**

xii. Following are the list of existing and proposed products.

S. No.	Name of Products	Production Capacity (MT/Month)		
		Existing as per CC & A GPCB	Proposed	Total after Expansion
1	Industrial & Decorative Coating Polymers	30	Nil	30
2	Purified Butanol /Glycerin (by rectification / distillation / extraction only)	510	Nil	510
3	Resin Solutions (by Formulation)	1500	(-) 1000	500
4	Resin manufacturing by synthesis	Nil	1000	1000
	A. Alkyd Resins			
	B. Polyamide Resins			
	C. Polyester Resins			
	D. Acrylic Resins			
	E. Rosin Esters and Derivatives			
	F. Epoxy Derivatives			
5	Resin manufacturing by synthesis	Nil	500	500
	A. Amino Resins (Melamine resin/ Urea resin/ Phenol Resins)			
	B. Ketonic Resins			
<b>By-Product</b>				
1	Caustic Lye (45%)	Nil	870	870

The EAC has deliberated on the proposal and public hearing report. EAC noted that the PP has addressed the issues raised during the public hearing in the EIA/EMP report. EAC has opinioned that the PP has to develop greenbelt of atleast 10 m width leaving the building and storage tank area.

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

	<p><b>Specific Conditions:</b></p> <ul style="list-style-type: none"> <li>(i). Zero Liquid Discharge shall be ensured.</li> <li>(ii). If Coal is used as fuel, then coal having sulphur content less than 0.5 % only shall be used.</li> <li>(iii). Continuous online (24 x7) monitoring system to be installed in the unit. Data to be uploaded on company's website and provided to the respective RO of MEF&amp;CC, CPCB and SPCB.</li> <li>(iv). Groundwater for the proposed expansion project shall be extracted only after getting prior approval from the concerned authority. PP shall also adhere to the environmental conditions imposed by the authority. Status of groundwater withdrawal permission and compliance of the conditions shall be reported to Ministry's regional Office in the six monthly report.</li> <li>(v). Smart energy conservation equipments (like LED/solar light) shall be installed in the factory and premises.</li> <li>(vi). 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.</li> <li>(vii). 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.</li> <li>(viii). Solid Waste shall be handled as per the provisions of the Solid Waste Management Rules, 2016 and necessary permissions shall be obtained under the said rules.</li> <li>(ix). Unit shall have an environment management cell with full fledged laboratory and an Environmental Manager having post graduate/graduate qualification in Environmental Sciences/Environmental Engineering.</li> <li>(x). Green belt of 10 m width shall be developed along the periphery of the plant with three layers of trees (excluding the building and storage tank area). At least 33 % of the area shall be developed as green area with trees.</li> <li>(xi). PP shall plant and maintain at least 10000 native trees/year for five year in the nearby villages.</li> <li>(xii). Enterprises Social Commitment (ESC) plan shall be implemented with atleast 5 % of the expansion cost. PP shall develop and maintain RO drinking water facility with modern facilities in the nearby two villages.</li> </ul>
25.7.5	<p><b>Setting up of resins manufacturing plant (PF-250 MTPM; MF: 250MTPM; UF: 150 MTPM) along with laminated sheets (190000 Nos/Month) at Survey No.: 113/3, Paiki 1, Plot no.1 &amp; 2, Village: Bhunava, Taluka: Gondal, District: Rajkot, Gujarat by M/s Multiply Inc.-reg. EC {(J-11011/199/2016- IA II(I)) (IA/GJ/IND2/58160/2016)}</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> <ul style="list-style-type: none"> <li>i. The proposal is for environmental clearance for Setting up of resins manufacturing plant (PF-250 MTPM; MF: 250MTPM; UF: 150 MTPM) along with laminated sheets (190000 Nos/Month) at Survey No.: 113/3, Paiki 1, Plot no.1 &amp; 2, Village: Bhunava, Taluka: Gondal, District: Rajkot, Gujarat by M/s Multiply Inc.</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>xiii. The project proposal was considered by the expert appraisal committee (Industry- 2) in its 14<sup>th</sup> meeting held during 26-27<sup>th</sup> October, 2016 and recommended terms of references (TORs) for the project. The ToR has been issued by Ministry vide letter dated</li> </ul>

31.01.2017.

- xiv. The total land for the proposed project is 12026 m<sup>2</sup>. Industry will develop greenbelt in an area of 35.17% i.e. 4230 m<sup>2</sup> out of 12026 m<sup>2</sup> of area of the project. The estimated project cost is Rs.1.25 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 35.55 Lakhs and the recurring cost (operation and maintenance) will be about Rs. 29.6 lakhs per annum. Total employment will be 75 persons. Industry proposes to allocate Rs. 3.125 Lakhs@of 2.5% towards Corporate social responsibility. No National parks, wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, wildlife corridors etc. Lies within 10 km distance from the project site. Jasuki river is flowing at a distance a distance of 3.2kmin E direction.
- xv. Ambient air quality monitoring has been carried out at 8 locations during October to December, 2016 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (60.81 to 96.50 µg/m<sup>3</sup>), PM<sub>2.5</sub> (22.50 to 35.59 µg/m<sup>3</sup>), SO<sub>2</sub> (10.0 to 25.0 µg/m<sup>3</sup>) and NO<sub>2</sub> (14.87 to 30.55 µg/m<sup>3</sup>) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.7µg/m<sup>3</sup>, 0.1µg/m<sup>3</sup> and 1.0µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>2</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- xvi. Total water requirement is 50.2m<sup>3</sup>/day which will be met from Bore well.
- xvii. Treated effluent of 6.43m<sup>3</sup>/day will be treated through Effluent treatment plant (including Evaporator followed by Condenser). It will be based on Zero Liquid Discharge system
- xviii. Power requirement of proposed project will be 180 HP and will be met from Paschim Gujarat Vij Company Limited (PGVCL). Stack (height 6.5mt) will be provided as per CPCB norms to the proposed DG sets of 180 KVA which will be used as standby during power failure.
- xix. In Proposed unit 3 TPH coal/briquettes Fired boiler and 10 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>). Details are as below:

S. No	Stack attached to	Height of the stack (m)	Fuel & its Consumption	APC System	Expected Pollutant	GPCB Limit
1	Steam Boiler (3 TPH)	30 m	Coal Briquettes / 5.6MT/Day	Cyclone Separator followed by Bag Filter	SPM SO <sub>2</sub> NO <sub>2</sub>	As per GPCB Norms SPM ≤ 150 mg/Nm <sub>3</sub> SO <sub>2</sub> ≤ 100 ppm NO <sub>2</sub> ≤ 50 ppm
2	Thermic Fluid Heater (10 Lakh Kcal/hr)					
3	D.G. Set (180 KVA)	6.5 m	HSD 33.5Liter/Hr.	N.A.	SPM SO <sub>2</sub> NO <sub>2</sub>	

xx. Details of process emissions generation and its management.



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

xxi. 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	34.3	3.35	Collection, storage and Disposal at 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	33.3	0.26	Collection, storage & sell to authorized vendor
4	Edge Cutting Waste	23.1	0.76	Collection, storage & disposal at common Incineration facility
5	Spent carbon	54.3	10.0	Collection, storage, transportation & disposal at common Incineration facility/ sell to authorized vendor

xxii. Public hearing for the proposed project has been conducted by the state pollution control board on 02.05.2017

xxiii. Following are the list of proposed products.

Proposed product and their capacities

Sr. No.	Name of Product	Quantity
1	Phenol Formaldehyde Resin	250 MT/Month
2	Melamine Formaldehyde Resin	250 MT/Month
3	Urea Formaldehyde Resin	150 MT/Month
4	Laminated Sheets	1,90,000 Sheets/Month

The EAC has deliberated on the proposal and public hearing report. EAC noted that the PP has addressed the issues raised during the public hearing in the EIA/EMP report. EAC has opined that the PP has to develop greenbelt of atleast 10 m width around the periphery of the unit. As there is a space constraint in one side, PP shall develop atleast 6m width green belt in that side.

**The 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 shall be ensured.
- (ii). If Coal is used as fuel, then coal having sulphur content less than 0.5 % only shall be

	<p>used.</p> <p>(iii). Groundwater for the proposed project shall be extracted only after getting prior approval from the concerned authority. PP shall also adhere to the environmental conditions imposed by the authority. Status of groundwater withdrawal permission and compliance of the conditions shall be reported to Ministry's regional Office in the six monthly report.</p> <p>(iv). Smart energy conservation equipments (like LED/solar light) shall be installed in the factory and premises.</p> <p>(v). 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>(vi). 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.</p> <p>(vii). Solid Waste shall be handled as per the provisions of the Solid Waste Management Rules, 2016 and necessary permissions shall be obtained under the said rules.</p> <p>(viii). Green belt of 10 m width shall be developed along the periphery of the plant with three layers of trees (excluding one side/6m). At least 33 % of the area shall be developed as green area with trees.</p> <p>(ix). PP shall plant and maintain at least 10000 native trees/year for five year in the nearby villages.</p> <p>(x). Enterprises Social Commitment (ESC) plan shall be implemented with atleast 2.5 % of the expansion cost. PP shall develop and maintain RO drinking water facility with modern facilities in the nearby two villages.</p>
25.7.6	<p><b>Setting up of synthetic organic resins (Phenol Formaldehyde-600 MTPM, Urea Formaldehyde-300 MTPM, Melamine Formaldehyde-300 MTPM) and Laminated Sheets (200000 No/Month) at Survey No.: 668, Post Ghadkan, Majara-Talod Road, Taluka Prantij, District Sabarkantha, Gujarat by M/s Damas Laminates Pvt. Ltd. -reg. EC [IA/GJ/IND2/36181/2015, J-11011/17/2016-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> <p>i. The proposal is for environmental clearance for Setting up of synthetic organic resins (Phenol Formaldehyde-600 MTPM, Urea Formaldehyde-300 MTPM, Melamine Formaldehyde-300 MTPM) and Laminated Sheets (200000 No/Month) at Survey No.: 668, Post Ghadkan, Majara-Talod Road, Taluka Prantij, District Sabarkantha, Gujarat by M/s Damas Laminates Pvt. Ltd.</p> <p>iii. 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).</p> <p>ii. The project proposal was considered by the expert appraisal committee (Industry 2) in its 4<sup>th</sup> meeting held during 11-12<sup>th</sup> February, 2016 and recommended terms of references (TORs) for the project. The ToR has been issued vide Ministry's letter dated 31.03.2016.</p> <p>iii. The land area of the proposed project is 16334 m<sup>2</sup>. Industry will develop greenbelt in</p>

an area of 35.05 % i.e. 5726 m<sup>2</sup> out of 22966 m<sup>2</sup> of area of the project. The estimated project cost is Rs.1.20 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 38.1 Lakhs and the recurring cost (operation and maintenance) will be about Rs. 31.9 lakhs per annum. Total employment opportunity will be for 60 persons. Industry proposes to allocate Rs. 3 Lakhs @of 2.5% towards Corporate social responsibility. No National parks, wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, wildlife corridors etc. lies within 10 km distance from the project site. Khari river is flowing at a distance of 5.33 km in ESE direction.

- iv. Ambient air quality monitoring has been carried out at 8 locations during March to May, 2016 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (60 to 81.5 µg/m<sup>3</sup>), PM<sub>2.5</sub> (21.4 to 32.6 µg/m<sup>3</sup>), SO<sub>2</sub> (5.6 to 20.6 µg/m<sup>3</sup>) and NO<sub>2</sub> (7.1 to 24.4 µg/m<sup>3</sup>). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.0 µg/m<sup>3</sup>, 0.3 µg/m<sup>3</sup> and 1.8 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>2</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- v. Total water requirement is 52.8m<sup>3</sup>/day which will be met from Bore well.
- vi. Treated effluent of 15m<sup>3</sup>/day will be treated through Effluent treatment plant (including Evaporator followed by Condenser). It will be based on Zero Liquid Discharge system.
- vii. Power requirement of proposed project will be 500 KVA and will be met from Uttar Gujarat Vij Company Limited (PGVCL). Stack (height 7mt) will be provided as per CPCB norms to the proposed DG sets of 250 KVA which will be used as standby during power failure.
- viii. In Proposed unit, 4 TPH coal/briquettes Fired boiler and 15 Lakh Kcal/hr Thermic Fluid Heater will be installed. Dust collector 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>). The details are;

Sr. No	Stack attached to	Height of the stack (m)	Fuel & its Consumption	APC System	Expected Pollutant	GPCB Limit
1	Steam Boiler (4 TPH)	30 m	Coal Briquettes 8MT/Day	Cyclone Separator followed by Bag Filter	SPM SO <sub>2</sub> NO <sub>2</sub>	As per GPCB Norms
2	Thermic Fluid Heater (15 Lakh Kcal/hr)					SPM ≤ 150 mg/Nm <sup>3</sup> SO <sub>2</sub> ≤ 100 ppm NO <sub>2</sub> ≤ 50 ppm
3	D.G. Set (250 KVA)	7 m	HSD 46.5Liter/Hr.	N.A.	SPM SO <sub>2</sub> NO <sub>2</sub>	

- ix. Details of process emissions generation and its management.

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

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

S. No.	Description	Category	Quantity (MT/Month)	Mode of Disposal
1	ETP Sludge & Evaporation Residue	34.3	30	Collection, storage, transportation and disposal at approved TSDF Site
2	Used/Spent Oil	5.1	0.004	Collection, storage and used within premises as a lubricant / sold to registered recycler.
3	Discarded bags/barrels	33.3	4.3	Collection, storage & sell to authorized vendor
4	Edge cutting waste	24.3	9.6	Collection, storage, transportation and disposal at common incineration Site
5	Spent carbon	35.3	100	Collection, storage, transportation & disposal at common Incineration facility/ sell to authorized vendor

xi. Public hearing for the proposed project has been conducted by the state pollution control board on 10.05.2017

xii. Following are the list of proposed products.

**Proposed product and their capacities**

S. No.	Name of Product	Quantity
1	Phenol Formaldehyde Resin	600 MT/Month
2	Melamine Formaldehyde Resin	300 MT/Month
3	Urea Formaldehyde Resin	300 MT/Month
4	Laminated Sheets	2,00,000 Sheets/Month

The EAC has deliberated on the proposal and public hearing report. EAC noted that the PP has addressed the issues raised during the public hearing in the EIA/EMP report.

