

**GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE  
(IMPACT ASSESSMENT DIVISION  
INDUSTRY-2 SECTOR)**

**Dated: 24<sup>th</sup> April, 2020**

\*\*\*

**MINUTES OF THE 18<sup>th</sup> MEETING OF THE EXPERT APPRAISAL COMMITTEE  
(INDUSTRY-2 SECTOR) HELD DURING 13-15 APRIL, 2020**

**Venue: Meeting conducted through Video Conferencing (VC) and moderated by the Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003.**

**Time: 10:40 AM**

**(i) Opening Remarks by the Chairman**

Dr. J.P. Gupta, Chairman, Expert Appraisal Committee, welcomed the Committee members and gave the opening remarks. The Chairman reiterated that Government of India is taking all necessary steps to ensure the challenge and threat posed by the growing pandemic of COVID-19 the Corona Virus and with active support of the people of India, we have been able to contain the spread of the Virus in our country. The most important factor in preventing the spread of the Virus locally is to empower the citizens with the right information and taking precautions as per the advisories being issued by Ministry of Health & Family Welfare, Government of India. The Chairman requested to follow all the Guidelines issued by the Government of India from time to time for fighting against the COVID-19.

The Chairman has also appreciated the efforts of the Ministry of Environment, Forest and Climate Change for conduction of the EAC meeting through Video Conferencing mode in the lock down period.

The Committee also appealed to the Project Proponents to contribute the voluntary fund to the Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund (PM CARES Fund) and the Chief Ministers Fund for fighting against the COVID-19 pandemic in India.

**(ii) Remarks by the Member Secretary**

Dr. R.B. Lal, Scientist 'E' & Member Secretary, Expert Appraisal Committee informed to the Committee that this 18th Expert Appraisal Committee meeting of Industry -2 Sector was earlier scheduled on 25-27 March, 2020. This meeting was postponed in view of the outbreak of Corona Virus (COVID19) and subsequent OM

issued by MoEFCC vide no. 19-206/2018-IA.III, dated 18.03.2020 and further lock down declared by Govt. of India vide its Order dated 24.03.2020.

The matter has been examined by the EAC/Ministry and accordingly it was decided to hold the 18<sup>th</sup> EAC meeting through Video Conferencing which was successfully conducted during April 13-15, 2020. Project Proponents were requested to forward the various details of the proposals (viz. EIA/EMP Report, Form-2, Copy of presentation, Brief summary and other requisite documents as per Agenda and other provisions of the EIA Notification, 2006) in advance to the EAC for advance examination of the proposal. PPs have been forwarded the requisite documents to the EAC for appraisal.

The meeting was moderated by the NIC Team of the MoEFCC. Shri Anil Kumar, Director NIC and Shri Kamal Gupta were present during the meeting and the Committee appreciated the work of NIC Team for successful conduction of meeting.

**(iii) Confirmation of the Minutes of the 17<sup>th</sup> Meeting of the EAC (Industry-2) held during 25-27 February, 2020 at MoEFCC, Indira Paryavaran Bhawan, New Delhi**

The EAC, having taken note that no comments were offered on the minutes of its 17<sup>th</sup> EAC meeting held during **25-27 February, 2020** at MoEFCC New Delhi, confirmed the same.

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

Details of the proposals considered during the meeting **conducted through Video Conferencing (VC)**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under:-

**DAY 1: 13<sup>th</sup> April, 2020 (Monday) Meeting held through Video Conferencing (VC) Mode**

**Consideration of Environmental Clearance**

**Agenda No.18.1**

**Expansion of distillery for manufacture of ethanol under EBP programe and expanding distillery capacity from 120 KLD to 500 KLD at Belgaum (Karnataka) by M/s Shree Renuka Sugars Limited- Consideration of Environment Clearance [IA/KA/IND2/134412/2018, J-11011/08/2002-IAII(I)]**

The project proponent and their consultant M/s Samrakshan made a detailed presentation on the salient features of the project through Video Conferencing (VC).

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion of molasses based distillery from 120 KLD to 500 KLD and to establish Cogeneration power 18 MWH by M/s Shree Renuka Sugars Limited at Survey R.S.No.367/1 Village Munoli, Taluk Saundatti, District Belagavi (Karnataka).

The details of product and capacity as under:-

S. No.	Details	Existing	Proposed	After Expansion
1	a. Sugar b. Co-generation	10000 TCD 35.5 MWH	Nil Nil	10000 TCD 35.5 MWH
2	Distillery	120 KLD (Molasses based)	380 KLD (C / B Molasses/sugar syrup based)	500 KLD (C / B Molasses/sugar syrup based)
3	Distillery Co-Gen	Nil	18 MWH	18 MWH
Total		Distillery and Captive power generation after expansion		500 KLD and 18 MWH

The project/activity is covered under category A of item 5 (g) 'Distilleries' of the schedule to the EIA Notification, 2006 and requires appraisal/approval at central level in the Ministry.

PP reported that Existing land area is 421601.502 m<sup>2</sup> or 42.16 hectares, no additional land is required for proposed expansion. Industry has already developed greenbelt in an area of 34.01 % i.e.,143420.59 m<sup>2</sup> or 14.34 hectares out of total area of the project. The estimated project cost is Rs 761.82 Crores including existing investment of Rs 381.82 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 12.45 crores and the Recurring cost (operation and maintenance) will be about Rs. 3.5 crores per annum. Total Employment will be 150 persons as direct and 50 persons indirect after expansion.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Reserved forest is in the South and East at 3.0 km. The main vegetation in the reserved forest are scrubs and having rocky out crops. Malaprabha river flows at 1.4 km in East direction. River/ water body Renukasagar reservoir at 3.7 km towards South-West.

The EAC, after detailed deliberations decided to **defer the proposal for want of requisite information as under** and have asked the PP to revise the Report along with following clarification/information:-

- (i) Proof to establish that existing unit is operating with proper prior permission and to confirm that unit is not violating the provision contained in EIA Notification, 1994 and 2006. In this regard, PP needs to submit all the old CTE/CTO to verify the violation, if any. Also submit justification for carried out expansion from 60 KLD to 120 KLD in 2006 without environmental clearance.
- (ii) PP needs to submit the details of production since inception of the unit to verify violation, if any.
- (iii) Commitment need to be submitted that produced ethanol will be sold under Ethanol Blending programme.
- (iv) Committee observed that the water requirement has exponentially increased from 230-2963 m<sup>3</sup>/day. PP needs to rework on water requirement and resubmit the water balance accordingly.
- (v) Details of Permission for water withdrawal of fresh water need to be submitted.
- (vi) Details of CO<sub>2</sub> emission control plan.
- (vii) Commitment not to use composting and submit plan for incineration to achieve the ZLD.
- (viii) Details of PESO approvals needs to be submitted.
- (ix) Compliance of Ministry's Notification dated 17.01.2019 w.r.t. MoPNG letter needs to be submitted.
- (x) Details of completed actions needs to be submitted as per commitments made in Public Hearing held in 2018.
- (xi) Details of completion work of non-compliances of earlier certified compliance report submitted by the RO, MOEFCC

### **Agenda No.18.2**

#### **Setting up technical grade pesticides manufacturing unit by M/s Fengel Crop Sciences (Unit-II) at Survey No. 65/2, Village Shemala, Tehsil Gondal, District Rajkot (Gujarat)- Consideration of Environment Clearanc [IA/GJ/IND2/98969/2019, IA-J-11011/81/2019-IA-II(I)]**

The project proponent and their accredited consultant M/s San Envirotech Pvt Ltd made a detailed presentation on the salient features of the project through Video Conferencing (VC).

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for setting up technical grade pesticides manufacturing unit of capacity 300 MTPM by M/s Fengel Crop Sciences (Unit-II) in an area of 11962.23 sqm at Survey No. 65/2, Village Shemala, Tehsil Gondal, District Rajkot, Gujarat.

The details of product and capacity as under:-

<b>Sr. No.</b>	<b>Name of Products</b>	<b>Class</b>	<b>CAS No.</b>	<b>LD<sub>50</sub></b>	<b>Quantity (MTPM)</b>
1.	Azoxystrobin	Fungicide	131860-33-8	>2000 mg/kg	300
2.	Thiamethoxam	Insecticide	153719-23-4	1563 mg/kg	
3.	Acetamiprid	Insecticide	135410-20-7	217 mg/kg	
4.	Imidacloprid	Insecticide	138261-41-3	410 mg/kg	
5.	Chlorpyrifos	Insecticide	2921-88-2	>200 mg/kg	
6.	Bio Pesticide		--	--	100
7.	Bio Fertilizer		--	--	
<b>Total</b>					<b>400</b>

The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The Terms of References (TORs) for the Project has been issued by the Ministry vide letter dated 13<sup>th</sup> April, 2019.

PP reported that Total land area of the project is 11962.23 sqm. Industry will develop greenbelt in an area of 33% i.e. 3960m<sup>2</sup>, out of total area of the project. The estimated project cost of proposed unit is Rs. 3.5 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 1.2Crore and the Recurring cost (operation and maintenance) will be about Rs. 1.0Crore per annum. Total employment including direct and indirect will be 50 persons.

PP reported that there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site.

The EAC, after detailed deliberations decided to **defer the proposal for want of requisite information as under** and have asked the PP to revise the Report alongwith following clarification/information:-

- (i) Revised layout plan needs to be submitted consisting green belt around the periphery not in three side.
- (ii) Commitment not to use furnace oil as fuel for boiler.
- (iii) PP in slide number 53 mentioned that there is no schedule-I species reported, However as per EIA/EMP Report Schedule I species were reported. The PP needs to prepare the Conservation plan for protection of schedule-1 species and submit to the CWLW for approval.
- (iv) Action Plan on the issues raised during PH needs to be submitted alongwith timeline and budget. The concerns were related to dumping of waste in night and contamination of ground water in the area.
- (v) PP needs to submit the reasons for ground water contamination and its mitigation measures.
- (vi) PP needs to relook the water analysis report as in some of the samples eg. SW 1 & SW2, TDS < total ions. Please verify the water analysis and identify the root cause analysis for the same and resubmit.
- (vii) Status of TSDF membership.
- (viii) Land conversion details for industrial purpose needs to be submitted.
- (ix) Revised detailed CER plan @ 5% of project cost and needs to be submitted.

### **Agenda No.18.3**

**Addition of New Product & Thermal Power Plant In Existing Unit at 6/121, A-1, Paiki, Plot No.8, First floor, Vairaginiwadi, Surat, Gujarat by M/s SUMILON POLYESTER LIMITED- Consideration of Environmental Clearance**

**[IA/GJ/IND2/99226/2019, IA-J-11011/90/2019-IA-II(I)]**

The project proponent and their consultant M/s. Earthcare Enviro Solutions Pvt. Ltd. made a detailed presentation on the salient features of the project through Video Conferencing (VC).

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for increase production capacity of existing products, addition of new product and power plant within existing premises by M/s Sumilon Polyester Limited at Vairaginiwadi, Surat, Gujarat.

The details of existing and proposed product as under:-

<b>S. No.</b>	<b>Product Details</b>	<b>Existing Quantity (MT/Month)</b>	<b>Proposed Quantity (MT/Month)</b>	<b>Total Quantity (MT/Month)</b>
1	Bi Axial Orient Polyester Film	4000	4000	<b>8000</b>
2	Metalized Polyester Film	2050	--	<b>2050</b>
3	Mettalized & lacquered Polyester Film	800	2200	<b>3000</b>
4	Polyester chips (different grades)	--	31000	<b>31000</b>
5	Power plant	--	20 MW	<b>20 MW</b>
6	Metalized Laminated polyester Film	800	- 800	<b>NIL</b>
7	Metalized & Lacquaered Laminated Polyester Film	800	- 800	<b>NIL</b>
8	Mettalic Yarn	400	- 400	<b>NIL</b>
9	M.F Resin	350	- 350	<b>NIL</b>
10	Epoxy Resin	350	- 350	<b>NIL</b>
11	Lacquers	1000	- 1000	<b>NIL</b>
12	Plastic Bobbins (Reels)	90	- 90	<b>NIL</b>
<b>By product</b>				
13	Tetra Hydrogen Furan	---	250	<b>250</b>

The EAC, after detailed deliberations decided to **defer the proposal for want of requisite information as under** and have asked the PP to revise the Report alongwith following clarification/information:-

- (i) Consultant is not accredited with QCI/NABET. Consultant has made the court case against the Ministry's Notification on QCI/NABET accreditation. Details of all orders needs to be submitted. If Consultant applied for accreditation, details, if any needs to be uploaded.
- (ii) Proof to establish that existing unit is operating with proper prior permission and to confirm that unit is not violating the provision contained in EIA Notification, 1994

and 2006. In this regard PP needs to submit all the old CTE/CTO to verify the violation, if any.

- (iii) PP needs to submit the details of production since inception of the unit to verify violation, if any.
- (iv) This is an expansion case and as per TOR PP needs to submit the certified compliance report of CTO from SPCB. However PP has not submitted the same.
- (v) PP needs to confirm the categorization of the project as per the schedule to the EIA Notification, 2006.
- (vi) Adequate Action Plan on the issues raised during PH needs to be submitted alongwith timeline and budged.
- (vii) PP needs to relook the water analysis report as the data seems wrong. Please verify the water analysis and identify the root cause analysis for the same and resubmit.
- (viii) Details of water approval needs to be submitted.

#### **Agenda No.18.4**

#### **Proposed Synthetic Resin (Urea-Formaldehyde and Phenol-Formaldehyde) plant of M/s Sarara Chemicals, located at Village Kuakandar, District-Darjeeling, West Bengal - Consideration of Environmental Clearance.**

#### **[IA/WB/IND2/72842/2018, J-11011/56/2018-IA-II(I)]**

The proposal is for environmental clearance to the project for Setting up Synthetic Resin (Urea Formaldehyde and Phenol Formaldehyde) manufacturing plant of capacity 5400 TPA by M/s Sarara Chemicals, in an area of 1335.45 sqm., located at Village Kuokandar, District Darjeeling, West Bengal.

The Project Proponent and their consultant made a detailed presentation on the salient features of the project through Video Conferencing (VC) and informed that:

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

Standard ToR for the project was issued by the Ministry vide letter dated 23<sup>rd</sup> March, 2018. Public Hearing for the project has been conducted by the State Pollution Control Board on 28<sup>th</sup> August, 2019, which was presided over by Additional District Magistrate. The main issues raised during the public hearing are related to air & water



pollution and its management, CER & employment. The Committee deliberated the action plan on the issues raised during PH and found adequate.

PP reported that Land area available for the project is 1335.45 sqm. Industry will develop greenbelt in an area of 454.12 sqm covering 34% of the project area. The estimated project cost is Rs 110.47 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs 20.9 lakhs and the recurring cost (operation and maintenance) will be about Rs 5.8 lakhs per annum. The project will provide employment for 10 persons directly & 6 persons indirectly. Industry proposes to allocate Rs 2.2 lakhs (@ 2 %) towards Corporate Environmental Responsibility.

PP reported that there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Mechi River is flowing at 4.6 km in West direction and River Swarnamati is at 1 km in East direction. No litigation is pending against the proposal.

Ambient air quality monitoring was carried out at 8 locations during January to March 2018 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub>(50.0 – 100.4 µg/m<sup>3</sup>), PM<sub>2.5</sub> (28.2 – 57.4 µg/m<sup>3</sup>), SO<sub>2</sub> (5.1 – 8.1µg/m<sup>3</sup>) and NO<sub>2</sub> (23.3 – 43.2µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.043µg/m<sup>3</sup>, 0.011µg/m<sup>3</sup> and 0.009 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).

Total water requirement is estimated to be 5.2 cum/day, which includes fresh water requirement of 4.6 cum/day, proposed to be met from bore well. Permission in this regard has been obtained from CGWA vide letter dated 1<sup>st</sup> October, 2018. Effluent of 0.7 cum/day will be treated through ETP and reused. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 48 kVA and will be met from West Bengal State Electricity Distribution Company Limited (WBSEDCL). Additionally, DG set of 50 kVA will be used as standby during power failure. Stack (height 2m) will be provided as per CPCB norms to the proposed DG set. Coal fired boiler of 1 TPH will be installed in the plant. Cyclone Separator with a stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm<sup>3</sup>.

**Details of Process emissions generation and its management.**

<b>S.No</b>	<b>Stack attached to</b>	<b>Emissions (gm/sec)</b>	<b>Treatment</b>
1	Boiler (1 TPH)	PM -0.04	Cyclone Separator
		SO <sub>2</sub> - 0.01	Dispersed into atmosphere
		NO <sub>x</sub> - 0.008	Dispersed into atmosphere

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

### *Non-Hazardous Solid Waste*

S.No	Waste	Quantity	Disposal
1	Dry Garbage	4 Kg/day	To be disposed in panchayat vat
2	Wet Garbage	6 Kg/day	To be disposed in panchayat vat

### *Details of Hazardous Waste generation and Disposal*

S. No.	Types of Waste	Quantity	Mode of Disposal
1.	ETP Sludge	5 Kg/Month	Collection, Storage, Transportation, Disposal at TSDF site.
2	Used oil/ spent oil	15 Lit/Year	Collection, Storage, Transportation, Sell to Registered Pre-processor
3	Bags	50 Nos./Day	Sold to Registered Recycler

The details of products and capacity are as under:

S. No	Product	Capacity	
		MT/Month	MT/Annum
1	Urea-Formaldehyde Resin	315	3780
2	Phenol-Formaldehyde Resin	135	1620
<b>Total</b>		<b>450</b>	<b>5400</b>

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario

for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing. The Committee noted that the acquired land has been converted for Industrial use and necessary permission in this regard has been obtained.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21<sup>st</sup>July, 2010 and amended from time to time shall be followed.
- (v) Fugitive emissions shall be controlled at 99.98% with effective chillers.
- (vi) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (vii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

- (viii) Solvent management shall be carried out as follows:
  - a) Reactor shall be connected to chilled brine condenser system.
  - b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  - c) Solvents shall be stored in a separate space specified with all safety measures.
  - d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  - e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  - f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (ix) Total fresh water requirement shall not exceed 4.6 cum/day, proposed to be met from bore well. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA and renewed from time to time.
- (x) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- (xi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (xii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xiii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xiv) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
- (xv) The company shall undertake waste minimization measures as below:-
  - a) Metering and control of quantities of active ingredients to minimize waste.
  - b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - c) Use of automated filling to minimize spillage.
  - d) Use of Close Feed system into batch reactors.
  - e) Venting equipment through vapour recovery system.

- f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi) The green belt of at least 5-10 m width shall be developed in not less than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvii) As committed, at least Rs. 2.2 lakhs (2 % of the project cost) shall be allocated towards Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for addressing the issues raised during public consultation/hearing including assistance/infrastructure development of village school, social/environmental activities, skill development, etc.
- (xviii) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xix) 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.
- (xx) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxi) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

### **Agenda No.18.5**

#### **Setting up Synthetic Organic Chemicals Manufacturing Unit by M/s Cosmic Pigments and Intermediates at Survey No. 202/6/p, Sokhda, Tehsil Khambhat District Anand, Gujarat by M/s Cosmic Pigments and Intermediates - Consideration of Environmental Clearance**

**[IA/GJ/IND2/91049/2019, IA-J-11011/25/2019-IA-II(I)]**

The Project Proponent and their consultant M/s Aqua-Air Environmental Engineers Pvt. Ltd. (Hon'ble High Court of Gujarat stay order), made a detailed presentation through Video Conferencing (VC) on the salient features of the project. Consultant has

informed to the EAC that they have also applied for QCI/NABET Accreditation on March 11, 2020, which is under active consideration before QCI/NABET.

The proposal was earlier considered by the EAC in its meeting held during 20-22 November, 2019. The additional information desired by the Committee and response from the project proponent is as under:

<b>S. No.</b>	<b>Query Raised</b>	<b>Query Reply Given by PP</b>
1.	EIA report to be revised as per the terms of reference granted for the project, and shall conform to Appendix III of the EIA Notification, 2006.	EIA Report is revised with complying of all TOR points as per the terms of reference granted for the project, and conforms to the Appendix III of the EIA Notification, 2006. Revised EIA Report with Form-2 is uploaded on portal. The Committee deliberated the same.
2.	EAC noted that PP has not submitted adequately TOR compliance and PP needs to be resubmit the TOR compliance adequately.	EIA Report is revised and TOR compliance is adequately prepared. Revised EIA Report with adequate TOR Compliance is uploaded on portal. The Committee deliberated and found the same in order.
3.	The Committee noted that there are various deficiencies in Form 2 (viz. S. no. 13, 15 etc.) uploaded by the PP and accordingly Revised Form 2 shall be submitted incorporating all the information related to the project.	Form-2 & EIA Report is revised and TOR compliance is adequately prepared. Revised Form-2 & EIA Report with adequate TOR Compliance is uploaded. The Committee deliberated and found the same in order.
4.	The Committee noted that there are Schedule I species in the study area. PP needs to prepare the species specific conservation plan along with budgetary allocation and PP to take approval for the Wildlife conservation and management plan from CWLW State Government.	There are 3 Schedule I species found in the study area. Indian Peafowl, White Rumped Vulture & Common Pierrot Butterfly and its budgetary allocation is Rs. 202500, Rs. 302500, Rs. 102500, so total budgetary allocation for conservation of Schedule-I Species comes to Rs. 607500. Approval for the Wildlife Conservation and Management Plan from CWLW State Government is submitted on January 24, 2020. Species specific conservation plan for schedule-I species along with budgetary allocation is submitted. The Committee deliberated and found the same in order.

5.	Issues raised during public hearing, response by the project proponent, action plan with budgetary allocation. Public hearing proceedings to be forwarded by the Member Secretary, SPCB along with complete public hearing/consultation documents.	Issues raised during Public Consultation by 3 People: (i) Local Employment to get increased due to proposed project, (ii) PP helped the nearby villages for each and every activity required and that led to the development of nearby villages, (iii) PP is actively involved to improve environment quality of the area. The Committee deliberated the action plan and found the same in order.						
6.	Onsite emergency plan as per MSIHC Rules.	Company shall develop the emergency management system to tackle the emergency situation, apart from the EMS. Onsite emergency plan as per MSIHC Rules is submitted. The Committee deliberated and found the same in order.						
7.	Revised water balance with details of total water and fresh water requirement, and permission from concerned regulatory authority.	Revised water balance with details of total water and fresh water requirement, and permission from concerned regulatory authority is submitted. The Committee deliberated and found the same in order.						
8.	Effluent treatment mechanism with plan for Zero Liquid Discharge.	Wastewater generated will be treated by giving Primary Treatment followed by RO & MEE to achieve ZLD. Effluent treatment mechanism with plan for Zero Liquid Discharge is submitted. The Committee deliberated and found the same in order.						
9.	Plan for Corporate Environmental Responsibility	<p>Revised CER @ 2.5% of project cost. Plan for Corporate Environmental Responsibility has been submitted as under:</p> <table border="1" data-bbox="776 1646 1484 1934"> <thead> <tr> <th data-bbox="776 1646 997 1730"><b>CER Activities</b></th> <th data-bbox="997 1646 1227 1730"><b>Time Limit in Year</b></th> <th data-bbox="1227 1646 1484 1730"><b>Fund (Rs. In Lakhs)</b></th> </tr> </thead> <tbody> <tr> <td data-bbox="776 1730 997 1934">Provision of Raw Material like Cement &amp; Concrete, SS Roads,</td> <td data-bbox="997 1730 1227 1934">2 Year</td> <td data-bbox="1227 1730 1484 1934">25,00,000/-</td> </tr> </tbody> </table>	<b>CER Activities</b>	<b>Time Limit in Year</b>	<b>Fund (Rs. In Lakhs)</b>	Provision of Raw Material like Cement & Concrete, SS Roads,	2 Year	25,00,000/-
<b>CER Activities</b>	<b>Time Limit in Year</b>	<b>Fund (Rs. In Lakhs)</b>						
Provision of Raw Material like Cement & Concrete, SS Roads,	2 Year	25,00,000/-						

		Briquettes, etc. for Water Tank for water distribution.		
		Land Filling at Lunej School	2 Year	12,50,000/-
		Contribution in the laying of water pipeline in the Lunej Village.	1 Year	10,00,000/-
		Contribution in the development of Green belt in Nagra Village	1 Year	2,50,000/-
		<b>Total</b>		<b>50,00,000/-</b>
10.	QCI/NABET Accreditation details of consultants prepared the EIA/EMP report	M/s. Aqua Air Environmental Engineers Pvt. Ltd. has stay order in Hon'ble High Court against Notification dated March 3, 2016.		
11.	PP/Consultant was unable to show the video of PH	DVD of the video of Public Hearing is submitted.		
12.	PP/Consultant has submitted the undertaking for owning the draft EIA Report. The consultant has not applied his mind during uploading the information on portal. The Committee was very disappointed by this act of consultant.	Undertaking for owning the EIA Report has been submitted.		

The proposal is for environmental clearance to the project for Setting up of pigments, dyes and synthetic organic chemicals manufacturing unit of capacity 2900 TPM by M/s Cosmic Pigments & Intermediates (Unit-II) in an area of 20,538 sqm at Survey No. 238, Village Lunej, Taluka Khambhat, District Anand, Gujarat.

The details of products are as under:



Sr.No. of Total Products	Category wise Sr.No. of Products	Group wise Sr. No. of Products	Name of the Products	CAS no. / CI no.	Quantity MT/Month	LD50 /LC50
<b>1.Total No. of Products : Category : A+B+C+D+E+F+G+H+I+J+K+L = 274;</b>						
<b>Total Production capacity of All Products : 2900 MT/Month</b>						
<b>Category-A: Pigments (Group 1+2+3+4+5 = 106 )</b>						
<b>Group-1: Pigment Red = 49</b>						
1	1	1	Pigment Red 2	6041-94-7	200	LD50 Oral, Rat 8110 mg/kg
2	2	2	Pigment Red 3	2425-85-6		LD50 Oral, Rat 8180 mg/kg
3	3	3	Pigment Red 4	2814-77-9		LD50 Oral, Rat 8140 mg/kg
4	4	4	Pigment Red 5	6410-41-9		LD50 Oral, Rat 8190 mg/kg
5	5	5	Pigment Red 12	6410-32-8		LD50 Oral, Rat 8160 mg/kg
6	6	6	Pigment Red 14	6471-50-7		NA
7	7	7	Pigment Red 38	6358-87-8		dermal route (LD50 > 2000 mg/kg bw)
8	8	8	Pigment Red 48:1	7585-41-3		LD50 Oral, Rat 8160 mg/kg
9	9	9	Pigment Red 48:2	7023-61-2		LD50 Oral, Rat 8190 mg/kg
10	10	10	Pigment Red 48:3	15782-05-5		LD50 Oral, Rat 8130 mg/kg
11	11	11	Pigment Red 48:4	5280-66-0		LD50 Oral, Rat 8160 mg/kg
12	12	12	Pigment Red 48:5	N.A.		NA
13	13	13	Pigment Red 49	1248-18-6		NA
14	14	14	Pigment Red 49:1	1103-38-4		NA
15	15	15	Pigment Red 49:2	1103-39-5		NA
16	16	16	Pigment Red 49:3	6371-67-1		NA
17	17	17	Pigment Red 52:1	17852-99-2		NA
18	18	18	Pigment Red 52:2	12238-31-2		NA

19	19	19	Pigment Red 53	2092-56-0	NA
20	20	20	Pigment Red 53:1	5160-02-1.	LD50 Oral, Rat 8190 mg/kg
21	21	21	Pigment Red 53:3	73263-40-8	L.D.50 ACUTE ORAL(RATS) : ABOUT 5,000mg/KG
22	22	22	Pigment Red 57:1	5281-04-9.	LD50 Oral, Rat 8140 mg/kg
23	23	23	Pigment Red 63:1	6417-83-0	NA
24	24	24	Pigment Red 63:2	35355-77-2	LD50 rat (oral): > 2.000 mg/kg
25	25	25	Pigment Red 81	12224-98-5	LD50 rat : 8260 mg/kg
26	26	26	Pigment Red 81:1	80083-40-5	LD50 rat (oral): > 2.000 mg/kg
27	27	27	Pigment Red 81:x	63022-06-0	LD50 rat (oral): > 2.000 mg/kg
28	28	28	Pigment Red 81:y	N.A.	LD50 rat (oral): > 2.000 mg/kg
29	29	29	Pigment Red 81:2	75627-12-2	LD50 rat (oral): > 2.000 mg/kg
30	30	30	Pigment Red 81:3	68310-07-6	LD50 rat (oral): > 2.000 mg/kg
31	31	31	Pigment Red 81:4	85959-61-1	LD50 rat (oral): > 2.000 mg/kg
32	32	32	Pigment Red 112	6535-46-2	LD50 Oral, Rat 8290 mg/kg
33	33	33	Pigment Red 122	980-26-7	LD50 Oral, Rat 8290 mg/kg
34	34	34	Pigment Red 123	24108-89-2	LD50 rat (oral): > 2.000 mg/kg
35	35	35	Pigment Red 144	5280-78-4	LD50 Oral, Rat 8380 mg/kg
36	36	36	Pigment Red 146	5280-68-2	LD50 Oral, Rat 8360 mg/kg
37	37	37	Pigment Red 168	4378-61-4	NA
38	38	38	Pigment Red 169	12237-63-7	LD50 Oral, Rat 5000 mg/kg
39	39	39	Pigment Red 170	2786-76-7	LD50 Oral, Rat 8270 mg/kg
40	40	40	Pigment Red 175	6985-92-8	LD50 Oral, Rat 8350 mg/kg
41	41	41	Pigment Red 176	12225-06-8	LD50 Oral, Rat 8380 mg/kg
42	42	42	Pigment Red 177	4051-63-2	LD50 Oral, Rat 8340 mg/kg
43	43	43	Pigment Red 178	3049-71-6	LD50 Species: rat Value: > 5,000 mg/kg
44	44	44	Pigment Red 179	5521-31-3	LD50 Oral, Rat 8290 mg/kg
45	45	45	Pigment Red 188	61847-48-1	LD50 rat (oral): > 2.000 mg/kg

46	46	46	Pigment Red 202	3089-17-6		LD50 Oral, Rat 8360 mg/kg
47	47	47	Pigment Red 254	122390-98-1		LD50 Oral, Rat 8380 mg/kg
48	48	48	Pigment Red 256	79102-65-1		Oral LD50: >10 g/kg (rats) practically non-toxic
49	49	49	Pigment Red 264	122390-98-1		LD50 Oral, Rat 8320 mg/kg
<b>Group-2: Pigment Yellow = 32</b>						
50	50	1	Pigment Yellow 1	2512-29-0		LD50 Oral, Rat. >10000mg/kg
51	51	2	Pigment Yellow 3	6486-23-3		LD50 Oral, Rat 8252mg/kg
52	52	3	Pigment Yellow 12	6358-85-6		LD50 Oral, Rat >5000mg/kg
53	53	4	Pigment Yellow 13	5102-83-0		LD50 Oral, Rat >5000mg/kg
54	54	5	Pigment Yellow 14	5468-75-7		LD50 Oral, Rat >5000mg/kg
55	55	6	Pigment Yellow 16	5979-28-2		Not Listed
56	56	7	Pigment Yellow 17	4531-49-1		LD50 Oral, Rat 8230 mg/kg
57	57	8	Pigment Yellow 61	12286-65-6		LD50 Oral, Rat 8160 mg/kg
58	58	9	Pigment Yellow 62	12286-66-7		LD50 rat (oral): > 5,000 mg/kg
59	59	10	Pigment Yellow 63	14569-54-1	200	Not Listed
60	60	11	Pigment Yellow 65	6528-34-3		LD50 Oral, Rat 8230 mg/kg
61	61	12	Pigment Yellow 73	13515-40-7		LD50 Oral, Rat 8190 mg/kg
62	62	13	Pigment Yellow 74	6358-31-2		LD50 Oral, Rat 8260 mg/kg
63	63	14	Pigment Yellow 83	5567-15-7		LD50 Oral, Rat 8390 mg/kg
64	64	15	Pigment Yellow 93	5580-57-4		LD50 Oral, Rat 14000 mg/kg
65	65	16	Pigment Yellow 97	12225-18-2		LD50 Oral, Rat 8250 mg/kg
66	66	17	Pigment Yellow 101	2387-03-3.		LD50 rat (oral): > 2.000 mg/kg
67	67	18	Pigment Yellow 120	29920-31-8		oral route (LD50 > 15 000 mg/kg bw)