**The 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 shall be ensured.
- (ii). If Coal is used as fuel, then coal having sulphur content less than 0.5 % only shall be used.
- (iii). Groundwater for the proposed project shall be extracted only after getting prior approval from the concerned authority. PP shall also adhere to the environmental conditions imposed by the authority. Status of groundwater withdrawal permission and compliance of the conditions shall be reported to Ministry's regional Office in the six monthly report.
- (iv). Smart energy conservation equipments (like LED/solar light) shall be installed in the factory and premises.
- (v). 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.
- (vi). The by-products which fall under the Hazardous Waste Rules, be handled as per the

	<p>provisions of the said Rules and necessary permissions shall be obtained under the said rules.</p> <p>(vii). Solid Waste shall be handled as per the provisions of the Solid Waste Management Rules, 2016 and necessary permissions shall be obtained under the said rules.</p> <p>(viii). Green belt of 10 m width shall be developed along the periphery of the plant with three layers of trees. At least 33 % of the area shall be developed as green area with trees.</p> <p>(ix). PP shall plant and maintain at least 10000 native trees/year for five year in the nearby villages.</p> <p>(x). Enterprises 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 nearby village.</p>
25.7.7	<p><b>Establishment of Molasses based Distillery Plant (40 KLD) along with Co-Generation power plant (2.0 MW) within the premises of existing sugar Mill at Iqbalpur, Tehsil Roorkee, District Haridwar, Uttarakhand by M/s Lakshmi Sugar Mills Co Limited- reg. EC [IA/UK/IND2/41026/2016, J-11011/35/2016-IA II (I)]</b></p> <p>The project proponent and the accredited consultant M/s Ascenso Enviro Pvt. Ltd gave a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>The proposal is for environmental clearance for Establishment of Molasses based Distillery Plant (40 KLD) along with Co-Generation power plant (2.0 MW) within the premises of existing sugar Mill at Iqbalpur, Tehsil Roorkee, District Haridwar, Uttarakhand by M/s Lakshmi Sugar Mills CO Limited.</li> <li>All Distillery projects are listed at S.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>The project proposal was considered by the expert appraisal committee (Industry 2) in its 6<sup>th</sup> meeting held during 30<sup>th</sup> March- 2<sup>nd</sup> April, 2016 and recommended terms of references (TORs) for the project. The ToR has been issued vide Ministry's letter dated 11<sup>th</sup> May, 2016.</li> <li>The land for the proposed project is 12.42 Acre. Industry will develop greenbelt in an area of 33 % i.e 4.35 Acre out of 12.42 Acre of area of the project. The estimated project cost is Rs 8389.90 Lakh. Total capital cost earmarked towards environmental pollution control measures is Rs 2400.0 and the Recurring cost (operation and maintenance) will be about Rs 53.0 per annum. Total Employment will be for 37 persons as direct &amp; 80 persons as indirect after establishment. Industry proposes to allocate Rs 168.0 Lakhs @ of 2.0 % towards Corporate Social Responsibility. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance from the project site. Saloni river is flowing at a distance of 6.54 km in North and North East direction.</li> <li>Ambient air quality monitoring was carried out at 8 locations during 1<sup>st</sup> March 2016 to 31<sup>st</sup> May 2016 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (48.6 – 89.2 µg/m<sup>3</sup>), PM<sub>2.5</sub> (15.2 – 46.8 µg/m<sup>3</sup>), SO<sub>2</sub> (5.22 – 21.4 µg/m<sup>3</sup>) and NO<sub>2</sub> (6.72 – 22.8 µg/m<sup>3</sup>) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.98 µg/m<sup>3</sup> and 1.45 µg/m<sup>3</sup> with respect to PM<sub>10</sub> and SO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).</li> <li>Total water requirement is 1234.0 m<sup>3</sup>/day of which fresh water requirement of 364.0</li> </ol>

m<sup>3</sup>/day and will be met from Ground water.

- vii. Spent wash generation will be 320.0 m<sup>3</sup>/Day which will be treated through concentration in MEE and then concentrate from MEE will be used as fuel along with bagasse in Slop fired boiler. Other effluent like MEE Condensate and CT blow down will be treated in condensate Polishing unit and reutilised in process and cooling.
- viii. Power requirement will be 1.6 – 1.7 MW and will be met from in house power generation.
- ix. Proposed 16 TPH Slop (Mixed fuel) fired boiler will be installed. Bag filter with a stack of height of 50.0 m will be installed for controlling the Particulate emissions (within statutory limit of 150.0 mg/Nm<sup>3</sup>).
- x. Major emission of Particulate matter and SO<sub>x</sub> will be from fuel combustion in boiler Bag filter with adequate stack height will be installed .
- xi. Total ash generation from the distillery unit is 21.56 T/Day and fermenter sludge : 18.0 Mt/Day will be utilised as manure.
- xii. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 06.01.2017.
- xiii. The proposed products and capacity are:

S.No	Product	Capacity
1	Distillery	40 KLD
2	Co-Generation power plant	2.0 MW

The EAC has deliberated on the proposal and public hearing report. EAC noted that the PP has properly addressed the issues raised during the public hearing in the EIA/EMP report. EAC desired that PP shall clear all the dues to be given for the farmers before implementation of the present project.

**The 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 shall be ensured.
- (ii). Public hearing issues shall be properly addressed and resolved.
- (iii). As assured, only bio-fuel shall be made. No portable liquor shall be made in this project.
- (iv). Water requirement shall not exceed 6KL/KL of alcohol. Accordingly fresh water requirement shall be reduced from the proposed quantity.
- (v). Groundwater for the proposed project shall be extracted only after getting prior approval from the concerned authority. PP shall also adhere to the environmental conditions imposed by the authority. Status of groundwater withdrawal permission and compliance of the conditions shall be reported to Ministry's regional Office in the six monthly report.
- (vi). Smart energy conservation equipments (like LED/solar light) shall be installed in the factory and premises.
- (vii). 20 % of the total power requirement shall be met from solar power/renewable energy sources.
- (viii). Green belt of 10 m width shall be developed along the periphery of the plant with three layers of trees. At least 33 % of the area shall be developed as green area with trees.

	<p>(ix). PP shall plant and maintain at least 25000 native trees/year for five year in the nearby villages.</p> <p>(x). Enterprises 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 three nearby village.</p>
25.7.8	<p><b>Expansion of Viscose Staple Fibre (1,27,750 TPA to 2,55,500 TPA), Sulphuric Acid (1,38,700 TPA to 2,19,000 TPA), Carbon-Disulphide (54,750 TPA to 65,700 TPA) along with Proposed Solvent Spun Cellulosic Fibre (Excel Fibre) (36,500 TPA) and Captive Power Plant (55 MW) at Plot No. 1, GIDC Industrial Area, Vilayat, Tehsil: Vagra, District: Bharuch, Gujarat by M/s. Grasim Industries Ltd. (Grasim Cellulosic Division)-EC reg. [IA/GJ/IND2/58913/2016, J- 11011/321/2016-IA.II(I)]</b></p> <p>The project proponent and the accredited consultant M/s J.M.EnviroNet Pvt Ltd., gave a detailed presentation on the salient features of the project and informed that:</p> <ol style="list-style-type: none"> <li>The proposal is for environmental clearance for Expansion of Viscose Staple Fibre (1,27,750 TPA to 2,55,500 TPA), Sulphuric Acid (1,38,700 TPA to 2,19,000 TPA), Carbon-Disulphide (54,750 TPA to 65,700 TPA) along with Proposed Solvent Spun Cellulosic Fibre (Excel Fibre) (36,500 TPA) and Captive Power Plant (55 MW) at Plot No. 1, GIDC Industrial Area, Vilayat, Tehsil: Vagra, District: Bharuch, Gujarat by M/s. Grasim Industries Ltd. (Grasim Cellulosic Division).</li> <li>All Manmade Fibres Manufacturing (Rayon) projects are listed at S.No. 5(d) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 14<sup>th</sup> meeting held during 26<sup>th</sup>- 27<sup>th</sup> October, 2016 and recommended Terms of References (ToRs) for the Project. The ToR has been issued vide Ministry's letter dated 02<sup>nd</sup> February, 2017.</li> <li>Ministry &amp; SEIAA had issued EC earlier vide letter no. J-11011/463/2007-IA-II(I) dated 20<sup>th</sup> Dec., 2007 for Viscose Staple Fibre, Sulphuric Acid, Carbon-Disulphide unit &amp; vide SEIAA (Gujarat) letter no. SEIAA/GUJ/EC/1(d), 4(d) &amp; 5(f)/96/2011 dated 30<sup>th</sup> May, 2011 for Sulphuric Acid, Carbon-Disulphide respectively to M/s. Grasim Industries Ltd. (Grasim Cellulosic Division).</li> <li>The existing land area is 222.63 ha, proposed expansion will be done within the existing plant premises. Industry will develop Greenbelt in an area of 33 % i.e., 73.46 Ha out of 222.63 ha of area of the project. Presently, 25.78 ha has been developed under greenbelt. Greenbelt is planned for 47.68 Hectare in next seven years. The estimated project cost is Rs. 2560 Crores (Debottlenecking: Rs. 12 Crores &amp; New Machines: Rs. 2548 Crores). Total capital cost earmarked towards environmental pollution control measures is Rs. 150 Crores and the Recurring cost (operation and maintenance) will be about Rs. 15 Crores per annum. Total Employment will be for 1300 persons as direct &amp; 1200 persons indirect after expansion. Industry proposes to allocate Rs 64.04 Crores @ of 2.5% towards Enterprise Social Commitment. No National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wild life Corridors etc. lies within 10 km distance from the project site. Narmada River (estuarine region) is flowing at a distance of 9.0 km in SSW direction from the project site.</li> <li>Ambient air quality monitoring was carried out at 8 locations during Winter Season (December, 2016 to February, 2017) and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (55.2 to 88.2 µg/m<sup>3</sup>), PM<sub>2.5</sub> (26.5 to 48.7 µg/m<sup>3</sup>), SO<sub>2</sub> (11.3 to 28.7 µg/m<sup>3</sup>), NO<sub>2</sub> (11.9 to 32.5 µg/m<sup>3</sup>), CS<sub>2</sub> (18.6 to 31.9 µg/m<sup>3</sup>) &amp; H<sub>2</sub>S (6.2 to 10.6</li> </ol>

$\mu\text{g}/\text{m}^3$ ). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be  $0.2 \mu\text{g}/\text{m}^3$ ,  $5.3 \mu\text{g}/\text{m}^3$ ,  $0.9 \mu\text{g}/\text{m}^3$ ,  $8.5 \mu\text{g}/\text{m}^3$  &  $5.1 \mu\text{g}/\text{m}^3$  with respect to  $\text{PM}_{10}$ ,  $\text{SO}_2$ ,  $\text{NO}_2$ ,  $\text{CS}_2$  &  $\text{H}_2\text{S}$ . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

vii. Total fresh water requirement is  $35,000 \text{ m}^3/\text{day}$  which will be met from water supply by Gujarat Industrial Development Cooperation (GIDC).

viii. Effluent generated from the project activity will be treated through existing Effluent Treatment Plant and treated effluent will be discharged into bed level of Bay of Kambhat through GIDC pipeline.

ix. Total Power requirement after expansion will be 55 MW. Existing requirement of 25 MW is being met through Grasim Chemical Division (Sister Concern). After expansion total requirement will be met from proposed CPP. Existing unit has 2 DG sets of 1250 KVA capacity that are used as standby during power failure. Stack height of 30m has been provided as per CPCB norms for the existing DG sets.

x. For proposed CPP, three 175 TPH coal/petcoke fired boiler will be installed. Multi cyclone separator/ bag filter with a stack of height of 125 m will be installed for controlling the Particulate emissions within prescribed norms.

xi. Details of Process emissions generation and its management.

Emissions	Source	Management Measures
$\text{CS}_2$	VSF Plant-spinning	<ul style="list-style-type: none"> <li><math>\text{CS}_2</math> Recovery System from machine &amp; exhaust.</li> <li>Powerful Exhaust System for spinning off gases (<math>\text{CS}_2</math> and <math>\text{H}_2\text{S}</math>)</li> <li>Air dilution with adequate stack height.</li> <li>Shutters for spinning machine.</li> </ul>
	$\text{CS}_2$ Plant	<ul style="list-style-type: none"> <li>Scrubber system.</li> <li>Klaus kiln for recovery of Sulphur.</li> <li>Tail gas treatment</li> </ul>
$\text{SO}_2$	$\text{H}_2\text{SO}_4$ Plant	<ul style="list-style-type: none"> <li>Alkali scrubber</li> </ul>
	CPP boiler	<ul style="list-style-type: none"> <li>Lime dozing will be done in CFBC boiler (coal fired).</li> <li>125 m stack height will be provided.</li> </ul>
Acid Mist	$\text{H}_2\text{SO}_4$ Plant	<ul style="list-style-type: none"> <li>Mist eliminator</li> <li>Alkali scrubber</li> </ul>
PM	Proposed CPP boiler	<ul style="list-style-type: none"> <li>ESPs will be installed for CFBC boiler.</li> </ul>
Fugitive Emission	Proposed CPP-handling & Storage	<ul style="list-style-type: none"> <li>Covered storage yard will be provided to store coal at the plant site.</li> <li>Silos will be provided to store fly ash at the plant site.</li> <li>Transportation of Fly ash will be done through closed tankers / bulkers.</li> <li>Dust collection system will be provided to control dust emission.</li> <li>Water sprinkling will be done to reduce dust generation.</li> <li>Greenbelt / plantation done along the plant boundary to attenuate air pollution.</li> </ul>



	CS <sub>2</sub> Plant-Sulphur handling	<ul style="list-style-type: none"> <li>Covered storage yard for storage of sulphur.</li> <li>Sulphur transportation through covered conveyor belt.</li> </ul>
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xii. Details of Solid waste/ Hazardous waste generation and its management.

Plant Unit	Waste	Treatment / Disposal
Acid Plant	Sulphur Filter Residue	TSDF
	Spent Catalyst (V <sub>2</sub> O <sub>5</sub> )	
ETP	ETP Inorganic Sludge (Gypsum)	Sold to cement industries
	ETP bio sludge	Burn in CPP boiler
Plant Maintenance-Different sections	Oil soaked Cotton Waste & cotton waste	TSDF
	Used Oil	Sent to Authorized Recycler
	Used Resin	Sent to TSDF for disposal
STP	STP Sludge	Used as manure in greenbelt development/ plantation
Proposed CPP	Fly Ash	Will be supplied to Brick manufacturers, Cement industries

xiii. Public Hearing for the proposed expansion project was exempted as per para 7 (i), Point III, Stage (3)(i)(b) of EIA Notification, since the project site is located in GIDC Notified Industrial Area.

xiv. The PP has submitted the certified compliance report issued by Regional Office of Ministry vide letter no. 6-2/2007(ENV)/309 dated 23<sup>rd</sup> May, 2017.

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

#### Existing & Proposed Products

S. No	Name of Products (Unit)	Existing Capacity	Additional (Proposed) Capacity	Total Capacity after Expansion
1.	Viscose Staple Fibre (TPA)	1,27,750	1, 27,750 (Debottlenecking: 36,500 New Machines: 91,250)	2,55,500
2.	Solvent Spun Cellulosic Fibre (Excel Fibre) (TPA)	None	36,500	36,500
3.	Sulphuric Acid (TPA)	1,38,700	80,300	2,19,000
4.	Carbon-Disulphide (TPA)	54,750	10,950	65,700
5.	Anhydrous Sodium Sulphate (By Product) (TPA)	83,038 - 1,27,750	83,038 - 1,27,750	1,66,076 - 2,55,500
6.	Captive Power Plant	None	55	55

	<table><tr><td></td><td>(MW)</td><td></td><td></td><td></td></tr></table> <p>The EAC has deliberated on the proposal and certified compliance report. The EAC noted that the public hearing has been exempted, as the project is located in the notified Industrial area.</p> <p><b>The EAC after detailed deliberation has recommended the project for environmental clearance subject to compliance of following specific and other general conditions:</b></p> <p><b>Specific Conditions:</b></p> <ul style="list-style-type: none"><li>(i). Effluent shall be treated properly before discharging to Bay of Kambhat through GIDC pipeline.</li><li>(ii). Atleast, 50 % of the fuel requirement shall be met from natural gas and the rest 50 % may be met from briquette/coal (with sulphur content less than 0.5%).</li><li>(iii). Proposed effluent generation (27160 KLD) shall be reused after treating/processing through RO, etc. and fresh water requirement shall accordingly be restricted to 22,000 KLD.</li><li>(iv). Smart energy conservation equipments (like LED/solar light) shall be installed in the factory and premises.</li><li>(v). As assured, 5 MW power (of the total power requirement) shall be generated from solar power/renewable energy sources.</li><li>(vi). Green belt of 10 m width shall be developed along the periphery of the plant with three layers of trees. At least 33 % of the area shall be developed as green area with trees.</li><li>(vii). PP shall plant and maintain at least 1 lakh native trees for five year in the nearby villages.</li><li>(viii).Enterprises Social Commitment (ESC) plan shall be implemented with atleast 2.5 % of the project cost. As proposed, Hospital (with modern facilities) may be constructed/ maintained, and also construct and maintain modern RO drinking water facility in the five nearby village.</li></ul>		(MW)			
	(MW)					
25.7.9	<p><b>Setting up of Synthetic Organic Chemicals (6959 MTPM) and Agro Chemicals (2200 MTPM) Unit at Plot No. 755/1, GIDC Industrial Estate, Village Jhagadia, District Bharuch, Gujarat by M/s Parikh Enterprises Pvt. Ltd.-reg. EC [IA/GJ/IND2/31402/2015, J-11011/305/2015-IA II (I)]</b></p> <p>The Project Proponent and the accredited consultant M/s. Anand Environmental Consultants 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 environmental clearance for Setting up of Synthetic Organic Chemicals (6959 MTPM) and Agro Chemicals (2200 MTPM) Unit at Plot No. 755/1, GIDC Industrial Estate, Village Jhagadia, District Bharuch, Gujarat by M/s Parikh Enterprises Pvt. Ltd.</li><li>ii. All synthetic organic chemicals industries are listed at S.N. 5(f) of EIA Notification and all Pesticides industry and pesticide specific intermediates (excluding formulations) units producing technical grade pesticides are listed at S.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. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 3<sup>rd</sup> meeting held during 18<sup>th</sup> – 19<sup>th</sup> January, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued vide Ministry’s letter no.</li></ul>					

dated 5<sup>th</sup> March, 2016.

iv. The land area for the proposed project is 165825 m<sup>2</sup>. Industry will develop greenbelt in an area of 33 % i.e., 54750 m<sup>2</sup> out of 165825 m<sup>2</sup> of area of the project. The estimated project cost is Rs 90 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 4.5 crores and the recurring cost (operation and maintenance) will be about Rs 3 crores per annum. Total employment opportunity will be for 300 persons. Industry proposes to allocate Rs 2.25 crore @ of 2.5 % towards Corporate Social Responsibility. No National park, wildlife sanctuaries, biosphere reserves, Tiger/Elephant reserves, wildlife corridors etc. lie within a 10 km distance from the project site. Narmada River flows at a distance of 9.5 kms in NNW direction.

x. Ambient air quality monitoring was carried out at 6 locations during October 2015 to December 2015 and the baseline data indicates the ranges of concentrations as; PM<sub>10</sub> (52 to 113 µg/m<sup>3</sup>), PM<sub>2.5</sub> (13 to 45 µg/m<sup>3</sup>), SO<sub>2</sub> (7 to 43 µg/m<sup>3</sup>) and NO<sub>2</sub> (11 to 56 µg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project are as given below in µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS)

Location	PM <sub>10</sub>	SO <sub>x</sub>	NO <sub>x</sub>
Village: Talodra	1.42	8.61	4.35
Village: Navagam Mota	0.80	7.31	3.49
Village: Sardarpura	1.08	6.73	3.22
Village: Pardi Mokha	0.79	6.19	2.96
Village: Randedi	0.97	3.16	1.51

xi. Total water requirement is 1388 m<sup>3</sup>/day (1184 m<sup>3</sup>/day Fresh water + 204 m<sup>3</sup>/day recycled) of which fresh water requirement of 1184 m<sup>3</sup>/day will be met from GIDC water supply.

xii. Effluent of 778 m<sup>3</sup>/day will be treated in our primary, secondary and tertiary Effluent Treatment Plant and ultimate disposal of the same to deep sea through NCT (BEAIL) pipeline whereas effluent from CPC Blue Plant will be evaporated in a Multiple Effective Evaporator (MEE).

xiii. Power requirement will be 10000 KVA and will be met from DGVCL (State power distribution corporation limited). One 2000 KVA DG set will be used as standby during power failure and it will have a stack height of 12 m as per CPCB norms.

xiv. Multi cyclone separator and bag filter with a stack of height of 30 m will be installed for controlling particulate emissions (to be within statutory limit of 150 mg/Nm<sup>3</sup>) for the proposed 1 no. of 3 TPH and 2 no. of 6 TPH coal fired boilers respectively.

xv. Details of emissions and its management will be as stated below.

**Flue Gas Emissions :**

S. No .	Stack attached to	Type and quantity of fuel	Height of stack from ground level(m)	Diameter at top (m)	Expected Pollutant & Emission	Air Pollution Control Equipment

1.	Steam Boiler IBR 3TPH	Coal 10 MT/Day	30	0.6	PM < 150mg/m <sup>3</sup> SO <sub>2</sub> < 100 ppm NO <sub>x</sub> < 50 ppm	Bag filter, MCS, Water Scrubber
2.	Steam Boiler IBR (6TPH x 2)	Coal 40 MT/Day	30	0.6	PM < 150mg/m <sup>3</sup> SO <sub>2</sub> < 100 ppm NO <sub>x</sub> < 50 ppm	Bag filter, MCS, Water Scrubber
3.	TFH (10 kcal/hr x 6)	Diesel 3000 L/Day	12	0.45	PM < 150mg/m <sup>3</sup> SO <sub>2</sub> < 100 ppm NO <sub>x</sub> < 50 ppm	Bag filter
4.	SFD (0.75 TPH x 7)	Diesel 3000 L/Day	15	0.45	PM < 150mg/m <sup>3</sup>	Bag filter (500 micron, 3m x 160 Nos.)
5.	SFD (0.3 TPH x 4)	Diesel 400 L/Day	15	0.45	PM < 150mg/m <sup>3</sup>	Bag filter
6.	Tray Dryer (192 Trays x 5)	Diesel 1000 L/Day	8	0.45	PM < 150mg/m <sup>3</sup>	Bag filter
7.	Spray Dryer (0.75 TPH x 2)	Diesel 1000 L/Day	15	0.45	PM < 150 mg/m <sup>3</sup>	Bag filter, MCS
8.	D G Set (Stand by)	Diesel	12	0.2	PM < 150mg/m <sup>3</sup> SO <sub>2</sub> < 100 ppm NO <sub>x</sub> < 50 ppm	--

**(A) Process Emissions**

1.	Glass Lined Vessel (GLV) -1	20	0.150	NH <sub>3</sub> mg/m <sup>3</sup>	Water Scrubber
2.	Glass Lined Vessel (GLV)-2	15	0.150	HCl mg/m <sup>3</sup>	Water Scrubber and Caustic Scrubber

xvi. Details of Solid waste/ Hazardous waste generation and its management is as stated below.

S.No.	Type of waste	Hazardous waste category*	Quantity per month	Mode of storage & disposal
1.	ETP sludge	35.3	100 MT	Will be collected, stored and disposed off to TSDF Site.
2.	MEE residue	37.3	116 MT	Will be collected, stored and sent to CHWIF.

	3.	Sludge from wet scrubber	37.1	50 Kg	Will be collected, stored and disposed to an authorized TSDF site.
	4.	Process (Distillation) waste/ residue	36.1	215 MT	Will be collected, stored and sent to CHWIF.
	5.	Ammonium Carbonate Solution		2442 MT	Will be sold to authorized dealers / recyclers / used in making ammonium Sulphate under Rule 9 of Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016 within premises.
	6.	Ammonium Carbonate		850 MT	Will be sold to authorized dealers / recyclers / unsold will be destroyed by flaring.
	7.	Spent Carbon	36.2	100 kg	Will be sent to TSDF
	8.	Spent Acid	26.3		
		Dilute HCl (Pigment Green 7) (25-28%)		370 MT	Will be used in production of other products
		Dilute H <sub>2</sub> SO <sub>4</sub> (Alpha Blue) (25-30%)		1250 MT	Will be used in production of other products
		Dilute HNO <sub>3</sub> (Pigment Violet 23)		522 MT	Will be used in subsequent batches.
		Spent Phosphoric Acid (P V 19 or 122)	26.3	1504 MT	Will be sold to IFFCO under Rule 9 of Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.
		Aluminum Chloride Solution (P G 7) (28-30%)		1130 MT	Will be used in making Aluminum Hydroxide within our factory premises.
		Sodium Hypochlorite (P G 7) (10-11%)		562 MT	Will be sent to our ETP for chlorination purposes.
	9.	Used oil	5.1	0.05 MT	Will be used for low grade lubrication of machinery or will be sold to registered refiners.
	10.	Discarded drum/ containers/carboys Plastic bags/ liners	33.1	Bags: 4000 Nos. Drums: 10 Nos.	Will be reused or returned to drum sellers or will be sold to authorized dealers/recyclers.
	11.	Fly ash **	--	150 MT	Will be collected stored and given to nearest brick/cement manufacturing units.
	12.	Gypsum	--	900 MT	Will be collected stored and given to nearest cement manufacturing

unit.

**NOTE:** \* Hazardous waste (HW) category as per the Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.

\*\* Fly ash excluded from the category of Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.

xx. Following is the list of Proposed products:

Sr. No.	Name Of Product	Production Capacity (MT/Month)
<b>A</b>	<b>Synthetic Organic Chemicals</b>	
1.	Activated Copper Phthalocyanine Blue	500
2.	Copper Phthalocyanine Blue	500
3.	Alpha Blue	65
4.	Pigment Beta Blue (15:3)	300
5.	Pigment Beta Blue (15:4)	200
6.	Copper Phthalocyanine Pigment Green -7	200
7.	Pigment Violet 23	50
8.	Pigment Red 122 or Pigment Violet 19	50
9.	Sosperse 5000	50
10.	Carbazole	50
11.	Azo Pigments(Red Series -50 + Yellow Series-	100
12.	Pigment Dispersion	400
13.	Reactive Blue 21/ Turquoise Blue – G	200
14.	Reactive Blue 25/Turquoise Blue - H5G	50
15.	Direct Blue 86	100
16.	Direct Blue 199	100
17.	Ammonium Sulphate Solution	3400
18.	Ammonium Sulphate	451
19.	Aluminium Hydroxide	193
<b>B</b>	<b>Agro Chemicals Technical</b>	
1.	Copper Sulphate Technical	500
2.	Copper Sulphate (Basic) / Tribasic Copper	200
3.	Bordeaux Mixture Tech	200
4.	Copper Oxychloride Tech	800
5.	Copper Hydroxide Tech	100
6.	Cuprous Oxide Tech	400

xxi. Following by-products will be used / sold as per Rule 9 of Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.

Sr.No.	By Product	MT/Month
1.	Ammonium Carbonate (100 %)	850
2.	Ammonium Carbonate Solution	2442
3.	Dilute HCl	370
4.	Sodium Hypochlorite Solution	562

	<p>The EAC has deliberated on the proposal. The EAC opinioned that the baseline data collected during October 2015 to December 2015 can be considered for analysing the impact of the proposed project, though the ToR is issued afterwards.</p> <p><b>The EAC after detailed deliberation has recommended the project for environmental clearance 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>PP shall ensure proper treatment of the effluents before discharging into the sea. Discharge of effluent shall be done through authorized agency only.</li> <li>As proposed, 15 m width green belt shall be developed along the periphery of the plant with three layers of trees. At least 33 % of the area shall be developed as green area with trees.</li> <li>Continuous online (24 x7) monitoring system to be installed in the unit. Data to be uploaded on company's website and provided to the respective RO of MEF&amp;CC, CPCB and SPCB.</li> <li>Fresh water requirement shall be restricted to 950 KL/Day.</li> <li>Coal/Briquette/ Natural gas may be used as fuel. If Coal is used as fuel, then coal having sulphur content less than 0.5 % only shall be used.</li> <li>Smart energy conservation equipments (like LED/solar light) shall be installed in the factory and premises.</li> <li>20 % of the total power requirement shall be produced from solar power/renewable energy sources.</li> <li>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.</li> <li>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.</li> <li>Solid Waste shall be handled as per the provisions of the Solid Waste Management Rules, 2016 and necessary permissions shall be obtained under the said rules.</li> <li>Unit shall have an environment management cell with full fledged laboratory and an Environmental Manager having post graduate/graduate qualification in Environmental Sciences/Environmental Engineering.</li> <li>Enterprises Social Commitment (ESC) plan shall be implemented with atleast 2.5 % of the expansion cost. As proposed by the PP, education scholarship of Rs. 1000/month may be given to school girls (of the BPL families). The scholarship shall be distributed through schools only.</li> </ol>
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### **Reconsideration of EC**

25.7.10	<p><b>Modernization with Change in Product mix of existing manufacturing facility for Synthetic organic chemicals and Specialty Chemicals (740 TPM) at Plot Nos: 1-7 &amp; 26-31, MIDC Industrial Area, Dhatavvillage, Tal- Roha, Dist- Raigad, Maharashtra by Deepak Nitrite Limited.- EC Reg. [ IA/MH/IND2/63448/2016, J- 11011/363/2016-IA.II(I)]</b></p> <p>Member Secretary informed the EAC that the proposal was earlier considered in the 23<sup>rd</sup> EAC meeting held during 3-5 May, 2017. The EAC desired to have the following additional information/details:</p> <ol style="list-style-type: none"> <li>Risk assessment to be done by 3D model.</li> <li>Report on Prediction of Ground Level Concentrations of Air Pollutants to be submitted.</li> </ol>
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3. List of pollution control equipments w.r.t. each pollution source to be submitted.
4. Commitment to not store locally available raw materials more than 3 days.
5. Make an ESR plan for 5 years @ 5 % of the project cost with the consultation of nearby villagers.