68	68	19	Pigment 121	Yellow	61968-85-2		NA
69	69	20	Pigment 138	Yellow	30125-47-4		LD50 rat (oral): > 5.000 mg/kg
70	70	21	Pigment 139	Yellow	36888-99-0		LD50 Oral, Rat 2000 mg/kg
71	71	22	Pigment 151`	Yellow	31837-42-0		LD50 Oral, Rat 8330 mg/kg
72	72	23	Pigment 153	Yellow	68859-51-8		NA
73	73	24	Pigment 154	Yellow	68134-22-5		LD50 Oral, Rat 8250 mg/kg
74	74	25	Pigment 155	Yellow	68516-73-4		NA
75	75	26	Pigment 174	Yellow	78952-72-4		LD50 Oral, Rat =980mg/kg
76	76	27	Pigment 180	Yellow	77804-81-0		LD50 Oral, Rat 5000mg/kg
77	77	28	Pigment 181	Yellow	74441-05-7		oral route (LD50 > 5000 mg/kg bw)
78	78	29	Pigment 182	Yellow	67906-31-4		NA
79	79	30	Pigment 183	Yellow	23792-68-9		LD50 Species: rat (male/female) Value: > 5,000 mg/kg
80	80	31	Pigment 191	Yellow	129423-54-7		Oral LD50 value of 5 mg/kg or greater in rats.
81	81	32	Pigment 191:1	Yellow	154946-66-4		LD50 Oral, Rat 2000mg/kg
<b>Group-3: Pigment Orange = 8</b>							
82	82	1	Pigment 5	Orange	3468-63-1	200	LD50 Oral, Rat 8120 mg/kg
83	83	2	Pigment 13	Orange	3520-72-7		LD50 Oral, Rat 8190 mg/kg
84	84	3	Pigment 16	Orange	6505-28-8		LD50 Oral, Rat 8120 mg/kg
85	85	4	Pigment 34	Orange	15793-73-4		LD50 Oral, Rat 8250 mg/kg
86	86	5	Pigment 36	Orange	12236-62-3		LD50 Oral, Rat 8210 mg/kg
87	87	6	Pigment 43	Orange	4424-06-0		LD50 Oral, Rat 2000 mg/kg
88	88	7	Pigment 62	Orange	52846-56-7		LD50 Oral, Rat 8370 mg/kg

89	89	8	Pigment Orange 64	72102-84-2		LD50 Oral, Rat 8270 mg/kg
<b>Group-4: Pigment Blue = 10</b>						
90	90	1	Pigment Blue 1	1325-87-7	200	NA
91	91	2	Pigment Blue 15	147-14-8		LD50 Oral, Rat. >3200mg/kg
92	92	3	Pigment Blue 15:1	147-14-8		LD50 Oral, Rat. >3200mg/kg
93	93	4	Pigment Blue 15:2	147-14-8		LD50 Oral, Rat. >3200mg/kg
94	94	5	Pigment Blue 15:3	147-14-8		LD50 Oral, Rat 2000mg/kg
95	95	6	Pigment Blue 15:4	147-14-8		LD50 Oral, Rat 2000mg/kg
96	96	7	Pigment Blue 15:6	147-14-8		LD50 Oral, Rat 2000mg/kg
97	97	8	Pigment Blue 16	574-93-6		LD50 Oral, Rat 2000mg/kg
98	98	9	Pigment Blue 60	81-77-6		LD50 Oral, Rat > 980 mg/kg
99	99	10	Pigment Blue 62	57485-98-0		LD50 Oral, Rat 2000mg/kg
<b>Group-5: Pigment Violet = 7</b>						
100	100	1	Pigment Violet 1	1326-03-0	200	LD50 Oral, Rat 2000mg/kg
101	101	2	Pigment Violet 1x	N.A.		LD50 Oral, Rat 2000mg/kg
102	102	3	Pigment Violet 3	1325-82-2		LD50 Oral, Rat 2000mg/kg
103	103	4	Pigment Violet 19	1047-16-1		LD50 Oral, Rat 8420 mg/kg
104	104	5	Pigment Violet 23	6358-30-1		LD50 Oral, Rat 2000mg/kg
105	105	6	Pigment Violet 27	12237-62-6		LD50 Oral, Rat. >3200mg/kg
106	106	7	Pigment Violet 29	81-33-4		LD50 Oral, Rat 2000mg/kg
<b>Total of Category-A ( Group 1 + 2 + 3 + 4 + 5 ) = 106</b>					<b>1000</b>	
<b>Category-B: Solvent Dyes</b>						
<b>Group-1: Red Solvent Dyes = 13</b>						
107	1	1	Solvent Red 19E	6368-72-5	100	NA
108	2	2	Solvent Red 23	85-86-9		NA
109	3	3	Solvent Red 24	85-83-6		Acute oral toxicity: LD50(Rat): 8110mg/kg
110	4	4	Solvent Red 52	81-39-0		Acute oral toxicity: LD50(Rat): 8160mg/kg

111	5	5	Solvent Red 111	82-38-2	Acute Toxicity: Oral-dog LD 50: >8 g/kg
112	6	6	Solvent Red 135	20749-68-2	Acute oral toxicity: LD50(Rat): 8260mg/kg
113	7	7	Solvent Red 151	144013-41-1	NA
114	8	8	Solvent Red 168	71832-19-4	Acute oral toxicity: LD50(Rat): 8220mg/kg
115	9	9	Solvent Red 169	27354-18-3	Acute oral toxicity: LD50(Rat): 8230mg/kg
116	10	10	Solvent Red 179	479-27-6	Acute oral toxicity: LD50(Rat): 8260mg/kg
117	11	11	Solvent Red 197	52372-39-1	Acute oral toxicity: LD50(Rat): 8190mg/kg
118	12	12	Solvent Red 207	15958--69-6	NA
119	13	13	Solvent Red 227	2944-28-7	NA
			<b>Group-2: Yellow Solvent Dyes = 12</b>		
120	14	1	Solvent Yellow 2	6370-43-0	NA
121	15	2	Solvent Yellow 14	842-07-9	NA
122	16	3	Solvent Yellow 18	6407-78-9	NA
123	17	4	Solvent Yellow 33	8003-22-3	Skin, rabbit: LD50 = >2 gm/kg.
124	18	5	Solvent Yellow 43	19125-99-6	NA
125	19	6	Solvent Yellow 44	2478-20-8	NA
126	20	7	Solvent Yellow 72	61813-98-7	NA
127	21	8	Solvent Yellow 114	7576-65-0	NA
128	22	9	Solvent Yellow 131	71819-82-4	NA
129	23	10	Solvent Yellow 157	27908-75-4	Acute oral toxicity: LD50(Rat): 8200mg/kg
130	24	11	Solvent Yellow 163	106768-99-4	LD50 rat (oral): > 2,000 mg/kg (OECD Guideline 423)
131	25	12	Solvent Yellow 167	N.A.	NA

		<b>Group-3: Orange Solvent Dyes = 3</b>				
132	26	1	Solvent Orange 60	61969-47-9		Acute oral toxicity: LD50(Rat): 8090mg/kg
133	27	2	Solvent Orange 63	16294-75-0		Acute oral toxicity: LD50(Rat): 8190mg/kg
134	28	3	Solvent Orange 105	31482-56-1		LD50 Intraperitoneal Rat=3060 MG/KG
		<b>Group-4: Blue Solvent Dyes = 6</b>				
135	29	1	Solvent Blue 35	17354-14-2		NA
136	30	2	Solvent Blue 36	14233-37-5		Acute oral toxicity: LD50(Rat): 8080mg/kg
137	31	3	Solvent Blue 97	61969-44-6		Acute oral toxicity: LD50(Rat): 8200mg/kg
138	32	4	Solvent Blue 101	6737-68-8		NA
139	33	5	Solvent Blue 102	15403-56-2		NA
140	34	6	Solvent Blue 104	116-75-6		Not acutely toxic via the oral route (LD50 > 5000 mg/kg bw)
		<b>Group-5: Violet Solvent Dyes = 4</b>				
141	35	1	Solvent Violet 13	81-88-1		LD50 Oral, Rat. >500mg/kg
142	36	2	Solvent Violet 14	67577-84-8		Acute oral toxicity: LD50(Rat): 8110mg/kg
143	37	3	Solvent Violet 38	63512-14-1		NA
144	38	4	Solvent Violet 59	6408-72-6		Acute oral toxicity: LD50(Rat): 8220mg/kg
		<b>Group-6: Green Solvent Dyes = 3</b>				
145	39	1	Solvent Green 3	128-80-3		LD50 = 3660 mg/kg ( Rat )
146	40	2	Solvent Green 28	71839-01-5		LD50 = 3660 mg/kg ( Rat )
147	41	3	Solvent Green 33	10671-57-8		NA
		<b>Total of Category-B ( Group 1 + 2 + 3 + 4 + 5 + 6 ) = 41</b>			<b>100</b>	
		<b>Category-C: Solvent Dyes</b>				
		<b>Group-1: Red Acid Dyes = 3</b>				
148	1	1	Acid Red 34	6360-67-1	100	NA
149	2	2	Acid Red 88	1658-31-7		NA
150	3	3	Acid Red 183	6408-31-7		NA

		<b>Group-2: Yellow Acid Dyes = 3</b>				
151	4	1	Acid Yellow 36	587-98-4		ORAL LD50 Rat > 2000 mg/k
152	5	2	Acid Yellow 151	12715-61-6		NA
153	6	3	Acid Yellow 194	61814-52-6		NA
		<b>Group-3: Orange Acid Dyes = 2</b>				
154	7	1	Acid Orange 33	6507-77-3		NA
155	8	2	Acid Orange 61	6408-33-9		NA
		<b>Group-4: Blue Acid Dyes = 3</b>				
156	9	1	Acid Blue 40	4474-24-7		NA
157	10	2	Acid Blue 49	N.A.		NA
158	11	3	Acid Blue 80	4474-24-2		Oral, rat: LD50 = 3350 mg/kg.
		<b>Group-5: Black Acid Dyes = 1</b>				
159	12	1	Acid Black 210	99576-15-5		Rat Oral LD50 (mg/kg) >5000
		<b>Group-6: Brown Acid Dyes=5</b>				
160	13	1	Acid Brown 58	12269-87-3		NA
161	14	2	Acid Brown 126	N.A.		NA
162	15	3	Acid Brown 362	61931-13-3		Acute oral toxicity: LD50(Rat): 8300mg/kg
163	16	4	Acid Brown 425	119509-49-8		NA
<b>164</b>	17	5	Acid Brown 432	119509-50-1		NA
		<b>Total Of Category C =(Group 1+2+3+4+5+6) = 17</b>			<b>100</b>	
		<b>Category-D:Basic Dyes</b>				
		<b>Group-1: Red Basic Dyes=3</b>				
165	1	1	Basic Red 12	6320-14-5		NA
166	2	2	Basic Red 14	12217-48-0		NA
167	3	3	Basic Red 18	14097-03-01	100	NA
		<b>Group-2: Yellow Basic Dyes=2</b>				
168	4	1	48054	54060-92-3		Acute oral toxicity: LD50(Rat): 200mg/kg



169	5	2	N.A	78181-99-4		NA
<b>Group-3: Orange Basic Dyes=2</b>						
170	6	1	Basic Orange 30	12217-45-7		NA
171	7	2	Basic Orange 33	12217-46-8		NA
<b>Group-4: Blue Basic Dyes</b>						
172	8	1	Basic Blue 140	61724-62-4		NA
<b>Group-5: Black Basic Dyes</b>						
173	9	1	Basic Mix Black	NA		NA
<b>Total Of Category D =(Group 1+2+3+4+5) = 9</b>					<b>100</b>	
<b>Category-E: Direct Dyes</b>						
<b>Group-1: Red Basic Dyes=3</b>						
174	1	1	Direct Red 16	07/02/6227		NA
175	2	2	Direct Red 80	08/10/2610		NA
176	3	3	Direct Red 81	09/11/2610		NA
<b>Group-2: Yellow Direct Dyes</b>						
177	4	1	Direct Yellow 11	1325-37-7		NA
178	5	2	Direct Yellow 27	10190-68-8		NA
179	6	3	Direct Yellow 147	71838-49-8	100	NA
<b>Group-3: Orange Direct Dyes</b>						
180	7	1	Direct Orange 15	1325-35-5		NA
181	8	2	Direct Orange 102	6598-63-6		NA
<b>Group-4: Blue Direct Dyes</b>						
182	9	1	Direct Blue 80	12222-00-3		NA
183	10	2	Direct Blue 86	1330-38-7		ORAL RAT LD50:>5 g/kg
<b>Group-5: Black Direct Dyes</b>						
184	11	1	Direct Black 168	3818-60-8		NA
<b>Total Of Category E =(Group 1+2+3+4+5) = 11</b>					<b>100</b>	
<b>Category-f: Disperse Dyes</b>						
<b>Group-1: Red Disperse Dyes</b>					100	

185	1	1	Disperse Red 50	12223-35-7	NA
186	2	2	Disperse Red 60	12223-37-9	NA
187	3	3	Disperse Red 91	12223-46-0	NA
188	4	4	Disperse Red 92	12236-11-2	NA
189	5	<b>5</b>	Disperse Red 167	61968-52-3	NA
<b>Group-2: Yellow Disperse Dyes</b>					
190	6	1	Disperse Yellow 54	12223-85-7	NA
191	7	2	Disperse Yellow 56	54077-16-6	NA
192	8	3	Disperse Yellow 114	61968-66-9	NA
193	9	4	Disperse Yellow 119	57308-41-5	NA
194	10	5	Disperse Yellow 211	86836-02-4	NA
<b>Group-3: Orange Disperse Dyes</b>					
195	11	1	Disperse Orange 25	12223-22-2	Oral (rat) LD50: >2000 mg/kg
196	12	2	Disperse Orange 30	12223-23-3	NA
<b>Group-4: Blue Disperse Dyes</b>					
197	13	1	Disperse Blue 56	12217-79-7	NA
198	14	2	Disperse Blue 79	12239-34-8	NA
199	15	3	Disperse Blue F2RX (mix)	N.A.	NA
200	16	4	Disperse Blue F2GX (mix)	N.A.	NA
201	17	<b>5</b>	Disperse Blue F2IX (mix)	N.A.	NA
<b>Group-5: Black Disperse Dyes</b>					
202	18	1	Disperse Black R (mix)	N.A.	NA
203	19	2	Disperse Black RLX (mix)	N.A.	NA
204	20	3	Disperse Black XPX (mix)	N.A.	NA

		<b>Group-6: Green Disperse Dyes</b>				
205	21	1	Disperse Green 2B (mix)	NA		NA
		<b>Group-7: Brown Disperse Dyes</b>				
206	22	1	Disperse Brown 3BS(mix)	NA		NA
		<b>Group-8: Gray Disperse Dyes</b>				
207	23	1	Disperse Gray RBB (mix)	NA		NA
		<b>Total Of Category f = (Group 1+2+3+4+5+6+7+8) = 23</b>			<b>100</b>	
		<b>Category-G: Reactive Dyes</b>				
		<b>Group-1: Red Reactive Dyes</b>				
208	1	1	Reactive Red 45	12226-22-1		Rat Oral LD50 (mg/kg) >5000
209	2	2	Reactive Red 65	12226-32-3		NA
210	3	3	Reactive Red 111	88232-20-6		NA
211	4	4	Reactive Red 152	71870-80-5		NA
212	5	5	Reactive Red 194	23354-52-1		NA
		<b>Group-2: Yellow Reactive Dyes</b>				
213	6	1	Reactive Yellow 18	12226-48-1		Rat Oral LD50 (mg/kg) >5000
214	7	2	Reactive Yellow 57	61969-35-3	100	NA
215	8	3	Reactive Yellow 81	59112-78-6		Rat Oral LD50 (mg/kg) >5000
216	9	4	Reactive Yellow 135	77907-38-1		NA
217	10	5	Reactive Yellow 160	129898-77-7		NA
		<b>Group-3: Orange Reactive Dyes</b>				
218	11	1	Reactive Orange 12	35642-64-9		NA
219	12	2	Reactive Orange 13	12225-85-3		Rat Oral LD50 [mg/kg] : > 5000
220	13	3	Reactive Orange 84	91261-29-9		NA
221	14	4	Reactive Orange 122	12220-12-1		NA
		<b>Group-4: Blue Reactive Dyes</b>				

222	15	1	Reactive Blue 49	12236-92-9		Rat Oral LD50 (mg/kg) >5000	
223	16	2	Reactive Blue 50	12225-61-5		Rat Oral LD50 (mg/kg) >5000	
224	17	3	Reactive Blue 69	59800-32-7		NA	
225	18	4	Reactive Blue 198	124448-55-1		Rat Oral LD50 (mg/kg) >5000	
<b>Group-5: Black Reactive Dyes</b>							
226	19	1	Reactive Black 5	12225-25-1	LD50 > 2,000 mg/kg (rat)		
<b>Total Of Category G =(Group 1+2+3+4+5) = 19</b>					<b>100</b>		
<b>Category-H: Vat Dyes</b>							
<b>Group-1: Red Vat Dyes</b>							
227	1	1	Vat Red 1	2379-74-0	100	NA	
<b>Group-2: Yellow Vat Dyes</b>							
228	2	1	Vat Yellow 2	129-09-9		NA	
229	3	2	Vat Yellow 4	128-66-5		NA	
230	4	3	Golden Yellow GK	1324-11-4		NA	
<b>Group-3: Orange Vat Dyes</b>							
231	5	1	Vat Orange 1	1324-11-4		NA	
232	6	2	Vat Orange 5	3263-31-8		NA	
<b>Group-4: Blue Vat Dyes</b>							
233	7	1	Vat Blue 5	2475-31-2		ipr-rat LD50:5700 mg/kg	
<b>Group-5: Brown Vat Dyes</b>							
234	8	1	Vat Brown 5	398-75-1	NA		
<b>Total Of Category H =(Group 1+2+3+4+5) = 8</b>					<b>100</b>		
<b>Category-I: Naphtho</b>							
235	1	1	NAPHTHOL - AS	92-77-3	100	NA	
236	2	2	NAPHTHOL - AS BO	132-68-3		ipr-rat LD50:7320 mg/kg	
237	3	3	NAPHTHOL - AS D	135-61-5		NA	
238	4	4	NAPHTHOL - AS OL	135-62-6		NA	
239	5	5	NAPHTHOL - AS BS	132-65-9		NA	
240	6	6	NAPHTHOL - AS E	92-78-4		NA	
241	7	7	NAPHTHOL - AS CL (ASCA)	132-65-9		NA	

242	8	8	NAPHTHOL - AS KB	135-63-7		NA
<b>Total Of Category I = 8</b>					<b>100</b>	
<b>Category-J: Fast Basis</b>						
243	1	1	Bordeaux GP	96-96-8	100	Oral, rat: LD50 = 14100 mg/kg.
244	2	2	Orange GC	17333-85- 5		NA
245	3	3	Red B	97-52-9		Oral, rat: LD50 = 997 mg/kg
246	4	4	Red RC	93-34-5		NA
247	5	5	Red TR	97-35-8		NA
248	6	6	Scarlet RC	27165-17- 9		LD50 Oral - Rat - 400 mg/kg
249	7	7	Yellow GC	17333-83		NA
250	8	8	Blue B	119-90-4		NA
251	9	9	Garnet GBC	97-56-3		NA
252	10	10	Black K	64071-88- 9		NA
253	11	11	Red KB	2780-35-4		NA
254	12	12	Blue BB	5486-84-0		NA
255	13	13	Red 3GL	89-63-4		LD50 Oral - Rat - 400 mg/kg(4-Chloro-2- nitroaniline)
256	14	14	Orange RD	29362-18- 3		NA
257	15	15	Corinth V	47300-91- 4		NA
258	16	16	Fast Red G Base	89-62-3		NA
259	17	17	Fast Scarlet R Base	99-59-2		Oral, rat: LD50 = 2250 mg/kg;
<b>Total Of Category J = 17</b>					<b>100</b>	
<b>Category-K: Pyrazolone</b>						
260	1	1	2,5-Dichloro SPMP	84-57-1	100	NA
261	2	2	Ortho Chloro SPMP	88-76-6		NA
262	3	3	1,3-SPMP	119-17-5		NA
263	4	4	1,4-SPMP	89-36-1		NA
264	5	5	PMP	89-25-8		Oral, rat: LD50 = 1915 mg/kg;
<b>Total Of Category K = 5</b>					<b>100</b>	
<b>Category-L: Fast Basis</b>						

65	1	1	3,3-Dichloro Benzidine Dihydrochloride [3,3-DCB]	612-83-9	500	Oral LD50 5628 mg/kg (rat)
266	2	2	Tobias Acid	81-16-3	150	Oral LD50 19400 mg/kg (rat)
267	3	3	4B- Acid	88-44-8	50	LD50 = 11700 mg/kg ( Rat )
268	4	4	2B-Acid	88-51-7	50	Oral LD50 1230 mg/kg (rat)
269	5	5	Quinizarine	81-64-1	25	ORAL LD50 Rat > 5000 mg/kg
270	6	6	Chloranil	118-52-2	25	NA
271	7	7	DMSS	6289-46-9	25	LD50 > 15000 mg/kg ( Rat )
272	8	8	1-Chloro-1,8-Naphthalic Anhydride	01/08/4053	25	Oral LD50 3460 mg/kg (rat)
273	9	9	1, 8-Diamino Naphthalene	479-27-6	25	Acute oral toxicity (LD50): 800 mg/kg [Rat].
274	10	10	1,5-Dichloro Anthraquinone	82-46-2	25	NA
<b>Total Of Category L</b>					<b>900</b>	
<b>Grand Total</b>					<b>2900</b>	

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry. The standard ToR for the project was granted on 26th February, 2019. Public hearing for the project was conducted by the State Pollution Control Board on 21<sup>st</sup> August, 2019.

Total land area is estimated to be 20,538 sqm. Green belt will be developed in 6,356 sqm out of total project area. The estimated project cost of proposed unit is Rs.20 crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 2.5 Crores and the recurring cost (operation and maintenance) will be about Rs. 3.5 Crores per annum. Total Employment will be 100 persons as direct & indirect for project.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site.

Total water requirement is 1001 m<sup>3</sup>/day of which fresh water requirement of 313 m<sup>3</sup>/day and will be met from Ground Water. Total wastewater generation will be 720 KL/day (Industrial: 705 KL/day + Domestic: 15 KL/day). 310 KLD of dilute stream of effluent will be sent to RO and RO permeate @ 210 KLD will be reused in process. 490

KLD of Concentrated stream of effluent (Process: 390 KLD + RO Reject: 100 KLD) will be treated in ETP and sent to own MEE, 473 KLD MEE condensate will be recycled. 5 KLD of wastewater from cooling will be reused within premises. Domestic wastewater will be disposed through Septic Tank/Soak Pit.

Power requirement for proposed project will be 2000 KVA and will be met from MGCVCL. 2 Nos. DG set of 250 KVA capacity shall be used as standby during power failure. Stack (height 11 m) will be provided as per CPCB norms to the proposed DG sets of 250 KVA which will be used as standby during power failure.

Unit shall have one Briquette/Coal fired boiler of 5 TPH and four PNG fired boilers of capacity 2 LakhKcal/Hr, 1 Nos. of 2 LakhKcal/Hr Briquette Thermopack Boiler will be installed. Multi cyclone separator, Dust Collector & Bag filter + Water Scrubber with a stack of height of 32 m will be installed for controlling the Particulate emissions (within statutory limit of 150 mg/Nm<sup>3</sup>) respectively.

Ten Categories of Hazardous/Solid Wastes shall be generated from this Unit. ETP Dry Sludge @ 480 MT/Annum will be Collected, Stored, Transported and Disposal at nearest TSDF site. Spent Oil @ 1.8 KL/Annum will be Collected, Stored, Transported & sale out to registered refineries. Discarded Bags/ containers/ Drums @ 3,60,000 Nos./Annum will be Collected, Stored, Decontaminated & Used for in-house packing of some intermediates & ETP wastes, & return back to Raw Material suppliers for same products. MEE Salt @ 3600 MT/Annum will be Collected, Stored, Transported and Disposal at nearest TSDF site. Spent Acid @ 7500 MT/Annum, Spent HCl @ 22800 MT/Annum, Ammonium Carbonate Solution @ 8760 MT/Annum, Sodium Hypo chloride Solution @ 9360 MT/Annum Collected, Stored, Transported & Reuse in own premises in manufacturing process / Sale to actual user having Rule 9 Permission, Fly Ash from Boiler @ 3600 MT/Annum Collected, Stored, Transported & sent to brick manufacture & Spent Solvent @ 480 MT/Annum Collected, Stored, Transported & Sale to actual user having Rule 9 Permission.

Ambient air quality monitoring was carried out at 10 locations during October, 2017 to December, 2017 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (78.83 – 69.35 µg/m<sup>3</sup>), PM<sub>2.5</sub> (47.28 – 40.35 µg/m<sup>3</sup>), SO<sub>2</sub> (12.92 – 8.57 µg/m<sup>3</sup>) and NO<sub>2</sub> (17.09 – 11.94 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 0.0594 µg/m<sup>3</sup>, 0.0888 µg/m<sup>3</sup>, and 0.0312 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).

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing.

Additional information submitted by the project proponent to be satisfactory and addressing the concerns of the Committee. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- (v) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.



- (vi) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (vii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (viii) Solvent management shall be carried out as follows:
  - (a) Reactor shall be connected to chilled brine condenser system.
  - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  - (c) Solvents shall be stored in a separate space specified with all safety measures.
  - (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  - (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  - (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (ix) Total fresh water requirement shall not exceed 313 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- (x) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.
- (xi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. Raw material and products should be stored in leak proof containers. Spent acid to be stored over the ground tank and to be sent to TSDF.
- (xii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xiii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

- (xiv) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
- (xv) The company shall undertake waste minimization measures as below:-
  - (a) Metering and control of quantities of active ingredients to minimize waste.
  - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (c) Use of automated filling to minimize spillage.
  - (d) Use of Close Feed system into batch reactors.
  - (e) Venting equipment through vapour recovery system.
  - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi) The green belt of at least 5-10 m width shall be developed in in not less than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvii) As proposed 5% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). As proposed, and the CER allocation shall be spent mainly for addressing the issues (social, health, employment, infrastructure, Drinking water facility, skill development, plantation etc) raised during public consultation/hearing.
- (xviii) Preference shall be given to local villagers for employment in the unit. For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xix) 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.
- (xx) Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxi) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

## **Agenda No.18.6**

**Setting up Bulk Drug and Drug Intermediates manufacturing unit by M/s Graddy Pharmachem, located at Plot No. 205, 206, 207/18, GIDC Estate-Panoli, Taluka Ankleshwar, District Bharuch (Gujarat) - Consideration of Environmental Clearance.**

**[IA/GJ/IND2/123966/2019, J-11011/327/2019 IA II (I)]**

The Project Proponent and their consultant M/s Aqua-Air Environmental Engineers Pvt. Ltd. (Hon'ble High Court of Gujarat stay order), made a detailed presentation through Video Conferencing (VC) on the salient features of the project. Consultant has informed to the EAC that they have also applied for QCI/NABET Accreditation on March 11, 2020, which is under active consideration before QCI/NABET.

The proposal is for environmental clearance to the project for setting up Bulk Drug and Drug Intermediates manufacturing unit of capacity 100 TPM by M/s Graddy Pharmachem in an area of 2592 sqm at Plot No. 205, 206, 207/18, GIDC Estate-Panoli, Taluka Ankleshwar, District Bharuch (Gujarat).

The details of products are as under:

<b>S. No.</b>	<b>Name of Product</b>	<b>CAS. No.</b>	<b>Capacity (TPM)</b>	<b>END Use</b>
1.	Pregabalin	148553-50-8	<b>50</b>	Anti-Epileptic
2.	Atorvastatin Calcium	134523-00-5		Anti-Lipemic
3.	Metoprolol Tartrate	56392 -17-7		Anti-Hypertensive
4.	Metoprolol succinate	98418-47-41		Anti-Hypertensive
5.	Rosuvastatin	287714-41-4		Anti-Lipemic
6.	Amlodipine Besylate	88150-42-9		Used to treat high blood pressure and coronary artery disease
7.	Pantoprazole	102625-70-7		Used for the treatment of stomach ulcers, short-term treatment of erosive esophagitis due to gastroesophageal reflux disease
8.	Piroxicam	36322-90-4		Anti-inflammatory drug
9.	Lidocaine	137-58-6		Used to treat ventricular tachycardia and to perform nerve blocks
10.	Veratic Acid	93-07-2		Used in API as a Raw Material

11.	Lornoxicam	70374-39-9		Anti-inflammatory
12.	Mefanamic Acid	61-68-7		Anti-pain
13.	<i>N,N'</i> -Carbonyldiimidazole	530-62-1	<b>50</b>	Used in to couple amino acids during artificial peptide synthesis. Reagent in organic synthesis. To convert amines to amides, carbamates, ureas, alcohol to ester etc.
14.	Chloromethyl methyl ether	107-30-2		Used as an alkylating agent, industrial solvent, water repellent, synthesis of ion-exchange resin. Synthesis of MOM (methoxymethyl) protecting group, industrial polymer.
15.	<i>tert</i> -Butyl carbazate	870-46-2		Used as intermediate in the synthesis of HIV-1ptotese inhibitors, palladium catalyzed cross coupling with vinyl halide to prepare N-Boc-N-alkenylhydrazines, peptide synthesis, purity determination of alpha amino aldehyde. Starting material for preparation of Boc-azide, sulfonic acid, carboxylic hydrazides.
16.	2,4,5 Trichloropyrimide	5750-76-5		It is used as chemical intermediate for the synthesis of antibacterial and anti-inflammatory drugs, synthesis of anaplastic lymphoma kinase inhibitor used as anti-tumor treatment, synthesis of EGFR inhibitors.
17.	Iodobenzene diacetate	3240-34-4		It is used in organic synthesis as reagents in many chemical reactions. It is used for preparation of glycol diacetates, selective catalyst for amination of hydrocarbons, preparation

				of heterocyclic compounds, synthesis of sulfonyloxyketones used as strong oxidizing agents.
18.	4-Methoxybenzyl chloride	824-94-2		Used as a protecting group for alcohols, phenol & various nitrogen moieties in organic synthesis. It is known as efficient protection of imide nitrogen in ribosyl nucleobase, glutarimide etc.
19.	<i>N</i> -Boc-piperazine	57260-71-6		It is used in the synthesis of varieties of pharmaceutical drugs, Preparation of series of <i>m</i> -phenoxy phenyl substituted derivatives, termination step during synthesis of poly(2-oxazoline) lipopolymers via living cationic ring opening polymerization.
20.	10-Methoxy-5H-dibenz[ <i>b,f</i> ]azepine-5-carbonylchloride, 10-Methoxyiminostilbene-5-carbonylchloride	28721-08-6		Use as a raw material to manufacture of Oxcarbazapine
<b>Total</b>			<b>100</b>	

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals And Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' to be appraised at State level. However being the project is located inside the critically polluted area, the project appraised at Central level in the Ministry.

Total land area is estimated to be 2592 sqm. Green belt will be developed in 40% i.e., 1036 sqm out of total project area. The estimated project cost is Rs. 4.5 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 1.3 Crores and the Recurring cost (operation and maintenance) will be about Rs. 2.8 Crores per annum. Total Employment will be 30 persons as direct & indirect for project.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site.

Total water requirement is 61 cum/day of which fresh water requirement of 29 cum/day and will be met from GIDC Water Supply. Total wastewater generation will be 36.0 cum/day (Industrial: 34.7 KL/day + Domestic: 1.3 KL/day). 36 cum/day effluent will be treated in primary treatment in ETP and then sent to In-House MEE plant Followed by Solvent Stripper & ATFD. 32 cum/day MEE Condensate Will be Reuse in Plant Premises & MEE Salt will be sent to TSDF Site. 1.3 KLD Domestic wastewater will be disposed through Septic Tank/Soak Pit.

Power requirement for proposed project will be 250 KVA and will be met from DGVCL. 2 Nos. DG set of 125 KVA capacity shall be used as standby during power failure. Stack (height 18 m) will be provided as per CPCB norms to the proposed DG sets of 125 KVA which will be used as standby during power failure.

Unit shall have 1 Nos. of 1 TPH Natural Gas = 500 Nm<sup>3</sup>/Day, 1 Nos. of 2 LakhKcal/Hr Natural Gas = 200 Nm<sup>3</sup>/Day, 2 Nos. of D.G Set HSD - 100 Liter/Day\_will be installed. Adequate Stack height will be provided. Stack of height of 18 m will be installed for controlling the Particulate emissions (within statutory limit of 150 mg/Nm<sup>3</sup>) respectively.