Thereafter, the Project Proponent and the accredited Consultant Goldfinch Engineering Systems Private Limited, Thane made a detailed presentation on the salient features of the project and informed that:

- i. The proposal is for environmental clearance for Modernization with Change in Product mix of existing manufacturing facility for Synthetic organic chemicals and Specialty Chemicals (740 TPM) at Plot Nos: 1-7 & 26-31, MIDC Industrial Area, Dhatav village, Tal- Roha, Dist- Raigad, Maharashtra by Deepak Nitrite Limited.
- ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 17<sup>th</sup> meeting held on 26<sup>th</sup> December, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued vide Ministry's letter dated 28<sup>th</sup> February 2017.
- iii. 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 non functioning of SEIAA Maharashtra, the project is considered as category 'B' and appraised at Central level by Expert Appraisal Committee.
- iv. The unit was set up in 1992 prior to EIA notification, 1994. Unit has valid consent to operate.
- v. Existing land area is 26624m<sup>2</sup>. No additional land will be used for proposed modernization. Industry has developed Greenbelt in an area of 9.7 % area, i.e. 2581m<sup>2</sup> out of 26624 m<sup>2</sup> of area of the project. In addition, PP has developed green belt area (5400 m<sup>2</sup>) at another plot S. No : 21, 171 & 206 located at about 1 km distance in the same MIDC, Area. PP also proposes to develop 4300 m<sup>2</sup> green belt in its another plot 53 A at 1.5 Km distance from the existing site. Thus the total green belt proposed is 12281 m<sup>2</sup> which is in compliance to the norms of 33%. The estimated project cost is Rs 38.68 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs 3.41 Cr and the Recurring cost (operation and maintenance) will be about Rs 27 lakhs per annum. Employment is provided to 220 persons directly and to 102 persons indirectly. Industry proposes to allocate Rs 95lacs @ of 2.5 % towards Corporate Social Responsibility. No National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, wildlife Corridors etc. lie within 10 km distance from the project site. Kundalika river is flowing at a distance of 1 km in North Direction.
- vi. Ambient air quality monitoring was carried out at 8 locations during March to May 2016 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (42.79 µg/m<sup>3</sup>-48.43 µg/m<sup>3</sup>), PM<sub>2.5</sub> (21.40 µg/m<sup>3</sup>-26.22 µg/m<sup>3</sup>), SO<sub>2</sub> (14.7 µg/m<sup>3</sup>-24.3 µg/m<sup>3</sup>) and NO<sub>2</sub> (17.07 µg/m<sup>3</sup>-26.81 µg/m<sup>3</sup>). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- vii. Total water requirement is 519m<sup>3</sup>/day of which fresh water requirement of 519m<sup>3</sup>/day and will be met from MIDC Dhatav.
- viii. Treated effluent of 243 m<sup>3</sup>/day will be treated through ETP having primary and secondary treatment. High TDS stream will be treated separately in MEE. Effluent treated to MPCB norms is being disposed to CETP Roha for onward discharge to Arabian sea.



- ix. Power requirement after modernization will be 2625KVA and will be met from Maharashtra State power distribution corporation limited (MSPDCL).
- x. Existing unit has 3 DG sets of 750 KVA, 750 KVA and 500 KVA capacities, as standby. These may be used during power failure as per requirement. No DG sets are required additionally. Stack (height = 4.5 m) has been provided as per CPCB norms
- xi. Existing unit has one no 8 TPH steam Boiler using Indian/Imported coal. Additional 8 TPH boiler is stand by in which F.O is used. Unit has a Thermopac of capacity 6 Lac Kcal/hr where Indian/Imported coal is used. In addition, unit has two numbers of 4 Lac Kcal/hr thermopacs for which F.O is being use. These are standby Thermopac. Cyclone separator with bag filter and stack of height of 34m provided as APC.
- xii. Details of Process emissions generation PM<sub>10</sub>, SO<sub>2</sub> and process emissions and its management.

	Equipment	Fuel	Control	Emission	Stack height
Particulate emissions	Boiler -1 (8-TPH)	Coal	Cyclone with Bag filter	9.88 TPD	34 m Common
	Thermopac 6 lac Kcal/hr	Coal			
	Boiler-1(8-TPH) Standby	FO	stack	Nil	24.5 m
	Thermopac 4 lac Kcal/hr	FO			
	Thermopac 4 lac Kcal/hr	FO	stack	Nil	20 M
SO <sub>2</sub> emission	Boiler -1	Coal		0.65 TPD	
	Boiler -1 Standby	F O		0.72 TPD	
	Thermopac 6 lac Kcal/hr	Coal	stack	0.16 TPD	34 m
	Thermopac4 lac Kcal/hr	F O	stack	0.16 TPD	
	Thermopac4 lac Kcal/hr	F O		0.16 TPD	
Process Emissions	Nitration		Scrubber-1		8.5 m
D G set	750 KVA 2 nos, 500 KVA 1 no		Stack	1 Kg/hr, 1 kg/hr 0.65 kg/hr	4.5 m

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

- Used spent oil of 91 MTPA will be sale to Authorized re processor.
- Spent Chemical / Acid of 836 MTPA will be sale to Authorized re processor.
- Spent Chemicals of 91 MTPA will be Sale to Authorized re processor
- Discarded containers/barrels/liner of 25 Nos. will be dispose to CHWTSDF ,Taloja/ Sale to Authorized party
- Chemical sludge from waste water treatment of 50 MTPA will be dispose to CHWTSDF ,Taloja
- Spent catalyst of 0.07 MTPA will be send back to Authorized party
- Distillation residue from contaminated organic solvents of 28 MTPA will

be dispose to CHWTSDF ,Taloja  
(viii). MEE Salts of 1778 MTPA will be dispose to CHWTSDF ,Taloja / Sale

xiv. Non- hazardous waste generation and its management

- (i). Ash from boiler of 2.5 TPD will be Sale to brick manufacturer.
- (ii). Insulating Material of 2 T/A will be Sale or dispose to CHWTSDF ,Taloja
- (iii). Glass ware / Broken Discarded Glass of 1 T/A will be Sale or dispose to CHWTSDF ,Taloja

xv. Public Hearing for the proposed project has been exempted as as the project is located in the notified Industrial area, MIDC Dhatav

xvi. Following are the list of existing and proposed products and by products:

**Existing and proposed product list:**

S. No	Existing Product mix	Existing Capacity TPM	Proposed Product Mix	Proposed Capacity TPM
1.	Para Cumidine(PC) or 2 Ethyl Hexy Nitrite	200	Para Cumidine(PC) or 3 Amino BenzotriFlouride (3ABTF)	200
2.	Ortho Anisidine(OA)or Tri Methyl Hydro Quinine	75	Ortho Anisidine(OA) or Tri Methyl Hydro Quinine(TM HQ)	50
3.	2,4 Xylidine and 2,6 Xylidine or nitrobenzene or 2,3 Xylidine and 3,4 Xylidine	250	2,4 Xylidine and 2,6 Xylidine or 2,3 Xylidine and 3,4 Xylidine or 2,5 Xylidine and 2,3 xyleneol2,4 and 2,5 Xyleneol	250
4.	Meta Cholro Aniline or Diphenyl Amine Derivatives	50	Diphenyl Amine Derivatives	50
5.	Crystal Diethyl Meta Amino Phenol(Cryst. DEMAP) or Dibutyl Para Phenylene Di amine (DBPPDA )	55 50	Crystal Diethyl Meta Amino Phenol(Cryst. DEMAP) or Dibutyl Para Phenylene Di amine (DBPPDA or 3 NAP (3 Nitro AcetoPhenone)/ or 3AAP(3Amino AcetoPhenone) or 3 HAP (3 HydroxyAcetoPhenone)	40
6.	TFMAP(3-(trifloromethyl)acetophenone MePPDASulphate (2 Methyl P-phenyleneDiamineSulphate) or 1,3 CHD(1,3 Cyclohexane dione)' or	55 50 22 10	TFMAP(3-(trifloromethyl)acetophenone	80

	4-NAX (Benenamine, N-(1-ethyloropy)-3-4-dimethyl)			
7.	Pilot Plant Products 1,3 CHD(1,3 Cyclohexane dione) and SMIA(synMethoximino (2 furanyl)acetic acid	5	2 MePPDASulphate (2 Methyl P-phenyleneDiamineSulphate ) or 1,3 CHD(1,3 Cyclohexane dione)	60
8.	--	--	Pilot Plant Products ( synthetic Organic Chemicals)	10
	<b>Total</b>	<b>822</b>		<b>740</b>

**List of By-products:**

S. No.	Name of Existing by Product	Existing Capacity TPM	Name of Proposed by Product Mix	Proposed Capacity TPM
1.	Ortho Nitro Cumene(from p-cumidiene)	150	Ortho Nitro Cumene(from p-cumidiene)	150
2.	PPO (Poly phenylene Oxide) from product tri methyle hydro quinine	201	2 NBTF(2 Nitro BTF)/2 ABTF (2 Amino BTF)/ 4 ABTF (4 Amino BTF) from 3 Amino BTF	41
3.	Ortho Toludine(OT)	20	PPO (Poly phenylene Oxide)	135
4.	--	--	OHBTF/OA BTF from TFMAP	20
5.	--	--	Ortho Toludine(OT)	25
	<b>Total</b>	<b>371</b>	<b>Total</b>	<b>371</b>

The EAC has deliberated on the proposal and additional documents/information submitted by the PP. The EAC has found the additional information and documents adequate and satisfactory.

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

**Specific Conditions:**

- (i). As assured, locally available raw materials shall not be stored for more than three days.
- (ii). Green belt of atleast 10 m width shall be developed along the periphery of the plant (excluding the existing building/storage area) with three layers of trees. At least 33 % of the area shall be developed/compensated as green area with trees.
- (iii). Continuous online (24 x7) monitoring system to be installed in the unit. Data to be uploaded on company's website and provided to the respective RO of MEF&CC, CPCB and SPCB.
- (iv). Fresh water requirement shall be restricted to 420m<sup>3</sup>/Day.
- (v). Smart energy conservation equipments (like LED/solar light) shall be installed in the

	<p>factory and premises.</p> <p>(vi). 25 % of the total lighting requirement shall be produced from solar power/renewable energy sources.</p> <p>(vii). 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>(viii). 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.</p> <p>(ix). Solid Waste shall be handled as per the provisions of the Solid Waste Management Rules, 2016 and necessary permissions shall be obtained under the said rules.</p> <p>(x). Unit shall have an environment management cell with full fledged laboratory and an Environmental Manager having post graduate/graduate qualification in Environmental Sciences/Environmental Engineering.</p> <p>(xi). Enterprises Social Commitment (ESC) plan shall be implemented with atleast 5 % of the expansion cost. Drinking water facility (RO plant with modern facilities like activated carbon, chlorination etc) shall be provided to the nearby villages. As proposed by PP, mobile ambulance with basic medical facilities shall be provided for the benefit of atleast 3 villages.</p>
25.7.11	<p><b>Modernization of existing project with change in product mix for manufacture of synthetic organic chemicals and allied products at plot nos K-09 and K-10 in MIDC Taloja, District Raigad, Maharashtra by Deepak Nitrite Limited-reg EC [IA/MH/IND2/61070/2016, J-11011/367/2016-IA.II(I)]</b></p> <p>Member Secretary informed the EAC that the proposal was earlier considered in the 23<sup>rd</sup> EAC meeting held during 3-5 May, 2017. The EAC desired to have the following additional information/details:</p> <ol style="list-style-type: none"> <li>1. Risk assessment to be done by 3D model.</li> <li>2. Report on Prediction of Ground Level Concentrations of Air Pollutants to be submitted.</li> <li>3. List of pollution control equipments w.r.t. each pollution source to be submitted.</li> <li>4. Commitment to not store locally available raw materials more than 3 days.</li> <li>5. Make an ESR plan for 5 years @ 5 % of the project cost with the consultation of nearby villagers.</li> </ol> <p>Thereafter, the Project Proponent and the accredited Consultant Goldfinch Engineering Systems Private Limited Thane 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 environmental clearance for Modernization of existing project with change in product mix for manufacture of synthetic organic chemicals and allied products at plot nos K-09 and K-10 in MIDC Taloja, District Raigad, Maharashtra by Deepak Nitrite Limited.</li> <li>ii. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 17<sup>th</sup> meeting held on 27<sup>th</sup> December, 2016 and recommended Terms of References (ToRs) for the Project. The ToR has been issued by Ministry vide letter dated 28<sup>th</sup> February 2017.</li> <li>iii. 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 non functioning of SEIAA</li> </ol>

	Maharashtra, the project is considered as category ‘B’ and appraised at Central level by Expert Appraisal Committee.																
iv.	Existing land area is 13109.00m <sup>2</sup> , No additional land required. Industry has developed Greenbelt in an area of 1148 m <sup>2</sup> the project. Additionally 3180 m <sup>2</sup> greenbelt area will be developed outside plant. Total greenbelt area will be 4328 m <sup>2</sup> . The estimated project cost is Rs.41.24Cr, including existing investment of Rs 33.78 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 1.26 Cr and the Recurring cost (operation and maintenance) will be about Rs. 10.10lacs per annum. Employment is provided to 145 persons. Additional manpower is not required. Industry proposes to allocate Rs. 117 lakh @ of 2.5 % towards Corporate Social Responsibility. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance from the project site. River Kasardi is flowing at a distance of approx. 400 m in south direction.																
v.	Ambient air quality monitoring was carried out at 8 locations during December 2015 to February, 2016 and the baseline data indicates that ranges of concentrations of PM <sub>10</sub> (42.5 - 64.5 µg/m <sup>3</sup> ), PM <sub>2.5</sub> (1.8 - 32.4 µg/m <sup>3</sup> ), SO <sub>2</sub> (0.22 - 3.8 µg/m <sup>3</sup> ) and NO <sub>2</sub> (0.07 - 1.8 µg/m <sup>3</sup> ) respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).																
vi.	Total fresh water requirement is 319 m <sup>3</sup> /day and will be met from MIDC water supply.																
vii.	Trade effluent of 75 CMD is being treated in full fledged ETP Plant having Primary, Secondary, Tertiary treatment. Effluent treated to MPCB norms is being disposed to CETP Taloja for discharge 7 km inside sea.																
viii.	Power requirement after modernization will be 1228 kW including existing and will be met from Maharashtra State power Distribution Corporation Limited (MSPDCL). Existing unit has one DG set of 750 KVA capacity, No more DG sets will be required in addition to the existing DG set.																
ix.	Existing unit has 2 nos. of boilers having capacities 4 TPH & 5 TPH, fired on FO. One Thermopack of 2 lac.kcal/hr. fired on FO also available. Thermopack & 5 TPH boiler has common stack of 32 m. For 4 TPH boiler separate 32 m. stack is provided.																
x.	Details of Process emissions generation and its management are as follows: <table><tr><th>S. No.</th><th>Equipment</th><th>Control</th><th>Stack height</th></tr><tr><td>1</td><td>Hydrogenator 1</td><td>Scrubber-1</td><td>25 m</td></tr><tr><td>2</td><td>Hydrogenator 2</td><td>Scrubber-2</td><td>25 m</td></tr><tr><td>3</td><td>Hydrogenator 3</td><td>Scrubber-3</td><td>25 m</td></tr></table>	S. No.	Equipment	Control	Stack height	1	Hydrogenator 1	Scrubber-1	25 m	2	Hydrogenator 2	Scrubber-2	25 m	3	Hydrogenator 3	Scrubber-3	25 m
S. No.	Equipment	Control	Stack height														
1	Hydrogenator 1	Scrubber-1	25 m														
2	Hydrogenator 2	Scrubber-2	25 m														
3	Hydrogenator 3	Scrubber-3	25 m														
xi.	Details of Solid waste/ Hazardous waste generation and its management are as follows: <ul style="list-style-type: none"><li>Spent Lube oil of 21 TPA will be Sale to Authorized recycler</li><li>Distillation residue of 70 TPA will be Disposal to MWML</li><li>Spent Chemicals of 5 TPA will be Disposal to MWML</li><li>ETP Sludge of 4 TPA will be Disposal to MWML</li><li>Flue gas cleaning residue of 8 TPA will be Disposal to MWML</li></ul>																
xii.	Public Hearing for the proposed project has been exempted as the project is located in Notified Industrial area, MIDC Taloja.																
xiii.	Following are the list of existing products, proposed products and by products:																
	<b>Existing Product being manufactured:</b>																

Sr. No.	Products	Quantity (TPM)
1	<b>Aromatic Amines Like:</b> Toulidines (Ortho/ Meta/Para) Xylidines, O-anisidine, Cumidines (Ortho/ Para) Phnylene, Di-amine (Ortho/ Para) Chloro Aniline Meta (Ortho/Para) Dimethyl Amino Benzoic Acid, Dimethyl Cyclohexanone	1500
	<b>Total</b>	<b>1500</b>

**Proposed Products and their quantum of production:**

S. No.	Products	Quantity (TPM)
1	Toulidines (Ortho / Meta / Para)	150
2	Xylidines (2,3/2,4/2,5/2,6/3,5) OR Xylidine Derivatives as Xylenols (2,3/2,4/2,5/2,6)	295
3	Cumidines (Ortho / Para)	270
4	Phnylene Di-amine (Ortho / Para)	50
5	Dimethyl Cyclohexanone (DMCH)	425
6	3 Amino Benzo Trifluoride (3-ABTF)	150
7	Benzhydrol OR	100
8	Cyclohexenylethylamine (CHEA) OR	
9	Homoveratrylamine (HVA) OR	
10	4-(2-Methoxyethyl) Phenol.(4 MEP)	
	<b>Total</b>	<b>1440</b>

**By-products**

Sr. No.	Name of the By products	Quantity (TPM)
1.	2 Aminobenzotrifluoride (2ABTF)	24
2.	4 Aminobenzotrifluoride (4ABTF)	36
	<b>Total</b>	<b>60</b>

The EAC has deliberated on the proposal and additional documents/information submitted by the PP. The EAC has found the additional information and documents adequate and satisfactory. The EAC has also considered the validity of the AAQ data collected and accepted the data. After considering the water balance and recovery efficiency, the EAC suggested that fresh water requirement shall be reduced by 15 %.