Ambient air quality monitoring was carried out at 10 locations during March 2019 to May, 2019 and submitted baseline data indicates that ranges of concentrations of PM10 (76.63 – 95.94 µg/m<sup>3</sup>), PM2.5 (44.39 – 58.1 µg/m<sup>3</sup>), SO<sub>2</sub> (17.52 – 26.72 µg/m<sup>3</sup>) and NO<sub>2</sub> (19.98 – 28.53 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 0.22218 µg/m<sup>3</sup>, 0.38869 µg/m<sup>3</sup>, and 0.13938 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).

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario

for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The Committee also deliberated the compliances of the Ministry's OM dated 31.10.2019 (Critically Polluted Areas) and accordingly stipulated the conditions. The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) Consent to Establish/Operate (CTE/CTO) for the project shall be obtained from the State Pollution Control Board (SPCB) as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, and the SPCB shall follow the mechanism/protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24<sup>th</sup> October, 2019 and forwarded by Central Pollution Control Board vide letter dated 25<sup>th</sup> October, 2019 to the SPCB's, while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Pharmaceuticals Industry (Bulk Drugs) issued by the Ministry vide G.S.R.149(E) dated 4<sup>th</sup> March, 2009 and amended from time to time shall be followed.
- (v) Fugitive emissions shall be controlled at 99.98% with effective chillers.
- (vi) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (vii) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.

- (viii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (ix) Solvent management shall be carried out as follows:
  - (a) Reactor shall be connected to chilled brine condenser system.
  - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  - (c) Solvents shall be stored in a separate space specified with all safety measures.
  - (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  - (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  - (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (x) Total fresh water requirement shall not exceed 29 cum/day, proposed to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (xi) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.
- (xii) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. Raw material and products should be stored in leak proof containers. Spent acid to be stored over the ground tank and to be sent to TSDF.
- (xiii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xiv) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xv) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
- (xvi) The company shall undertake waste minimization measures as below:-
  - (a) Metering and control of quantities of active ingredients to minimize waste.



- (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (c) Use of automated filling to minimize spillage.
  - (d) Use of Close Feed system into batch reactors.
  - (e) Venting equipment through vapour recovery system.
  - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvii) The green belt of at least 5-10 m width shall be developed in not less than 40 % of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xviii) As proposed 4% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). As proposed, and the CER allocation shall be spent mainly for addressing the issues (social, health, employment, infrastructure, Drinking water facility, skill development, plantation etc).
- (xix) Preference shall be given to local villagers for employment in the unit. For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xx) 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.
- (xxi) Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

### **Agenda No.18.7**

**Setting up Bulk Drug manufacturing unit of capacity 177 MTPM by M/s Cadila Healthcare Limited at Masar Block No –1162-1164, 1171-1174, 1181-1183 and Kanzat Block No –1115-1120, 1122, 1126, 1159-1170, 1207, Village Masar & Kanzat, Tehsil Padra, District Vadodara (Gujarat) - Consideration of Environmental Clearance.**

**[IA/GJ/IND2/72445/2018, IA-J-11011/39/2018-IA-II(I)]**

The project proponent and the accredited Consultant M/s. San Envirotech Pvt. Ltd made a detailed presentation Video Conferencing (VC) on the salient features of the project.

The proposal is for environmental clearance to the project for setting up Bulk Drug manufacturing unit of capacity 177 MTPM by M/s Cadila Healthcare Limited in an area of 260789 sqm at Masar Block No -1162-1164, 1171-1174, 1181-1183 and Kanzat Block No -1115-1120, 1122, 1126, 1159-1170, 1207, Village Masar & Kanzat, Tehsil Padra, District Vadodara (Gujarat).

The details of products are as under:

<b>S. No.</b>	<b>List of product</b>	<b>Quantity (MTPM)</b>	<b>Quantity (MTPA)</b>
1	Acotiamide hydrochloride	20	240
2	Agomelatine		
3	Anagrelide Mono hydrochloride Monohydrate		
4	Anastrozole		
5	Apixaban		
6	ApomorphineHCl		
7	Apremilast		
8	Aripiprazole		
9	Atenolol		
10	AtomoxetineHCl		
11	Trazodone		
12	Atorvastatin Calcium	20	240
13	Atovaquone		
14	Avanafil		
15	AzelastineHCl		
16	AzilsartanMedoxomil		
17	Bisacodyl		
18	Bosentan		
19	Brexpiprazole		
20	Bupropion HCl		
21	BupironeHCl		
22	Brivaracetam		
23	Canagliflozin		
24	Candesartan Cilexetil		
25	Carvedilol		
26	Clindamycin		
27	Clonidine		
28	ClopidogrelBisulphate/ besylate		
29	Colestipol Hydrochloride		
30	CinacalcetHCl		

31	Dapagliflozin		
32	Darunavir		
33	Desloratadine		
34	Desvenlafaxine succinate		
35	Dimethyl Fumarate		
36	Donepezil HCl		
37	Duloxetine Hydrochloride		
38	Edoxaban Tosylate Monohydrate		
39	Eltrombopagolamine		
40	Empagliflozin		
41	Entecavir		
42	Escitalopram Oxalate		
43	Esomeprazole Magnesium		
44	Ethacrynic acid	20	240
45	Etoricoxib		
46	Famotidine		
47	Fingolimod		
48	Flibanserin		
49	Fluconazole		
50	Fosphenytoin Sodium		
51	Gabapentine		
52	Glimepiride		
53	Hydrochlorothiazide		
54	Hyoscyamine Sulfate		
55	Ivabradine Hydrochloride		
56	Levomilnacipran		
57	Hydroxychloroquine sulfate	20	240
58	Lamotrigine		
59	Lansoprazole Sulphide		
60	Ledipasvir		
61	Letrozole		
62	Levofloxacin Hemihydrate		
63	Linagliptine		
64	Loratidine		
65	Lorcaserin HCl		
66	Losartan Potassium		
67	Lurasidone hydrochloride		
68	Macitentan		
69	Meloxicam		
70	Mesalamine	20	240
71	Metoprolol succinate		
72	Midodrine HCl		
73	Mirabegron		

74	Nicronadil		
75	Olmesartane		
76	Omeprazole/OmeprazoleMagnesium		
77	Pantoprazole Sodium		
78	Paroxetine Hydrochloride		
79	Phenteramin		
80	PramipexoleDihydro Mono Hydrate		
81	Pregabalin	20	240
82	Propefenone		
83	Polmacoxib		
84	QuetiapineHemifumarate		
85	Ranolazine		
86	Rasagilinebesylate		
87	Risperidone		
88	Rivastigmine		
89	Roflumilast		
90	Rosuvastatin calcium		
91	Rosuvastatin ethanol amine		
92	Sacubitril Valsartan Trisodium		
93	Saroglitazar		
94	Saxagliptin		
95	SetralineHydrochloride		
96	Sildenafil citrate		
97	Silodosin		
98	Sitagliptin phosphate Anhydrous/Besylate		
99	Sparfloxacin		
100	TamsulosinHCl		
101	Tebipenempivoxil		
102	Telapvir		
103	Telmisartan		
104	Tenegliptin		
105	Amlodipine Beyslate	25	300
106	Etodolac		
107	TirofibanHCl		
108	Tofacitinib Citrate		
109	Tolvaptan		
110	Topiramate		
111	Tramadol Hydrochloride		
112	UDCA (India Market)		
113	Valdecoxib		
114	Valsartan		
115	Venlafaxine Hydrochloride		
116	Vilazodone hydrochloride		

117	Vildagliptin		
118	VortioxetineHydrobromide		
119	Warfarin sodium clathrate		
120	ZiprasidoneHCl		
121	Azathioprine	10	120
122	Febuxosate		
123	Lacosamide		
124	Refaximin		
125	Tolperison		
126	Udenafil		
127	R&D Products/Pilot Plant batches/ Development Batches	2	24
<b>Total</b>		<b>177</b>	<b>2124</b>

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals And Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' to be appraised at Central level in the Ministry.

The standard ToR for the project was granted on 24<sup>th</sup> March, 2018. Public hearing for the project was conducted by the State Pollution Control Board on 1<sup>st</sup> November, 2018 under the Chairmanship of Additional District Magistrate. The main issues raised during the public hearing are related to local employment, training programs for locals, APCM and wastewater management.

Proposed land area of the project is 260789 sqm. Industry will develop greenbelt in an area of 33% i.e. 87000 sqm, out of total area of the project. The estimated project cost of proposed unit is Rs.200 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs.10 Crore and the recurring cost (operation and maintenance) will be about Rs.4.35 Crore per annum. Total employment including direct and indirect will be 850 persons.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km distance of the project site. Schedule I species were reported in the Study area.

Total water requirement is 1395 m<sup>3</sup>/day of which fresh water requirement of 645 m<sup>3</sup>/day will be met from Bore well. The committee suggested to construct rain water storage tank of capacity 20 Lac Litre to cater the water requirement and to reduce the fresh water demand from bore well. The project proponent was agreed with it.

High COD stream from process (175 KLD) will be sent to stripper, stripped water will be sent to MEE-1. Condensate of MEE-1 along with Low COD process effluent,

wastewater of scrubber and lab/R&D (465 KLD) will be treated in ETP-1 followed by RO. Permeate of RO will be reused (370 KLD) and reject will be sent to MEE-2. Wastewater from washing, utility and water treatment reject (165 KLD) will be taken to ETP-2. Treated effluent will be equalized in equalization sump followed by RO. RO reject will be sent to MEE-2; RO permeate and condensate of MEE-2 will be reused. Domestic wastewater (90 KLD) will be treated in STP and will be reused for greenbelt development within plant premises. 750 m<sup>3</sup>/day will be recycled/treated water. Thus, unit proposed to achieve Zero Liquid Discharge (ZLD).

Power requirement will be 2800 kVA proposed to be met from Madhya Gujarat Vij Company Ltd. (MGVCL). Unit will install D.G. Sets of 500 kVA, 750 kVA and (1000 kVA x 2 nos.) capacity and will be used as standby during power failure. Stack (height 11 meters & 21 meters) will be provided as per CPCB norms to the proposed D.G. Sets.

In proposed unit, three steam boilers (5 TPH, 6 TPH, 12 TPH) will be installed. Coal/white coal/imported coal will be used as fuel in proposed utilities. Cyclone and bag filter (to the boiler of 5 TPH & 6 TPH) and Electrostatic Precipitator (to the boiler of 12 TPH) with a stack height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm<sup>3</sup> for the proposed utilities.

Ambient air quality monitoring was carried out at 8 locations during March, 2018 to May, 2018 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (62.9 – 74.3 µg/m<sup>3</sup>), PM<sub>2.5</sub> (35.1– 40.7 µg/m<sup>3</sup>), SO<sub>2</sub> (12.0 – 15.2 µg/m<sup>3</sup>) and NO<sub>x</sub> (14.9– 17.6 µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 4.608 µg/m<sup>3</sup>, 3.606 µg/m<sup>3</sup>, 2.565 µg/m<sup>3</sup>, 0.682 µg/m<sup>3</sup> and 0.046 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, HCl and Cl<sub>2</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and

incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance **subject to submission of conservation plan for Schedule-I species** duly forwarded to CWLW of State Govt. for its approval, along with subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Pharmaceuticals Industry (Bulk Drugs) issued by the Ministry vide G.S.R.149(E) dated 4<sup>th</sup> March, 2009 and amended from time to time shall be followed.
- (v) Fugitive emissions shall be controlled at 99.98% with effective chillers.
- (vi) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. The PP shall make the arrangements in such a way that the Unit shall be odorless.
- (vii) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.

- (viii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (ix) Solvent management shall be carried out as follows:
  - (a) Reactor shall be connected to chilled brine condenser system.
  - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  - (c) Solvents shall be stored in a separate space specified with all safety measures.
  - (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  - (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  - (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (x) Total fresh water requirement shall not exceed 645 cum/day, proposed to be met from bore well. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- (xi) Underground tank of capacity 20 lakhs liters shall be constructed to store the collected rain water from the roof tops and reduce the fresh water demand accordingly.
- (xii) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.
- (xiii) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. Raw material and products should be stored in leak proof containers. Spent acid to be stored over the ground tank and to be sent to TSDF.
- (xiv) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xv) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.



- (xvi) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
- (xvii) The company shall undertake waste minimization measures as below:-
  - (a) Metering and control of quantities of active ingredients to minimize waste.
  - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (c) Use of automated filling to minimize spillage.
  - (d) Use of Close Feed system into batch reactors.
  - (e) Venting equipment through vapour recovery system.
  - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xviii) The green belt of at least 5-10 m width shall be developed in not less than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xix) As proposed 5% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). The CER funds shall be utilized for meeting the issues suggested during public hearing. The CER plan shall be completed before commissioning of the project.
- (xx) Preference shall be given to local villagers for employment in the unit. For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xxi) 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.
- (xxii) Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxiii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxiv) Disaster Management Plan (DMP) shall be prepared based on recommendations of advance Risk modeling and compliance be submitted to the concerned authorities.

## **Agenda No. 18.8**

**Proposed Project for Manufacturing of Bulk Drugs with proposed capacity of 50 MTPM, located at Survey No. 504, 505, 507, Village: Dabhasa, Tehsil: Padra, District Vadodara, Gujarat by M/s Reynish Pharmachem Pvt. Ltd- Consideration of Environmental Clearance.**

**[IA/GJ/IND2/75368/2018, J-11011/194/2018-IA-II(I)]**

The project proponent and their accredited consultant M/s San Envirotech Pvt Ltd. made a detailed presentation on the salient features of the project through Video Conferencing (VC).

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for setting up bulk drug manufacturing unit of capacity 50 TPM by M/s Reynish Pharmachem Pvt. Ltd., in an area of 36958 sqm. located at Survey No.504, 505, 507, Village Dabhasa, Tehsil Padra, District Vadodara (Gujarat).

The details of product and capacity as under:-

<b>S. No.</b>	<b>Name of Products</b>	<b>Qty. MTPM</b>
1.	Telmisartan	48
2.	Ondansetron HCl	
3.	Benfotiamine	
4.	Albendazole	
5.	4-Hexyl resorcinol	
6.	Zopiclone	
7.	Tamoxifen citrate	
8.	Bupropion HCl	
9.	Anastrozole	
10.	Theophylline	
11.	Allantoin	
12.	Terbinafine Hydrochloride	
13.	Pregabalin Hydrochloride	

14.	Rebamipide	
15.	Valsartan	
16.	R & D Drugs	2.0
<b>Total</b>		<b>50.0</b>

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals And Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' to be appraised at Central level in the Ministry.

The terms of References (TOR) for the Project has been issued by the Ministry vide letter dated 13<sup>th</sup> July, 2018. Public hearing for the project was conducted by the Gujarat Pollution Control Board on 21<sup>st</sup> June 2019 under the chairmanship of Additional District magistrate. The main issues raised during the public hearing are priority to local employment, utilization of CSR fund, management plan for waste water and air pollution control, use of agro based fuel instead of coal.

Total land area of the project is 36958 sqm. Industry will develop greenbelt in an area of 33% i.e. 12175m<sup>2</sup>, out of total area of the project. The estimated project cost of proposed unit is Rs. 40.0Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 2.5 Crore and the Recurring cost (operation and maintenance) will be about Rs. 1.5 Crore per annum. Total employment including direct and indirect will be 65 persons.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site.

The EAC, during deliberation observed that the EIA report uploaded on the website was finalized in March, 2019 i.e. prior to public hearing conducted (June, 2019) for the project seems to be Draft EIA/EMP report. The committee suggested to submit clarification in this regard and to submit the revised EIA/EMP report on the PARIVESH portal. The EAC also decided to **defer the proposal for want of requisite information as under** and have asked the PP to revise the Report alongwith following clarification/inputs:-

- (i) EIA report uploaded on the website was finalized in March, 2019 as per title of the Report. PP needs to upload the correct EIA/EMP Report. The Committee suggested that the Consultant/PP has to read all the documents before uploading on the Parivesh Portal.

- (ii) PP mentioned that instant site is not located at CPA, the Committee suggested that PP needs to submit a letter from CPCB or SPCB about the location of project site in CPA or not.
- (iii) PP has not carried out alternate site analysis. Committee is of the view that as PP shall conduct the alternate site analysis study and prepare the Report as per Appendix III of the EIA Notification, 2006.
- (iv) PP in slide number 49 mentioned that there is no schedule-I species reported, However as per EIA/EMP Report Schedule I species were reported. The PP needs to prepare the Conservation plan for protection of schedule-1 species and submit to the CWLW for approval.
- (v) Status of TSDF membership.
- (vi) Land conversion details for industrial purpose needs to be submitted.
- (vii) Revised detailed CER plan @ 5% of project cost and needs to be submitted.
- (viii) Details technology/mitigation measure to achieve the Volatile organic compounds (VOCs)/Fugitive emissions @ 99.997%.
- (ix) Details of fly ash brick making unit inside the plant for fly ash disposal.

### **Agenda No. 18.9**

#### **Setting up LPG Storage of 3 x 150 MT MSVs & Bottling Capacity of 30 TMTPA at Umiam (V), Ri-Bhoi (D), Meghalaya by M/s INDIAN OIL CORPORATION LTD- Consideration of Environment Clearance.**

**[IA/ML/IND2/82553/2018,J-11011/325/2018-IA-II(I)]**

The project proponent did not attend the meeting. It was informed to the Committee that, as per the Ministry's notification SO 1960(E) dated 13<sup>th</sup> June, 2019, such projects (item 6(b) of the EIA Notification, 2006) do not require prior environmental clearance for its operation/activities, and the same has been communicated to the project proponent through EDS. In view of the same, the Committee has desired to **RETURN** the proposal in present form.

## **Agenda No. 18.10**

**EXPANSION OF SYNTHETIC ORGANIC CHEMICALS PROJECT OF M/s CHEMOX CHEMOPHARMA INDUSTRIES, located at Plot No. 3704/B, GIDC Estate Ankleshwar, District Bharuch, Gujarat by M/s CHEMOX CHEMOPHARMA INDUSTRIES-Consideration of Environmental Clearance.**

**[IA/GJ/IND2/128261/2011, File No. IA-J-11011/399/2019-IA-II(I)]**

The proposal is for environmental clearance to the project for expansion of Synthetic Organic Chemicals manufacturing unit from 10.5 to 38 TPM by M/s Chemox Chemopharma Industries, located at Plot No. 3704/B, GIDC Estate Ankleshwar, District Bharuch (Gujarat).

The project proponent and their consultant made a detailed presentation on the salient features of the project through Video Conferencing (VC).

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals And Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' to be appraised at State level. However being the project is located inside the critically polluted area, the project appraised at Central level in the Ministry.

The EAC, after detailed deliberations decided to **defer for want of requisite information as under** and have asked the PP to revise the Report alongwith following clarification/inputs:-

- (i) Proof to establish that existing unit is operating with proper prior permission and to confirm that unit is not violating the provision contained in EIA Notification, 1994 and 2006. In this regard, PP needs to submit all the old CTE/CTO to verify the violation, if any.
- (ii) This is an expansion case and as per TOR PP needs to submit the certified compliance report of CTO from SPCB. However, PP has not submitted the same.
- (iii) PP needs to submit the details of production since inception of the unit to verify violation, if any.
- (iv) PP needs to update the Report as per provisions of the Ministry's OM, dated 31.10.2019 (CPA).

The Committee suggested that PP/Consultant shall submit the above mentioned clarification on Parivesh Portal and afterwards the proposal may be appraised/deliberated on priority.

## **Agenda No. 18.11**

### **Setting of 120 KLPD molasses based ethanol plant and 4 MW cogeneration power plant by M/s Indian Sucrose Limited, located at village-Chak Allabaksh, Tehsil-Mukerian, District-Hoshiarpur Punjab -Reconsideration of Environmental Clearance**

**[IA/PB/IND2/116878/2018, No.IA-J-11011/404/2018-IA-II(I)]**

The proposal is for environmental clearance to the project for Setting up Molasses based distillery of 120 KLD for the production of Ethanol and co-generation power plant of 4 MW by M/s Indian Sucrose Ltd located at Village chak Allabaksh, Tehsil Mukerian, District Hoshiarpur, Punjab.

The proposal was earlier considered by the EAC in its meeting held during 20-22 November, 2019. The EAC, during deliberations noted that the project details mentioned in the EIA report were not consistent with that presented during the meeting. The Committee also took serious note on the quality of the EIA/EMP report prepared by the consultant.

Based on the information submitted by PP, the proposal is placed before the EAC in this present meeting. The project proponent and their consultant M/s Vardan EnviroNet made a detailed presentation on the salient features of the project through Video Conferencing (VC)

The EAC, after detailed deliberations has asked for clarification/inputs, and the reply submitted by the project proponent is as under:

<b>S. No.</b>	<b>Observations</b>	<b>Replies</b>	<b>Remarks of the EAC</b>
(i)	EIA report to be revised as per the terms of reference granted for the project.	EIA report has been revised as per ToR issued by MoEF & CC.	EIA report updated with additional information.
(ii)	Incremental GLC of air quality parameters due to the proposed project.	The maximum cumulative GLC concentration of PM10 wiz. 87.127 ug/m <sup>3</sup> , SO <sub>2</sub> wiz. 14.563 ug/m <sup>3</sup> , NO <sub>x</sub> wiz. 31.207 ug/m <sup>3</sup> was predicted inside the study area which is within limits prescribed under NAAQS 2009.	The details submit is not in line with the query of the EAC. The project proponent have failed to provide the incremental GLC due to the proposed project.

(iii)	Details of courts/NGT cases, if any, on the project area or against the projects proponent.	The court case initially filed by the petitioners under petition no. CWP No. 9131of 2012(in High Court of Punjab and Haryana at Chandigarh) against DEBT recovery Appellate Tribunal was dismissed by the Division Bench of Punjab & Haryana High Court on 24th May 2012. Recently Hon'ble Supreme Court of India dismissed their curative petition on 19th February, 2019. As of today's date there is no court case pending.	The Committee has taken note of the submission by the PP. However, it was desired that the Ministry may to confirm the status of the court case/operation of the Industry from the SPCB before considering the project for EC.
(iv)	Details of land area available for the project, proof for occupancy and permission for industrial use.	The land is under the ownership of M/s Indian Sucrose Ltd. Land Papers and permission for industrial use is submitted to MoEF & CC /EAC.	PP submitted the khasra number/ land document is submitted in simple paper and there is no forwarding letter from the office of Tehsildar/Revenue Department.  IN view of the above, the land documents submitted by the project proponent regarding Industrial use of the land from the Tehsildar needs reconfirmation from the State Revenue Dept./Industries Dept.
(v)	Issues raised during public hearing, response by the project proponent, action plan with budgetary allocation. Public hearing proceedings	Action plan with budgetary provision on issues raised (six issues) by public during public hearing submitted. Project proponent has allocated Rs. 6.40 crores as budget for CER to be spent to address the issues of public. Public hearing proceedings along with annexures submitted to MOEF/EAC.	Action plan with budgetary provisions found to be satisfactory.

	along with Annexures.		
(vi)	Revised layout plan with 33% greenbelt.	Layout plan with 33% greenbelt has been revised and submitted. Total land area of project site is 5.26 ha out of which 1.74 ha (33.39%) is greenbelt.	Revised layout plan submitted. The Committee deliberated the same.
(vii)	Revised water balance with details of total water and fresh water requirement, and permission from concerned regulatory authority.	Water Balance keeping view of water minimization has been prepared. Fresh water requirement is 853 KLD. The CGWA application is already filed vide letter no. 21-4/4688/PB/IND/2019 which is under process. Affidavit has been submitted in this regard.	Even after the suggestions of the Committee, the project proponent has not reduced the fresh water requirement.
(viii)	Details of fuels to be used in the boiler/unit.	Fuel burned in the boiler is the mixture of Bagasse and spent wash. The composition of spent wash is 30-35 %, if the sludge content in the spent wash is 50-60% brix (4000-6000 mg/kg) for the maximum gross value. The quantity of bagasse required will be ~ 20 TPH.	Details provided
(ix)	As per EIA report (pageno.190) schedule I species reported, however conservation plan for Schedule I species along with budgetary provisions and its approval has not submitted.	Wildlife conservation plan has been approved by Principle Chief Conservator of Forest (Wildlife) & Chief Wildlife Warden, SAS Nagar, Punjab vide letter no. Endst No. 7075-76 dated 23.12.2019.	Wildlife conservation plan submitted. The Committee deliberated the plan and found adequate in order.
(x)	Occupational health plan.	Occupational health plan include Training and Safety Awareness Program, PPE Purchase, Environment Audit and EHS audits	Occupational health plan submitted



		etc. has been revised. Total Rs. 30 lakhs will spend on OH&S activity.	
(xi)	Effluent treatment mechanism with plan for Zero Liquid Discharge.	MEE and CPU technology will use for treatment of waste water. Total waste water generate in the process will be treat and consume within the plant.	ZLD plan submitted and deliberated by the EAC.
(xii)	Detailed Plan for Corporate Environmental Responsibility and its implementable schedule with budgetary provision needs to be resubmitted.	Project proponent will provide R.O., Rain water harvesting, Computers, Dispensary to the nearby villages. Total budget 6.4 Crores will spend as CER activity in nearby 5 villages.	CER plan submitted. The Committee deliberated the plan and found adequate in order.
(xiii)	The onsite emergency plan is not satisfactory as per MSIHC Rules, layout plan of the plant need to be revised.	Onsite emergency plan has been revised as per MSIHC rules. Total budget will be 64 lakhs will for onsite emergency plan activity.	Onsite emergency plan. The Committee deliberated the plan and found adequate in order.

The project/activity is covered under category A of item 5 (g) 'Distilleries' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at central level by the sectoral EAC in the Ministry.

Standard terms of reference to the project was issued on 7<sup>th</sup> January, 2019. Public Hearing for the project has been conducted by the State Pollution Control Board on 11<sup>th</sup> June 2019, which was presided over by the Additional Deputy Commissioner. The main issues raised during public hearing are related to employment, CER, development of the village, etc.

The estimated project cost is Rs.160 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 9.61 crores and the recurring cost (operation and maintenance) will be about Rs 4.36 lakhs per annum. The project will provide employment for 98 persons directly and 50 persons indirectly. Industry proposes to allocate Rs. 3.2 crores towards Corporate Environmental Responsibility.

There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Beas river is flowing at a distance of 8 km in West direction.

Total fresh water requirement is estimated to be 853 cum/day, proposed to be met from ground water. Effluent of 853 m<sup>3</sup>/day quantity will be treated through ETP and treated water will be reused in the process. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 3100 Kwh will be met through own power plant of capacity 4 MW. In case of emergency DG sets of capacity 600 KVA will be used. Stack (height 30m) will be provided as per CPCB norms to the proposed DG sets. Boiler of 45 TPH will be installed in the unit with multi cyclone separator/ bag filter and a stack of height will be as per CPCB norms based on sulphur dioxide and other emission concentrations to control the emissions within the statutory limit as per CPCB standard. Boiler ash will be collected and will be given to authorized vendor for the Brick manufacturing. MEE salt will be burnt in the boiler. Yeast Sludge from the fermenter tank and decanter will be dried in the lagoon and would be used as the cattle feed. Used oil which will be in minimum quantity would be given to authorized vendor for disposal. Other solid waste like plastic container, tank would be sold to authorized vendor.

Ambient air quality monitoring was carried out at 8 locations during October to December 2018 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (66.5 to 86.9 µg/m<sup>3</sup>), PM<sub>2.5</sub> (35.3 to 56.4 µg/m<sup>3</sup>), SO<sub>2</sub> (8.1 to 14.5 µg/m<sup>3</sup>) and NO<sub>2</sub> (16.5 to 31.2 µg/m<sup>3</sup>). The maximum cumulative GLC concentration of PM<sub>10</sub> viz. 87.127 µg/m<sup>3</sup> was predicted inside the study area. As the distance from source increases, the incremental concentration of PM<sub>10</sub> drops drastically due to settling of PM<sub>10</sub> particles under gravity. The maximum cumulative GLC concentration of SO<sub>2</sub> viz. 14.563 µg/m<sup>3</sup> was predicted inside the study area. The maximum cumulative GLC concentration of NO<sub>2</sub> viz. 31.207 µg/m<sup>3</sup> was predicted inside the study area.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing.

The Committee noted that the project proponent has not made any serious rework on the proposal and additional details desired has not been properly provided by the project proponent. Though, EIA report is updated with annexing the additional details, the purpose has not been served and EIA report has not been revised. It was noted that the existing area was with another company and details regarding project operation in the area has not been provided. The information related to court cases require verification from the SPCB and Committee desired that the Ministry may request SPCB regarding the court cases and operation of the project in the area. The Committee also showed its displeasure regarding water balance, baseline data and GLC. The Committee suggested that considering the prevailing situation of the area, CER shall be increased and atleast Rs. 12.8 crores shall be allocated. The PP shall also allocate Rs. 50 lakhs for conservation of schedule 1 species and flora and fauna of the region. The Committee also took serious note on the mismatch of ADS details provided on Parivesh portal and presented before the EAC. However, considering the project being for ethanol, the Committee has recommended the proposal.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance **subject to verification of Court case/land issues**. The Committee also recommended that the clearance is subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) The project proponent shall submit land conversion details for Industrial use from the Revenue Dept/Industries Dept of the State Govt..
- (ii) The project proponent shall submit the details of court cases, its present status, operational status of the project in the area, through State Pollution Control Board, along with SPCB's comments on permission of such polluting Industries in the area.
- (iii) 100% Ethanol produced will be used for bio-fuel.
- (iv) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981,

as applicable from time to time, shall be obtained from the State Pollution Control Board as required.

- (v) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (vi) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (vii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (viii) Coal shall not be used as fuel in boiler.
- (ix) Total fresh water requirement shall not exceed 853 cum/day proposed to be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- (x) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- (xi) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xii) The company shall undertake waste minimization measures as below:-
  - (a) Metering and control of quantities of active ingredients to minimize waste.
  - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (c) Use of automated filling to minimize spillage.
  - (d) Use of Close Feed system into batch reactors.
  - (e) Venting equipment through vapour recovery system.
  - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii) The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xxii) As committed, an amount of Rs. 12.8 crores shall be allocated for Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for addressing the issues raised during public consultation/hearing

including assistance/infrastructure development, water conservation, health, social/environmental activities, skill development, etc.

- (xiv) As committed, Rs. 50 lakhs shall be allocated towards Wildlife conservation plan and intimation shall be given to State Wildlife Dept. The compliance report shall be submitted to Regional Office of the Ministry.
- (xv) The stack height shall be as per prescribed CPCB norms based on Sulphur dioxide emissions concentrations.
- (xvi) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xvii) For effective fly ash management, the project proponent shall set up Brick manufacturing unit inside the project area.
- (xviii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (xix) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xx) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.
- (xxi) Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xxii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxiii) CO<sub>2</sub> generated from the process shall be bottled/made solid ice and sold to authorized vendors.

### **Agenda No. 18.12**

**Proposed Sulphonation plant to manufacture Linear Alkyl Benzene Sulphonic Acid (28800 TPA) & allied products such as Alcohol Ether Sulfates (4968 TPA), Alfa Olefins Sulfonates (4162 TPA), Sodium Lauryl Sulphate (3744 TPA) at Plot No. A6/2Part,C4, SIPCOT Industrial Park, Thervoy Kandigai Village, Gummidipoondi Taluk, Tiruvallur District, Tamil Nadu by M/s Mahaveer Surfactants Pvt Ltd- Consideration of Environmental Clearance.**

**[IA/TN/IND2/75612/2018, IA-J-11011/217/2018-IA-II(I)]**

The project proponent and their accredited consultant M/s Vimta Labs Limited made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Setting up of LABSA (Linear Alkyl Benzene Sulphonic Acid) manufacturing unit of capacity 28800 TPA by M/s Mahaveer Surfactants Pvt Ltd in an area of 2.62 ha at Plot No. A6/2Part,C4, SIPCOT Industrial Park, Village Thervoy Kandigai, Taluk Gummidipoondi, District Tiruvallur, (Tamil Nadu).

The EAC, during deliberation observed that as per the Ministry's earlier clarifications manufacturing of LABSA is not covered under the purview of EIA Notification, 2006 and does not requires prior environmental clearance.

The EAC therefore **return the proposal** in present form.

### **Agenda No. 18.13**

**Synthetic Organic Chemicals Manufacturing Unit (Dyes Intermediates & Pharmaceuticals Industry Products) at Plot No. 223, GIDC Industrial Estate, GIDC Ankleshwar, Dist – Bharuch (Gujarat) by M/s Rishabh Dye Chem Industries- Consideration of Environment Clearance.**

**[IA/GJ/IND2/127752/2018, IA-J-11011/435/2019-IA-II(I)]**

The project proponent and their accredited consultant M/s. Envirocare Technocrats Pvt. Ltd. made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for setting up Synthetic Organic Chemicals manufacturing unit by M/s Rishabh Dyechem Industries in an area of 704 sqm. located at Plot No. 223, GIDC Industrial Estate, GIDC Ankleshwar, District Bharuch (Gujarat).

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals And Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' to be appraised at State level. However being the project is located inside the critically polluted area, the project appraised at Central level in the Ministry.

The EAC, during deliberation observed that the **unit is being proposed in a very small plot i.e. 704 sqm area**. Also the project location comes under critically polluted area (CPA) i.e. Ankaleshwar. It is very difficult to install all pollution control equipment, ZLD, Green Belt and other machinery etc. in a very small plot.

The EAC suggested that PP shall first conduct an alternate site analysis or to choose another location for the project as in this small plot such project does not seem feasible. The EAC therefore **retuned** the proposal in present form.

### **Amendment/Extension in Environmental Clearance**

#### **Agenda No. 18.14**

**Pesticide & Pesticide Intermediate Plant (4108 MTPM) of M/s Sabero Organic Gujarat Ltd. [Now taken over by M/s Coromandel International Limited], located at Plot No. Z/103/G, SEZ-2, Dahej, District Bharuch, Gujarat -Extension of validity of Environmental Clearance**

**[IA/GJ/IND2/116626/2019, J-11011/425/2010-IA.II(I)]**

The proposal is for extension of the validity of the environmental clearance granted to the project vide MoEF&CC Letter No. J-11011/425/2010-IA II (I) dated 16<sup>th</sup> October, 2012 for Pesticide & Pesticide Intermediate Plant (4108 MTPM) at Plot No.Z/103/G, SEZ-2, Dahej, District Bharuch (Gujarat) by M/s Coromandel International Limited (Formerly known as M/s Sabero Organic Gujarat Ltd).

The project proponent and consultant has made the presentation through Video Conferencing (VC) and requested for extension of the validity of the EC.

PP reported that initially due to poor market penetration and readiness for operations, PP decided to go in phase wise manner and put up the facility for only Group D product for which PP got CCA in December 2017. Again in 2019 based on products demand PP have put up facility for additional two group i.e. C & E for which CCA application was uploaded. Based on market analysis, it is expected to get the demand of other group products i.e. A & B in next 2 to 3 years' time for which PP have not put up any facility yet. In view of that, the project proponent has requested to re-validate of Environmental Clearance for further three years.

The project proponent has also informed that due to lack of knowledge they have not transferred EC from M/s Sabero Organic Gujarat Limited to M/s Coromandel International Limited. Now PP has submitted the proposal for transfer of EC on Parivesh Portal on 11<sup>th</sup> November, 2019.

The Committee has made a detailed deliberation on the progress of the project and found to be satisfactory. The Committee has noted that transfer of existing environmental clearance in favour of the present applicant is under consideration in the Ministry.

The Committee, after detailed deliberations, has **recommended** for extension of validity of the environmental clearance till 16<sup>th</sup> October, 2022, to complete the work as per the scope of the project, **subject to transfer of existing environmental clearance** in favour of M/s Coromandel International Limited, with all other terms and conditions remain unchanged.

**Agenda No. 18.15**

**Setting up Pesticide Technical and Synthetic organic chemical manufacturing unit by M/s Hemani Intermediates Pvt. Ltd (Unit-VI) at Plot No. T-35,36, 37, 45, 46, 47, GIDC Saykha, Taluka Vagra, District Bharuch(Gujarat) - Amendment in Environmental Clearance**

**[IA/GJ/IND2/116824/2019, J-11011/231/2018-IA.II(I)]**

The proposal of M/s. Hemani Industries Limited (Unit-6) is for amendment in the environmental clearance granted by the Ministry vide letter dated 16<sup>th</sup> October, 2019 for setting up Pesticide Technical and Synthetic Organic Chemicals manufacturing unit at Plot No. T-35,36,37,45,46,47, GIDC Saykha, Taluka: Vagra, Dist: Bharuch, Gujarat.

The project proponent has requested for amendment in the EC and made the presentation through Video Conferencing (VC)

with the details as under:

<b>S. No.</b>	<b>Point of EC issued by MoEFCC</b>	<b>Details as per the EC</b>	<b>To be revised</b>	<b>Justification/Reasons</b>
1	<b>Point-6</b>	Total water requirement is estimated to be 9,235 cum/day including fresh water requirement of 1,540 cum/day proposed to be met from GIDC supply.	Total water requirement is estimated to be 9,235 cum/day including fresh water requirement of 3061 cum/day proposed to be met from GIDC supply.	Due to ZLD, capital cost of effluent treatment scheme will increase up to 14% and recurring cost will increase 11.4298%. Detail calculation is submitted by PP.  When PP applied for EC to MoEFCC, CETP, Saykha



		<p>Effluent generated shall be segregated in to high COD and low COD stream. Company proposes a new ETP consisting of primary, secondary and tertiary treatment &amp; RO facility for Low COD/Low TDS stream (7,120 m<sup>3</sup>/day). The low COD stream effluent (7,120 m<sup>3</sup>/day) will be sent to proposed ETP. Treated effluent shall be sent to RO and RO permeate will be reused in plant premises and RO Reject will be treated in MEE. The high COD stream and High TDS effluent (1,000 m<sup>3</sup>/day) will be treated in primary ETP and then treated effluent will be sent to MEE and MEE Condensate will be treated in ETP. Final Treated effluent shall be reused in plant premises. Domestic Waste water will be treated in secondary treatment or disposed by septic tank &amp; soak pit.</p>	<p>Company proposes a new ETP consisting of primary, secondary and tertiary treatment &amp; RO facility for Low COD/Low TDS stream (7,120 m<sup>3</sup>/day). The low COD stream effluent (7,120 m<sup>3</sup>/day) will be sent to proposed ETP. 1,600 KL/Day treated effluent will be sent to CETP, Saykha for further treatment and remaining effluent will be passed through RO and treated effluent from RO shall be reused in plant premises. Treated effluent shall be sent to RO and RO permeate will be reused in plant premises and RO Reject will be treated in MEE.</p>	<p>did not exist and it did not give the membership. Now, CETP, Saykha is completed and it gives membership to discharge the treated effluent into CETP and company has obtained the membership from CETP, Saykha to discharge the treated effluent of 1600 KL/Day into CETP, saykha.</p> <p>There is no space available for maintaining total ZLD in company.</p> <p>Total wastewater generation is 8,136 m<sup>3</sup>/day. Company wants to discharge treated effluent only 1,600 m<sup>3</sup>/day out of 8,136 m<sup>3</sup>/day. Total ZLD is not possible because of the capital investment of ZLD is very huge.</p> <p>PP will not reuse the total treated wastewater due to cross contamination of different type wastewater generated from different products like fungicides, herbicides and insecticides as EU &amp; USA do not allow any impurity in products. More than 90% of our production is exported.</p>
2	<b>Point No. 10:</b>	<p>Zero Liquid Discharge shall be ensured and no waste/ treated water shall be</p>	<p>Company proposes a new ETP consisting of primary, secondary</p>	<p>If cross contamination will occur, then exported products will be rejected</p>

	<p><b>Specific Condition (b):</b></p>	<p>discharged outside the premises.</p>	<p>and tertiary treatment &amp; RO facility for Low COD/Low TDS stream (7,120 m<sup>3</sup>/day). The low COD stream effluent (7,120 m<sup>3</sup>/day) will be sent to propose ETP. 1600 KL/Day treated effluent will be sent to CETP, Saykha for further treatment and remaining effluent will be passed through RO and treated effluent from RO shall be reused in plant premises. Treated effluent shall be sent to RO and RO permeate will be reused in plant premises and RO Reject will be treated in MEE.</p>	<p>and it may result in huge financial loss to the company and we &amp; our country shall not earn foreign currency.</p> <p>PP has taken the loan of Rs. 200 Crores from Bank for the Plant and financial condition of company is poor due to present slow down in the market. Therefore, PP shall explore possibility of ZLD after 5 years, if space will be available within premises and financial condition of the company becomes strong.</p> <p>Company cannot survive in international Market with ZLD condition due to high competition from global players.</p> <p>Due to ZLD condition, company may lose export orders and foreign currency.</p>
3	<p><b>Point No. 10:</b></p> <p><b>Specific Condition (h):</b></p>	<p>Total fresh water requirement shall not exceed 1,540 cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.</p>	<p>Total fresh water requirement shall not exceed 3061 cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.</p>	<p>Change in "Mode of Disposal" from "Zero Discharge" to "Discharge to CETP (which has deep sea Marine Discharge) &amp; the final treated wastewater from Factory Premises will be disposed of to this CETP facility, GIDC is Gujarat Government's undertaking Project worth Rs. 250 Crores &amp; PP have</p>

				<p>already contributed membership fee for the CETP. CETP was also constructed using subsidy from State &amp; Central Governments.</p> <p>GIDC has also laid pipeline from CETP to deep sea (project cost = Rs. 180 crores) for disposal of treated wastewater discharge having marine norms. We have also contributed membership fee for the pipeline project.</p> <p>Due to this, Company will discharge the treated effluent 1600 KL/Day into CETP, Saykha, So that total fresh water requirement will increase from 1540 m<sup>3</sup>/Day to 3061 m<sup>3</sup>/Day.</p>
4	--	<p>Process organic residue and spent carbon, if any, shall be sent to cement industries.</p> <p>ETP sludge, process inorganic &amp; evaporation salt shall be disposed off to the TSDF.</p>	<p>Generation Quantity of evaporation salt will be reduced from 12,150 MT/Month to 6,350 MT/Month and evaporation salt shall be disposed off to the TSDF.</p>	<p>1,600 KL/Day treated effluent will send to CETP for further treatment.</p> <p>Due to this, capacity of RO and MEE will be reduced and Generation Quantity of evaporation salt will be reduced.</p>
5	--	<p>The Ministry of Environment, Forest and Climate Change has examined the proposal for grant of environmental clearance to the project for setting up</p>	<p>The Ministry of Environment, Forest and Climate Change has examined the proposal for grant of environmental clearance to the</p>	<p>Company wants to remove the Plot No. T-47 (20000 m<sup>2</sup>) from the total plot area 121000 m<sup>2</sup>. After the removal of Plot No. T-47, Area will be 101000 m<sup>2</sup>.</p>

	pesticide Technical (31200 TPM) and Synthetic Organic Chemical @ 16500 TPM manufacturing unit by M/s. Hemani industries Ltd (Unit-VI) in an area of 1,21,000 sqm at plot No T-35,36,37,45,46,47, GIDC Saykha, Tal: Vagra, Dist: Bharuch (Gujarat).	project for setting up pesticide Technical (31200 TPM) and Synthetic Organic Chemical @ 16500 TPM manufacturing unit by M/s. Hemani industries Ltd (Unit-VI) in an area of 1,01,000 sqm at plot No T-35,36,37,45,46, GIDC Saykha, Tal: Vagra, Dist: Bharuch (Gujarat).	
--	--	--	--

The Committee has made a detailed deliberation on the proposal and observed that EC was granted with the condition of ZLD recently and now the project proponent want to amend the EC and want to discharge the treated water of 1,600 KL/Day to CETP, Saykha for further treatment. Also project proponent want to increase the fresh water requirement from 1540 cum/day to 3061 cum/day.

The EAC, after detailed deliberation, **deferred** the proposal and decided that the subject matter be kept in abeyance till the issues related to ZLD are deliberated and discussed. Till such time prevailing and already prescribed guidelines shall remain be applicable to the project.

### **Agenda No. 18.16**

#### **Expansion and modification of Molasses Based Distillery Plant from 60 KLPD to 70 KLPD through process modification in its existing Distillery Plant by M/s SIDDAPUR DISTILLERIES LIMITED-Amendment in Environmental Clearance**

**[IA/KA/IND2/125695/2019, J-11011/10/2017-IA II (I)]**

The proposal of M/s Siddapur Distilleries Limited is for amendment/modification in the Environmental clearance granted by the Ministry vide letter number dated 9<sup>th</sup> July, 2018 for the project expansion of Molasses Based Distillery from 60 KLPD to 70 KLPD through process modification/improvement by at village Siddapur, Taluk Jamkhandi, District Bagalkot (Karnataka).

The project proponent and their accredited consultant made a detailed presentation on the salient features of the project through Video Conferencing (VC).

The project proponent has requested for the amendments and modifications as under:

S. No.	Para of EC issued no J-1011/10/2017-IA II (I) dated 9th July 2018	Details as per the EC	To be revised / read as	Justification / reasons by PP
1	Point No.5	There is no boiler in existing plant as the steam requirement for the distillery is sourced from Sri Prabhulingeshwar Sugars & Chemicals Ltd, Siddapur, located adjacent to the distillery plant.	Addition of Two numbers of boilers (18 TPH in I phase and 25 TPH II Phase). ESP as APC equipment for boilers.	For easy operation and to de-bottleneck the steam requirement at sugar mill and distillery, SDL proposes to install two numbers of boilers 18 TPH in I Phase and 25 TPH in II Phase ESP as APC equipment for boilers.
			Addition of Captive power generation plant of 1.5 MW and 2.5 MW.	Captive power generation plant (1.5 MW and 2.5 MW) in phased manner to augment the power requirement and for judicious use of steam.
			Addition of MEE for concentration of spent wash.	MEE for concentration of spent wash for recovery of condensate and reuse in process and also to reduce the quantity of spent wash. Spent wash will be reduced from 420 KLD to 84 KLD
2	Sl.no 10 (f)	Industrial/trade effluent shall be segregated into High	To be deleted as it is not applicable to our line of treatment of spent wash and other effluents.	

		COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in the ETP and then through RO system.	
3	Sl.No. 10 (j)	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.	To be deleted as it is not applicable to our nature of activity.

The EAC during deliberation observed that the details of boilers and captive power plant was not mentioned in the EIA/EMP report and addition of proposed boilers and CPP will add pollution load for which EC was granted in 2018.

The EAC, after detailed deliberations, observed that the instant **proposal is not amendment in EC, however the said proposal is for modification of scope** of the project viz. (i) installation of addition of Two numbers of boilers (18 TPH in I phase and 25 TPH II Phase), (ii) addition of Captive power generation plant of 1.5 MW and 2.5 MW, and (iii) addition of MEE for concentration of spent wash.

The Committee suggested that PP needs to submit an addendum to the EIA Report w.r.t. of pollution load and other mitigation measures to control the same. The PP shall submit the application under the provisions of the para 7(ii) of the EIA Notification, 2006 for further appraisal/consideration of the EAC. The EAC, therefore **returned** the proposal in present form.

**DAY 2: 14<sup>th</sup> April, 2020 (Tuesday)-Meeting held through  
Video Conferencing (VC) Mode**

**Agenda No. 18.17**

**REFINERY EXPANSION OF M/s NUMALIGARH REFINERY LIMITED FROM 3.0 TO 9.0 MMTPA, LOCATED AT NUMALIGARH, ASSAM - Consideration of Environmental Clearance**

**[IA/AS/IND2/134396/2018, J-11011/274/2015-IA II (I)]**

The proposal is for environmental clearance to the project for expansion of the Refinery from 3 MMTPA to 9 MMTPA by M/s Numaligarh Refinery Limited in an area of 333.5 ha located at Village Pankagrang, District Golaghat, Assam. The proposal also involves activities requiring prior permission as per the Ministry's Notification vide S.O. 481 (E) dated 5<sup>th</sup> July, 1996 in 'No Development Zone' of Numaligarh.

The Project Proponent and their Consultant M/s Engineer India Ltd. made a detailed presentation through Video Conferencing (VC) on the salient features of the project and informed that:

- (i). The project/activity is covered under category A of item 4(a) 'Petroleum Refining Industry' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.
- (ii). Standard TOR was issued vide letter dated 21<sup>st</sup> June, 2018 for the proposed project. Public Hearing for the project has been conducted by the Pollution Control Board, Assam on 25<sup>th</sup> October, 2019, which was presided over by the Deputy Commissioner. The main issues raised during the public hearing were related to employment generation, socio economic development and environment.
- (iii). The total land requirement of the project is 88.4 ha which is in existing refinery premises of 333.5 Ha. Additional land of 180 ha will be required for some developmental activities/ancillary facilities in "No Development Zone" area around the existing refinery. Greenbelt area of 56 ha has been developed in the refinery complex and additionally 6 ha shall be developed, covering 18.4% of the total area. It is proposed to make plantation in collaboration with Assam Forest Department under compensatory afforestation programme.
- (iv). The estimated project cost is Rs. 22594 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 258 crores and the recurring cost (operation and maintenance) will be about Rs.12 crores per annum. The project will lead to employment for 500 persons directly and 1500 persons indirectly after expansion.

It is proposed to allocate Rs 36.51 crores towards Corporate Environment Responsibility (CER).

(v). It was informed that most of the process units will be accommodated within the existing premises but for other enabling and associated project activities are falling short of land. Accordingly, various options have been explored for acquiring additional land, and a meeting has been conducted with various stake holders, including State forest/wildlife officials. Based on the meeting 9 sites were recommended for associated project activities like construction sheds, workers camp, warehouse, storage yard, RMC Batch plant, fabrication yard etc., in the 'Numaligarh No Development'.

(vi). There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Dhansiri and Kaliyani are flowing at 1.3 Km in North direction and 2.1 km in NW direction respectively.

(vii). Ambient air quality monitoring was carried out at 8 locations during March to May 2019 and the baseline data indicates the ranges of concentrations as PM<sub>10</sub> (65.8-95.1 µg/m<sup>3</sup>), PM<sub>2.5</sub> (30.1-51.1 µg/m<sup>3</sup>), SO<sub>2</sub> (12-19.4 µg/m<sup>3</sup>) and NO<sub>2</sub> (21.1-33.3 µg/m<sup>3</sup>) respectively. Maximum incremental (24 hourly) GLC for SO<sub>2</sub> and NO<sub>x</sub> are predicted as 12.5 µg/m<sup>3</sup> and 37.6 µg/m<sup>3</sup>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(viii). Total fresh water requirement after expansion is estimated to be 2508 cum/day, which includes fresh water requirement of 1820 cum/day for proposed expansion and existing 688 cum/day. Water demand will be met from Dhansiri river.

(ix). Effluent will be treated in a new Effluent Treatment Plant with RO-DM facility. The RO reject of 300 cum/hr will be discharged to Dhansiri river through a pipeline.

(x). Power requirement for the proposed project will be 135 MW and sourced from state electricity grid and proposed STG. Existing refinery has 9 DG sets of 6430 KVA capacity, additionally 01 DG set will be used as standby during power failure. Adequate Stack height will be provided as per CPCB norms to the proposed DG set.

(xi). Existing refinery has 53 TPH FO/FG/NG fired boiler. Additionally, 3x275 TPH FG/NG fired boiler (2 working, 1 standby) will be installed. Minimum Stack height of 35 m will be provided for the proposed boiler stack.

(xii). SO<sub>x</sub> emission from the proposed project shall be 330 kg/hr and total SO<sub>x</sub> emission post expansion from the refinery will be 586 kg/hr. For emission management, use of FG/NG in heater as fuel, adequate stack height, use of Low NO<sub>x</sub> burners in heater & boiler, continuous stack monitoring, developing green belt etc. shall be carried out.



(xiii). Hazardous solid waste like spent catalyst will be disposed off to CPCB approved recyclers, Tank bottom sludge will be disposed off to CPCB approved recyclers/bioremediation.

(xiv). The Ministry has issued following Environmental Clearances in favor of M/s Numaligarh Refinery Limited. The details of all ECs are given below.

<b>S. No.</b>	<b>Project Name</b>	<b>MoEFCC File No.</b>	<b>EC issued on</b>
1	Petroleum Refinery at Numaligarh	J-11011/16/78-IA. II	May 31,1991
2	BS-III Motor Spirit Project at NRL	J-11011/92/2003-IA II (I)	February 13, 2004
3	Coke-Calcination Unit (0.1 MTPA)	J-11011/203/2003-IA II (I)	March 22, 2004
4	Diesel Quality Up-gradation Project (DQUP) at NRL	J-11011/272/2008-IA-II (I)	November 10, 2008
5	Paraffin Wax Type (43,000 TPA) & Semi-Microcrystalline Wax Type A (4,500 TPA) within the existing premises of 3 MMTPA Petroleum refinery at NRL	J-11011/113/2009-IA-II (I)	September 5, 2012
6	Naptha Splitter Unit (160,000 TPA) in the existing Refinery at NRL	J-11011/534/2009-IA-II (I)	September 12, 2012
7	Installation of new LPG mounded bullet & up-gradation of existing LPG bottling plant and BS-IV HSD project at NRL	J-11011/150/2015-IA-II (I)	December 9, 2016

(xv). Certified compliance report was forwarded by the Regional Office MoEFCC, Shillong vide letter no. RO-NE/E/IA/AS/OR/3,9,10,17,25,26,33/868-69 dated 29/08/2018.

(xvi). There is no litigation pending against the proposal. However, there are court cases related to Township and Bamboo based ethanol project. The environmental clearance issued to M/s NRL has been transferred in favour of M/s Assam Biorefinery Ltd.

(xvii). The details of products and capacity are submitted by PP as under. The production capacity also includes the additional products purchased outside the refinery, in addition to the product/capacities permitted in the existing environmental clearances.

<b>S.No.</b>	<b>Product Details</b>	<b>Existing Quantity (MMTPA)</b>	<b>Proposed Quantity (MMTPA)</b>	<b>Total Quantity (MMTPA)</b>
1.	LPG	0.066	0.500	0.566
2.	Coke	0.080	0.245	0.325
3.	Motor Spirit BS VI	0.360	1.572	1.932
4.	HSD BS VI	2.236	3.370	5.606
5.	Naphtha	0.288		0.288
6.	ATF	0.060		0.060
7.	SKO/MTO	0.072		0.072
8.	Sulphur	0.0060	0.145	0.151
9.	Wax	0.05		0.05

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing.

The Committee noted that the certified compliance report was forwarded by the Regional Office MoEFCC, Shillong vide letter dated 29/08/2018. The Committee deliberated the certified compliance report and found in order.

The member secretary informed the Committee that the proposed project requires environmental clearance as per the EIA Notification, 2006 for its operations and prior approval of the central government as per the Ministry Notification vide S.O. 481 (E) dated 5<sup>th</sup> July, 1996, for any developmental/associated activities which could lead to pollution and congestion.

A meeting in this regard has been convened in the Ministry to consider approval for undertaking various associated activities in the NDZ area for the Numaligarh refinery. It was desired that the project proponent shall undertake and include the details of activities in the EIA/EMP report. The EAC may consider issues related to associated activities in the NDZ area, while appraising the project for grant of EC.

The PP reported that in the EIA/EMP report, it was envisaged that most of the process units will be accommodated within the existing premises. PP also reported that in no development zone, the other enabling and associated activities (viz. labour camp, warehousing, labour camp during construction phase etc.) will be undertaken and this land will be released further. Therefore, the usage of this land will be in temporary in nature.

Accordingly, various options have been explored by the project proponent for acquiring additional land, and a meeting has been conducted with various stake holders, including State forest/wildlife officials. Based on the meeting 9 sites were recommended for associated project activities. The project proponent needs to point down the exact number of sites, proposed activities in the area and commitment/MoU from the stakeholders regarding land transfer in favour of PP.

It was also informed that a case of M/s Numaligarh Refinery Limited is also being discussed in Hon'ble NGT related to ethanol plant/construction of boundary wall/developmental activities in NDZ. However, as reported by the project proponent there is no court case pending related to the proposed project.

Regarding ensuring Zero Liquid Discharge by the refinery, the Member Secretary informed the Committee that the Ministry is examining the matter on techno-feasibility of implementing ZLD and a Committee has been constituted for the assessment of the same. It was suggested that ZLD may be ensured by the unit, however, considering the opinion of the EAC that the ZLD is not feasible for the refineries, the project would be considered subject to techno-feasibility study on ZLD by the project proponent. It was informed that the opinion of the SPCB would be required for releasing effluent to the river and discharge point needs to be suggested (upstream/downstream). The Member Secretary also informed that the Committee that the Ministry has received complaints forwarded by the CPCB regarding effluent release by the project proponent.

The Member Secretary also informed the Committee that the maximum incremental values of SO<sub>x</sub> and NO<sub>x</sub> are at very high level and needs a relook. However, the Committee suggested that the predicted values are the worst case scenario and the same can be controlled with the proposed measures, and installation of Sulphur recovery plant and low NO<sub>x</sub> burners.

The EAC has deliberated the proposal and opinion of the MS and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as

amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC). The Committee also recommended for approval for proposed developmental/associated activities of the refinery, as per the Ministry Notification vide S.O. 481 (E) dated 5<sup>th</sup> July, 1996.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance for expansion of Refinery unit **from 3.0 to 9.0 MTPA** as per provisions of the EIA Notification, 2006, as well as approval as per the Ministry's Notification dated 5<sup>th</sup> July, 1996 (NDZ), subject to submission of MoU from the stakeholders regarding land transfer in favour of PP. The EAC has also **recommended** the following specific terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (ii) The effluent shall be treated and recycled/reused to meet the requirement of different industrial operations and Zero Liquid Discharge shall be achieved. The treated effluent of 300 cum/hr, if discharged to Dhansiri river through pipeline (to downstream only), shall conform to the standards prescribed under the Environment (Protection) Rules, 1986. If Zero Liquid Discharge is not followed, the Project Proponent shall submit plan for achieving Zero Liquid Discharge with its techno-economic feasibility within 3 months before the EAC/Ministry.
- (iii) The project proponent shall finalize and submit the details of sites to be utilized for associated activities of the refinery in the NDZ area within six months. Preference shall be given to the sites which is adjoining/adjacent to the refinery area. The project proponent shall submit MoU/commitment from the stakeholders regarding transfer of the land.
- (iv) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (v) The National Emission Standards for Petroleum Oil Refinery issued by the Ministry vide G.S.R. 186(E) dated 18<sup>th</sup> March, 2008 and G.S.R.595(E) dated 21<sup>st</sup> August, 2009 as amended from time to time, shall be followed.
- (vi) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. For emission control and management, use of FG/NG in heater as fuel, adequate stack height, use of Low

NOX burners in heater & boiler, continuous stack monitoring, Sulphur recovery plant, etc. shall be installed/ensured.

- (vii) Total fresh water requirement for the proposed project shall not exceed 2508 cum/day to be met from Dhansiri river. Fresh water requirement shall be reduced by recycling/reuse of water. Necessary permission for fresh water procurement shall be obtained from the concerned regulatory authority.
- (viii) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (ix) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.
- (x) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xi) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xii) Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided. The ash from boiler shall be sold to brick manufacturers/cement industry.
- (xiii) The company shall undertake waste minimization measures as below:-
  - a. Metering and control of quantities of active ingredients to minimize waste.
  - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - c. Use of automated filling to minimize spillage.
  - d. Use of Close Feed system into batch reactors.
  - e. Venting equipment through vapour recovery system.
  - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiv) The green belt of 5-10 m width shall be developed in the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. The project proponent shall ensure 40% greenbelt area vis-à-vis the project area

through afforestation in the degraded area. The Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

- (xv) As proposed, at least Rs. 36.51 crore shall be allocated towards Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for addressing the issues raised during public consultation/hearing including assistance/infrastructure for transport facility, drinking water, social/environmental activities, education & skill development, etc.
- (xvi) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (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.
- (xviii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.
- (xix) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xx) Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.
- (xxi) The project proponent shall implement the Site-Specific Conservation Plan for conservation of Schedule I Species in the study area and obtain approval from the State Chief Wildlife Warden of the Department. The recommendations of the approved Site-Specific Conservation Plan shall be implemented in consultation with the State Wildlife Department. The implementation report shall be furnished along with the six-monthly compliance report.
- (xxii) The PP should improve the efficiency of ETP Plant and the water discharge should be as per prescribed CPCB Norms. They should also install 24x7 hours monitoring system (of the discharge) and the same should be connected to the server of SPCB/CPCB.

(xxiii) Fly Ash Brick making plant shall be installed for proper disposal of fly ash.

### **Agenda No.18.18**

**Setting up Malt based distillery Unit of capacity 30 KLD by M/s Microbrew Bistro Private Limited at Khasra No. 933, 934, 936, 937, 938, 940, village Mahuakheraganj, Tehsil Kashipur, District Udham Singh Nagar, (Uttarakhand) - Consideration of Environmental Clearance**

**[IA/UK/IND2/98132/2019, File No. J-11011/66/2019-IA-II(I)]**

The project proponent and their consultant M/s. Gaurang Environmental Solutions Private Limited made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Setting up Malt based distillery unit of capacity 30 KLD by M/s Microbrew Bistro Private Limited at Khasra No. 933, 934, 936, 937, 938, 940, village Mahuakheraganj, Tehsil Kashipur, District Udham Singh Nagar, Uttarakhand.

The project/activity is covered under category B of item 5 (g) 'Distilleries' of the schedule to the EIA Notification, 2006 and requires appraisal/approval at state level but due to applicability of general condition (interstate boundary at a distance of 1.3 km towards SE) the project appraised at Central level in the Ministry.

The EAC during deliberation observed that the values for PM<sub>10</sub> are very high and need to be rechecked. The GLC values for SO<sub>x</sub> and NO<sub>x</sub> are in higher side the same needs to be rechecked. Also in the proposal it is proposed that fresh water will be met from ground water source. However, as per the CGWA this area is comes under semi critical and as per Hon'ble NGT order permission for ground water withdrawal may not be issued from CGWA at present, therefore the EAC is therefore suggested to find out alternate source of fresh water.

The EAC, after detailed deliberations decided to **defer for want of requisite information as under** and have asked the PP to revise the Report alongwith following clarification/inputs:-

- (i) Alternate source of fresh water needs to be submitted and commitment not to use ground water.
- (ii) Revised water balance with details of total water and fresh water requirement and reduction in fresh water demand as per 5 KL/kl of production. Also plan to construct RCC tank to collect rain water from the roof top.
- (iii) Clarification for high PM 10 values recorded during and plan to control/reduce.

- (iv) Detailed scheme for treatment spent wash need to be submitted.
- (v) Revised prediction of GLC due to the proposed project.
- (vi) Commitment not to use composting and submit plan for incineration to achieve ZLD.
- (vii) Commitment to not use coal as fuel in boiler.

### **Agenda No.18.19**

#### **Proposed Modernization of Synthetic Organic Chemicals Manufacturing Unit (173.88 TPA) by M/s Kothari Phytochemicals International (Division of Kothari Phytochemicals & Industries Limited) at villages Nagari and Thiruvallavanallur, Taluk Vadipatti District Madurai (Tamil Nadu) - Consideration of Environment Clearance**

#### **[IA/TN/IND2/122790/1991, IA-J-11011/180/2018-IA-II(I)]**

The project proponent and their consultant M/s. KKB Envirocare Consultants Pvt. Ltd made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Proposed Modernization of Synthetic Organic Chemicals Manufacturing Unit (173.88 TPA) by M/s Kothari Phytochemicals International (Division of Kothari Phytochemicals & Industries Limited), located at villages Nagari and Thiruvallavanallur, Taluk Vadipatti District Madurai, Tamil Nadu.

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals And Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' to be appraised at Central level in the Ministry.

The EAC during deliberation observed that the GLC values are in higher side the same needs to be rechecked. Also in the proposal it is proposed that fresh water will be met from local panchayat. The EAC is therefore suggested to find out alternate source of fresh water, and further come for appraisal.

The EAC noted that the plant is operating before 1994 and PP needs to clarify why PP has not obtained earlier EC under the provisions of the EIA Notification. The EAC, after detailed deliberations decided to **defer for want of requisite information as under** and have asked the PP to revise the Report alongwith following clarification/inputs:-



- (i) Proof to establish that existing unit is operating with proper prior permission and to confirm that unit is not violating the provision contained in EIA Notification, 1994 and 2006. In this regard PP needs to submit all the old CTE/CTO to verify the violation, if any.
- (ii) This is a modernization case and as per TOR PP needs to submit the certified compliance report of CTO from SPCB. However, PP has not submitted the same.
- (iii) PP needs to submit the details of production capacity since inception of the unit to verify violation, if any.
- (iv) Alternate source of fresh water needs to be submitted and commitment not to use ground water.
- (v) Revised prediction of GLC due to the proposed project.