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

**Specific Conditions:**

- (i). As assured, locally available raw materials shall not be stored for more than three days.

	<p>(ii). Green belt of atleast 10 m width shall be developed along the periphery of the plant (excluding the existing building/storage area) with three layers of trees. At least 33 % of the area shall be developed/ compensated as green area with trees.</p> <p>(iii). PP shall plant and maintain 10000 trees/year for five years in the nearby villages/areas</p> <p>(iv). Continuous online (24 x7) monitoring system to be installed in the unit. Data to be uploaded on company's website and provided to the respective RO of MEF&amp;CC, CPCB and SPCB.</p> <p>(v). Fresh water requirement shall be restricted to 271 m<sup>3</sup>/day.</p> <p>(vi). Smart energy conservation equipments (like LED/solar light) shall be installed in the factory and premises.</p> <p>(vii). PP shall meet part of lighting requirement from solar power/renewable energy sources.</p> <p>(viii). 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>(ix). 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.</p> <p>(x). Solid Waste shall be handled as per the provisions of the Solid Waste Management Rules, 2016 and necessary permissions shall be obtained under the said rules.</p> <p>(xi). Unit shall have an environment management cell with full fledged laboratory and an Environmental Manager having post graduate/graduate qualification in Environmental Sciences/Environmental Engineering.</p> <p>(xii). Enterprises Social Commitment (ESC) plan shall be implemented with atleast 5 % of the expansion cost. Drinking water facility (RO plant with modern facilities like activated carbon, chlorination etc) shall be provided to the nearby villages. In addition, education scholarship of Rs. 1000/month shall be given to school girls (of the BPL families). The scholarship shall be distributed through schools only.</p>
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## 25.8 Terms of Reference (TOR)

25.8.1	<p><b>Barmer- Pali Natural Gas Transportation pipe line taking off from existing Cairn Raageshwari Dispatch Terminal in district Barmer to Sevtalav in District Pali covering length of 180.057 Km and 18" Dia with associated facilities by M/s GSPL India Gasnet Limited – reg. TOR [IA/RJ/IND2/65286/2017, IA-J-11011/312/2017-IA-II(I)]</b></p> <p>The project proponent made a detailed presentation on the proposal and informed that:</p> <ol style="list-style-type: none"> <li>The proposal is for Barmer- Pali Natural Gas Transportation pipe line taking off from existing Cairn Raageshwari Dispatch Terminal in district Barmer to Sevtalav in District Pali covering length of 180.057 Km and 18" Dia with associated facilities by M/s GSPL India Gasnet Limited.</li> <li>The associated facilities are : <ol style="list-style-type: none"> <li>Dispatch Terminal (DT) at Rageshwari: 01 No.,</li> <li>Sectionalized Valve (SV) Station: 04 No.</li> <li>Sectionalized Valve (SV) Station with Tap Off for proposed Jalore Spurline: 01 No.,</li> </ol> </li> </ol>
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	<p>(d). Sectionalized Valve (SV) Station for proposed Sirohi Spurline: 01No.</p> <p>(e). Receiving Terminal-Pali: 01No.(IP-01 of Proposed MBPL Main line)</p> <p>iii. All Oil &amp; 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.</p> <p>iv. It is reported that a portion of proposed pipeline (13.7 km) is passing through the vicinity of 10 km boundary of Kumbhalgarh Wildlife Sanctuary.</p> <p>v. It is reported that the proposed pipeline is falling far outside the ESZ area as per Government of Rajasthan draft notification dated 31.03.2011 and from Mt Abu and Todgarh Raioli WLS Sanctuary ESZ (MoEFCC draft notification).</p> <p>vi. The PP vide letter dated 19.05.2016 had applied for EC/NOC from Ministry.</p> <p>vii. The EAC in its 12<sup>th</sup> meeting held during 24.08.2016 has noted that being the project an extension of MBPL network, the clarifications issued earlier by Ministry vide letter dated 23.04.2013 for MBPL main line shall be applicable to Barmer Pali pipeline being an extension.</p> <p>viii. PP has obtained various statutory permissions and proceeded for implementation based of EAC's observation.</p> <p>ix. Ministry vide letter dated 16.01.2017 has directed PP to obtain EC as it is falling within the vicinity of 10 km boundary of Kumbhalgarh Wildlife Sanctuary. Accordingly, the PP has again submitted the application for EC.</p> <p>x. PP has informed that they have prepared EIA and Risk Assessment and Disaster Management Plan as per Standard ToR in consultation with NEERI.</p> <p>xi. PP has also obtained the recommendation of Standing Committee of National Board for Wildlife in its meeting held on 02<sup>nd</sup> March, 2017 under the Chairmanship of Hon'ble Minister (EF&amp;CC), for the proposed project. The SC NBWL has recommended the project considering its utility for energy sector.</p> <p>EAC has deliberated on the proposal. EAC noted that the proposed pipeline is falling about 5 km distance outside the proposed ESZ area. The PP vide letter dated 19.05.2016 had also applied for EC/NOC from the Ministry. The EAC in its 12<sup>th</sup> meeting had noted that, being the project an extension of MBPL network, the clarifications issued earlier by Ministry vide letter dated 23.04.2013 for MBPL main line shall be applicable to Barmer Pali pipeline being an extension. EAC has also noted that the present proposal does not attract the provision of the EIA Notification, 2006.</p> <p><b>EAC after detailed deliberation has recommended that the present proposal does not attract the provisions of EIA Notification and thus does not require EC.</b></p>
25.8.2	<p><b>Drilling of 6 Development Wells; Conversion of 3 Exploratory Wells to Development wells; Up -gradation of Gas Collection System (GCS) at Gamnewala and Laying of 10" Pipeline (42 KM length) from Chinewala Tibba field to GCS at Gamnewala, Jaisalmer, Rajasthan by M/s ONGC Ltd.- Reg. TOR [IA/RJ/IND2/65373/2017, IA-J-11011/314/2017-IA-II(I)]</b></p> <p>The Project Proponent made a detailed presentation on the salient features of the project and informed that:</p> <p>i. The proposal is for Terms of Reference for Drilling of 6 Development Wells; Conversion of 3 Exploratory Wells to Development wells; Up -gradation of Gas Collection System (GCS) at Gamnewala and Laying of 10" Pipeline (42 KM length) from Chinewala Tibba</p>



field to GCS at Gamnewala, Jaisalmer, Rajasthan by M/s ONGC Ltd.

- ii. All the projects related to Offshore and onshore oil and gas exploration, development & production are listed at S.N. 1(b) under category "A" and appraised at Central level by Expert Appraisal Committee (EAC).
- iii. The proposed drilling depth of each new wells will be ranging between 2000-2200 m.
- iv. Total approximate cost of the project is Rs. 283.92 crore.
- v. Proposed project has no direct employment potential. Indirect employment is approximately of 30-40 personnel.
- vi. The project is outside the national parks, wild life sanctuaries or forest land.
- vii. The coordinates of the locations are as follows:

**Drilled exploratory wells to be converted to development wells**

Wells	Latitude	Longitude
CT-1	27°26'18.2033"N	70°00'04.6028"E
CT-2	27°27'05.6001"N	70°00'26.9314"E
CT-4	27°30'07.6177"N	70°01'06.6002"E

**Proposed development wells**

Wells	Latitude	Longitude
ICT-1	27°26'44.4178"N	70°00'37.5971"E
ICT-2	27°25'52.0710"N	70°00'29.8473"E
ICT-3	27°29'47.9111"N	70°01'28.3542"E
ICT-4	27°29'26.9431"N	70°01'15.4633"E
ICT-5	27°30'21.8336"N	70°01'30.5054"E
ICT-6	27°29'36.3555"N	70°01'51.8742"E

**GCS Gamnewala**

Installation	Latitude	Longitude
GCS Gamnewala	27°29'06"N	70°16'41"E

- viii. Total estimated water requirement is 25 KLD which will be met from nearby surface sources like canals.
- ix. Treated effluent of proposed GCS will be treated through Effluent Treatment Plant in the GCS.
- x. The power requirement for the exploratory/development well will be met through the operation of DG sets. Fuel requirement will be 2-5 KLD of diesel during drilling phase.
- xi. The drill cuttings are disposed in HDPE lined secured pit and will be subsequently covered to ensure conformance with CPCB designated Best Use Standards and Oil Drilling & Gas Extraction Industry Standards and guidelines provided by the MoEFCC under the Hazardous Wastes (Management, Handling & Trans boundary Movement) Rules, 2016. The mud/drilling fluid to be used is water based, as such drilled cuttings so generated would be non-hazardous.

EAC has deliberated on the proposal. The **EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry, for preparation of**

	<b>EIA/EMP report. Public hearing has to be conducted as per the provisions of EIA Notification, 2006.</b>																												
25.8.3	<p><b>Expansion of Isolated Storage terminal with additional One storage tank for MS (9000 KL capacity) at IOCL- Tikri Kalan Terminal, NH-10, Tikri Kalan, Ghevra Mode, New Delhi-110041 by M/s. Indian Oil Corporation Limited– Reg. TOR [IA/DL/IND2/64278/2017, IA-J-11011/287/2017-IA-II(I)]</b></p> <p>The Project proponent and the accredited Consultant M/s. Eco Chem Sales &amp; Services, Surat, made a detailed presentation of the proposal and informed that:</p> <ol style="list-style-type: none"> <li>The proposal is for Expansion of Isolated Storage terminal with additional One storage tank for MS (9000 KL capacity) at IOCL- Tikri Kalan Terminal, NH-10, Tikri Kalan, Ghevra Mode, New Delhi by M/s. Indian Oil Corporation Limited.</li> <li>All Isolated Storage &amp; Handling of Hazardous Chemicals (As per threshold planning quantity indicated in column 3 of schedule 2 &amp; 3 of MSIHC Rules 1989 amended 2000) projects are listed at S.N. 6(b) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'B'. However, considering the, general Condition (ie. Location of project within 5 km radius from interstate boundary), the project is considered as Category A and appraised at Central Level by Expert Appraisal Committee (EAC).</li> <li>Existing land area is 161874 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 6070m<sup>2</sup> out of 161874m<sup>2</sup> of area of the project. The estimated project cost is Rs.17.5 Cr. Total employment will remain same after proposed expansion (700). No National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. A canal is at 6.45 km in SE direction from the project site.</li> <li>Total water requirement is 20 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.</li> <li>It is a zero liquid discharge as the terminal is providing only storage and handling services, there will be no generation of industrial effluent. Domestic waste water of 5m<sup>3</sup>/day will be disposed off in soak pit through septic tank.</li> <li>Power requirement for the terminal is 1000 KVA (Existing 1000 KVA+ Proposed Nil) supplied by power grid. As a backup plan during emergency, terminal equipped with 02 Nos. of 400 KVA &amp; 01 No. of 82.5 KVA DG Sets. Stack (height 20 meters) is provided as per CPCB Norms to the existing DG Set of 2 x 400 KVA &amp; 1 x 82.5 KVA. There is no additional power requirement for proposed expansion and additional DG Set will not be proposed.</li> <li>As the terminal is providing only storage and handling services, there is no generation of process emission.</li> <li>Details of Solid waste/ Hazardous waste generation and its management.</li> </ol> <table border="1"> <tr> <th rowspan="2">S. No.</th><th rowspan="2">Hazardous Waste</th><th rowspan="2">Hazardous Waste Category</th><th colspan="3">Quantity in MTPA</th><th rowspan="2">Management</th></tr> <tr> <th>Existing</th><th>Proposed</th><th>Total</th></tr> <tr> <td>1</td><td>Used Oil</td><td>5.1</td><td>0.52</td><td>0</td><td>0.52</td><td rowspan="2">Disposed to authorized vendor /agency</td></tr> <tr> <td>2</td><td>Tank cleaning</td><td>3.3</td><td>6</td><td>0</td><td>6</td></tr> </table>						S. No.	Hazardous Waste	Hazardous Waste Category	Quantity in MTPA			Management	Existing	Proposed	Total	1	Used Oil	5.1	0.52	0	0.52	Disposed to authorized vendor /agency	2	Tank cleaning	3.3	6	0	6
S. No.	Hazardous Waste	Hazardous Waste Category	Quantity in MTPA			Management																							
			Existing	Proposed	Total																								
1	Used Oil	5.1	0.52	0	0.52	Disposed to authorized vendor /agency																							
2	Tank cleaning	3.3	6	0	6																								

	Sludge						
ix. Details of storage &handling for existing and additional products/ Hazardous chemicals are given as below:							
S. No.	Material	Existing		Additional		Total	
		Storage Capacity (KL)	Nos. of Storage Tanks	Storage Capacity (KL)	Nos. of Storage Tanks	Storage Capacity (KL)	Nos. of Storage Tanks
1	MS	5203	4	9000	1	23830	5
		5203					
		2212					
		2212					
2	HSD	3422	7	-	-	22879	7
		3422					
		3422					
		3754					
		3754					
		3754					
1351							
3	SKO	1351	1	-	-	1351	1
4	Ethanol	200	3	-	-	600	3
		200					
		200					
Total		39660	15	9000	1	48660	16
EAC has deliberated on the proposal. EAC noted that the proposed project falls in Category B. However, as the site is located within 5 km distance from the State of Haryana, it is considered as category A project. <b>The 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 has to be conducted as per the provisions of EIA Notification, 2006.</b>							
25.8.4	<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>  Member Secretary informed the EAC that the proposal was earlier considered by the EAC in its 24 <sup>th</sup> meeting held during 14-16 June, 2017 and desired to have the following information: 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. ii. Details of structure/pipeline connecting Plot 1 & Plot 2. iii. Land ownership certificate from the concerned authority/letter from MSIDC. iv. PP shall submit details of site selection analysis and also the details of studies conducted for alternate site analysis. v. Video coverage of the area to understand the real habitat. 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.						

Thereafter, the project proponent and the accredited consultant M/s Engineers India Limited made a detailed presentation on the project and informed that, the additional information/documents sought by the EAC has been submitted and informed the following:

**1. 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.**

- i. As per Office Memorandum (OM) (J.21011/58/2010-IA-I dated 17<sup>th</sup> October 2013) vide Sl. No.8 (*Page of 2*) all villages falling in Taluka of Rajapur was identified for moratorium.
- ii. Later on, MOEFCC vide its office memorandum (J.21011/58/2010-IA-I dated 25<sup>th</sup> July 2014), has decided to lift the moratorium from the villages falling in non-ecologically sensitive area of the Taluks mentioned in above OM dated 17<sup>th</sup> October 2013, i.e. for Rajapur.
- iii. However, moratorium will continue for the list of villages of Ratnagiri district covered in the ESA identified by HLWG as annexed to Directions issued on 13<sup>th</sup> November 2013.
- iv. The proposed refinery site will be developed in two plots namely plot-1 and plot -2. These two plots fall under Rajapur Taluka of Ratnagiri district. List of villages falling in plot-1 & plot-2 is given in Table 1.0:

**Table 1.0: List of villages falling in the proposed site**

Sr No.	Name of Village	Taluka	District	Area (in Hectre)
1	Karshingewadi	Rajapur	Ratnagiri	336.896
2	Sagve	Rajapur	Ratnagiri	121.048
3	Vilye	Rajapur	Ratnagiri	471.102
4	Dattawadi	Rajapur	Ratnagiri	292.463
5	Palekarwadi	Rajapur	Ratnagiri	109.692
6	Katradevi	Rajapur	Ratnagiri	204.687
7	Karivane	Rajapur	Ratnagiri	38.704
8	Chouke	Rajapur	Ratnagiri	281.377
9	Nanar	Rajapur	Ratnagiri	714.923
10	Upale	Rajapur	Ratnagiri	473.06
11	Padve	Rajapur	Ratnagiri	306.116
12	Sakhar	Rajapur	Ratnagiri	364.698
13	Taral	Rajapur	Ratnagiri	723.011
14	Gothivare	Rajapur	Ratnagiri	1015.968
			Total Land in Hectre	5453.745
			In Acre	13470.75

All the above villages are not listed in the annexed list of villages of Rajapur Taluka. Further MOEFCC issued the following draft notifications indicating the prohibition of projects in eco-sensitive villages in Western Ghats (Gujarat, Maharashtra, Goa, Karnataka and Tamilnadu): All villages mentioned in Table 1.0 are not listed in the latest notification S.O. 667 E dated 27<sup>th</sup> February 2017. However, a corridor of width 200m of about 800 m long is required to connect the Plot 1 & Plot 2. This corridor is falling within Khumbhavade and Dongar villages. These villages are listed as eco-sensitive zone.

	<p><b>2. Details of structure/pipeline connecting Plot 1 &amp; Plot 2.</b></p> <p>A corridor of width 200m of about 800 m long is required to connect the Plot 1 &amp; Plot 2. This corridor will facilitate a pipeline and a connecting road between plot 1 &amp; plot 2.</p> <p><b>3. Land ownership certificate from the concerned authority/letter from MSIDC.</b></p> <p>PP has submitted the letter from MSIDC.</p> <p><b>4. PP shall submit details of site selection analysis and also the details of studies conducted for alternate site analysis.</b></p> <p>PP has submitted the summary of site selection analysis</p> <p><b>5. Video coverage of the area to understand the real habitat.</b></p> <p>Video coverage of the area is given in CD separately.</p> <p><b>6. 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.</b></p> <p>PP has agreed for the same.</p> <p>EAC has deliberated on the proposal. EAC has found the additional documents submitted by the PP are satisfactory. PP has requested the EAC to consider the utilization of baseline data available in the ENVIS website. EAC opinioned that, PP may use the ENVIS data and shall also collect fresh baseline data.</p> <p><b>The 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 has to be conducted as per the provisions of EIA Notification, 2006.</b></p>
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## 25.9 Any Other

25.9.1	<p><b>Synthetic organic chemicals manufacturing unit at 3133 to 3139, 3231 to 3245, 3330 to 3353, 3517 to 3524, GIDC, Bharuch, Gujarat by M/s P I Industry Ltd. –Terms of Reference [A/GJ/IND2/63289/2008, J-11011/308/2008-IA-II(I)]</b></p> <p>The project proponent made a detailed presentation on the proposal and informed that:</p> <ol style="list-style-type: none"> <li>PP has obtained EC for proposed Synthetic organic chemicals manufacturing unit at 3133 to 3139, 3231 to 3245, 3330 to 3353, 3517 to 3524, GIDC, Bharuch, Gujarat by M/s P I Industry Ltd during 8<sup>th</sup> December, 2008.</li> <li>As moratorium was imposed in CPA in the State, the PP has not taken up the project.</li> <li>PP has now requested to extent the validity of the EC.</li> </ol> <p>EAC has deliberated on the proposal. EAC opinioned that the validity extension is not possible and suggested PP to apply for fresh ToR. EAC after discussion has observed that, the project was unable to take up due to moratorium, and the PP may hence be given with ToR in this meeting. EAC has also accepted the request of the PP for utilization of baseline data collected during March-May, 2017 for preparation of EIA/EMP report. EAC suggested the PP to apply online for ToR.</p> <p><b>The EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry, for preparation of EIA/EMP report. EAC has recommended to exempt Public hearing 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>
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25.9.2	<p><b>Expansion of Fine Chemical Product Manufacturing Unit at 237 GIDC, Bharuch, Gujarat by M/s P I Industry Ltd.-reg. ToR[ IA/GJ/IND2/63283/ 2008, J-11011/1323/2007-IA-II]</b></p> <p>The project proponent made a detailed presentation on the proposal and informed that:</p> <ul style="list-style-type: none"><li>i. The PP has obtained EC for Expansion of Fine Chemical Product Manufacturing Unit at 237 GIDC, Bharuch, Gujarat by M/s P I Industry Ltd. vide letter dated 14<sup>th</sup> July, 2008.</li><li>ii. As moratorium was imposed in CPA in the State, the PP has not taken up the project.</li><li>iv. PP has now requested to extent the validity of the EC.</li></ul> <p>EAC has deliberated on the proposal. EAC after discussion has observed that, the project was unable to take up due to moratorium, and the PP may hence be given with ToR. EAC has also accepted the request of the PP for utilization of baseline data collected during March-May, 2017 for preparation of EIA/EMP report. EAC suggested the PP to apply online for ToR.</p> <p><b>The EAC after detailed deliberation has recommended the project for Standard ToR as available in the website of Ministry, for preparation of EIA/EMP report. EAC has recommended to exempt Public hearing 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>							
25.9.3	<p><b>PROPOSED CHANGE IN PRODUCT MIX IN SYNTHETIC ORGANIC CHEMICALS MANUFACTURING UNIT of M/s. BASF India Limited Plot No. 4B, Dahej Industrial Estate, Village: Dahej, Taluka: Vagra, Dist: Bharuch-392 130, Gujarat.- Amendment in EC [IA/GJ/IND2/64763/2012, IA-J-11011/336/2017-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 change in product mix in synthetic organic chemicals manufacturing unit at Plot. No. 4B, Dahej Industrial Estate, Village Dahej, Taluka Vagra, Dist. Bharuch – 392 130, Gujarat of M/s. BASF India ltd.</li><li>ii. PP has obtained EC earlier vide letter no. SEIAA/GUJ/EC/5(f)/2012 dated 02.04.2012 for synthetic organic chemicals manufacturing unit to M/s. BASF India Limited.</li><li>iii. Proposed land area is 2,34,400 m<sup>2</sup>.</li><li>iv. Industry has developed Greenbelt in an area i.e. 38,472 m<sup>2</sup> out of 2,34,400 m<sup>2</sup> of area of the project.</li><li>v. The estimated project cost is Rs. 2250 Lakhs.</li><li>vi. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. lies within 10 km distance.</li><li>vii. Total water requirement will be 4955 KL/Day and will be met from GIDC Water Supply.</li><li>viii. Total Treated Effluent 1250 KL/Day. After primary and secondary treatment treated effluent is sent to GIDC underground drain for its final disposal into deep sea.</li><li>ix. Power requirement will be 9000 KW and will be met from DGVCL and D.G. Sets (3 No.) of capacity 2500 KVA, 3000 KVA and 1800 KVA (emergency standby)</li><li>x. Unit has Boiler (1 no.), Thermic Fluid Heater (1 no.), Hot Air Generator (1 no.) DG Sets (3 No.) and Process Vents. Adequate air pollution control equipments are installed and adequate stacks and vents height is provided for controlling the Particulates missions.</li><li>xi. Details of Process emissions generation and its management</li></ul> <table><tr><th>Sr.</th><th>Source of Emission</th><th>Stack</th><th>Stack</th><th>Fuel</th><th>Type of</th><th>Pollution</th></tr></table>	Sr.	Source of Emission	Stack	Stack	Fuel	Type of	Pollution
Sr.	Source of Emission	Stack	Stack	Fuel	Type of	Pollution		

No		Height (meter)	Diameter (meter)	name	Emission	Control Equipment
1	Boiler	40	1.1	NG	SPM SO <sub>x</sub> NO <sub>x</sub>	-
2	Thermic Fluid Heater	35	0.45	NG	SPM SO <sub>x</sub> NO <sub>x</sub>	-
3	Hot Water Generator*	--	--	--	SPM SO <sub>x</sub> NO <sub>x</sub>	-
4	Process Vent-I (EM Plant)	15	0.15	--	SO <sub>2</sub>	Alkali Scrubber
5	Process Vent-II (EM Plant)	15	0.05	--	NH <sub>3</sub>	Alkali Scrubber & Water Scrubber
6	Process Vent-III (EM Plant)	30	0.8	--	SO <sub>2</sub>	ESP & Alkali Scrubber
7	Process Vent-IV (EM Plant)	30	0.8	--	OFF GASE	Regenerative Thermic Oxidiser
8	Process Vent-V (EM Plant)	15	0.05	--	PM	Bag Filter
9	Process Vent-VI (EM Plant)	30	0.1	--	N <sub>2</sub>	Alkali Scrubber
10	Process Vent-VII (EM Plant)	18	0.15	--	PM	Bag Filter
11	Formulation Vessels*	21	--	--	SOLVE NT FUMES	Activated Carbon Filter
12	Dust Collector-I*	23	--	--	SPM	Dust Collector
13	Dust Collector-II*	23	--	--	SPM	Dust Collector
14	Dust Collector-III*	23	--	--	SPM	Dust Collector
15	QC Fume Hood Vent*	15	--	--	SOLVE NT FUMES	Activated Carbon Filter
16	Tank Farm Vent*	11	--	--	SOLVE NT FUMES	Activated Carbon Filter
17	Steam Catch*	15	--	--	---	Activated Carbon Filter
18	Filling Line Fume Hood Vent*	15	--	--	SOLVE NT FUMES	Activated Carbon Filter

19	Dust Collector*	23	--	--	SPM	Dust Collector
20	Process Vent-III (Rector System Use)	11	0.15	--	REACT OR OFF GASES	Activated Carbon Filter
21	Process Vent-IX (Rector-1202 System House)	11	0.15	--	REACT OR OFF GASES	Activated Carbon Filter
22	Process Vent-X (Rector-1201 Combined System House)	11	0.1	--	REACT OR OFF GASES	Activated Carbon Filter
23	Process Vent-XI (HCl Tank Process Vent-Xi Scrubber)	6.5	0.08	--	HCL FUME S	Caustic Scrubber
24	Process Vent-XII (ED Plant)	12	0.15	--	FUME S FOR DRUM CHAR GING	Waste Scrubber
25	Process Vent-XIII (TPU Plant)	7	0.50	--	HOT AIR	Waste Scrubber
26	Process Vent-XIV (QA Lab)	15	0.25	--	LAB EXHA UST	Adequate Stack Height Provided
27	Process Vent-XV (QA Lab)	15	0.25	--	LAB EXHA UST	Adequate Stack Height Provided
28	Process Vent-XVI (QA Lab)	10	0.60	--	LAB EXHA UST	Adequate Stack Height Provided
29	Process Vent-XVII (Coolant)*	20	--	--	PM	Bag Filter
30	D. G. Set – 2500 KVA **	25	0.55	Diesel (100 Liter/day )	SPM SOx NOx	Silencer
31	D. G. Set – 3000 KVA **	30	0.55	Diesel (100 Liter/day )	SPM SOx NOx	Silencer
32	D. G. Set – 1800 KVA **	30	0.55	Diesel (100 Liter/day )	SPM SOx NOx	Silencer

\* Yet not installed

\*\* used in emergency only.

Note: No change in fuel gas and process gas emissions.

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



Sr. No.	Solid/Hazardous Waste	Category	Quantity		Mode of disposal
			Existing	Total after Change in Product Mix	
1	Used Oil	5.1	10 KLPA	10 KLPA	Collection, Storage, Transportation, Disposal by Selling to Registered re-processors/reuse as lubricant.
2	Process Waste/Residues	26.1	165 TPA	165 TPA	Collection, Storage, Transportation, disposal at CHWIF or for co-processing at approved facility.
3	ETP Sludge	34.3	4500 TPA	4500 TPA	Collection, Storage, Transportation, Disposal at approved TSDF site.
4	Spent Carbon	35.3	210 TPA	210 TPA	Collection, Storage, Transportation, Disposal at approved TSDF site.
5	Filter Aid/ Filter Plates	35.1	60 TPA	60 TPA	Collection, Storage, Transportation, Disposal at approved TSDF site.
6	Discarded Containers, Barrels, Liners, contaminated with hazardous wastes/ Chemicals	33.3	1500 TPA	1500 TPA	Collection, storage, Decontamination and detoxification, transportation and disposal by selling to authorize -vendors.
7	Distillation Residue	20.3	135 TPA	135 TPA	Collection, Storage, Transportation, Disposal at approved CHWIF.
8	Spent Organic Solvent	20.2	2505 TPA	2505 TPA	Collection, Storage, Transportation and disposal at approved CHWIF and/or recovered though in house solvent recovery plant for reuse.
9	RO Membrane / Spent ion exchange resin	34.2	5 TPA	5 TPA	Collection, Storage, Transportation, Disposal at approved TSDF site.
10	Spent Catalyst (Vanadium	35.2	15 TPA	15 TPA	Collection, Storage, Transportation, Disposal

	Pentoxide)				at approved TSDF site.
Note: No change in solid/hazardous waste generation quantities.					
xiii. Following are the list of proposed products:					
SR. NO.	PRODUCTS	CAS No.	PRODUCTION QUANTITY (TON/ANNUM)		
			Existing	After Change in Product Mix	
A.	INTEGRATED POLYURETHANE (KU) COMPLEX				
1.	Polyether Polyols (PEOLs)	56731-02-3	50,000 T	50,000 T	
2.	Polyester Polyols (PESOLs)	25214-18-0	50,000 T	50,000 T	
3.	Methyl Diphenyl Di Isocyanate (MDI) splitter (Distillation of crude MDI)	32055-14-4	80,000 T	80,000 T	
	Monomeric MDI (MI+ME)	101-68-8			
	Polymeric MDI (M50 + M20)	9016-87-9			
4.	Poly Urethane (PU) Systems				
	a. Poly Ether Polyol (PEOL) / Polyester Polyol (PESOL) Blends	63641-63-4	90,000 T	90,000 T	
	b. Isocyanate Blends	9016-87-9			
	c. Prepolymers	26447-40-5	35,000 T	35,000 T	
5.	Cellasto	--	20 million pieces	20 million pieces	
6.	Thermoplastic Polyurethane (TPU)	25190-06-1	7,000 T	7,000 T	
B.	SURFACTANTS				
7.	Sulfation Products	--	1,00,000 T	85,000 T	
	Sodium Lauryl Sulphate (SLS) high active	151-21-3			
	Sodium Lauryl Sulphate (SLS) low active	151-21-3			
	Sodium Lauryl Ether Sulphate (SLES) high active	9004-82-4			
	Sodium Lauryl Ether Sulphate(SLES) low active	9004-82-4			
	Linear Alkyl Benzene Sulphonic Acid (LABSA)	27176-87-0			
	Sodium Lauryl Sulphate (SLS) dry (needles)*	151-21-3			
8.	Low Temperature Reaction (LTR) Products		20,000 T	20,000 T	
	Gr. B - Liquid Alkano-amides (Comperlans)	--			