### **Agenda No.18.20**

#### **Onshore Exploration development and production drilling by M/s PFH Oil & Gas Private Limited in CB/ONDSF/ELAO/2016 block at village Elao, Taluk Olpad & Hansot, District Bharuch & Surat (Gujarat) - Consideration of Environment Clearance**

#### **[IA/GJ/IND2/74633/2018, IA-J-11011/144/2018-IA-II(I)]**

The Project Proponent and their accredited consultant M/s Bhagavathi Ana Labs Pvt. Limited, made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for exploration development and production drilling by M/s PFH Oil & Gas Private Limited in CB/ONDSF/ELAO/2016 block, located at village Elao, Taluk Olpad & Hansot, District Bharuch & Surat (Gujarat).

The project/activity is covered under category A of item 1(b) 'Offshore and onshore oil and gas development & production' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at central level by sectoral Expert Appraisal Committee in the Ministry.

Standard terms of reference (ToR) for the project has been issued by Ministry vide letter dated 1<sup>st</sup> June, 2018. The project location fall under two district, therefore two

public hearing were conducted at two districts. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 10<sup>th</sup> July 2019 for District Bharuch & on 11<sup>th</sup> October 2019 for District Surat. The said public hearing was presided by the Additional Collector & Additional District Magistrate respectively. The main issues raised during the Public Hearings are related to the employment opportunities, environmental pollution problems and the funds for the development of the surrounding villages.

PP reported that Block area allotted for the project is 9.98 sq. km. The estimated project cost is up to Rs 50 Crores per well. Total Capital Cost earmarked towards environmental pollution control measures is up to Rs 1 Crore and the Recurring cost (Operation and Maintenance) will be up to about Rs 0.25 Crores per annum. Total Employment will be up to 40 Persons as direct.

PP reported that there are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the block area. Kim river is flowing across the contract area.

Ambient air quality monitoring was carried out at 8 locations during October 2018 to December 2018 and submitted baseline data indicates that ranges of concentrations of PM10 (56.5 µg/m<sup>3</sup>), PM2.5 (24.6 µg/m<sup>3</sup>), SO<sub>2</sub> (17.6 µg/m<sup>3</sup>) and NO<sub>2</sub> (19.3 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 25.6 µg/m<sup>3</sup> with respect to NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement is 25 m<sup>3</sup>/day of which fresh water requirement of 25 m<sup>3</sup>/day will be met from Tanker Supply. Effluent of 5 m<sup>3</sup>/day quantity will be treated through mobile ETP system. The plant will be based on Zero Liquid discharge system. Power requirement will be 2.5 MW during drilling, and will be met through DG Sets onsite. Stack (height 30 m) will be provided as per CPCB norms.

ELAO Contract Area has been awarded to PFH Oil & Gas Pvt Ltd by Govt. of India during Marginal Field DSF-2016 round. The drilling of a new well may go to a maximum depth of about 3000 m BGL. It is estimated that 0.5 to 1.0 Billion Cubic Feet (BCF) of gas will be recovered through the life of the Project.

PP reported that Drill cutting will be separated from water based mud (WBM) and unusable drilling fluid will be stored in HDPE lined pit for solar drying for temporary storage. The cuttings/mud residues so stored will then be treated and disposed in accordance with CPCB regulations specified for onshore oil & gas industry.

The project proponent has informed that earlier environmental Clearance (EC) was granted to M/s ONGC for drilling of 67 location in 23 blocks in western Onshore Basin, vide letter No. J-11011/431/2011-IA II (I) dated 25<sup>th</sup> June, 2014 which includes EC for

one location in ELAO PML (10.37 Sq.km). ELAO PML with an area of 9.98 sq.km, carved out as Discovered Small Field, has been awarded to M/s PFH Oil & Gas Pvt. Ltd by Ministry of Petroleum & Natural Gas (MoPNG). The Committee deliberated the issues.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after deliberations, **recommended** the project for grant of environmental clearance, **subject to submission of NOC from M/s ONGC** stating that they have No objection if EC granted in favour of M/s PFH Oil & Gas Private Limited. The EAC also recommended the following specific conditions as under:-

- (i) No drilling shall be carried out in Protected Areas. Drilling in the National Park/Wildlife Sanctuaries, if any, are subject to the recommendations of orders of Hon'ble Supreme Court, recommendations of Standing Committee of NBWL, recommendations of the State Chief Wildlife Warden and strict compliance of the conditions imposed therein.
- (ii) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.

- (iii) During transportation of crude oil Oil Industry Safety Directorate (OISD)/ Petroleum and Natural Gas Regulatory Board (PNRB) safety regulations shall strictly be followed.
- (iv) No well shall be spudded before the issuance of the environmental clearance and other requisite approvals.
- (v) As proposed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land. Mobile ETP along with RO plant shall be installed to treat the waste water.
- (vi) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (vii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (viii) Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, CH<sub>4</sub>, HC, Non-methane HC etc.
- (ix) During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- (x) Approach road shall be made pucca to minimize generation of suspended dust.
- (xi) The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.
- (xii) Total fresh water requirement shall not exceed 25 cum/day. Prior permission shall be obtained from the concerned regulatory authority. Mobile ETP coupled with RO shall be installed to reuse the treated water in drilling system. Size of the waste shall be equal to the hole volume+ volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix

with waste water. Alternatively, if possible pit less drilling be practiced instead of above.

- (xiii) The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- (xiv) Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30<sup>th</sup> August, 2005.
- (xv) Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- (xvi) The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- (xvii) The company shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self containing breathing apparatus.
- (xviii) The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and Regional Office.
- (xix) Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.
- (xx) Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.
- (xxi) On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from

environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.

- (xxii) All the issues raised during public hearing shall be satisfactorily implemented. Action plan proposed shall be implemented in a timely manner and compliance report to be submitted to the Regional Office of the Ministry for verification.
- (xxiii) At least 2.5 % of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xxiv) No lead acid batteries shall be utilized in the project/site.
- (xxv) Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.
- (xxvi) Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.
- (xxvii) Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

### **Agenda No. 18.21**

**Expansion Grain based Distillery plant from 125 KLPD to 200 KLPD & Co-generation from 3 MW to 9 MW by M/s Pioneer Industries Ltd., located at A-2(P), A-3 AND A-4, Industrial Growth Center, Village Ranipur, Defence Road, Tehsil and District Pathankot, Punjab - Consideration of Environmental Clearance**

**[IA/PB/IND2/142310/2016, J-11011/127/2016-IA II (I)]**

The proposal was earlier considered by the EAC in its meeting held during 20-22 November, 2019. The EAC, during deliberations noted that the project details mentioned in the EIA report were not consistent with that presented during the meeting. The Committee also took serious note on the quality of the EIA/EMP report prepared by the consultant and underrated the consultant. The EAC, after detailed deliberations decided to **return the proposal** in its present form and have asked for clarification/inputs, in respect of the following:-

- (i). EIA report to be revised as per the terms of reference granted for the project, and shall conform to Appendix III of the EIA Notification, 2006.
- (ii). The Committee noted that there are various deficiencies in Form 2 (viz. S. no. 6, 15, etc.) uploaded by the PP and accordingly Revised Form 2 shall be submitted incorporating all the information related to the project.
- (iii). Action Taken Report on non-compliance points in the existing EC conditions to be forwarded by the Regional Office of the Ministry.
- (iv). Revised layout plan with 33% green belt area.
- (v). Issues raised during public hearing, response by the project proponent, action plan with budgetary allocation and its time lines needs to be submitted.
- (vi). Revised water balance with details of total water and fresh water requirement, and permission from CGWA.
- (vii). Effluent treatment mechanism with plan for Zero Liquid Discharge.
- (viii). Detailed Plan for Corporate Environmental Responsibility and its implementable schedule with budgetary provisions needs to be resubmitted.
- (ix). The onsite emergency plan is not satisfactory as per MSIHC Rules, layout plan of the plant need to be revised.
- (x). Consent to Operate for the present Industrial operations needs to be submitted.

The project proponent and their consultant [[M/s Enviro Infra Solutions Pvt. Ltd.] made a detailed presentation through Video Conferencing (VC) on the salient features of the project and informed the following:

- (i). The proposal is for environmental clearance to the project for expansion of grain based Distillery from 125 KLPD to 200 KLPD & cogeneration from 3 MW to 9 MW by M/s Pioneer Industries Ltd. located in an area of 171739 sqm located at A-2(P), A-3 and A-4, Industrial Growth Center, Village Ranipur, Defense Road, Tehsil and District Pathankot, Punjab.
- (ii). The project/activity is covered under category A of item 5(g) 'Distilleries' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006.
- (iii). The project proposal was considered by the EAC (Industry – 2) in its meeting held during 27- 28 June, 2016 and recommended Terms of Reference (TORs) for the project. The ToR has been issued by the Ministry vide letter dated 2<sup>nd</sup> August, 2016. Public Hearing for the proposed project has been conducted by the State Pollution Control Board

on 14<sup>th</sup> March, 2019 which was presided over by Additional District Magistrate. The main issues raised during the public hearing are related to employment and control of pollution.

(iv). Existing land area is 171739 sqm and no additional land area will be used for the proposed expansion. Industry has developed green belt in an area of 63327 sqm covering more than 33 % of total project area. The estimated project cost is Rs. 214.71 crores including existing investment of Rs. 162.21 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 10.95 crores and recurring cost (operation and maintenance) will be about Rs. 2.75 crores. The project will provide employment for 250 persons directly and 100 persons indirectly after expansion. Industry proposes to allocate Rs. 1.25 crores @ 2.4 % towards corporate social responsibility.

(v). There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant reserves, Wildlife corridors etc. within 10 km from the project site. River Ravi is flowing at a distance of around 4 kms. in North direction.

(vi). Ambient air quality monitoring was carried out at 8 locations during January to March, 2019 and the baseline data indicates the range of concentration as PM10 (40 to 71  $\mu\text{g}/\text{m}^3$ ), PM2.5 (18 to 37  $\mu\text{g}/\text{m}^3$ ), SO<sub>2</sub> (5.4 to 10.2  $\mu\text{g}/\text{m}^3$ ) and NO<sub>x</sub> (11.7 to 23.4  $\mu\text{g}/\text{m}^3$ ). AAQ modeling study for point source emissions indicates that the maximum incremental GLC's after the proposed project would be particulate matter (8  $\mu\text{g}/\text{m}^3$ ), SO<sub>2</sub> (3.5  $\mu\text{g}/\text{m}^3$ ) and NO<sub>x</sub> (4.3  $\mu\text{g}/\text{m}^3$ ). The resultant concentrations are within the National Ambient Air Quality Standards.

(vii). Total water requirements after the proposed expansion will be 1165 m<sup>3</sup>/day for 9 months of the year and 1460 m<sup>3</sup>/day for 3 summer months of the year. The higher water consumption during summer months is due to the higher evaporation rate in the cooling towers. All the fresh water requirements for the distillery plant will be met from ground water. The industry has obtained permission from CGWA for the extraction of ground water @ 1490 m<sup>3</sup>/day.

(viii). The industry will generate a total of 1650 m<sup>3</sup>/day of condensates including spent lees. Out of this, 800 m<sup>3</sup>/day will be directly used in the process for slurry preparation. Remaining condensates @ 850 m<sup>3</sup>/day will be treated in condensate polishing unit and reused for cooling tower makeup water. Effluent from misc. streams will be 178 m<sup>3</sup>/day which will be treated in ETP and reused for water of green belt within the industrial premises.

(ix). Power requirements after expansion will be 5000 KVA including existing requirements of 3000 KVA and will be met from in house cogeneration power plant. Existing unit has 3200 KVA D G sets to be used as standby during power failure. Stack height to the D G sets has been provided as per PB norms.



(x). Existing unit has 49 TPH biomass/coal fired boilers. Additional 50 TPH biomass/coal fired boiler will be installed. Electrostatic precipitator will be installed as pollution control system to achieve the statutory limit of 50 mg/Nm<sup>3</sup> for the proposed boiler. The industry will install dryers for the handling of DWGS for controlling process odours from the factory.

(xi). The Ministry has earlier issued Environmental Clearance vide letter no. J-11011/38/2010-IA.II(I) dated 7<sup>th</sup> December, 2012 to the existing project of 125 KLPD grain based distillery and 3 MW of cogeneration of power in favor of M/s Pioneer Industries Ltd. The Regional Office of the Ministry vide letter no. 5-65/2005-RO(NZ)/143 dated 07/08/2019 and 5-65/2005-RO(NZ)/Vol.III/16-17 dated 08/01/2020 has forwarded the certified compliance report.

(xii). There is no litigation pending against the proposal.

(xiii). The details of products and capacity are as under;

S. No.	Item	Unit	Existing Capacity	Proposed Additional Capacity	Total
1.	ENA/RS/ Impure spirit/ Country spirit/ Denatured spirit/ Fuel Ethanol (Absolute ethanol)	KL	125	75	200
2.	By-products				
	CO2	MT	100	60	160
	Fusel Oil	MT	2.0	1.2	3.2
	DDGS/Conc. rice protein	MT	130	70	200
	Corn Oil (in case of <b>maize used as raw material</b> )	MT	7	3	10

The EAC during deliberations noted that the project requires appraisal at **the State level as per the Ministry's Notification dated 13<sup>th</sup> June, 2019, the project/activity as category B.** Further, the area is classified as water scarcity area and continuity of ground water supply to the industry is in question and the matter regarding ground water extraction in such area is subjudice in the Hon'ble NGT. The Committee has also noted that there are drastic variation in the existing land area, water balance as stated in the EIA report/presented earlier and now.

The Committee has also **deferred** on the additional points submitted by the project proponent. The Committee after detailed deliberations, **deferred** the proposal and insisted for requisite information/clarification with respect to the following:

- (i) Categorization of the project (category A/B) and justification for submitting the proposal at the central level.
- (ii) Ministry to take necessary Action against the Consultant [M/s Enviro Infra Solutions Pvt. Ltd.] for misguiding the project proponent regarding categorization of the project, if so.
- (iii) Revised water balance and zero liquid discharge scheme.
- (iv) Alternate water source, if any, and commitment/MoU.
- (v) Recalibration of incremental GLCs due to the proposed project.
- (vi) Justification for changes in the existing land area details.
- (vii) Justification for drastic changes in water balance presented now and earlier.

The proposal was there for **deferred** for the needful. However, if the project falls under Category B, it requires appraisal at the State level.

**Agenda No.18.22**

**Setting up Specialty Chemicals manufacturing unit of capacity 550 TPM by M/s R A Chem Pharma Organic Industries at Survey No. 454, Village Neja, Taluka khambhat, District Anand (Gujarat) - Consideration of Environment Clearance**

**[IA/GJ/IND2/111654/2019, IA-J-11011/231/2019 – IA II (I)]**

The proposal is for environmental clearance to the project for Setting up Specialty Chemicals manufacturing unit of capacity 550 TPM by M/s R A Chem Pharma Organic Industries in an area of at Survey No. 454, Village Neja, Taluka khambhat, District Anand (Gujarat).

During deliberations, the EAC noted the following:

The Project Proponent and their consultant M/s Aqua-Air Environmental Engineers Pvt. Ltd. (Hon'ble High Court of Gujarat stay order), made a detailed presentation through Video Conferencing (VC) on the salient features of the project. Consultant has informed to the EAC that they have also applied for QCI/NABET Accreditation on March 11, 2020, which is under active consideration before QCI/NABET.

The details of products are as under:

<b>S. No.</b>	<b>Name of Product</b>	<b>CAS. No.</b>	<b>Production (MT/Month)</b>	<b>LD50 /LC50 (mg/kg)</b>
<b>(A)</b>	<b>Chlorinated Products</b>		<b>250</b>	

1.	3-Chloromethylbenzoic (Toluic) acid	31719-77-4		-
2.	4-Chloromethylbenzoic (Toluic) acid	1642-81-5		-
3.	Benzotrichloride	98-07-7		6000
4.	o-Chlorobenzotrichloride	2136-89-2		-
5.	P-Chlorobenzotrichloride	5216-25-1		820
6.	m-Chlorobenzotrichloride	2136-81-4		500
7.	2,3-Dichlorobenzotrichloride	84613-97-8		-
8.	2,4-Dichlorobenzotrichloride	13014-18-1		3160
9.	2-Chloro-4-Fluorobenzotrichloride	88578-92-1		-
10.	o-Fluorobenzotrichloride	488-98-2		-
11.	p-Fluorobenzotrichloride	5216-25-1		-
12.	Trichloromethoxy benzene	456-55-3		-
13.	o-Chlorobenzyl chloride	611-19-8		50
14.	2,4-Dichlorobenzyl chloride	94-99-5		-
15.	3-Chloro pivaloyl chloride	4300-97-4		-
<b>(B) Acid Chlorides</b>				
16.	Benzoyl chloride	98-88-4		1900
17.	Chloroacetyl chloride	79-04-9		200
18.	2-Ethylhexanoyl chloride	760-67-8		1260 mg/m3
19.	Octanoyl chloride	111-64-8		-
20.	o-Chlorobenzoyl chloride	609-65-4		3250
21.	P-Chlorobenzoyl chloride	122-01-0		-
22.	m-Chlorobenzoyl chloride	618-46-2		-
23.	2,3-Dichlorobenzoyl chloride	2905-60-4		-
24.	2,4-Dichlorobenzoyl chloride	89-75-8		4640
25.	2-Chloro-4-Fluorobenzoyl chloride	21900-54-9		-
26.	o-Fluorobenzoyl chloride	393-52-2		-
27.	p-Fluorobenzoyl chloride	403-43-0		-
28.	2-Ethoxybenzoyl chloride	256-003-4		-
29.	3-Chloromethylbenzoyl (Toluoy) chloride	63024-77-1	<b>200</b>	-
30.	4-Chloromethylbenzoyl (Toluoy) chloride	876-08-4		-
31.	2-Methylbenzoyl chloride	933-88-0		-
32.	4-Methylbenzoyl chloride	874-60-2		-
33.	4-Methoxybenzoyl chloride	100-07-2		-
34.	n-Butyryl chloride	141-75-3		1470
35.	Isobutyryl chloride	79-30-1		1000
36.	4-Chlorobutyryl chloride	4635-59-0		1350
37.	Propionyl chloride	79-03-8		823
38.	2-Chloropropionyl chloride	7623-09-8		642
39.	3-chloropropionyl chloride	625-36-5		-
40.	n-Valeryl chloride	638-29-9		2.07 mg/L
41.	5-Chlorovaleryl chloride	1575-61-7		<2000
42.	Isovaleryl chloride	108-12-3		-
43.	Heptanoyl chloride	2528-61-2	-	

44.	Hexanoyl chloride	142-61-0		-
45.	Isophthaloyl chloride	99-63-8		2200
46.	Cyclopropane carbonyl chloride	4023-34-1		-
47.	Cyclobutane carbonyl chloride	5006-22-4		-
48.	Cyclohexane carbonyl chloride	2719-27-9		-
49.	2-Furoyl chloride	527-69-5		-
50.	2-Thiophenecarbonyl chloride	5271-67-0		-
51.	Trimethylacetyl chloride	3282-30-2		638
<b>(C) Alkyl chlorides</b>				
52.	n-Propyl chloride	540-54-5	<b>40</b>	>2000
53.	n-Butyl chloride	109-69-3		2670
54.	Isobutyl chloride	513-36-0		-
55.	n-Pentyl chloride	543-59-9		-
56.	n-Hexyl chloride	544-10-5		-
57.	n-Heptyl Chloride	629-06-1		-
58.	n-Octyl Chloride	111-85-3		>20,000
59.	2-Ethylhexyl (Isooctyl) Chloride	123-04-6		-
60.	Propoxyethyl chloride	42149-74-6		-
61.	2-Chloroethylacetoacetate	609-15-4		2000
62.	Methyl-2-chloropropionate	17639-93-9	-	
<b>(D) Alkyl Bromides</b>				
63.	Isopropyl bromide	75-26-3	<b>20</b>	>2000
64.	Butyl bromide	109-65-9		2761
65.	Pentyl bromide	110-53-2		1300
66.	Hexyl bromide	111-25-1		3300
67.	1,4-Dibromobutane	110-52-1		-
68.	Cyclopropyl bromide	4333-56-6		-
69.	Cyclobutyl bromide	4399-47-7		-
70.	Cyclohexyl bromide	108-85-0		4100
<b>(E) Others</b>				
71.	Chloromethyl Naphthalene	86-52-2	<b>40</b>	890
72.	Chloroacetic Anhydride	541-88-8		-
73.	Trimethyl acetic acid	75-98-9		900
74.	HCl in Isopropanol (IPA.HCl)	7647-01-0/67-63-0		5840/277
75.	HCl in Methanol (MeOH.HCl)	132228-87-6		4701
76.	4-Methylbenzoic acid tert-butyl ester	13756-42-8		-
77.	4-Chloromethylbenzoic acid tert-butyl ester	121579-86-0		-
<b>TOTAL</b>			<b>550</b>	

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The standard ToR for the project was granted on 26<sup>th</sup> August, 2019. Public hearing for the project was conducted by the State Pollution Control Board on 3<sup>rd</sup> January, 2020. The public hearing was presided over by the Additional District Magistrate. The

Committee deliberated the action plan on the issues raised during PH and found adequate.

Total land area is estimated to be 8,802 sqm. Green belt will be developed in 33% i.e., 2911.15 out of total project area. The estimated project cost is Rs. 4.5 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 0.6 Crores and the Recurring cost (operation and maintenance) will be about Rs. 1.33 Crores per annum. Total Employment will be 45 persons as direct & indirect for project.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. PP reported that conservation plan for schedule I species has been prepared and submitted for approval of CWLW. The Committee deliberated the plan.

Total water requirement is 55.5 m<sup>3</sup>/day of which fresh water requirement of 49.5 m<sup>3</sup>/day and will be met from ground Water. Total wastewater generation will be 34.73 KL/day. 6 KLD of effluent will be treated in primary ETP and the reused in Scrubbing. 27.23 KLD of Scrubbing Media will be sold to end users under Rule-9. Domestic wastewater will be disposed through Septic Tank/Soak Pit.

Power requirement for proposed project will be 250 kVA and will be met from MGVL. DG set of 250 kVA capacity shall be used as standby during power failure. Stack (height 10 m) will be provided as per CPCB norms to the proposed DG sets of 250 kVA which will be used as standby during power failure.

One briquettes fired boiler of capacity 2 TPH shall be installed. One briquettes fired Thermic Fluid Heater of 10 LakhKcal/Hr shall be installed. Dust Collector/Multi cyclone separator with a stack of height of 30 m will be installed to control the particulate emissions (within statutory limit of 150 mg/Nm<sup>3</sup>) respectively.

Ambient air quality monitoring was carried out at 10 locations during October, 2017 to December, 2017 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (78.83 – 69.35 µg/m<sup>3</sup>), PM<sub>2.5</sub> (47.28 – 40.35 µg/m<sup>3</sup>), SO<sub>2</sub> (12.92 – 8.57 µg/m<sup>3</sup>) and NO<sub>2</sub> (17.09 – 11.94 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 0.0594 µg/m<sup>3</sup>, 0.0888 µg/m<sup>3</sup>, and 0.0312 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).

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- (v) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (vi) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (vii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (viii) Solvent management shall be carried out as follows:
  - (a) Reactor shall be connected to chilled brine condenser system.
  - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.

- (c) Solvents shall be stored in a separate space specified with all safety measures.
  - (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  - (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  - (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (ix) Total fresh water requirement shall not exceed 49.5 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
  - (x) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.
  - (xi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. Raw material and products should be stored in leak proof containers. Spent acid to be stored over the ground tank and to be sent to TSDF.
  - (xii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
  - (xiii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
  - (xiv) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
  - (xv) The company shall undertake waste minimization measures as below:-
    - (a) Metering and control of quantities of active ingredients to minimize waste.
    - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
    - (c) Use of automated filling to minimize spillage.
    - (d) Use of Close Feed system into batch reactors.
    - (e) Venting equipment through vapour recovery system.
  - (xvi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
  - (xvii) The green belt of at least 5-10 m width shall be developed in not less than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

- (xviii) As proposed 4% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). As proposed, and the CER allocation shall be spent mainly for addressing the issues (social, health, employment, infrastructure, Drinking water facility, skill development, plantation etc) raised during public consultation/hearing.
- (xix) Preference shall be given to local villagers for employment in the unit. For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xx) 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.
- (xxi) Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxiii) The project proponent shall implement the Site-Specific Conservation Plan for conservation of Schedule I Species in the study area and obtain approval from the State Chief Wildlife Warden of the Department. The recommendations of the approved Site-Specific Conservation Plan shall be implemented in consultation with the State Wildlife Department. The implementation report shall be furnished along with the six-monthly compliance report.

### **Agenda No.18.23**

#### **Onshore Oil and Gas Exploration, Development and Production by M/s Megha Engineering & Infrastructures Ltd in Block CB/ONDSF/Khambel/2016 Contract area at District Patan and Mehsana (Gujarat) - Consideration of Environment Clearance**

#### **[IA/GJ/IND2/137857/2018, J-11011/373/2018-IA-II (I)]**

The Project Proponent and their accredited consultant M/s Kadam Environmental Consultant, made a detailed presentation through video conferencing (VC) on the salient features of the project.

During deliberations, the EAC noted the following:



The proposal is for environmental clearance to the project for Onshore Oil and Gas Exploration, Development and Production by M/s Megha Engineering & Infrastructures Ltd in Block CB/ONDSF/Khambel/2016 Contract area at District -Patan and Mehsana (Gujarat).

The project/activity is covered under category A of item 1(b) 'Offshore and onshore oil and gas development & production' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at central level by sectoral Expert Appraisal Committee in the Ministry.

Standard terms of reference (ToR) for the project has been issued by Ministry vide letter dated 31<sup>st</sup> December, 2018. Public Hearing for the proposed project has been conducted in two Districts as the project site is located at two district. PH was conducted on 7<sup>th</sup> November, 2019 for District Patan and on 12<sup>th</sup> December, 2019 for District Mehsana. The said public hearing was presided by the Director DRDA & Additional District Magistrate respectively. The Committee deliberated the action plan on the issues raised during PH.

Land requirement will be ~ 3.63 ha for three wells for proposed project. The estimated project cost is Rs.74.21 crore (Total for 3 wells). The one-time expenditure for environmental management and mitigation is estimated to be approx. Rs.70.97 Lakhs and the recurring cost (operation & maintenance) will be about Rs.12.73 Lakhs. About 40 employees will be working in 8 hour shift at site. There is some of possibility that local people will be hired for some temporary work like construction activity for drilling.

There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the block area. Narmada Canal and Khari River are passing through the study area. PP reported that there is no forest land involved in this activity.

Ambient air quality monitoring was carried out at 8 locations during winter season of 2018 to 2019 and submitted baseline data indicates that ranges of concentrations of PM10 (59.7 to 71.8  $\mu\text{g}/\text{m}^3$ ), PM2.5 (20  $\mu\text{g}/\text{m}^3$  to 27  $\mu\text{g}/\text{m}^3$ ), SO<sub>2</sub> (5-6.1  $\mu\text{g}/\text{m}^3$ ) and NO<sub>2</sub> (15.0 to 18.1  $\mu\text{g}/\text{m}^3$ ) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the Proposed Project would be 0.13  $\mu\text{g}/\text{m}^3$ , 3.41  $\mu\text{g}/\text{m}^3$  and 0.13  $\mu\text{g}/\text{m}^3$  for SO<sub>2</sub>, NO<sub>x</sub> and particulate matter respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement is 40 m<sup>3</sup>/day of which fresh water requirement of 25 m<sup>3</sup>/day will be met from Tanker Supply. Effluent of 5 m<sup>3</sup>/day quantity will be treated through mobile ETP system. The plant will be based on Zero Liquid discharge system. Drill cutting will be separated from water based mud (WBM) and unusable drilling fluid will be stored in HDPE lined pit for solar drying for temporary storage. The cuttings/mud

residues so stored will then be treated and disposed in accordance with CPCB regulations specified for onshore oil & gas industry.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after deliberations, **recommended** the project for grant of environmental clearance **subject to submission of conservation plan for schedule I species to CWLW**. The EAC has also recommended the following specific terms and conditions as under:-

- (i) No drilling shall be carried out in Protected Areas. Drilling in the National Park/Wildlife Sanctuaries, if any, are subject to the recommendations of orders of Hon'ble Supreme Court, recommendations of Standing Committee of NBWL, recommendations of the State Chief Wildlife Warden and strict compliance of the conditions imposed therein.
- (ii) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.

- (iii) During transportation of crude all Oil Industry Safety Directorate (OISD)/ Petroleum and Natural Gas Regulatory Board (PNRB) safety regulations shall strictly be followed.
- (iv) No well shall be spudded before the issuance of the environmental clearance and other requisite approvals.
- (v) As proposed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land. Mobile ETP along with RO plant shall be installed to treat the waste water.
- (vi) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (vii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (viii) Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, CH<sub>4</sub>, HC, Non-methane HC etc.
- (ix) During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- (x) Approach road shall be made pucca to minimize generation of suspended dust.
- (xi) The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.
- (xii) Total fresh water requirement shall not exceed 25 cum/day. Prior permission shall be obtained from the concerned regulatory authority. Mobile ETP coupled with RO shall be installed to reuse the treated water in drilling system. Size of the waste shall be equal to the hole volume+ volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above.

- (xiii) The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- (xiv) Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30<sup>th</sup> August, 2005.
- (xv) Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- (xvi) The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- (xvii) The company shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
- (xviii) Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.
- (xix) Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.
- (xx) On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.
- (xxi) All the issues raised during public hearing shall be satisfactorily implemented. Action plan proposed shall be implemented in a timely manner.

- (xxii) At least 3% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xxiii) No lead acid batteries shall be utilized in the project/site.
- (xxiv) Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.
- (xxv) Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.
- (xxvi) Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

#### **Agenda No.18.24**

#### **Setting up of Synthetic Organic Chemicals manufacturing unit by M/s Aaradhya Industries, located at Survey No. 50/paiki-2, Village Dhroliya, Taluka Tankara, District Morbi, Gujarat- Consideration of Environmental Clearance**

#### **[IA/GJ/IND2/84040/2018, IA-J-11011/364/2018-IA-II(I)]**

The project proponent and their accredited consultant M/s T.R. Associates, made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal is for environmental clearance to the project for Setting up of Synthetic Organic Chemicals manufacturing unit (Ethyl Benzyl Aniline Sulphonic Acid-100 TPM, Para Nitro Toluene Ortho Sulphonic Acid-100 TPM, Melamine Formaldehyde Resin -100 TPMM, Urea Formaldehyde Resin-100 TPM) by M/s Aaradhya Industries, in an area of 10,117 sqm., located at Survey No. 50/paiki-2, Village Dhroliya, Taluka Tankara, District Morbi Gujarat.

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The terms of reference was granted by the Ministry on 24<sup>th</sup> December, 2018. The public hearing was conducted by the State Pollution Control Board on 18<sup>th</sup> January, 2020.

The public hearing was presided over by the District Magistrate. The main issues raised during the Public Hearing are related to welcoming the project proponent, employment potential of the project, air pollution control measures, CER activities. The Committee deliberated the action plan on the issues raised during PH and found adequate.

Total land area is estimated to be 10,117 sqm. Green belt will be developed in 46% i.e., 4,656 sqm out of total project area. Total capital cost earmarked towards environmental pollution control measures is Rs. 22.3 Lakhs and the recurring cost (operation and maintenance) will be about Rs. 4.1 Lakhs per annum. Total employment will be 25 persons as a skilled and unskilled.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. River Demi flows at 4.1 km in East direction. PP reported that there is no forest land is involved in the project.

Total water requirement is estimated to be 21.68 cum/day including fresh water requirement of 20.78 cum/day proposed to be met from Borewell. Industrial effluent of 1.85 KLD will be treated through Effluent Treatment Plant to achieve Zero Liquid Discharge. Domestic effluent of 2.2 KL/Day will be disposed off through soak pit system. Power requirement of proposed project will be 100 HP and will be met from Paschim Gujarat Vij Company Limited (PGVCL). 10 HPD.G. Set will be used as standby during power failure.

PP reported that steam Boiler (400 KG/HR.) and D G Set (10HP) will be installed. Biocoal / Coal-1.54 MT/Day will be used as fuel in steam boiler. Multicyclone separator with adequate stack height of 30 m attached to Steam Boiler will be installed to control the particulate emissions within statutory limit of 150mg/Nm<sup>3</sup>. Stack (height 6 m) will be provided as per CPCB norms to the proposed D. G. Set.

Ambient air quality monitoring was carried out at 8 locations during October 2018 to December-2018 and the baseline data indicates that ranges of concentrations of PM<sub>10</sub> (60.12 to 88.23 µg/m<sup>3</sup>), PM<sub>2.5</sub> (26.03 to 50.48 µg/m<sup>3</sup>), SO<sub>2</sub> (6.67 to 23.00 µg/m<sup>3</sup>), NO<sub>2</sub> (13.31 to 36.75 µg/m<sup>3</sup>), VOC is B.D.L. and CO is N.D. respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.35 µg/m<sup>3</sup>, 0.065 µg/m<sup>3</sup> and 0.45 µg/m<sup>3</sup> for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- (v) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.

- (vi) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (vii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (viii) Solvent management shall be carried out as follows:
  - (a) Reactor shall be connected to chilled brine condenser system.
  - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  - (c) Solvents shall be stored in a separate space specified with all safety measures.
  - (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  - (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  - (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (ix) Total fresh water requirement shall not exceed 20.78 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- (x) Underground tank shall be constructed to store the collected rain water from the roof tops and reduce the fresh water demand accordingly.
- (xi) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.
- (xii) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. Raw material and products should be stored in leak proof containers. Spent acid to be stored over the ground tank and to be sent to TSDF.
- (xiii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xiv) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.



- (xv) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
- (xvi) The company shall undertake waste minimization measures as below:-
  - (a) Metering and control of quantities of active ingredients to minimize waste.
  - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (c) Use of automated filling to minimize spillage.
  - (d) Use of Close Feed system into batch reactors.
  - (e) Venting equipment through vapour recovery system.
  - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvii) The green belt of at least 5-10 m width shall be developed in not less than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xviii) As proposed 2.5% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). As proposed, and the CER allocation shall be spent mainly for addressing the issues (social, health, employment, infrastructure, Drinking water facility, skill development, plantation etc.) raised during public consultation/hearing.
- (xix) Preference shall be given to local villagers for employment in the unit. For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xx) 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.
- (xxi) Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

### **Agenda No.18.25**

**Setting up of Synthetic Organic Chemicals Manufacturing unit by M/s Pentakem Industries, located at Plot No. 3121, Panoli Industrial Estate, Taluka Ankleshwar, District Bharuch, Gujarat - Consideration of Environmental Clearance**

**[IA/GJ/IND2/126879/2019, IA-J-11011/15/2020-IA-II(I)]**

The project proponent and their consultant M/s. Shree Green Consultants made a detailed presentation through Video conferencing (VC) on the salient features of the project.

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for setting up of Synthetic Organic Chemicals Manufacturing unit of capacity 58 TPM by M/s Pentakem Industries in an area of 1500 sqm., located at Plot No. 3121, Panoli Industrial Estate, Taluka Ankleshwar, District Bharuch (Gujarat).

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals And Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' to be appraised at State level. However being the project is located inside the critically polluted area, the project appraised at Central level in the Ministry.

The EAC, during deliberation observed that the unit is being proposed in a very small plot i.e. 1500 sqm. area. Also the project location comes under critically polluted area i.e. Ankleshwar. The EAC suggested to carried out alternate site analysis or to choose another location for the project. The EAC, after detailed deliberation, therefore **return the proposal** in present form.

### **Agenda No.18.26**

**Setting up of Pharmaceutical API's and Intermediates manufacturing unit by M/s Punagri Organics and Lifesciences Pvt. Ltd., located at Plot No. 180, Phase II, GIDC, Vapi, Gujarat- Consideration of Environmental Clearance**

**[IA/GJ/IND2/63871/2017, IA-J-11011/176/2017-IA-II(I)]**

The proposal is for environmental clearance to the project for setting up of Pharmaceutical API's and Intermediates manufacturing unit of capacity 413 TPM by M/s Punagri Organics and Lifesciences Pvt. Ltd. in an area of 10556 sqm located at Plot No. 180, Near Sardar Chowk, Phase II, GIDC Vapi, District Valsad (Gujarat).

The project proponent and their accredited consultant M/s. ENPRO Enviro Tech and Engineers Pvt. Ltd, made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal was earlier considered by the EAC in its meeting held during 21-23 January, 2020 wherein the Committee deferred the proposal and sought the requisite information. In this context, PP has submitted the response on the query raised by the EAC. The additional information desired by the Committee and response from the project proponent is as under:

<b>S. No.</b>	<b>Query Raised</b>	<b>Query Reply Given</b>
1.	EAC noted that PP has not submitted adequately TOR compliance and PP needs to be resubmit the TOR Compliance adequately	Pointwise compliance of Terms of reference has been revised considering modifications carried out in EIA report as well. The Committee deliberated and found adequate.
2.	Revised layout plan with 40% greenbelt area	Unit has revised the plant layout to provide 4446 m <sup>2</sup> (42% of the total area) green belt area of the total plot area which was earlier proposed as 3484 m <sup>2</sup> (33% of total area). The Committee deliberated and found adequate.
3.	Onsite emergency plan as per MSIHC Rules and occupational health plan	Unit has proposed an onsite emergency plan considering 3 level of emergency preparedness plan and major responsibilities to be carried out during emergency. This plan has been proposed as per MSHCI rules which covers fire control arrangements, roles of representatives along with DO's and Don't activities. Occupational Health safety plan is proposed covering hazard identification, its impact and mitigations to be provided. Details including Antidotes and other safety precautions are also provided in this section. The Committee deliberated and found adequate.

4.	Revised water balance with details of total water and fresh water requirement and reduction in fresh water demand at-least 20%. Also plan to construct RCC tank to collect rain water from the roof top	Unit is assuring and committing to reduce the quantity of freshwater demand by 22 %. Total fresh water requirement will be reduced to 84 KLD which was 108KLD earlier.  Unit has proposed Rain water harvesting facility with in premises. Rain water will be collected, treated and stored in the dedicated storage tanks of RCC which shall be located near to admin building. This water will be used in the premises instead of charging into ground. The Committee deliberated and found adequate.
5.	Commitment to install 4 unit of MEE	Unit will install 4 no. of strippers and 4 no. of multiple effect evaporators for treatment of Concentrated Effluent generated from process and scrubber.
6.	Baseline data showing higher range and not matching with the CPCB data. Clarification need to be submitted in this regard	Average value of all the parameters are found within the limit of Ambient Air as per NAAQS. Value of SO <sub>2</sub> is higher than NO <sub>x</sub> at locations which are in downwind direction of the project site including project site. Considering the direction of the wind during monitoring period and influence of the industrial activities; it may be the reason behind higher value of SO <sub>2</sub> than NO <sub>x</sub> . In addition to this, average annual value of PM <sub>10</sub> and PM <sub>2.5</sub> provided on CPCB website for the Vapi GIDC region for the year 2017 are maximum as 116 micro-gram/m <sup>3</sup> and 37 microgram/m <sup>3</sup> respectively. The Committee deliberated and found adequate.
7.	Revised prediction of GLC due to the proposed project	For the proposed project air quality modelling has been carried out for the parameters like PM <sub>2.5</sub> , PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , NH <sub>3</sub> , HCl and H <sub>2</sub> S emitted from the stacks. Modelling has been carried out considering 80% stringent emission norms as per requirement. Maximum Incremental Ground Level Concentration are 0.13 µg/m <sup>3</sup> , 0.26 µg/m <sup>3</sup> , 0.68 µg/m <sup>3</sup> and 0.24 µg/m <sup>3</sup> in respect of PM <sub>2.5</sub> , PM <sub>10</sub> , Sox and NO <sub>x</sub> respectively. The Committee deliberated and found adequate.

8.	The project proponent has not carried out Traffic study as mentioned in the ToR, the same need to be carried out	Traffic survey has been conducted for the proposed project for 24 hours near junction of GIDC road on 8 <sup>th</sup> February, 2020 to assess existing traffic and the load on the road and surroundings. Also modelling of total predicted emission for parameters CO, PM and HC due to vehicular movements has been carried out by advanced modelling. The Committee deliberated and found adequate.
9.	Details of Bird Sanctuary needs to be recheck within study area	There is no bird Sanctuary or national park falling within study area of 10 km radius.
10.	Submit plan for storage of hazardous raw material @ 3 day for those available locally and 7 days for imported ones	Total Storage area of 1101 m <sup>2</sup> (Ware house - 476 m <sup>2</sup> +CCOE Tank farm - 375 m <sup>2</sup> + FLP Tank farm - 250 m <sup>2</sup> ) is provided for storage of raw materials. There will be racking system for storage of raw materials in warehouse. The Committee deliberated and found adequate.
11.	Details of VOC recovery techniques needs to be submitted so as to achieve 99.7% recovery	Unit will adopt three stage condensers instead of two stage condenser system to achieve 99.7 % solvent recovery in process. Unit has proposed LDAR program to achieve maximum recovery and minimum waste. The Committee deliberated and found adequate.

The details of products are as under:

Sr.no.		Products	Max. Production Capacity of Each Product MT/ Month	Production Capacity MT/Month (Product Mix)
<b>Group I</b>	<b>A</b>	<b>Anti-ulcer API's</b>		
		<b>(I) Prazole chlorides</b>		
		1 Omeprazole chloride <b>OR</b>	8	8
		2 Pantoprazole chloride <b>OR</b>	7	
		3 Rabeprazole chloride	8	
		<b>(II) Prazole Benzimidazoles</b>		
		1 2-Mercapto-5-methoxybenzimidazole <b>OR</b>	30	30
		2 5-Difluoromethoxy-2-mercaptobenzimidazole <b>OR</b>	7	
		3 2-Mercaptobenzimidazole	9	
		<b>(III) API's</b>		
		1 Omeprazole sulphide/Omeprazole salts <b>OR</b>	5	10
		2 Esomeprazole salts <b>OR</b>	3	
		3 Pantoprazole sulphide/Pantoprazole salts <b>OR</b>	10	
		4 Rabeprazolesulphide/Rabeprazole salts <b>OR</b>	10	
	<b>B</b>	<b>Anti depressant</b>		
		<b>(I) API's</b>		
		1 Citalopram salts <b>OR</b>	8	
		2 Escitalopram salts	4	
		<b>(II) Intermediates</b>		
		1 Cyanodiol salts <b>OR</b>	28	28
		2 5-Cyanophthalide AND	23	
		3 5-Carboxyphthalide	30	30
	<b>C</b>	<b>Beta Blocker</b>		
		<b>(I) Intermediates</b>		
		1 4-Hydroxycarbazole <b>OR</b>	14	30
		2 4-(2,3-epoxypropoxy)-carbazole <b>OR</b>	14	

	3	2-(2-Methoxy-phenoxy)-ethylamine <b>OR</b>	11
	<b>(II)</b>	<b>API</b>	
	1	Carvedilol <b>OR</b>	20
<b>D</b>	<b>Antiarrhythmic</b>		
	1	Lidocaine Hydrochloride <b>OR</b>	30
<b>E</b>	<b>Antianginal</b>		
	<b>(I)</b>	<b>Intermediates</b>	
	1	N-(2,6-dimethyl-phenyl)-2-piparazinoacetamide <b>OR</b>	3
	2	3-(2-Methoxyphenoxy)-1,2-epoxypropane <b>OR</b>	2
	<b>(II)</b>	<b>API</b>	
	1	Ranolazinedihydrochloride <b>OR</b>	2
<b>F</b>	<b>Anti-convulsant</b>		
	<b>(I)</b>	<b>Intermediates</b>	
	1	Isobutylglutaric acid <b>OR</b>	10
	2	R-(-)-3-(Carbamoylmethyl)-5-methylhexanoic acid <b>OR</b>	4
	<b>(II)</b>	<b>API</b>	
	1	Pregabalin <b>OR</b>	3
<b>G</b>	<b>Muscle relaxant</b>		
	1	Metaxalone <b>OR</b>	3
<b>H</b>	<b>Anti HIV/AIDS</b>		
	<b>(I)</b>	<b>Intermediates</b>	
	1	3-Amino-2-chloro-4-methylpyridine <b>OR</b>	4
	<b>(II)</b>	<b>API</b>	
	1	Nevirapine <b>OR</b>	4
<b>I</b>	<b>Lipid-lowering</b>		
	<b>(I)</b>	<b>Intermediates</b>	
	1	(4R-cis)-1,1-Dimethylethyl-6-Cyanomethyl-2,2-dimethyl -1,3-dioxane-4-acetate <b>OR</b>	2
	2	tert-butyl [(4R,6R)-6-aminoethyl-2,2-dimethyl-1,3-dioxan-4-yl]acetate <b>OR</b>	
	<b>(II)</b>	<b>API</b>	

	1	Atorvastatin <b>OR</b>	
<b>J</b>	<b>NSAID</b>		
	<b>(I) Intermediates</b>		
	1	2-Amino-5-methylthiazole	15
	2	Isopropyl 4-hydroxy-2-methyl-2H-1,2-benzothiazine-3-carboxylate 1,1-dioxide <b>OR</b>	21
	<b>(II) API</b>		
	1	Meloxicam <b>OR</b>	7
	2	Piroxicam <b>OR</b>	7
<b>K</b>	<b>Anti-diabetic</b>		
	<b>(I) Intermediates</b>		
	1	(S)-1-(2-chloroacetyl)pyrrolidine-2-carbonitrile <b>OR</b>	8
	<b>(II) API</b>		
	1	Vildagliptine <b>OR</b>	9
<b>L</b>	<b>Anti-histamine</b>		
	<b>(I) Intermediates</b>		
	1	2-Chlorobenzimidazole <b>OR</b>	10
<b>M</b>	<b>Cholinesterase inhibitors</b>		
	<b>(I) Intermediates</b>		
	1	(S)-3-[1-(Dimethylamino)ethyl]phenol <b>OR</b>	6
	<b>(II) API</b>		
	1	Rivastigmine Salt <b>OR</b>	5
<b>N</b>	<b>Anti cancer (Kinase inhibitors)</b>		
	<b>(I) Intermediates</b>		
	1	(2-Methyl-5-Nitrophenyl) Guanidine Nitrate <b>OR</b>	6
	2	3-Dimethylamino-1-(3-Pyridyl)-2-Propen-1-One <b>OR</b>	4
	3	N-(5-Amino-2-Methylphenyl)-4-(3-Pyridyl)-2-Pyrimidineamine <b>OR</b>	4
	<b>(II) API</b>		
	1	ImatinibMesylate <b>OR</b>	3



		2	Axitinib	3	
<b>Group II</b>	<b>Catalytic hydrogenation/dehydrogenation</b>				
		1	a. Nitro to amino b. Dearomatisation c. Aromatisation d. Debenzoylation e. Keto to alcohol etc.	100	100
<b>Group III</b>	<b>Fine Specialty Chemicals</b>				
		1	MNPT <b>OR</b>	150	150
		2	Fast Red B Base <b>AND</b>	90	
		3	Fast Scarlet R Base <b>OR</b>	12	
		4	Fast Bordeaux GP Base	150	
<b>Group IV</b>	<b>Intermediate for Pigments</b>				
		1	Fast Red KD Base <b>OR</b>	12	25
		2	Napthol ASLC <b>OR</b>	23	
		3	5-amino-6-methyl benzimidazolone (5-AMBI) <b>OR</b>	10	
		4	5-Acetoacetyl-amino- benzimidazolone <b>OR</b>	19	
		5	CLT Acid <b>OR</b>	25	
		6	OPDA/ PPDA	25	
<b>Group V</b>	<b>R&amp;D Centre</b>				
		1	Research activities of synthetic organic chemicals comprising of various unit processes & unit operations in a pilot reactor (like acetylation, nitration, hydrolysis, bromination, reduction, oxidation, hydrogenation, condensation etc.)	2	2
			<b>Total/Month</b>	<b>1042</b>	<b>413</b>

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals and Chemical Intermediates) are listed in

S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' to be appraised at State level. However, being the project is located inside the critically polluted area, the project appraised at Central level in the Ministry.

The ToR for the project was granted on 4<sup>th</sup> August, 2017 followed by amendment recommended by the EAC on 27<sup>th</sup> June, 2019. Public hearing is exempted as per para 7(i), III. Stage (3), (i)(b) of the EIA Notification, 2006, and in accordance with the Ministry's OM dated 27<sup>th</sup> April 2018, as the project site is located in the notified industrial area.

Total land area for the proposed project is 10,556 sqm. Green belt in an area of 42% i.e., 4446 sqm. out of total area of the project. The estimated project cost is Rs.60 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.2.23 Crores per Annum. Total Employment will be 120 persons as direct & indirect after proposed project.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. Daman Ganga River is at a distance of 4.5 km in South direction.

Total water requirement will be 275 m<sup>3</sup>/day (84m<sup>3</sup>/day Fresh Water+ 191 m<sup>3</sup>/day Recycled Water) Fresh water will be met from Notified Area Authority (Vapi GIDC). Industrial Effluent of 186 m<sup>3</sup>/day quantity from process and scrubber will be treated in stripper followed by MEE. MEE condensate along with 30 m<sup>3</sup>/day dilute stream from boiler, cooling tower and other utilities will be treated into ETP consisting of primary, secondary treatment and RO plant which will be entirely reused within plant itself. Unit has proposed entire ZLD system. Domestic sewage of 25 m<sup>3</sup>/day will be reused in the gardening and in cooling tower purpose.

Power requirement will be 800 KVA will be met from Dakshin Gujarat Vij Company Limited. Unit will have 2 nos. of DG sets of 250 KVA each capacity shall be used as standby during power failure. Stack (Height: 12 Meters) will be provided as per CPCB norms to the proposed DG sets.

Unit has proposed Thermopack with capacity of 2,00,000 kcal/hr, Hot air Generator with capacity of 1,00,000 kcal/hr, Boiler with capacity of 1 MT/Hr and 2 nos. of D.G set (Stand by) having capacity of 250 KVA. As natural gas will be used as a fuel in Boiler, Thermopack and hot air generator, 30 m stack height shall be provided for release of flue gas. Natural gas based DG set will be used.

Ambient air quality monitoring was carried out at six locations during 18<sup>th</sup> September, 2017 to 31<sup>st</sup> December, 2017 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (63.1 – 121.7 µg/m<sup>3</sup>), PM<sub>2.5</sub> (22.9 -58.3 µg/m<sup>3</sup>), SO<sub>2</sub> (8.6 – 75.7 µg/m<sup>3</sup>) and NO<sub>x</sub> (8.4 – 55.4 µg/m<sup>3</sup>). AAQ modeling study for point source emissions

indicates that the maximum incremental GLCs after the proposed project would be TSPM -0.57 µg/m<sup>3</sup>, SO<sub>2</sub> – 1.12 µg/m<sup>3</sup>, NO<sub>x</sub> – 0.35 µg/m<sup>3</sup>, NH<sub>3</sub> – 0.21 µg/m<sup>3</sup>, HCl – 0.09 µg/m<sup>3</sup>, H<sub>2</sub>S – 0.05 µg/m<sup>3</sup>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards.

Additional information submitted by the project proponent to be satisfactory and addressing the concerns of the Committee. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) Consent to Establish/Operate (CTE/CTO) for the project shall be obtained from the State Pollution Control Board (SPCB) as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, and the SPCB shall follow the mechanism/protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24<sup>th</sup> October, 2019 and forwarded by Central Pollution Control Board vide letter dated 25<sup>th</sup> October, 2019 to the SPCB's, while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.

- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.
- (iii) API products should not have mixed with Dye & dye intermediates. Separate effluent treatment system is required as in Bulk drug sectors effluent will contain active microbial residue (AMR) and it should not have mixed with other sector effluent.
- (iv) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (v) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- (vi) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (vii) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (viii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (ix) Solvent management shall be carried out as follows:
  - (a) Reactor shall be connected to chilled brine condenser system.
  - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  - (c) Solvents shall be stored in a separate space specified with all safety measures.
  - (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  - (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  - (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

- (x) Total fresh water requirement shall not exceed 84 cum/day, proposed to be met from GIDC Vapi. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (xi) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.
- (xii) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. Raw material and products should be stored in leak proof containers. Spent acid to be stored over the ground tank and to be sent to TSDF.
- (xiii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xiv) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xv) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
- (xvi) The company shall undertake waste minimization measures as below:-
  - (a) Metering and control of quantities of active ingredients to minimize waste.
  - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (c) Use of automated filling to minimize spillage.
  - (d) Use of Close Feed system into batch reactors.
  - (e) Venting equipment through vapour recovery system.
  - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvii) The green belt of at least 5-10 m width shall be developed in not less than 40% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xviii) As proposed Rs. 3.0 Crores shall be allocated towards Corporate Environment Responsibility (CER). Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.

- (xix) Preference shall be given to local villagers for employment in the unit. For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xx) 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.
- (xxi) Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

### **Agenda No.18.27**

#### **Setting up Active Pharmaceutical Ingredients (API) manufacturing unit of capacity 41.1 TPM by M/s Solisom Healthcare LLP, located at Survey No. 99/P1, Village Nashitpar, Taluka Tankara, District Morbi (Gujarat) - Consideration of Environmental Clearance.**

**[IA/GJ/IND2/92443/2019,IA-J-11011/28/2019-IA-II(I)]**

The proposal is for environmental clearance to the project for Setting up Active Pharmaceutical Ingredients (API) manufacturing unit of capacity 41.1 TPM by M/s Solisom Healthcare LLP, in area of 7689 sqm., located at Survey No. 99/P1, Village Nashitpar, Taluka Tankara, District Morbi Gujarat.

The project proponent and their accredited consultant M/s T.R. Associates, made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The terms of reference was granted by the Ministry on 26<sup>th</sup> February, 2019. The public hearing was conducted by the State Pollution Control Board on 4<sup>th</sup> October, 2019.

The public hearing was presided over by the Additional District Magistrate. The main issues raised during the Public Hearing are related to welcoming the project proponent & employment potential of the project. The Committee deliberated the action plan on the issues raised during PH.

Total land area is estimated to be 7689sqm. Green belt will be developed in 33.1% i.e. 2545 sqm. out of total project area. The estimated project cost is approx. Rs. 400.00 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 118.00 Lakhs and the recurring cost (operation and maintenance) will be about Rs. 450 Lakhs per annum. Total employment will be 30 persons as a skilled and unskilled.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. River Demi is flowing at a distance of 3.03km in WSW direction and Phuldi River is flowing at a distance of 4.4 Km in NE direction.

Total water requirement is 92 KLD (25.2 KLD fresh+ 66.8 KLD recycled) out of which fresh water requirement which will be met from Bore well. Industrial effluent of 83.5 KLD will be treated through Effluent Treatment Plant to achieve Zero Liquid Discharge. Domestic effluent of 1.35 KL/Day will be disposed off through soak pit system. Power requirement will be 200 kVA proposed to be met from Paschim Gujarat Vij Company Limited (PGVCL). One DG set of 125 kVA capacity will be used as standby during power failure.

Steam Boiler (1 TPH) and D G Set (125 KVA) will be installed. Coal/Briquettes-1.2 MT/Day will be used as fuel in steam boiler. Adequate stack height of 30 m attach to Steam Boiler will be installed for controlling the Particulate Emissions within statutory limit of 150mg/Nm<sup>3</sup>. Stack (height 6 m) will be provided as per CPCB norms to the proposed D. G. Set. LDO- 50 Lit/hr will be used as a fuel in D.G Set.

Ambient air quality monitoring was carried out at 8 locations during October 2018 to December-2018 and the baseline data indicates that ranges of concentrations of PM<sub>10</sub> (59.25 to 86.45 µg/m<sup>3</sup>), PM<sub>2.5</sub> (28.96 to 49.12 µg/m<sup>3</sup>), SO<sub>2</sub> (6.99 to 18.28 µg/m<sup>3</sup>), NO<sub>2</sub> (10.20 to 38.54 µg/m<sup>3</sup>), VOC is B.D.L. and CO is N.D. respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.30 µg/m<sup>3</sup>, 0.003 µg/m<sup>3</sup>, 0.05 µg/m<sup>3</sup> and 20 µg/m<sup>3</sup> for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- (v) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.



- (vi) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (vii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (viii) Solvent management shall be carried out as follows:
  - (a) Reactor shall be connected to chilled brine condenser system.
  - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  - (c) Solvents shall be stored in a separate space specified with all safety measures.
  - (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  - (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  - (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (ix) Total fresh water requirement shall not exceed 25.2 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- (x) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.
- (xi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. Raw material and products should be stored in leak proof containers. Spent acid to be stored over the ground tank and to be sent to TSDF.
- (xii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xiii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

- (xiv) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
- (xv) The company shall undertake waste minimization measures as below:-
  - (a) Metering and control of quantities of active ingredients to minimize waste.
  - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (c) Use of automated filling to minimize spillage.
  - (d) Use of Close Feed system into batch reactors.
  - (e) Venting equipment through vapour recovery system.
  - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi) The green belt of at least 5-10 m width shall be developed in not less than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvii) As proposed Rs. 10 Lacs shall be allocated towards Corporate Environment Responsibility (CER). As proposed, and the CER allocation shall be spent mainly for addressing the issues (social, health, employment, infrastructure, Drinking water facility, skill development, plantation etc) raised during public consultation/hearing.
- (xviii) Preference shall be given to local villagers for employment in the unit. For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xix) 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.
- (xx) Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxi) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

## **Agenda No. 18.28**

### **Manufacturing of Synthetic Organic Chemicals by M/s Paras Industries, located at Plot No.E-67, RIICO, Phase-II, Maval, Abu Road, District Sirohi, Rajasthan - Consideration of Environmental Clearance.**

**[IA/RJ/IND2/86809/2018, IA-J-11011/388/2018-IA-II(I)]**

The proposal was earlier considered by the EAC in its meetings held during 29-31 July, 2019 and 20-22 November, 2019. The Committee, observed that the project details mentioned in the EIA report were not consistent with that presented during the meeting. The EAC, after detailed deliberations decided to **return** the proposal in its present form and have asked for clarification/inputs, in respect of the following:-

- (i) EIA report to be revised as per the terms of reference granted for the project, and shall conform to Appendix III of the EIA Notification, 2006.
- (ii) The Committee noted that there are various deficiencies in Form 2 (viz. S. no. 11, 27 etc.) uploaded by the PP and accordingly Revised Form 2 shall be submitted incorporating all the information related to the project.
- (iii) Incremental GLC values in the EIA/Form 2 were reported to be much higher side, and needs to be confirmed.
- (iv) Onsite emergency plan as per MSIHC Rules.
- (v) Revised water balance with details of total water and fresh water requirement.
- (vi) MoU/NOC from RIICO for supply of fresh water.
- (vii) Effluent treatment mechanism with plan for Zero Liquid Discharge.
- (viii) Details of Wildlife Sanctuary/Protected Area within 10 km of the project site, and status of wildlife recommendations for the project, and conservation plan for Schedule I species, if any.
- (ix) Plan for Corporate Environmental Responsibility.
- (x) QCI/NABET Accreditation details of consultants prepared the EIA/EMP report.
- (xi) Copy of stay order of Hon'ble High Court permitting experts who prepared the EIA/EMP report.

The project proponent and their consultant [M/s Green Circle] made a detailed presentation through Video Conferencing (VC) on the project and informed the following:

(i). The proposal is for environmental clearance to the project for setting up synthetic organic chemical manufacturing unit of capacity 42 TPM by M/s Paras Industries in an area of 4879.2 sqm at Survey No.E-67, RIICO, Phase II, Maval, Abu Road, District Sirohi (Rajasthan).

(ii). The project/activity is covered under category B of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006. Due to applicability of general condition (location of the site within 5 km of Gujarat state), the project requires appraisal at central level by the sectoral EAC in the Ministry.

(iii). The standard ToR for the project was granted on 4<sup>th</sup> January, 2019. Public hearing is exempted as per the Ministry's OM dated 27<sup>th</sup> April 2018, as the project site is located inside the notified industrial area.

(iv). Total land area is estimated to be 4879.2 sqm. Green belt will be developed in 33% i.e. 1630 sqm. out of total project area. The estimated project cost of proposed unit is Rs.3.5 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.0.72 crores and the recurring cost (O&M) will be about Rs.0.06 crores per annum. Total Employment will be 10 persons as direct & 15 persons indirect for propose project.

(v). There are no National Parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. River Banas flows at 2.6 km in North. The Jessore Sloth Bear Sanctuary is located at 8.9 km from the project site.

(vi). Additional Ambient air quality monitoring was carried out at 10 locations during December 2019 and the baseline data indicates the ranges of concentrations as: PM10 (68-91 µg/m<sup>3</sup>), PM2.5 (36.5 -48.2 µg/m<sup>3</sup>), SO<sub>2</sub> (8.9 – 11.8 µg/m<sup>3</sup>), NO<sub>2</sub> (22 -29.1 µg/m<sup>3</sup>) and HCl (BDL -14.02 µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.3822µg/m<sup>3</sup>, 0.4011 µg/m<sup>3</sup> and 0.2674 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).

(vii). Total fresh water requirement is estimated to be 12 cum/day proposed to be met from RIICO water supply. Effluent of 8.07 cum/day (7.37 cum/day industrial waste water + 0.70 cum/day domestic waste water) will be treated in ETP and passed through the R.O. system and treated in MEE and ATFD. Treated water will be reused in the plant. The plant will be based on Zero Liquid discharge system.

(viii). Power requirement for new proposed will be 250 KVA met from Jodhpur Vidyut Vitran Nigam Ltd. Unit propose one DG set of 125 KVA capacity. Stack height of 5 m will be provided as per CPCB norms to the proposed DG set.

(ix). The unit will install agro waste fired boiler of 0.8 TPH. Multi cyclone separator/ bag filter with a stack of height of 13 m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm<sup>3</sup> for the proposed boiler.

(x). Details of Process emissions generation and its management are as below.

**Flue Gas Emission:**

S. No.	Stack Attached to	Stack Height (m)	Fuel Used	Quantity of Fuel	APCM	Pollutants
1	Boiler 0.8 Ton/hr	13	Agro Waste	1.0 MT/Day	Multi Cyclone	PM< 150 mg/Nm <sup>3</sup> SO <sub>2</sub> < 100 ppm NO <sub>x</sub> <50 ppm
2.	DG Set (125 KVA)	5	HSD	6.0 L/Hr.	Multi Cyclone	SO <sub>2</sub> < 100 ppm

**Process Gas Emission:**

Sr. No.	Stack Attached to	Pollutant	Stack Height (m)	APCM	Pollutants
1.	Reaction vessel	SO <sub>2</sub>	13	Water Scrubber	SO <sub>2</sub> <40 ppm

(x) Details of Solid waste/ Hazardous waste generation and its management is as below.

**Hazardous Waste Data:**

S. No.	Types of Waste	Total MT/Annum	Mode of Disposal
1.	Waste ETP Sludge	15	Collection, Storage, Transportation and disposal to TSDF site.
2.	Used Oil/ Spent Oil	0.10	Collection, Storage, Transportation and Sold to Recycler, Re processor or used as Lubricants for Machineries.
3.	Discarded Container / Drum Bags	6	Collection, Storage, Transportation and Sold to Registered Recycler <b>Or</b> Send back to Raw Material supplier <b>Or</b> Use for ETP sludge packing

4.	Gypsum	52	Collection, Storage, Transportation and disposal to cement plant.
5.	Carbon Waste	1.7	Collection, Storage, Transportation and disposal to Incineration Site.

(xi). No litigation is pending against the proposal

(xii). The details of products and capacity as under:

S. No.	Product	CAS NO.	Use Of Product	Quantity (TPM)
1	Meta Ureido Aniline (MUA)	59690-88-9	Dyes manufacturing	8
2	2, Naphthol, 6,8 Dia Sulphonic Acid (G. Salt)	118-32-1	Dyes manufacturing	12
3	4 Sulpho Ortho Amino Benzoic Acid	98-43-1	Dyes manufacturing	10
4	4,4 Dinitro Stilbene, 2,2 Disulphonic Acid	3709-43-1	Dyes manufacturing	12
<b>Total</b>				<b>42</b>

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The additional information submitted by the project proponent found to be satisfactory.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to

time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) The Jessore Sloth bear Sanctuary is located 8.9 km from the project site. The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable, as per the Ministry's OM dated 8th August, 2019. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposal for Wildlife Clearance will be considered by the respective authorities on its merit and decision taken.
- (ii) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (iii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iv) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (v) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21<sup>st</sup>July, 2010 and amended from time to time shall be followed.
- (vi) Fugitive emissions shall be controlled at 99.98% with effective chillers.
- (vii) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (viii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

- (ix) Solvent management shall be carried out as follows:
  - a) Reactor shall be connected to chilled brine condenser system.
  - b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  - c) Solvents shall be stored in a separate space specified with all safety measures.
  - d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  - e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  - f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
  
- (x) Total fresh water requirement shall not exceed 12 cum/day, proposed to be met from RIICO water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
  
- (xi) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
  
- (xii) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
  
- (xiii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
  
- (xiv) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
  
- (xv) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
  
- (xvi) The company shall undertake waste minimization measures as below:-
  - a) Metering and control of quantities of active ingredients to minimize waste.
  - b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - c) Use of automated filling to minimize spillage.