	Gr. B – Betaines (Dehytons)	61789-40-0		
	Gr. C – Sulfosuccinates (Texapon)	577-11-7		
9.	High Temperature Reaction (HTR) Products		15,000 T	15,000 T
	Gr. B - Dehyton intermediates	--		
	Gr. D - Ester waxes (Cutina)	--		
	Gr. E- Trimethyl-propanesters (Synatives)	--		
	Gr. F Solid Alkano-amides (Comperlans)	--		
C.	Polymeric Dispersions		1,00,000 T	1,00,000 T
	Acronals	55965-84-9		
	Styronals	55965-84-9		
	Basoplasts	--		
D.	Coolant Fluids for automotive engines			
	Super Concentrate (SC) Coolants	107-21-1	--	15,000 T
	Concentrate Coolants	107-21-1		
	Ready to Use (RTU) Coolants	107-21-1		
	<b>Total</b>		<b>5,47,000 T/Annum &amp; 20 million pieces/Annum</b>	<b>5,47,000 T/Annum &amp; 20 million pieces/Annum</b>

#### LIST OF BY-PRODUCTS ALONG WITH THEIR PRODUCTION CAPACITY

Sr. No.	PRODUCTS	CAS No.	Quantity (T/Annum)
1.	Sulfuric Acid (98%) **	7664-93-9	380
<b>Total</b>			<b>380</b>

Sulfuric Acid generated as by product is sold to actual end users. Records of the same is maintained and submitted to Board in monthly basis.

EAC has deliberated on the proposal. EAC noted that the proposal is for product change. EAC observed that, PP also undertake modernization of plants. EAC noted that due to these activities, there is no increase in total production, no increase in water and fuel and thus there is no impact on the environment.

**EAC after detailed deliberation has recommended for amendment in EC for modernization and product change with following additional specific condition:**

- There shall not be any increase in total approved production by SEIAA.

	<div>ii. There shall not be any increase in water and fuel consumption.</div> <div>iii. All the other conditions in the EC dated 02.04.2012 will remain unchanged.</div>														
25.9.4	<div><b>Specialty Chemicals &amp; Pesticide Intermediate Products Plant (600 MTPM) of M/s Benzo Chem Industries Pvt. Ltd. at Plot No. Z-103/D, Phase – II, Dahej SEZ, Taluka Vagra, District Bharuch, Gujarat- reg. EC Amendment.[ IA/GJ/IND2/64663/2015, J-11011/132/2014-IA II (I)]</b></div> <div>The Project Proponent and their consultant M/s. Jyoti Om Chemical Research Centre Private Limited made a detailed presentation on the salient features of Project and informed that:</div> <div><div>i. The proposal is for Amendment in EC for manufacturing of Specialty Chemicals &amp; Pesticide Intermediate Products, Plot No. Z-103/D, Phase II, Dahej SEZ Area, Taluka: Vagra, Dist: Bharuch, Gujaratby M/s. Benzo Chem Industries Pvt. Ltd.</div><div>ii. The unit has already acquired Environment Clearance F. No. J-11011/132/2014-IA II (I) dated 29<sup>th</sup> October, 2015 from MoEF&amp;CC and CTE No. 70398 from Gujarat Pollution Control Boardfor manufacturing of Specialty Chemicals &amp; Pesticide Intermediate Productsto M/s. Benzo Chem Industries Pvt. Ltd.</div><div>iii. Existing Land area is 47613.19 Square Meter, additional 0.00 Square meter land will be used for proposed Amendment.</div><div>iv. Industry will develop greenbelt in an area of 31.5 %, i.e. 15000 sq.m.out of 47613.19 sq. m. of area of the project.</div><div>v. The cost of project is Rs. 225crore.</div><div>vi. Total employment will be 145 persons as direct and 500 persons indirect after expansion. Industry proposed to allocate Rs. 5.6 crores @ of 2.5% towards corporate social responsibility.</div><div>vii. No national parks, wildlife sanctuaries, Biosphere Reserves, Tigers/Elephants Reserves, Wildlife Corridors lies within 10 km distance.</div><div>viii. Total fresh water requirement after proposed amendment will be 590KLD (Existing 154 KLD + Proposed Amendment 436 KLD)and will be met from Dahej SEZ, Dahej.</div><div>ix. Effluent of 315 KLD (Industrial)(Existing 106 KLD + Proposed Amendment 244 KLD)will be treated through Effluent Treatment Plant and effluent will be sent to GIDC Drain and20KLD(Existing 12 KLD + Proposed Amendment 8 KLD) of domestic wastewater will be sentto soak pit/septic tank.</div><div>x. Power requirement after proposed amendmentwill be 5600kVA and will be met from Torrent Power.And Existing D. G. Set (500 kVA) will be used as standby during power failure. Stack (height 11 m) is provided as per CPCB Norms.Unit has proposed D.G. set of 1500 KVA will be used as standby during power failure.The unit will be using steam from Boiler (8 TPH).</div><div>xi. The unit has proposed boiler (8 TPH) fueled by Coal/Briquette and Thermic fluid heater fueled by Coal/Natural Gas/Briquette.</div><div>xii. There will befour stacks attached (Height: 12 m each) in proposed amendment, where four stacks will be connected to two stage water scrubber followed by alkali scrubber.Detail of solid waste/Hazardous waste and its management given below:</div></div> <table><tr><th>Sr. No .</th><th>Type of Hazardous Waste</th><th>Categ ory No.</th><th>Quantity as per EC</th><th>Quantit y as per propose d Mix</th><th>Total Quantit y after propose d Change</th><th>Treatment &amp; Disposal</th></tr><tr><td>1.</td><td>ETP Sludge</td><td>26.2</td><td>30</td><td>+20</td><td>50</td><td>Collection, storage,</td></tr></table>	Sr. No .	Type of Hazardous Waste	Categ ory No.	Quantity as per EC	Quantit y as per propose d Mix	Total Quantit y after propose d Change	Treatment & Disposal	1.	ETP Sludge	26.2	30	+20	50	Collection, storage,
Sr. No .	Type of Hazardous Waste	Categ ory No.	Quantity as per EC	Quantit y as per propose d Mix	Total Quantit y after propose d Change	Treatment & Disposal									
1.	ETP Sludge	26.2	30	+20	50	Collection, storage,									

							transportation ,Disposal to Nearest TSDF site
2.	Residue from Distillation	28.1	65	+30	95		Collection, storage, transportation ,Co-processing in Cement Industries or send to Nearest Common Incineration Site
3.	Discarded Drum	33.3	1000 Nos.	+2000	3000		Collection, storage, transportation ,Sell to GPCB authorized Vendor after decontamination
4.	Discarded PP Bags/Liner	33.3	2000 Nos.	+2000	4000		Collection, storage, transportation ,Sell to GPCB authorized Vendor after decontamination
5.	Used Oil	5.1	200 Liters/Month	+300	500		Collection, storage, transportation, Sell to GPCB registered reprocessor.
6.	Inorganic Salts	28.2	100	-50	50		Collection, storage, transportation ,Sell to end user
7.	Carbon Sludge	--	5	-0	5		Collection, storage, transportation ,Disposed at Nearest TSDF Site
8.	MEE Salt	--	25	+275	300		Collection, storage, transportation ,Disposed at Nearest TSDF Site
9.	HCl (30%)	D2	126	-0	126		Collection, storage, transportation ,Sell to end user
10	H2SO4 (70%)	D2	50	-0	50		Collection, storage, transportation ,Sell to end user
11.	LiquorAmmonia (20-24%)	C1	45	+10	55		Collection, storage, transportation ,Sell to end user
12.	HBr (35-40%)	B26	70	-0	70		Collection, storage, transportation ,Sell to end user
13.	NaBr (20-22%)	B26	76	-0	76		Collection, storage, transportation ,Sell to end user
14.	Phosphoric Acid	D2	60	-0	60		Collection, storage, transportation ,Sell to end user
15.	Copper Sulphate/Copper Oxide	C1	80	-40	40		Collection, storage, transportation ,Sell to end user

16.	Sodium Acetate	--	5	-5	0	Collection, storage, transportation ,Sell to end user
17.	Sodium Sulphite	--	30	+10	40	Collection, storage, transportation ,Sell to end user
18.	Potassium Chloride	--	5	-5	0	Collection, storage, transportation ,Sell to end user
19.	Potassium Carbonate	--	12	-0	12	Collection, storage, transportation ,Sell to end user
20.	Ammonium Sulphate	C1	4	-4	0	Collection, storage, transportation ,Sell to end user
21.	Spent Solvent	--	00	50 KL/Month	50 KL/Month	Collection, storage, transportation ,Sell to Cement Industry
22.	Poly Aluminum chloride solution 25%	--	00	+20 KL/Month	20KL/Month	Collection, storage, transportation ,Sell to end user

xiii. Following are the list of existing and proposed product.

Sr. No.	Name of Products	Quantity as per EC No. F. No. J-11011/132/2014-IA II (I) and CTE No. 70398 in MT / Month	Addition/Deletion of products with reference to EC	Quantity after proposed Product Profile in MT / Month
1.	2-Amino Benzo Nitrile	10	-9	1
2.	2-Amino-5-Bromo Benzo Nitrile	5	-5	0
3.	2,4,6-trimethyl Benzaldehyde (Mesitaldehyde ) / or 2,4,6-TrimethylBenzaldehyde 84%in 16% Aceton (Mesitaldehyde 84% in 16% Aceton)	20	-12	8
4.	Indoline	20	-20	0
5.	2,4-Dichloro Phenyl Acetic Acid	25	-25	0
6.	2,4-Dichloro Phenyl Acetyl Chloride	25	-12	13
7.	2,4,6-Trimethyl Phenyl Acetyl Chloride	20	+1	21
8.	2,4 Dichloro Meta Cresol	4	-3	1

9.	Pivolo nitrile (Tri methyl acetone nitrile )	10	-10	0
10.	4,4-dihydroxy Benzo phenone	25	-25	0
11.	2-chloro-4,6 dimethoxy-1,3,5-Triazine	25	-17	8
12.	2-Coumaranone 30%,Acetic Anhydride70 %	170	+38	208
13.	4-Bromo-2-Hydroxy Anisole / 5-Bromo-2-Methoxy Phenol	4	-4	0
14.	5-Propionyl-2-Thiophenyl acetic acid (PPP) / 2-Phenyl Thio-5-Propionyl Phenyl Acetic Acid	2	-2	0
15.	2,3,4,5-tertrachloro Benzoyl chloride	17	-17	0
16.	3,4,5 tri methoxy Toluene	25	-17	8
17.	3,4,5 tri methoxy Benzyl chloride	2	-2	0
18.	3,4,5-tri methoxy benzyl cyanide	2	-2	0
19.	3,4,5-tri methoxy phenyl acetic acid	2	-2	0
20.	3,4,5-trimethoxy benzoic acid	4	-3	1
21.	3,4,5-Trimethoxy Benzaldehyde	17	-17	0
22.	4,4-dimethoxy-2-Butanone	17	-17	0
23.	R-2-(2,4-Dichlorophenoxy) Propionic Acod	40	-40	0
24.	Para Methyl Benzaldehyde / 4-Methyl Benzaldehyde	25	-25	0
25.	2-5 Dimethyl Phenyl Acetyl Chloride	25	+0	25
26.	2-Amino 2 Phenyl Butyric Acid	4	-4	0
27.	1-(2,6 Dichloro Phenyl)2-Indolinone	4	-4	0
28.	2-(3-Benzoyl Phenyl)-propio Nitrile / Ketoprofen Nitrile	8	-8	0
29.	N-Methyl-1-Naphtahlene Methyl Amine Acetate	2	+0	2

30.	N-Methyl-1-Naphtahlene Methyl Amine Base	2	+0	2
31.	Para Chloro Phenyl Ethyl Amine / 2-(4-Chloro-Phenyl)-Ethylamine	5	-5	0
32.	Ortho Chloro Phenyl Ethyl Amine	5	-5	0
33.	2-Dimethylamino-2-Phenyl Butanol/2-(N,N-Dimethylamino)-2-Phenyl-1-Butanol	4	-4	0
34.	Methyl- 2-Dimethylamino-2- Phenyl butyrate /2-(N,N-Dimethyl Amino)-2-Phenyl-2-Butyrate	4	-4	0
35.	2-Phenyl Butyric Acid	4	-4	0
36.	5-Chloro-2-Hydroxy Benzo phenone	5	-4	1
37.	5-(1- Carboxy Ethyl)-2-Phenyl Thiophenyl Acetic Acid (DIACID)	2	-2	0
38.	N-Methyl 1-Napthalene Methyl Amine Hydrochloride	5	-2	3
39.	7-Methoxy 1 Tetralone	5	-5	0
40.	2-Amino 4 Hydroxy Acetophenone	0	+3	3
41.	3-coumaranone	0	+8	8
42.	3, 3 Dimethyl Butyrl Chloride	0	+16	16
43.	4-bromo Anisole	0	+16	16
44.	4-Cyano Benzoic Acid	0	+1	1
45.	7-Hydroxy 1 Tetralone	0	+1	1
46.	Atropic acid	0	+2	2
47.	4-chloro Benzaldehyde Glycol Acetal	0	+6	6
48.	2,2-Dichloro-2 Phenyl Acetic Acid Ethyl Ester	0	+16	16
49.	Para Chloro Meta Xylenol BP	00	+25	25
50.	Pivaloacetonitrile	0	+3	3
51.	3-Chloro2- Methyl Anisole	0	+25	25
52.	2-Dimethyl 2 Methyl 1 Propanol	00	+8	8
53.	4-Hydroxy 3 5 Dimethyl Benzaldehyde	00	+2	2



54.	2 Ethyl 2 Methyl Butanoic Acid	00	+8	8
55.	2 2 Dimethyl Butyrl Chloride	00	+8	8
56.	DV Acid Chloride (60:40 Cistrans)	00	+5	5
57.	Ortho Benzyl Para Chloro Phenol	00	+7	7
58.	4-Isopropyl Catechol	00	+1	1
59.	1-Adamantyl HCL	00	+8	8
60.	1-Bromo-2-(3-Chloro-4-Ethoxyphenyl)-2-Methyl Propane	00	+11	11
61.	4-Chloro 2,6 Dimethyl Phenyl Acetic Acid	00	+8	8
62.	4-Hydroxy Benzyl Alcohol	00	+3	3
63.	2-Methoxy Phenyl Acetone	00	+1	1
64.	Methyl-2-Dimethyl Amino-2-phenyl butyrare	00	+2	2
65.	Meta Phenoxy Benzyl Alcohol	00	+4	4
66.	4-Bromophenyl Acetic Acid Methyl Ester	00	+1	1
67.	4-Hydroxy Acetophenone	00	+16	16
68.	2-(1-Admantyl)-4-Bromo Anisole	00	+2	2
69.	2-(3-Hydroxy-2-Methyl Propionyl)-aminol-2-methyl-propanol	00	+10	10
70.	4-Bromophenyl Acetic Acid	00	+1	1
71.	R & D Products	00	+70	70
	<b>Total</b>	<b>600</b>	<b>00</b>	<b>600</b>