- d) Use of Close Feed system into batch reactors.
  - e) Venting equipment through vapour recovery system.
  - f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvii) The green belt of at least 5-10 m width shall be developed in not less than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xviii) As committed, at least Rs. 8.75 lakhs (2.5 % of the project cost) shall be allocated towards Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for addressing the socio-economic issues in the study area including drinking water facility, assistance/infrastructure development of village school, social/environmental activities, skill development, etc.
- (xix) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xx) 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.
- (xxi) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

## Amendment/Extension in Environmental Clearance

### Agenda No. 18.29

#### **Expansion of API in Existing Unit at Survey No.119, 120 and 121 at & Post Village Panelav, Tehsil Halol, District Panchmahal, Gujarat by M/s Alembic Pharmaceuticals Limited (API Unit-I)-Amendment in Environment Clearance**

**[IA/GJ/IND2/135778/2020, J-11011/232/2014-IA II(I)]**

The proposal is for amendment in the environmental clearance granted by the Ministry vide letter dated 31<sup>st</sup> January 2017 for the project expansion of Active Pharmaceutical Ingredient (APIs) in Existing Unit at Survey No. 119, 120 & 121, Post & Village: Panelav, Tehsil: Halol, District: Panchmahal, Gujarat- Environmental Clearance reg. to M/s. Alembic Pharmaceuticals Limited (API Unit-1)

The project proponent has requested for amendment in the EC with the presented the details through Video Conferencing (VC). The details of justification are as under;

<b>Sr. No.</b>	<b>Para of EC issued by MoEF&amp;CC</b>	<b>Details as per the EC</b>	<b>To be revised as/ read as</b>	<b>Justification/ reasons</b>
1.	<b>Condition No. 2</b>	The Ministry of Environment, Forests and Climate Change has examined the application. It is noted that proposal is for expansion of Active Pharmaceutical Ingredients (APIs) in existing unit at Survey No. 119, 120 & 121, At, Post & Village: Panelav, Tehsil: Halol, District: Panchmahal, Gujarat by M/s. Alembic Pharmaceuticals	The Ministry of Environment, Forests and Climate Change has examined the application. It is noted that proposal is for expansion of Active Pharmaceutical Ingredients (APIs) in existing unit at Survey No. 119, 120 & 121, At, Post & Village: Panelav, Tehsil: Halol, District: Panchmahal, Gujarat by M/s. Alembic	<ul style="list-style-type: none"><li>• Separating manufacturing process from the existing multi steps production in multiproduct plant no. 2 to avoid cross contaminations and to maintain smooth and safe process as per WHO GMP / USFDA requirement. There will not be any addition of Land/survey nos. Reduction in the Green Belt Area from 35 % to 33 % will provide 1385 m<sup>2</sup> land which is enough to extend existing Plant No. 2 for product and process wise separation.</li><li>• Alembic Pharmaceuticals Ltd. are manufacturing bulk drugs at our API-1 unit at Panelav and are having existing production capacity of 75 MTM. Considering the market necessity during this</li></ul>

		<p>Limited (API Unit – I). Total plot area is 68,530.26 m2, of which green belt will be developed on 24,000 m2 (i.e. 35% of the total area). Total cost of expansion project is Rs. 36.81 Crore. Out of this Rs. 4.32 Crore is earmarked for environment management system. A River Vishwamitri is flowing at a distance 3.2 km. Following products will be manufactured:</p>	<p>Pharmaceuticals Limited (API Unit – I). Total plot area is 68,530.26 m2, of which green belt will be developed on 22,615 m2 (i.e. 33% of the total area). Total cost of expansion project is Rs. 36.81 Crore. Out of this Rs. 4.32 Crore is earmarked for environment management system. A River Vishwamitri is flowing at a distance 3.2 km. Following products will be manufactured:</p>	<p>global pandemic and subsequent disruption of supply from China has put tremendous pressure not only by heavy price risk escalation but as well to sustain operations to meet extended demand of markets, we have preponed certain production capacity expansion at our unit.</p> <ul style="list-style-type: none"> <li>• Moreover, PP is one of the largest producers of Azithromycin being used for COVID 19. There is tremendous pressure to produce and full fill the Domestic &amp; International demand to save society from the global pandemic situations</li> <li>• Plant 2 is a Multi-Product plant for manufacturing of API's like Azithromycin, Fenofibrate, Telmisartan, Venlafaxine, Lacosamide &amp; HCTZ (Hydrochlorothiazide).</li> <li>• With stringent GMP guidelines &amp; USFD strict compliance requirement pertaining to cross contamination, we are proposing to extend the plant (2B &amp; 2C) to accommodate dedicated manufacturing lines which will reduce cleaning cycle time &amp; improve Productivity.</li> <li>• Furthermore, PP is adopting Continuous process reactors for the expansion which not only leverage in operation to achieve volume as well allow</li> </ul>
--	--	---	---	--

				<p>us to operate without increasing the environmental pollution load.</p> <ul style="list-style-type: none"> <li>• By adopting new technology, the proposed plant extension expansion with no pollution load increase.</li> </ul>
2.	<b>A. Specific Conditions Sub Condition no. (xiv)</b>	As proposed, green belt of 24,000 m <sup>2</sup> shall be developed within plant premises with at least 10-meter-wide green belt on all sides along the periphery of the project area, in downwind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO	As proposed, green belt of 22,615 m <sup>2</sup> shall be developed within plant premises with at least 10-meter-wide green belt on all sides along the periphery of the project area, in downwind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO	<ul style="list-style-type: none"> <li>• Reduction of Green Belt from 35 % to 33 % for provision of extension of Plant 2 product wise separation as per the requirement of USFDA and WHO GMP</li> <li>• To avoid cross contaminations during production of Bulk Drugs/APIs.</li> </ul>

The EAC, after deliberations, **recommended** the amendment in EC as proposed by the project proponent with the following additional condition as under:

- (i) One Lac trees shall be planted and maintained by the PP in degraded land nearby to the plant. The compliance of the same shall be forwarded to the Regional Office of the MoEFCC.
- (ii) PP shall take necessary prior permissions from State Forest Department for cutting of trees.
- (iii) All other conditions mentioned in EC dated 31<sup>st</sup> January, 2017 shall remain unchanged.

### **Agenda No.18.30**

#### **Exploratory Drilling in NELP-VII Block CB-ONN-2005/4 at District Ahmedabad and CB-ONN-2005/10 at District Bharuch in Western Onshore Basin, Vadodara by M/s Oil and Natural Gas Corporation Limited –Amendment in Environmental Clearance**

**[IA/GJ/IND2/137374/2020, J-11011/470/2009-IA II (I)]**

The proposal is for extension of validity of Environmental Clearance (EC) granted by the Ministry vide letter dated 26<sup>th</sup> February, 2013 for the project exploratory Drilling in NELP-VII Block CB-ONN-2005/4 at District Ahmedabad and CB-ONN-2005/10 at District Bharuch in Western Onshore basin, Vadodara (Gujarat) by M/s Oil and Natural Gas Corporation Limited.

The project proponent made a detailed presentation through Video Conferencing (VC) on the project. PP has requested for extension of validity of EC with the justification as under;

EC issued by MoEF&CC	Period of Extension	Justification/ reasons
MoEFCC vide letter No. J-11011/470/2009-IA II (I), dated 26 <sup>th</sup> February, 2013	3 years	<ul style="list-style-type: none"><li>• Out of total 8 wells under the EC, three wells were drilled in phase-I</li><li>• One discovery well was drilled in extended period of phase-II. Regularization of this phase is pending with MoPNG.</li><li>• PP mentioned that drilling can be taken up for drilling only after regularization of phase-II and restructuring of appraisal program by MoPNG/DGH.</li><li>• In view of the above PP requested for extension of validity of EC.</li></ul>

The EAC, after detailed deliberations, **recommended** for extension of validity of the EC dated 26<sup>th</sup> February, 2013 for a period of three years, i.e. till 26<sup>th</sup> February, 2023, to complete the work as per scope of the project.

### **Agenda No.18.31**

#### **Additional Exploratory Drilling (25 Wells) in KG (On-land) PEL Blocks, Andhra Pradesh by M/s Oil and Natural Gas Corporation Limited –Amendment in Environmental Clearance**

**[IA/AP/IND2/137330/2020, J-11011/68/2011-IA II (I)]**

The proposal is for extension of validity of Environmental Clearance (EC) granted by the Ministry vide letter dated 14<sup>th</sup> June 2013 to the project for “Additional Exploratory Drilling (25 Wells) in KG (On-land) PEL Blocks, Andhra Pradesh by M/s Oil and Natural Gas Corporation Limited (ONGCL)” located at KG (On-land) PEL Blocks in favour of M/s Oil and Natural Gas Corporation Limited (ONGCL).

The project proponent made a detailed presentation through Video Conferencing (VC) on the project. PP has requested for extension of validity of EC with the justification as under;

EC issued by MoEF&CC	Period of Extension	Justification/ reasons
F. No. J-11011/68/2011-IA II (I) dated 14 <sup>th</sup> June 2013	3 years	The EC was granted for drilling of 25 exploratory wells. Out of which 15 wells were successfully completed. The remaining 10 wells could not be taken up as the G&G studies are under progress to analyse the prospectively of the area. In addition, studies are in progress to understand the subsurface conditions as the identified exploratory locations are of deeper depths with High Pressure and High temperature conditions. In view of the above PP requested for extension of validity of EC.

The EAC, after detailed deliberations, taking note of the justification submitted by the project proponent, has **recommended** for extension of validity of the environmental clearance dated 14<sup>th</sup> June 2013 **till 13<sup>th</sup> June 2023**, for completion of the work as per the scope of the project. All other terms and conditions shall remain unchanged.

**DAY 3: 15<sup>th</sup> April, 2020 (Wednesday) Meeting held through  
Video Conferencing (VC) Mode**

**Agenda No.18.32**

**Expansion/modernization of Gujarat refinery by M/s Indian Oil Corporation Limited at Koyali, District Vadodara (Gujarat) - Consideration of Environment Clearance**

**[IA/GJ/IND2/134702/2018,IA-J-11011/93/2018-IA-II(I)]**

The proposal is for environmental clearance to the project for Expansion/modernization of Gujarat refinery from 13.7 to 18 MTPA by M/s Indian Oil Corporation Limited in an area of 3743000 sqm at Koyali, District Vadodara (Gujarat).

The project proponent and their accredited consultant M/s. ABC Technolab India Pvt. Ltd. made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

During deliberations the EAC noted the following:

**Details of existing and proposed products are as under:**

<b>S. No.</b>	<b>Product Details</b>	<b>Existing Quantity (TMT/Year)</b>	<b>Proposed Quantity (TMT/Year)</b>	<b>Total Quantity (TMT/Year)</b>
1.	LPG	516	529	1045
2.	PolyPropylene	0	402	402
3.	Naphtha Export	794	-794	0
4.	LAB	120	42	162
5.	FGH	14	0	14
6.	MS	2010	2717	4727
7.	Reformate	60	-60	0
8.	Kerosene	500	-500	0
9.	MTO	0	120	120
10.	ATF	400	150	650
11.	PCK	70	70	140
12.	HSD	6866	1147	8013
13.	Sulphur	132	68	200
14.	Bitumen	430.7	49.3	480
15.	FO	248	160	408
16.	Coke	663	330	993

17.	HAB	0	8	8
18.	Normal Butanol	0	90	90
19.	Iso Butanol	0	2.6	2.6
	<b>Total</b>	<b>12823.7</b>	<b>4530.9</b>	<b>17454.6</b>

The project/activities are covered under category A of item 4 (a) 'Petroleum refining industry' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The Terms of References (TORs) for the Project has been issued by the Ministry vide letter dated 14<sup>th</sup> April, 2018. Public hearing was exempted as per the provisions contained in EIA Notification, 2006.

Existing land area is 3743000 sqm.; additional 324000 sqm. land will be used for proposed expansion. Industry has already developed / will develop greenbelt in an area of 33 % i.e 106920 m<sup>2</sup> out of total area of the project. The estimated project cost is Rs.33958 Crore including existing investment of Rs.22210 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 29590 lakhs and the recurring cost (operation and maintenance) will be about Rs 268 lakhs per annum. Total employment generation will be 125 persons as direct & 500 persons indirect after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, rivers etc. within 10 km distance. Mahi river flows at 4.2 km in North West direction.

Ambient air quality monitoring was carried out at 8 locations during 1<sup>st</sup> October, 2018 to 31<sup>st</sup> December, 2018 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (16.6-38.2 µg/m<sup>3</sup>), PM<sub>2.5</sub> (40-70 µg/m<sup>3</sup>), SO<sub>2</sub> (5.14-16 µg/m<sup>3</sup>) and NO<sub>2</sub> (8.63-19.6 µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.09 µg/m<sup>3</sup>, 15.51 µg/m<sup>3</sup> and 4.59 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).

Total water requirement is 54696 m<sup>3</sup>/day (Additional) of which fresh water requirement of 45456 m<sup>3</sup>/day proposed to be met from existing wells at Mahi river and MoU done with Vadodara municipal corporation (VMC) for using treated Municipal waste water. Effluent of 9240 m<sup>3</sup>/day (Additional) quantity will be treated through new Effluent Treatment Plant (ETP) of capacity 385 m<sup>3</sup>/ hr. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 252800 kVA proposed to be met from existing captive power plants and Grid power infrastructure. State power distribution



corporation limited (SPDCL). Existing unit has no DG sets. Additionally 315 kVA DG Set at 0.415 kVA level for Cooling Tower Package (CT-1 & CT-2), 2250 kVA DG Set at 6.6kV level for INDMAX FCC,CR LPG & IGHDS Units, 2000 kVA DG Set at 0.415kV level for MS Block and KHDS Units, 2 x 2750 kVA DG Set at 6.6kV level for Utility Block Units, 2000 kVA DG Set at 0.415kV level for PPU & PRU units, 2000 kVA DG Set at 0.415kV level for ETP Package, 800 kVA DG Set at 0.415kV level for Sulphur Block (SRU/SWS/ARU) unit. DG sets are used as standby during power failure. Stack (height 3.5M) will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 355 TPH Fuel oil/Fuel gas/ RLNG fired boiler. Additionally 3x150 TPH - RLNG fired boiler will be installed. Multi cyclone separator/ bag filter with a stack of height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm<sup>3</sup> for the proposed boilers.

Ministry had issued EC earlier vide letter No. J-11011/96/2015-IA-II(I); dated 20<sup>th</sup> March, 2017 to the project for proposed BS-IV and BS-VI in favour of M/s IOCL.

The Certified report dated 2<sup>nd</sup> July, 2019 on the compliance status of the EC conditions has been forwarded by the Ministry's Regional Office at Bhopal. The Committee deliberated the compliance report and found in order. The project proponent was agreed to allocate 0.25 % (double as per the Ministry's Office Memorandum dated 1<sup>st</sup> May, 2018) towards CER activities.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members

of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) Consent to Establish/Operate (CTE/CTO) for the project shall be obtained from the State Pollution Control Board (SPCB) as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, and the SPCB shall follow the mechanism/protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24<sup>th</sup> October, 2019 and forwarded by Central Pollution Control Board vide letter dated 25<sup>th</sup> October, 2019 to the SPCB's, while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) The National Emission Standards for Petroleum Oil Refinery issued by the Ministry vide G.S.R. 186(E) dated 18<sup>th</sup> March, 2008 and G.S.R.595(E) dated 21<sup>st</sup> August, 2009 as amended from time to time, shall be followed.
- (v) To control source and the fugitive emissions, suitable pollution control devices shall be installed with different stacks to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stacks of adequate height as per CPCB/SPCB guidelines.
- (vi) Total fresh water requirement shall not exceed 45456 m<sup>3</sup>/day proposed to be met from existing wells at Mahi river. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (vii) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (viii) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.

- (ix) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.
- (x) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xi) Regular VOC monitoring to be done at vulnerable points.
- (xii) The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.
- (xiii) Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.
- (xiv) Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.
- (xv) The company shall undertake waste minimization measures as below:-
  - (a) Metering and control of quantities of active ingredients to minimize waste.
  - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (c) Use of automated filling to minimize spillage.
  - (d) Use of Close Feed system into batch reactors.
  - (e) Venting equipment through vapour recovery system.
  - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi) The green belt of 5-10 m width shall be developed in more than 40% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvii) At least 0.25% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.

- (xviii) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xix) The unit shall make arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- (xx) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.
- (xxi) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxii) Disaster Management Plan (DMP) shall be prepared based on recommendations of advance Risk modeling and compliance be submitted to the concerned authorities.

### **Agenda No.18.33**

#### **Setting up resin manufacturing unit by M/s Creative Carbon Pvt. Ltd at Survey No. 688, 689, 691 & 698, Village Kanera, Taluka Kheda, District Kheda (Gujarat) - Consideration of Environment Clearance**

#### **[IA/GJ/IND2/108760/2019, IA-J-11011/211/2019-IA-II(I)]**

The proposal is for environmental clearance to the project for setting up resin manufacturing unit by M/s Creative Carbon Pvt. Ltd in an area of 8,903 sqm at Survey No. 688, 689, 691 & 698, Village Kanera, Taluka Kheda, District Kheda (Gujarat).

The project proponent and their consultant M/s. Green Circle Inc. made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

During deliberations, the EAC noted the following:

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals and Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' to be appraised at Central level in the Ministry.

The EAC, during deliberations noted that the project details mentioned in the EIA report were not consistent with that presented during the meeting.

The EAC during deliberation observed that the GLC values are in higher side and not consistent with the baseline data submitted the same needs to be re-examined.

The EAC also observed that the quality of EIA report is very poor. The Committee under rated the performance of the consultant (M/s Green Circle Inc). The Committee desired that the Ministry/QCI shall take action as appropriate on the matter against the consultant for providing wrong and inconsistent information the EIA/EMP and presentation.

The PP agreed that they will revise the EIA/EMP as per Appendix III of the EIA Notification, 2006. The EAC, after detailed deliberations decided to **return the proposal in its present form.**

#### **Agenda No. 18.34**

#### **Establishment of pesticide specific intermediate and synthetic organic chemicals manufacturing Facility at Plot No 53A, MIDC Dhatav, District- Raigad, Maharashtra by M/s Deepak Nitrite Limited- Consideration of Environmental Clearance**

#### **[IA/MH/IND2/90992/2019, IA-J-11011/17/2019-IA-II(I)]**

The Project Proponent and their Consultant M/s Aditya Environmental Services Pvt. Ltd. has made a detailed presentation thorough Video Conferencing (VC) on the salient features of the project and informed that:

(i). The proposal is for environmental clearance to the project for Establishment of pesticide specific intermediate of capacity 4500 TPA and synthetic organic chemicals manufacturing Facility of capacity 8040 TPA by M/s Deepak Nitrite Limited in an area of 20,224 sqm located at Plot No 53A, MIDC Roha, Dist. Raigad, Maharashtra.

(ii). The TOR has been issued by Ministry vide letter No. No IA-J-11011/17/2019-IA-II(I) dated 26<sup>th</sup> February 2019.

(iii). The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' and item 5(f) 'Synthetic organic chemicals industry' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

(iv). Total plot area is 20,224 sq. m. Plot is within notified industrial area of MIDC Dhatav, Roha. Industry will be developed Greenbelt in an area of 6767 sq. m out of total area of the project. Thus, total green belt development will be 33.46% of total plot area. The estimated project cost is Rs. 150 Crores. Total capital cost earmarked towards environmental pollution measures is Rs. 10 Crores & the Recurring cost (operation & maintenance) will be about Rs. 4.37 Crores per annum. Total employment will be 500 persons as direct & 1000 persons indirect. Industry proposes to allocate Rs. 225 Lakhs @ of 1.5% towards Corporate Environment Responsibility.

(v). There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Village Dhatav wherein the Dhatav MIDC is setup has appeared in the list of ESA village of Western Ghats (Ecological Sensitive Area Village) draft notification dated 14.03.2014, 04.09.2015, 27.02.2017 and 03.10.2018. There was representation from the Maharashtra Government and discussion with the concerned officers of MoEFCC for the reconsideration of ESA. Existing MIDC area, where project is proposed is likely to get excluded from the purview of ESA. Kundalika River is flowing at a distance of 0.8 km in north direction.

(vi). The details of products and capacity as under:

<b>S. No</b>	<b>Product</b>	<b>CAS No.</b>	<b>Activity</b>	<b>End Use of Products</b>	<b>Quantity, TPA</b>
1	Triazinone	33509-43-2	5(b)	Pesticide specific intermediates	4500
2	Thiocarbohydrazide (TCH)	2231-57-4	5(b)		
3	ADENINE (6- Amino Purine)	73-24-5	5(f)	Bulk drugs intermediates	2000
4	3-NAP (3 Nitro acetophenone)	121-89-1	5(f)		
5	3-AAP (3 Amino acetophenone)	99-03-6	5(f)		
6	3-HAP (3 Hydroxy acetophenone)	121-71-1	5(f)		
7	2,3-Xylenol	526-75-0	5(f)		
8	2,4-Xylenol	105-67-9	5(f)		
9	2,5-Xylenol	95-87-4	5(f)		
10	Phenyl Hydrazine	100-63-0	5(f)	Bulk drugs and intermediates	600
11	SMIA (2-Furanacetic acid, α-(methoxyimino)-, ammonium salt)	97148-39-5	5(f)		
12	DBTZ (Quetiapine Int.) (Dibenzo[b,f][1,4]thiazepine-11(10H)- one)	3159-07-7	5(f)	Bulk drugs and intermediates	2000

13	Guanine	73-40-5	5(f)		
14	Aciclovir	59277-89-3	5(f)		
15	PMPA (TENOFIVIR) ((R)-9-[2-Phosphonomethoxy) propyl] adenine)	107021-12-5	5(f)		
16	Omeprazole Chloro Intermediate (2-Chloromethyl-3,5-Dimethyl-4-methoxy pyridine hydrochloride)	86604-75-3	5(f)		
17	Omeprazole Nitro Intermediate (2,3,5-trimethyl-4-nitropyridine N-oxide)	86604-79-7	5(f)		
18	7-ETP (7-Ethyl tryptophol) Etodolac intermediate	41340-36-7	5(f)		
19	S-Alcohol (Duloxetine Intermediate)	132335-44-5	5(f)		
20	2-Methyl-3-Amino Benzotrifluoride (MTA)	54396-44-0	5(f)		
21	3-ABTF (3 Amino benzotrifluoride)	98-16-8	5(f)	Chemical intermediates	2000
22	TFMAP (3-Triflouromethyl Acetophenone)	349-76-8	5(f)		
23	Pilot Plant products (Synthetic Organic Chemicals)	Not applicable	5(f)	-	240
24	Distillation of crude Chemicals/solvents such as Nitroxylenes, Nitrocumens, crude Toluene, Crude benzotrifluoride, Crude Methanol etc, Spent acid recovery, Formamide recovery	Not applicable	-	-	1200
	<b>Total</b>				<b>12540</b>

The Committee during deliberation noted that the project is being located in Village Dhatav, which is in the list of Western Ghats Ecological Sensitive Area Village. The Ministry has restricted certain industrial activities in these areas based on the report of the Committee Chaired by Dr. Kasthurirangan on the Western Ghats region.

**In view of the above, the Committee has desired that, at first, the opinion of the ESZ Division of the Ministry may be solicited regarding consideration and appraisal of the projects in these area.**

*The proposal was accordingly **deferred** for the needful.*

### **Agenda No.18.35**

**Expansion of Sugar manufacturing unit from 6,000 TCD to 11,500 TCD and Cogeneration Power plant from 37 MW to 57 MW by M/s EID Parry (India) Limited located at villages Hullatti and Alloli, Taluk Haliyal, District Uttara Kannada (Karnataka) - Consideration of Environmental Clearance**

**[IA/KA/IND2/144530/2016, IA-J-11011/382/2016-IA-II(I)]**

The proposal is for environmental clearance to the project for expansion of sugar manufacturing unit from 6,000 TCD to 11,500 TCD and cogeneration power plant from 37 MW to 57 MW by M/s EID Parry (India) Limited. The unit is located at villages Hullatti and Alloli, Taluk Haliyal, District Uttara Kannada, Karnataka.

The project proponent and their accredited consultant M/s Pioneer Enviro Laboratories & Consultants Pvt. Ltd made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

During deliberations, the EAC noted the following:

The Ministry had issued EC earlier vide letter No. J - 11011 / 47 / 2007 – IA II (I) dated 18-10-2007 & J - 11011 / 336 / 2012 - IA II (I) dated 04-02-2015 to the existing project Sugar – 6000 TCD, Co-generation power – 37 MW & Distillery – 90 KLD in favour of M/s EID Parry (India) Limited.

All Sugar Industry are listed in S.N. 5(j) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' and all Thermal Power Plants (>15 MW plants based on biomass fuel) are listed in S.N. 1(d) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' and requires appraisal/ approval at State level.

The EAC deliberated the proposal and found that the proposal is technically feasible and in order.

The EAC, during deliberation observed that proposed project comes under category 'B' of EIA Notification, 2006 (as amended from time to time) and requires appraisal at SEAC/SEIAA and suggested that the proposal may be transfer to SEIAA, Karnataka for further consideration. The Committee, therefore, **return** the proposal in present form.



### **Agenda No. 18.36**

#### **Setting up pesticide manufacturing unit of capacity 757.2 TPA by M/s Synergia Sciences Pvt. Ltd at Plot No. 18, Survey No. 300, Village Indrad, Taluka Kadi, District Mehsana (Gujarat) - Consideration of Environment Clearance**

**[IA/GJ/IND2/105675/2019, IA-J-11011/187/2019-IA II (I)]**

The proposal is for environmental clearance to the project for Setting up pesticide manufacturing unit of capacity 757.2 TPA by M/s Synergia Sciences Pvt. Ltd in an area of 5,769.28 sqm., located at Plot No. 18, Survey No. 300, Village Indrad, Taluka Kadi, District Mehsana, Gujarat.

The project proponent and their accredited consultant M/s. Bhagwati Enviro Care Pvt. Ltd made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

During deliberations, the EAC noted the following:

The project/activity is covered under category A of item 5 (b) 'Pesticides industry and pesticide specific intermediates (excluding formulations)' of the schedule to the EIA Notification, 2006 and requires appraisal/approval at Central level in the Ministry.

The EAC during deliberation observed that the in the proposal it is proposed that fresh water will be met from ground water source. However, as per the CGWA this area is comes under critical area and as per Hon'ble NGT order permission for ground water withdrawal will not be issued from CGWA. The EAC is therefore suggested to find out alternate source of fresh water and submit plan to achieve Zero Liquid Discharge and accordingly revise the EIA/EMP Report. The EAC suggested the detailed presentation will be appraised in one go after submission of above mentioned information/revised report. The EAC therefore **deferred** the proposal.

### **Agenda No.18.37**

#### **Setting up Specialty Chemicals manufacturing unit of capacity 50 TPM by M/s Divine Chemicals located at Plot No. 3004, 2917 GIDC Industrial Estate, Panoli, Taluka Ankleshwar, District Bharuch (Gujarat) - Consideration of Environment Clearance**

**[IA/GJ/IND2/145854/2019IA-J-11011/64/2020-IA-II(I)]**

The PP vide email dated 7<sup>th</sup> April, 2020 has informed that due to unavailability of technical expert for the meeting, PP will not be able to attend the Expert Appraisal Committee (Industry-2) meeting.

The EAC therefore **deferred** the proposal.

### **Agenda No.18.38**

#### **Expansion of Bulk drug and drug intermediates manufacturing unit by M/s Oscar Pharma, located at Plot No A1-7304, 7305, 7313/4, GIDC Estate, Ankleshwar, District Bharuch (Gujarat) - Consideration of Environmental Clearance**

**[IA/GJ/IND2/123813/2019, IA-J-11011/325/2019-IA-II(I)]**

The proposal is for environmental clearance to the project for expansion of Bulk drug and drug intermediates manufacturing unit from 150 to 350 TPM by M/s Oscar Pharma in an area of 7398.2 sqm., located at Plot No A1-7304, 7305, 7313/4, GIDC Estate, Ankleshwar, District Bharuch (Gujarat).

The Project Proponent and their consultant M/s Aqua-Air Environmental Engineers Pvt. Ltd. (Hon'ble High Court of Gujarat stay order), made a detailed presentation through Video Conferencing (VC) on the salient features of the project. Consultant has informed to the EAC that they have also applied for QCI/NABET Accreditation on March 11, 2020, which is under active consideration before QCI/NABET.

The details of products are as under:

Sr No.	Name of Products	CAS Nos.	Quantity [MT/Month]		
			Existing	Proposed	Total
1	1-[2,4-d-Difluorophenyl]-2,3-epoxypropyl-1H-1,2,4-triazole methanesulfonate	86386-76-7	25	---	25
2	Magnesium Turnings	7439-95-4	25	---	25
3	2, 4-Dichloroacetophenone	2234-16-4	25	---	25
4	Azacyclonol	115-46-8	25	---	25
5	3-[Dimethylamino] Propiophenone	3506-36-3	25	---	25
6	N-Methyl-4Chloro Piperidine	92328-83-1	25	---	25
7	Alendronate Sodium	121268-17-5	---	50	50
8	Piroxicam	36322-90-4	---		
9	Aspirin	50-789-2	---		
10	Phenylramidol HCl	553-69-5	---		
11	Prilocaine HCl	1786-81-8	---		
12	Prilocaine	721-50-6	---		
13	Ethyl 4-Aminobenzoate[Benzocaine]	94-09-7	---		
14	Piroxicam Betacyclo Dextrin	96684-39-8	---		
15	Lornoxicam	70374-39-9	---		
16	Sodium Picosulphate	10040-45-6	---		

17	Bisacodyl	603-50-9	---				
18	Ambroxol Hydrochloride	18683-91-5	---				
19	Gabapentin	60142-96-3	---				
20	Mesalamine	89-57-6	---				
21	Levetiracetam	102767-28-2	---				
22	Alendronic Acid	121268-17-5	---				
23	Levo Cetirizine Hydrochloride	130018-87-0	---				
24	Montelukast Sodium	151767-02-1	---				
25	Nitrofurantoin Anhydrous	67-20-9	---				
26	Tigecycline	220620-09-7	---				
27	Flecainide acetate	54143-56-5	---				
28	Methyl Benzothiazine Isopropyl Ester	118854-48-1	---			150	150
29	4(aminomethyl) benzoic acid Sulphate	150-13-0	---				
30	2,6-Dimethylphenyl chloroacetamide	1131-01-7	---				
31	4,4'[2-Pyridinylmethylene] Bisphenol	603-41-8	---				
32	Veratric Acid	93-07-2	---				
33	2,4-Dichloro Benzyl Cyanide	77668-42-9	---				
34	4-Chloro-7-Tosyl-Pyrrolo[2,3-D]-Pyrimidine	479633-63-1	---				
35	(Z)-Ethyl 22-chloro-2-(2-(4-methoxyphenyl)hydrazono)acetate	545445-44-1	---				
36	1-(4-Chlorobenzhydryl) piperazine	303-26-4	---				
37	Trans 4-Amino Cyclohexanol	27489-62-9	---				
38	Denatonium Benzoate	3734-33-6	---				
39	2-[1-(Mercaptomethyl) cyclopropyl] acetic acid	162515-68-6	---				
40	2-[2-3(S)-3-[2-(7-chloro-2-quinoliny) -ethyl]phenyl]-3-hydroxypropyl] phenyl-2-propanol	142569-70-8	---				
41	2,2'-(cyclohexane-1,1-diyl)diacetic acid	4355-11-7	---				
42	6 chloro-4- hydroxy- 2- methyl-2H thieno [2,3-e] [1,2] thiazine-3- carboxylate- 1,1- dioxide	70415-50-8	---				
43	2-Mercaptobenzimidazole	583-39-1	---				

44	5-(Difluoromethoxy)-2-Mercapto Benzimidazole	97963-62-7	---		
45	5-Methoxy-2-Mercapto Benzimidazole	37052-78-1	---		
46	2-Amino 5-Methyl Thiazole	7305-71-7	---		
	<b>TOTAL</b>		<b>150</b>	<b>200</b>	<b>350</b>

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals And Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' to be appraised at State level. However being the project is located inside the critically polluted area, the project appraised at Central level in the Ministry.