#### LIST OF BY-PRODUCTS AS PER EC AND NOC

Sr. No.	By-Products	Quantity as per EC and NOC
1.	HCl (30%)	126
2.	H <sub>2</sub> SO <sub>4</sub> (70%)	50
3.	Ligour Ammonia (24%)	45
4.	HBr	70
5.	NaBr	76
6.	Phosphoric Acid	60
7.	Copper Sulphate	80
8.	Sodium Chloride	80
9.	Sodium Sulphate	60
10.	Sodium Acetate	5
11.	Sodium Sulfite	30

12.	Potassium Chloride	5
13.	Potassium Carbonate	12
14.	Ammonium Sulphate	4

**AFTER CHANGE LIST OF BY PRODUCTS:**

Sr. No.	List of By products	Quantity as per EC in MT/Month	Generated from Products	Quantity after proposed product profile (MT / Month)
1.	HCl (30%)	126	2-Amino Benzo Nitrite, 2,4-Dichloro Phenyl Acetyl Chloride, 2,4,6-Trimethyl Phenyl Acetyl Chloride, 2,5-Dimethyl Phenyl Acetyl Chloride, 5-Chloro-2-Hydroxy Benzo Phenone, 3 3 Dimethyl Butyrl Chloride, 7-Hydroxy 1 Tetralone, 2,2-Dichloro-2-phenyl Acetic Acid Ethyl Ester, Para Chloro Meta Xylenol BP, Pivalacetone nitrile, 22 Dimethyl Butyrl Chloride, DV Acid Chloride, Ortho Benzyl Para Chloro Phenol, 1-Admantyl HCL, Meta Phenoxy Benzyl Alcohol, 4-Hydroxy Acetophenone, 4-Bromo Phenyl Acetic Acid.	126
2.	H <sub>2</sub> SO <sub>4</sub> (70%)	50	--	50
3.	Liquor Ammonia (20-24%)	45	2-Coumarone 30%, Acetic Anhydride, Pivaloacetone nitrile, 2,2 Dimethyl Butyrl Chloride,	55
4.	HBr (35-40 %)	70	3,4,5 Trimethoxy toluene, 3,4,5- Trimethoxy benzoic acid/ ester	70
5.	NaBr (20-22 %)	76	3,4,5 Trimethoxy toluene, 3,4,5- Trimethoxy benzoic acid/ ester, 4-Bromo Anisole,	76
6.	Phosphoric Acid	60	7-Hydroxy 1 Tetralone	60
7.	Copper Sulphate/ Copper Oxide	80	2-Coumarone 30%, Acetic Anhydride 70%	40
8.	Sodium Chloride	80	--	00
9.	Sodium Sulphate	60	--	00
10.	Sodium Acetate	5	--	00
11.	Sodium Sulfite (20-22 %)	30	2,4-Dichloro phenyl acetyl chloride, 2,4,6-Trimethyl phenyl acetyl chloride, 3,4,5-Trimethoxy Benzoic Acid/	40

			ester, 2-5 Dimethyl phenyl acetyl chloride, 3,3 Dimethyl Butyrl Chloride, 2,2-Dichloro-2 phenyl acetic acid ethyl ester, 2,2 Dimethyl butyrl chloride, D V acid Chloride,	
12.	Potassium Chloride	5	--	0
13.	Potassium Carbonate	12	--	12
14.	Ammonium Sulphate	4	--	0
15.	Mix Chloro Xylenol	0	Para Chloro Meta Xylenol BP	6
16.	2-Hydroxy Acetophenone	0	4-Hydroxy Acetophenone	1
17.	Methanol 50%	0	2-Chloro-4,6 Dimethoxy-1,3,5-Triazine.	40
18.	Poly Aluminum Chloride Solution 25%	0	2,4-Dichloro Meta Cresol, 5-Chloro-2-Hydroxy Benzo Phenone, 2-Amino4 Hydroxy Benzophenone, 7-Hydroxy 1 Tetralone, Meta Phenoxy Benzyl Alcohol, 4-Hydroxy Acetophenone,	20

#### DETAILS OF WATER CONSUMPTION

Source of Water: GIDC water supply

Sr. No.	Particular	Water Consumption in KL/Day		
		As per EC No. F. No. J-11011/132/2014-IA II (I) and CTE No. 70398	Addition	Quantity after proposed Profile
1.	<b>Domestic</b>	15	+10	25
2.	<b>Gardening</b>	6	+24	30
3.	<b>Industrial</b>			
	Process & Washing	80	+140	220
	Boiler	20	+60	80
	Cooling	20	+160	180
	Cleaning	3	+22	25
	Scrubber	10	+20	30
	<b>Total(Industrial)</b>	<b>133</b>	<b>+402</b>	<b>535</b>
	<b>Total (Domestic + Industrial+ Gardening)</b>	<b>154</b>	<b>+436</b>	<b>590</b>

#### DETAILS OF WASTE WATER GENERATION

Sr.	Particulate	Waste Water Generation in KL/Day
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No.		As per EC No. F. No. J 11011/132/ 2014-IA II (I) and CTE No. 70398	Addition	Quantity after proposed Profile
1.	<b>Domestic &amp; Gardening</b>	12	8	20
2.	<b>Industrial</b>			
	Process & Washing	70	130	200
	Boiler	5	40	45
	Cooling	6	24	30
	Scrubber	10	20	30
	Cleaning	3	22	25
	<b>Total(Industrial )</b>	<b>94</b>	<b>236</b>	<b>330</b>
	<b>Total (Domestic + Industries)</b>	<b>106</b>	<b>244</b>	<b>350</b>

#### ENERGY AND FUEL CONSUMPTION DETAILS

Sr. No.	Fuel	As per EC No. F. No. J- 11011/132/2014-IA II (I) and CTE No. 70398	Addition	As per after proposed profile
1.	Bio Coal/Coal	40 T/Day	+40 T/Day	80 T/Day
2.	Natural gas	15000 Sm <sup>3</sup> /Day	+00	15000 Sm <sup>3</sup> /Day
3.	Diesel for D G Set	300 Lit/Day	+300 Lit/Day	600 Lit/ Day

#### FLUE GAS EMISSIONS

Sr. No.	Stack attached to	Fuel & Consumption	Stack Height in meter	Stack Diameter in mm	APCM	Probable Pollutants	Permissible Limit
<b>As per EC No. F. No. J-11011/132/2014-IA II (I) and CTE No. 70398</b>							
1.	Thermic Fluid Heater	Natural Gas	25	1000	--	SPM SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm
2.	Steam Boiler (Coal Fired FBC based system) 6 TPH	Coal/Brquette	35	1000	Multi Cyclone + Bag Filter	SPM SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm
3.	D.G.SET (500 KVA)	Diesel	11	200		SPM SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm
<b>After Proposed profile change</b>							
1.	Thermic Fluid Heater	Coal/Brquette/ Natural Gas	45	1400	MDC + Bag Filter	SPM SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm

	2.	Steam Boiler (Coal Fired FBC based system) 8 TPH	Coal/Br iquette	45	1400	Multi Cyclone + Bag Filter	SPM SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm
	3.	D.G.SET(1500 KVA)	Diesel	11	350	--	SPM SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm
<b>Process Emission</b>								
	<b>Sr . N o.</b>	<b>Stack attached to</b>	<b>Stack Height in meter</b>	<b>Stack Diamet er</b>	<b>APCM</b>	<b>Probable Pollutants</b>	<b>Permissibl e Limit</b>	
<b>As per EC No. F. No. J-11011/132/2014-IA II (I) and CTE No. 70398</b>								
	1.	Reaction Vessel	12	300	Two Stage Water Alkali Scrubber HBr Scrubber	HCl SO <sub>2</sub> HBr	20 mg/Nm <sup>3</sup> 40 mg/Nm <sup>3</sup> 5 mg/Nm <sup>3</sup>	
	2.	Reaction Vessel	12	300	Two Stage Alkali Scrubber	HCl	20 mg/Nm <sup>3</sup>	
	3.	Reaction Vessel	12	300	Two Stage Water Alkali Scrubber	HCl SO <sub>2</sub>	20 mg/Nm <sup>3</sup> 40 mg/Nm <sup>3</sup>	
<b>After Proposed profile change</b>								
	1.	Reaction Vessel	12	300	Three Stage Water /Alkali Scrubber	HCl SO <sub>2</sub> HBr	20 mg/Nm <sup>3</sup> 40 mg/Nm <sup>3</sup> 5 mg/Nm <sup>3</sup>	
	2.	Reaction Vessel	12	300	Three Stage water/Alkali Scrubber	HCl	20 mg/Nm <sup>3</sup>	
	3.	Reaction Vessel	12	300	Three Stage Water /Alkali Scrubber	HCl SO <sub>2</sub>	20 mg/Nm <sup>3</sup> 40 mg/Nm <sup>3</sup>	
	4.	Reaction Vessel	12	300	Three Stage Water /sulphuric Scrubber	NH <sub>3</sub>	175 mg/Nm <sup>3</sup>	
EAC has deliberated on the proposal. EAC noted that there is considerable change in water requirement, waste water generation, process plants, utility blocks & other infrastructure facilities. <b>The EAC after detailed deliberation recommended to reject the proposal for amendment in existing EC and suggested the PP to apply for fresh ToR/EC.</b>								
25.9.5	<b>Installation of additional tankages (2 x 2200 KL Ethanol; 1 x 15000 KL MS; 1 x 15000 KL HSD) and other facilities at Navagam in district Ahmedabad (Gujarat) by M/s IOCL– Environmental Clearance reg. [IA/GJ/IND2/65176/2002, J-11011/24/2002 IA II (I)]</b>							
The Project Proponent and the accredited Consultant M/s. Engineers India Limited, gave a detailed presentation on the salient features of the project and informed that:								
i. The proposal is for Amendment in Environmental Clearance at Ahmedabad Terminal by								



4	4A	HSD BS-III	12060
5	4B	HSD BS-III	12060
6	4C	HSD BS-III	12060
7	4D	HSD BS-III	12060
8	2A	SKO-DYED	3820
9	2B	SKO-DYED	3820
10	3A	ATF	6785
11	3B	ATF	6785
12	6A	Ethanol	70
13	6B	Ethanol	70

**Proposed products and their capacities for EC expansion**

SI.NO	Products	Quantity (KL)
1	Ethanol	2 x 2200
2	HSD	1 x 15000
3	MS	1 x 15000

Additionally 4 tanks of Ethanol (2 tanks), HSD (1 tank) & MS (1 tank) are required to store petroleum products at Ahmedabad Terminal.

EAC has deliberated on the proposal. EAC has noted that the project was a Category B project and as SEIAA, Gujarat is not in functional stage, it is appraised at Central Level. EAC noted that the proposed storage facility is important for the nation and in the safety point of view. Considering the same, EAC has recommended to consider the proposal under Category B2 for environmental clearance. **The EAC after detailed deliberation recommended the project for environmental clearance under category B2 exempting EIA/EMP report and public hearing, subject to compliance of following specific and other general conditions.**

**Specific conditions**

- (i). Green belt shall be developed along the periphery of the plant with trees. At least 33 % of the area shall be developed as green area with trees.
- (ii). Zero Liquid Discharge system shall be ensured.
- (iii). Regularly monitoring of VOC and HC in the work zone area in the plant premises should be carried out and data be submitted to Ministry's Regional Office, CPCB and State Pollution Control Board. Quarterly monitoring for fugitive emissions should be carried out as per the guidelines of CPCB and reports submitted to Ministry's Regional Office at Chennai.
- (iv). Necessary approvals from Chief Controller of Explosives must be obtained before commission of project, if applicable. Requisite On-site and Off-site Disaster Management Plans will be prepared and implemented.
- (v). The company should obtain all requisite clearances for fire safety and explosives and should comply with the stipulation made by the respective authorities.
- (vi). Emergency Response Plan should be based on the guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once in a month.
- (vii). Additional safety measures should be taken by using remote operated shut off valve, double block & bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.
- (viii). Unit should carry out safety audit and report submitted to the Regional Office.

	<p>(ix). Occupational health surveillance of worker should be done on a regular basis and records maintained as per the Factory Act.</p> <p>(x). PP shall strictly follow Oil Industry Safety Directorate (OISD) norms/guidelines for installation and design of equipments and operation.</p> <p>(xi). 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.</p> <p>(xii). 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.</p> <p>(xiii). High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.</p> <p>(xiv). Adequate stack height has to be provided to the DG sets as per CPCB norms.</p> <p>(xv). Acoustic enclosure shall be provided to DG set for controlling the noise pollution.</p> <p>(xvi). Water sprinkling has to be undertaken on regular basis to control the polluting particles.</p> <p>(xvii). 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>
25.9.6	<p><b>Augmentation of refrigerated LPG (Propane / Butane) import facility with provision of additional storage of 2 X 10000 MT and associated facilities at BPCL Uran LPG Plant at Navghar Industrial Estate , Behind MSEB Gas Turbine Unit, P.B. No. 8, Dist.- Raigad , Bokadvira , Uran, Maharashtra by M/s BPCL- reg. TOR amendment. [IA/MH/IND2/65206/2016, J-11011/317/2016-IA-II(I)]</b></p> <p>The project proponent made a detailed presentation on the proposal and informed that:</p> <ol style="list-style-type: none"> <li>The PP has obtained ToR for the project Augmentation of refrigerated LPG (Propane / Butane) import facility with provision of additional storage of 2 X 10000 MT and associated facilities at BPCL Uran LPG Plant at Navghar Industrial Estate , Behind MSEB Gas Turbine Unit, P.B. No. 8, Dist.- Raigad , Bokadvira , Uran, Maharashtra by M/s BPCL vide letter dated 31.01.2017.</li> <li>PP has carried out baseline monitoring during March-May, 2017.</li> <li>PP intends to enhance storage and handling capacity of additional import facilities as per granted ToR from 2x10000 MT to 2x 12000 MT and addition of 72 station Flexi Carousel.</li> </ol> <p>EAC has deliberated on the proposal. EAC observed that the baseline data collected during March-May 2017, as per the granted ToR can be utilized for EIA/EMP report preparation.</p> <p><b>EAC after detailed deliberation has recommended for amendment in ToR as per the proposal of PP.</b></p>

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**List of the Members who were present during the 25<sup>th</sup> Expert Appraisal Committee (EAC) - Industry-2 meeting**

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1.	<b><u>Dr. J. P. Gupta</u></b> A- 1/2 Panchsheel Enclave, New Delhi- 110070 E-mail: <a href="mailto:jpglobalconsultinggroup@gmail.com">jpglobalconsultinggroup@gmail.com</a>	Chairman
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13.	<b><u>Sh. Paritosh Kumar</u></b> Additional Director, Central Pollution Control Board, New	Member

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