The terms of reference was granted by the Ministry on 20<sup>th</sup> December, 2019. Public hearing is exempted as per para 7(i), III. Stage (3), (i)(b) of the EIA Notification, 2006, and in accordance with the Ministry's OM dated 27<sup>th</sup> April 2018, as the project site is located in the notified industrial area.

Total 7518.9 m<sup>2</sup> land will be used for proposed project. out of which 3000 m<sup>2</sup> green belt will be provided. The estimated project cost after expansion is Rs. 4.8 crores. Total employment will be 85 persons direct and indirect proposed project. There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site.

The water requirement after proposed expansion will be 81 cum/day, of which fresh water requirement of 30 cum/day will be met from GIDC Ankleshwar. Effluent. Industrial Effluent 53 cum/day will be treated in ETP with primary, secondary, tertiary treatment units followed by RO; RO permeate (37 m<sup>3</sup>/day) will be reused and the RO reject 16 m<sup>3</sup>/day will be subjected to MEE treatment. MEE condensate 14 m<sup>3</sup>/day will be reused and MEE Salt will be sent to TSDF Site. Domestic wastewater 1 cum/day will be disposed through Soak Pit/Septic Tank. Scrubbing Media will be sent to end users.

Power Requirement for the proposed expansion of project will be 250 KVA, which is met from DGVCL. one DG Set of 200 KVA capacity will also be installed as standby during power failure. Adequate stack height will be provided for control of emissions. Two Boiler of capacity 0.9 TPH & 3.0 TPH each, Thermic Fluid Heater(6 Lac KCal) utilities used for manufacturing of products. Briquettes of bio coal and/or Natural gas will be used as fuel in them.

Ambient air quality monitoring was carried out at 10 locations during October, 2017 to December, 2017 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (91.14–77.84 µg/m<sup>3</sup>), PM<sub>2.5</sub> (58.10 – 46.80 µg/m<sup>3</sup>), SO<sub>2</sub> (24.68 – 16.92 µg/m<sup>3</sup>) and NO<sub>2</sub> (25.68 – 17.52 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 0.0005 µg/m<sup>3</sup>, 0.00285 µg/m<sup>3</sup>, and 0.00311 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).

The EAC noted that existing unit is operating on Consent to Operate and as per the record the existing CTO was granted in the name of M/s Saheb Health Care the same need to be transferred in the name of M/s Oscar Pharma. The project proponent also needs to submit proof to establish that existing unit is operating with proper prior permission and to confirm that unit is not violating the provision contained in EIA Notification, 1994 and 2006. In this regard PP needs to submit all the old CTE/CTO and all the production details to verify the violation, if any. The Committee, after deliberation, recommended the proposal technically. However, the Ministry may further examine the proposal w.r.t. transfer of earlier CTO and other necessary requirements.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance **subject to transfer of CTO** in the name of M/s Oscar Pharma and to compliance of terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) Consent to Establish/Operate (CTE/CTO) for the project shall be obtained from the State Pollution Control Board (SPCB) as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, and the SPCB shall follow the mechanism/protocol issued by the

Ministry vide letter no. Q-16017/38/2018-CPA dated 24<sup>th</sup> October, 2019 and forwarded by Central Pollution Control Board vide letter dated 25<sup>th</sup> October, 2019 to the SPCB's, while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.

- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- (v) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (vi) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (vii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (viii) Solvent management shall be carried out as follows:
  - (a) Reactor shall be connected to chilled brine condenser system.
  - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  - (c) Solvents shall be stored in a separate space specified with all safety measures.
  - (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  - (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  - (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

- (ix) Total fresh water requirement shall not exceed 30 cum/day, proposed to be met from GIDC Ankleshwar. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- (x) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.
- (xi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. Raw material and products should be stored in leak proof containers. Spent acid to be stored over the ground tank and to be sent to TSDF.
- (xii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xiii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xiv) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
- (xv) The company shall undertake waste minimization measures as below:-
  - (a) Metering and control of quantities of active ingredients to minimize waste.
  - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (c) Use of automated filling to minimize spillage.
  - (d) Use of Close Feed system into batch reactors.
  - (e) Venting equipment through vapour recovery system.
  - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi) The green belt of at least 5-10 m width shall be developed in not less than 40% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvii) As proposed 4% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). As proposed, and the CER allocation shall be spent mainly for addressing the issues (social, health, employment, infrastructure,

Drinking water facility, skill development, plantation etc) raised during public consultation/hearing.

- (xviii) Preference shall be given to local villagers for employment in the unit. For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xix) 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.
- (xx) Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxi) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

### **Agenda No.18.39**

#### **Expansion Dye and pigment manufacturing unit from 2.4 to 38 TPM by M/s Chemox International located at Plot No.6605, GIDC Estate Ankleshwar, District Bharuch (Gujarat) - Consideration of Environmental Clearance**

#### **[IA/GJ/IND2/126408/2015, IA-J-11011/457/2019-IA-II(I)]**

The proposal is for environmental clearance to the project for Expansion Dye and pigment manufacturing unit from 2.4 to 38 TPM by M/s Chemox International in an area of 1000 sqm., located at Plot No.6605, GIDC Estate Ankleshwar, District Bharuch (Gujarat).

The project proponent and their consultant M/s. Jyoti Om Chemical Research Centre Pvt. Ltd. made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

During deliberations, the EAC noted the following:

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals And Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category



'B' to be appraised at State level. However, being the project is located inside the critically polluted area, the project appraised at Central level in the Ministry.

PP reported that existing unit is operating on Consent to Operate and PP has never taken EC under provisions of the EIA Notification. The project proponent has not submitted the certified compliance of CTO from SPCB. Moreover the Committee noted that the plot area is very small and it is very difficult to do the expansion in this small area as PP needs to develop 40% green belt as the unit is located in the Critically Polluted Area.

The EAC, during deliberation observed that the unit is being proposed in a very small plot i.e. 1000 sqm. area. Also the project location comes under critically polluted area i.e. Ankaleshwar. The EAC suggested to carried out alternate site analysis or to chose another location for the project. Also, the project proponent need to submit proof to establish that existing unit is operating with proper prior permission and to confirm that unit is not violating the provision contained in EIA Notification, 1994 and 2006. In this regard PP needs to submit all the old CTE/CTO and production details of the products to verify the violation, if any. The EAC therefore **deferred** the proposal.

#### **Agenda No. 18.40**

**Synthetic Organic Chemicals Manufacturing Unit (Expansion by Addition of New Products) at Plot No. 221 - 222, GIDC Industrial Estate, Ankleshwar – 393002, Distt-Bharuch (Gujarat) by M/s CAB CHEMICALS- Consideration of Environment Clearance.**

**IA/GJ/IND2/128116/2019, IA-J-11011/421/2019-IA-II(I)]**

The project proponent vide letter dated 14<sup>th</sup> April, 2020 has requested to **postponed** the proposal. Therefore, the EAC **deferred** the proposal.

#### **Agenda No. 18.41**

**Proposed manufacturing unit of Formaldehyde (37%) (100 TPD), Melamine Formaldehyde Resin (42.5 TPD), Phenol Formaldehyde Resin (15.0 TPD), Urea Formaldehyde Resin (42.5 TPD) at Village- Hambran, Near Murti Agro Foods, Hambran Road, Tehsil & District -Ludhiana, Punjab by M/S BALAJI OVERSEAS- Consideration of Environmental Clearance**

**[IA/PB/IND2/127321/2019, IA-J-11011/56/2019-IA-II (I)]**

The proposalis for environmental clearance to the project for setting up of Resin Manufacturing unit of capacity 200 TPD by M/s Balaji Overseas in an area of 7365.27 sqm., located at Village Hambran, Tehsil & District Ludhiana, Punjab.

The proposal was earlier placed before the EAC in its meeting held during 21-23 January, 2020. Based on the request of the project proponent, the proposal was deferred earlier.

The Project Proponent and their Consultant M/s Eco Laboratories & Consultants Pvt. Ltd. has made a detailed presentation through Video Conferencing (VC) on the salient features of the project and informed that:

(i). The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

(ii). Standard TORs were issued vide letter dated 24<sup>th</sup> march, 2019. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on dated 17.09.2019. The main issues raised during the public hearing are related to employment to locals, pollution & odour, etc.

(iii). Land area available for the project is 1.82 acres (7365.27sqm). Industry will develop greenbelt in an area of 2428.11 sqm covering 33% of project area. The estimated project cost is Rs. 4 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 9 lakh and the recurring cost (operation and maintenance) will be about Rs. 4.8 lakhs per annum. The project will provide employment for 25 persons. Industry proposes to allocate Rs. 8 lakh @ of 2 % of project cost towards Corporate Environmental Responsibility.

(iv). There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Satluj River is flowing at 7Km in North direction and Sirhind Canal is flowing at 3km in South direction from the project site.

(v). Ambient air quality monitoring was carried out at 8 locations during 15<sup>th</sup> March, 2019 to 15<sup>th</sup> June, 2019 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (72.3-82.2µg/m<sup>3</sup>), PM<sub>2.5</sub> (33.5-44.4.µg/m<sup>3</sup>), SO<sub>2</sub> (7.1-12.5µg/m<sup>3</sup>) and NO<sub>2</sub> (20.2-30.2µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 85.2µg/m<sup>3</sup> with respect to SPM. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(vi). Total fresh water requirement is 244m<sup>3</sup>/day which will be met from borewell. The proposed plant will be based on Zero Liquid Discharge. No process waste water will be generated.

(vii). Power requirement for the plant will be 200KW. The power will be sourced from PSPCL (Punjab State Power Corporation Limited). Solar panel for outer lighting, LED lights for inner lighting will be used as power saver. One DG set of 350 KVA capacity will be used as standby during power failure. Stack (height 4m) will be provided as per CPCB norms to the proposed DG sets.

(viii). Two boilers with capacity 600 kg/hr or 0.600TPH each of 20m stack height are proposed to be installed. Wet Scrubber will be installed as for process vent. Multiple dust cyclone separators with adequate height controlling the particulate emissions within the statutory limit of 150 mg/Nm<sup>3</sup> for the proposed boilers will be installed. The particulate emissions are controlled installation of multiple dust cyclone separators. Wet Scrubber will be installed as APCD for control of process/fugitive emission vent.

(ix). Waste salt as Hazardous waste will be generated @ 171Kg/day and used oil @ 50lt/year from DG set will be generated. The waste salt will be collected, stored separately and disposed off at TSDF site & used oil will be sold to authorized recyclers.

(x). No litigation is pending against the proposal.

(xi). The details of products and capacity as under:

S. No	Product	Quantity
1.	Formaldehyde (37%)	100 TPD
2.	Melamine Formaldehyde Resin	42.5 TPD
3.	Phenol Formaldehyde Resin	15 TPD
4.	Urea Formaldehyde Resin	42.50 TPD

The EAC during deliberations noted that the project is proposed to be located in the **ground water over exploited area**. The project proponent has not given proper water balance diagram and effluent treatment mechanisms. Further incremental values of the air quality parameters are found to be at higher level. The Committee after detailed deliberations, **deferred** the proposal and desired for requisite information/inputs as under:

(i). During PH, there was issues related to pollution in Buddha Nala as the Industries are polluting the Nala. The Committee want the detailed action plan on this issue and other issues raised during PH.

(ii). Details/report of the alternate site analysis study needs to be conducted.

(iii). Revised water balance scheme with details of total water and fresh water

requirement.

(iv). Detailed effluent treatment plan with ZLD.

(v). The Committee noted that the proposed project site comes under over exploited area regard to availability of water. In this context PP needs to explore the alternate water source and commitment/MoU from the concerned authority.

(vi). Recalibration of incremental GLCs due to the proposed project needs to redone as there is some error in the air quality modeling.

(vii). Detailed CER plan alongwith activities and its timeline and budget needs to be submitted.

(viii). The Committee noted that initially the report was prepared by the M/s Shivalik Consultant and now new consultant M/s Eco Laboratories & Consultants Pvt. Ltd. has come for presentation. The Committee suggested that as per the laid down procedure the new consultant shall redone some of the studies for data validation and own the report and do the correction accordingly.

The proposal was accordingly **deferred** for the needful.

### **Agenda No.18.42**

**Expansion of Agrochemicals and their Intermediates at existing manufacturing site Unit-II (Dahej) at Plot No. 42/4, Amod Road, Dahej-I GIDC Industrial Estate, Dahej – 392 130, District- Bharuch, Gujarat by M/s Bharat Rasayan Limited (Unit-II) - Consideration of Environmental Clearance**

**[IA/GJ/IND2/114039/2008, J-11011/961/2008-IA-II (I)]**

Earlier the proposal was considered by the EAC in its meeting held on 23-25 October, 2019, wherein the EAC deferred the proposal for site visit by sub-committee of the EAC.

Based on recommendation of EAC and subsequent approval of the Ministry, a Sub-committee comprising of Dr. J P Gupta (Chairman, EAC) Dr. Uma Kapoor (Member, EAC), Dr. Tudi Indrasen Reddy (Member, EAC) and Dr. Saurabh Upadhyay (Scientist C, MoEF&CC) conducted the site visit on 12<sup>th</sup> January, 2020. The Sub-Committee has submitted its report.

The EAC in its meeting held on 25-27 February, 2020 has considered the site inspection report submitted by the sub-committee and deferred the proposal for submission of action taken report duly certified from the Regional office of the Ministry.

The Project Proponent and their Consultant has made a detailed presentation through Video Conferencing (VC) on the salient features of the project. The project proponent during deliberation has informed that they have completed the actions as recommended during Sub-Committee visit. PP has informed to the Committee that the action taken report has been already submitted to the Ministry's Regional office, Bhopal and the certification from RO, MoEFCC is still awaited.

The EAC during deliberation noted that since the action taken report is still awaited from the Ministry's Regional office. Also, the EAC suggested to submit action plan/commitment in respect of action suggested in the site inspection report submitted by the sub-committee.

The EAC, after detailed deliberation, decided to **defer** the proposal for the present and suggested that the proposal may be placed only after submission of certification from the RO, MoEFCC. The EAC has also suggested that the Regional Office of the Ministry may be requested to provide the certification for further appraisal by the EAC.

### **Agenda No.18.43**

#### **Setting up of pharmaceutical bulk drugs & intermediates manufacturing unit of capacity 43.20 TPM by M/s Livmore Life Sciences Private Limited at Survey No: 424, 431, Village Ganpatpura Taluka Karjan, District Vadodara (Gujarat) - Consideration of Environment Clearance**

**[IA/GJ/IND2/90366/2019, IA-J-11011/5/2019-IA-II(I)]**

The proposal is for environmental clearance to the project for setting up of pharmaceutical bulk drugs & intermediates manufacturing unit of capacity 43.20 TPM by M/s Livmore Life Sciences Private Limited in an area of 28,567 sqm at Survey No: 424, 431, Village Ganpatpura Taluka Karjan, District Vadodara (Gujarat).

The Project Proponent and their Consultant M/s Envisafe Environment has made a detailed presentation through Video Conferencing (VC) on the salient features of the project and informed that:

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The terms of reference was granted by the Ministry on 4<sup>th</sup> February, 2019. The public hearing was conducted by the State Pollution Control Board on 18<sup>th</sup> October, 2019. The public hearing was presided over by the Additional District Magistrate. The main issues raised during the public hearing are related to employment opportunities and Social welfare activities.

Total land area is estimated to be 28,567 sqm. Green belt will be developed in 35.0% i.e. 5,913 sqm out of total project area. The estimated project cost is Rs. 7 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 1.20 crore and the recurring cost (operation and maintenance) will be about Rs. 1.5 crore/annum. Total Employment will be 114 persons.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. PP reported that no forest land is involved in the project and its related activities. PP reported that there are 07 Schedule-I species are reported in the study area.

Total water requirement will be 196 m<sup>3</sup>/day of which fresh water requirement of 97m<sup>3</sup>/day proposed to be met from own borewell. Effluent of 100 m<sup>3</sup>/day will be treated in ETP through stripper, primary, secondary & tertiary treatment followed by RO& MEE. Plant will be based on Zero Liquid Discharge system.

Power requirement will be 650 kVA and will be met from Madhya Gujarat Vij Company Ltd. (MGVCL). One DG sets of 600 kVA capacity will be used as standby during power failure. Stack (height 9 m) will be provided as per CPCB norms. Two steam boiler of 2 TPH capacity each will be installed to control the particulate emissions. Multicyclone separator followed by bag filter with stack height of 15 m will be provided to control the particulate emission within the statutory limit of 150 mg/Nm<sup>3</sup> for the proposed boilers. Process emission generation will be in the form of SO<sub>2</sub> gas from proposed project. Two stage alkali scrubbers will be provided for control of SO<sub>2</sub>.

Ambient air quality monitoring has been carried out at 9 locations during February 2019 to April 2019 and the baseline data indicated the ranges of concentration as: PM<sub>10</sub>(58- 93µg/m<sup>3</sup>), PM<sub>2.5</sub>(21-45µg/m<sup>3</sup>), SO<sub>2</sub>(10.7- 24.1µg/m<sup>3</sup>), NO<sub>2</sub>(15- 28.9µg/m<sup>3</sup>), and CO(0.9- 2 mg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.739µg/m<sup>3</sup>, 2.257µg/m<sup>3</sup> and 0.191µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance **subject to submission of conservation plan for schedule I** species to CWLW of State Govt. The Committee also recommended, the following specific terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) Consent to Establish/Operate (CTE/CTO) for the project shall be obtained from the State Pollution Control Board (SPCB) as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, and the SPCB shall follow the mechanism/protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24<sup>th</sup> October, 2019 and forwarded by Central Pollution Control Board vide letter dated 25<sup>th</sup> October, 2019 to the SPCB's, while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.

- (iv) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- (v) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (vi) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (vii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (viii) Solvent management shall be carried out as follows:
  - (a) Reactor shall be connected to chilled brine condenser system.
  - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  - (c) numilSolvents shall be stored in a separate space specified with all safety measures.
  - (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  - (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  - (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (ix) Total fresh water requirement shall not exceed 97 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- (x) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.
- (xi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. Raw material and products should be stored in leak proof containers. Spent acid to be stored over the ground tank and to be sent to TSDF.
- (xii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.



- (xiii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xiv) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
- (xv) The company shall undertake waste minimization measures as below:-
  - (a) Metering and control of quantities of active ingredients to minimize waste.
  - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (c) Use of automated filling to minimize spillage.
  - (d) Use of Close Feed system into batch reactors.
  - (e) Venting equipment through vapour recovery system.
  - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi) The green belt of at least 5-10 m width shall be developed in not less than 35% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvii) As proposed 4% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). As proposed, and the CER allocation shall be spent mainly for addressing the issues (social, health, employment, infrastructure, Drinking water facility, skill development, plantation etc) raised during public consultation/hearing.
- (xviii) Preference shall be given to local villagers for employment in the unit. For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xix) 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.
- (xx) Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.

(xxi) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xxii) No coal to be used. PP shall only use bio fuel.

### **Amendment/Extension in Environmental Clearance**

#### **Agenda No. 18.44**

#### **Modernization cum Expansion of Grain Based Distillery (125 KLPD to 140 KLPD) at Village Shyampur, Tehsil Behror, District Alwar, Rajasthan by M/s Globus Spirits Limited –Amendment in Environmental Clearance**

**[IA/RJ/IND2/145736/2020, J-11011/237/2015 – IA - II (I)]**

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated 15<sup>th</sup> November, 2018 to the project for Modernization cum Expansion of Grain Based Distillery (125 KLPD to 140 KLPD) located at Village Shyampur, Tehsil Behror, District Alwar (Rajasthan) in favour of M/s Globus Spirits Limited.

The Project Proponent and their Consultant M/s J. M. Environet Pvt. Ltd. has made a detailed presentation through Video Conferencing (VC) on the salient features of the project and requested for amendment in the EC with the details are as under:

<b>S. No.</b>	<b>Para of EC issued by MoEFCC</b>	<b>Details as per the EC</b>	<b>To be revised/ read as</b>	<b>Justification/reasons</b>
1.	Condition no. i of Para no. 9	The environmental clearance shall be valid for a period of one year. Meanwhile, based on certified compliance report for the conditions stipulated in the EC and the	The company has achieved proposed enhancement in Grain based distillery from 125 to 140 KLPD by modernization in fermentation technology and without	PP informed that after obtaining all statutory permissions (EC & CTO) from concerned authorities, the company was able to achieve proposed expansion in Grain based distillery from 125 to 140 KLPD by modernization in fermentation technology and without increasing any

		prevailing status for no increase in pollution load at the enhanced capacity of 140 KLPD, the project shall be reviewed by the EAC for its continuance.	increasing any pollution load.	pollution load. Thus, the project may be allowed to operate for the expanded capacity (140 KLPD Grain based distillery). The PP obtained Certified EC Compliance Report from RO, MoEFCC, Lucknow vide letter no. IV/ENV/ IND-62/939/2017 dated 26 <sup>th</sup> November, 2019.
--	--	---	--------------------------------	---

During deliberations, the EAC noted the following:

- (i). Based on the recommendations of the EAC, the Ministry has granted EC to the existing project as per para 7 (ii) of the EIA Notification, 2006, for period of one year. It was desired to review the project after one year based on the no pollution load study and certified report.
- (ii). The project proponent has obtained Consent to Operate (Air and Water) was obtained from RSPCB vide letter dated 20<sup>th</sup> December, 2018. After obtaining all statutory permissions the company achieved expansion in Grain based distillery from 125 to 140 KLPD by modernization in fermentation technology and without increasing any pollution load.
- (iii). The project proponent has requested Regional Office of the Ministry and site was conducted on 6<sup>th</sup> November, 2019 and Report was issued vide letter 26<sup>th</sup> November, 2019.
- (iv). The project proponent has complied with conditions and achieved the expansion/modernization without increase in any pollution load.

The Committee after detailed deliberations noted that the project proponent has achieved the expansion after obtaining EC & CTO and as such EC is having perpetual validity. The Committee has, therefor **recommended** to delete the condition at para 9(i) of the EC dated 15<sup>th</sup> November, 2018, as the condition has been complied with. All other terms and condition remain unchanged.

#### **Agenda No. 18.45**

**Modernization of existing 70 KLPD Molasses based Distillery to 70 KLPD Molasses/Grain/Juice (Juice Slurry) based distillery and to use Grain, Cane Juice (Juice Slurry) as raw material to produce Rectified by M/s PICCADILY SUGAR & ALLIED INDUSTRIES LIMITED - Extension of Validity of Environmental Clearance**

**[IA/PB/IND2/144557/2020, J-11011/240/2011- IA II (I)]**

The proposal is for extension of validity of the Environmental Clearance granted by the Ministry vide letter no. J-11011/240/2011 – IA - II (I) dated 26<sup>th</sup> February, 2013 for the project Modernization of existing 70 KLPD Molasses based Distillery to 70 KLPD Molasses/Grain/Juice (Juice Slurry) based distillery and to use Grain, Cane Juice (Juice Slurry) as raw material to produce Rectified Spirit/ENA Spirit Ethanol at Village Hamjheri, Jakhal Road, Tehsil Patran, District Patiala (Punjab) in favour of Piccadily Sugar & Allied Industries Limited.

The Project Proponent and their Consultant M/s J. M. Environet Pvt. Ltd. has made a detailed presentation through Video Conferencing (VC) on the salient features of the project with the details are as under:

It was informed that presently the company is operating 40 KLPD Molasses/ Grain based Distillery. After obtaining EC in 2013 for Modernization of existing distillery, the company installed the expanded capacity (70 KLPD Grain). The production has not been started yet as the issuance of Consent to Operate is under process from SPCB. The project will start only after obtaining validity in Environmental Clearance and all other required clearance from SPCB/Excise. Looking into preparedness and investment made for project; it was requested to consider the proposal and extend the validity of the Environmental Clearance Granted vide Letter dated 26<sup>th</sup> February, 2013 for another three years.

The EAC during deliberations noted that the letter dated 26<sup>th</sup> February, 2013 issued by the Ministry, in which extension has been sought by the project proponent is actually the amendment in the original EC. The environmental clearance for the project has been issued by the Ministry vide letter dated 16<sup>th</sup> September, 2008 and the validity of the same has been completed in on 15.09.2018. The Committee deliberated the issues and mentioned that as per provisions of the EIA Notification, 2006 the validity of EC is for 07 years and can be extended for three years. In this instant proposal the validity of EC of 2008 has already been expired.

The Committee has therefore not recommended the proposal and desired to **RETURN** in its present form.

**Agenda No. 18.46**

**Expansion of Grain/Molasses based distillery from 60 KLPD to 150 KLPD at Village Lauhka, Tehsil and District Tarn Taran, Punjab by M/s RANA SUGAR LIMITED- Amendment in Environmental Clearance**

**[IA/PB/IND2/145622/2020,IA-J-11011/175/2017-IA-II(I)]**

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated 1<sup>st</sup> March, 2019 to the project for Expansion of Grain/Molasses based distillery from 60 KLPD to 150 KLPD located at Village Lauhka, Tehsil and District Tarn Taran, Punjab in favour of M/s Rana Sugars Limited (Distillery Division).

The Project Proponent and their Consultant M/s J. M. Environet Pvt. Ltd. has made a detailed presentation through Video Conferencing (VC) on the salient features of the project. The project proponent has requested for amendment in the EC with the details are as under:

<b>S. No.</b>	<b>Para of EC issued by MoEFCC</b>	<b>Details as per the EC</b>	<b>To be revised/ read as</b>	<b>Justification/reasons</b>
1.	Para no. 5 and condition no. e	The total water requirement shall not exceed 900 cum/day proposed to be met from ground water source (360 cum/day) and surface water (540 cum/day). Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.	The total water requirement shall not exceed 900 cum/day proposed to be met from <b>ground water source (540 cum/day) and surface water (360 cum/day)</b> . Prior permission shall be obtained from the concerned regulatory authority/ CGWA in this regard.	The Superintending Engineer, Upper Bari Doab Canal Circle, Amritsar vide his letter no. 910-11/395-W dated 10.12.2019 stated that the department can provide the surface water to the extent of 360 m <sup>3</sup> /day i.e. only 0.14 cs/day on prevailing terms and conditions of the department. Thus, from surface PP can suffice only 360 m <sup>3</sup> /d water requirement. Company has already obtained the NoC from CGWA for ground water withdrawal of 588 m <sup>3</sup> /d and is complying to all the terms and conditions in the NoC.

The Committee during deliberations noted that :

(i). After grant of EC, the project proponent obtained Consent to Operate (Air) from Punjab Pollution Control Board vide letter no. CTOA/Varied/TRT/2019/11454580 and Consent to Operate (Water) was obtained from SPCB vide letter no. CTOW/Varied/TRT/2019/11454603. CTO (Air and Water) were issued dated 9th October, 2019 and valid till 8th October, 2020.

(ii). CGWA permission was renewed vide letter no. 21-4(70)/NWR/CGWA/2007-1365 dated 6<sup>th</sup> July, 2018 for 588 m<sup>3</sup>/day withdrawal of ground water.

(iii). The project site is located in the ground water over exploited area and matter is sub judice in Hon'ble NGT regarding ground water extraction in such areas.

(iv). Surface water permission was obtained from the Superintending Engineer, Upper Bari Doab Canal Circle, Amritsar vide letter no. 910-11/395-W dated 10.12.2019 for only 0.14 cs/day (360 m<sup>3</sup>/day). The Superintending Engineer, Upper Bari Doab Canal Circle, Amritsar vide his letter no. 910-11/395-W dated 10.12.2019 stated that the department can provide the surface water to the extent of 360 m<sup>3</sup>/day i.e. only 0.14 cs/day on prevailing terms and conditions of the department. Thus, from surface PP can suffice only 360 m<sup>3</sup>/d water requirement.

(v). PP has already obtained the NoC from CGWA for ground water withdrawal of 588 m<sup>3</sup>/d and is complying to all the terms and conditions in the NoC.

The Committee, after detailed deliberations, has suggested that the project proponent shall explore the option for utilization of surface water for the project. However, considering the prevailing situation and permission for ground water extraction available from CGWA, the Committee has **recommended** for amendment in the EC as proposed by the project proponent [ground water source (540 cum/day) and surface water (360 cum/day)] during the validity period of CGWA permission for ground water. However, in case the CGWA permission is not renewed the project shall operate with surface water or with reduced capacity. All other terms and conditions shall remain unchanged.

#### **Agenda No. 18.47**

#### **Installation of Diesel Hydro Treatment Unit (DHT) and associated facilities to produce 100% BS-IV HS in Maharashtra by M/s BHARAT PETROLEUM CORPORATION LIMITED - Amendment in Environmental Clearance [IA/MH/IND2/131676/2019, J-11011/21/2015-IA II (I)]**

The proposal is for amendment in the Environmental clearance granted by the Ministry vide letter dated, 13.08.2015 for the project Installation of Diesel Hydro

Treatment Unit (DHT) and associated facilities to produce 100% BS-IV HSD located at Mahul, Mumbai in favour of M/s. Bharat Petroleum Corporation Ltd.

The Project Proponent and their Consultant M/s Projects and Development India Ltd. has made a detailed presentation through Video Conferencing (VC) on the salient features of the project. The project proponent has requested for amendment in the EC with the details are as under;

<b>S. No.</b>	<b>Para of EC issued by MoEF&amp;CC</b>	<b>Details as per the EC</b>	<b>To be revised/ read as</b>	<b>Justification/ reasons</b>
1.	Subject & para 2.0:	Installation of DHT unit and associated facilities to produce 100% BS-VI HSD (capacity 2.6 MMTPA of DHT)	Installation of Kerosene Hydrotreater Unit (KHT) & Integration with Existing Diesel Hydrotreater Unit (DHT) along with revamp of DHT Unit to produce BS VI grade Fuel (Capacity 2.83 MMTPA of DHT)	To reduce Sulphur content in Kerosene from existing 2000 ppm to < 10 ppm is highly recommended to improve fuel quality in terms of Sulphur content and thus, improving overall environmental status

The EAC during deliberations noted that the environmental clearances issued in favour of M/s Bharat Petroleum Corporation Limited's Mumbai Refinery required CRZ clearance also. The same has been pointed by the EAC in its earlier meetings. However, the project proponent has neither mentioned anything regarding CRZ clearance nor presented before the Committee. The Committee noted that the present proposal for amendment also require CRZ clearance. The Committee has desired that the Ministry may examine the issues on CRZ and seek the comments of CRZ Division for further necessary action on the matter.

The Committee noted that the proposal for CRZ clearance for the project 'Upgradation of Kerosene Hydro Treating Unit (KHIT) integrated with Diesel Hydrotreter (DHT) and associated facilities' at BPCLs Mumbai Refinery, has not been considered by the EAC (CRZ) mentioning that setting up of new industries and expansion of existing industries is prohibited activity in the CRZ area as per the extant provisions of the CRZ Notification, 2011.

The Committee mentioned that the project, requiring CRZ and EC both, shall first

seek comments of CRZ Division based on the recommendations of the State CZMA and other studies under CRZ Notification, then place before the EAC for complete appraisal for both EC/CRZ angle.

The Committee also noted that the present proposal is not admissible in amendment category and shall require appraisal as a new case under expansion/modernization. **The Committee after detailed deliberations desired that the Ministry may examine the matter as appropriate first and seek the comments of CRZ Division.**

The proposal was accordingly **deferred** for the needful.

### **Consideration of Environmental Clearance**

#### **Agenda No. 18.48**

**Expansion of Pesticide Technical & Pesticide Specific Intermediates manufacturing unit by M/s Tagros Chemicals India Private Limited, located at Plot No. A4/1-2 & 4-5, SIPCOT Industrial Complex, village Pachayankuppam, Taluk Cuddalore, District Cuddalore (Tamil Nadu) - Consideration of Environment Clearance**

**[IA/TN/IND2/143725/2019, J-11011/453/2008-IA II (I)]**

The proposal is for environmental clearance to the project for expansion of Pesticide Technical & Pesticide Specific Intermediates manufacturing unit from 273.75 TPM to 983.75 TPM by M/s Tagros Chemicals India Private Limited in an area of 24,159.73 sqm at Plot No. A4/1-2 & 4-5, SIPCOT Industrial Complex, village Pachayankuppam, Taluk Cuddalore, District Cuddalore, Tamil Nadu.

The project proponent and their accredited consultant M/s Eco Chem Sales & Service and M/s Hubert Enviro Care System Pvt. Ltd. made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

During deliberations the EAC noted the following:

The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

**Details of existing and proposed products are as under:**



<b>S. No.</b>	<b>Product Name</b>	<b>Existing (TPM)</b>	<b>Total Proposed (TPM)</b>
1	DVAcid Chloride	15	280
2	Oxyclozanide	2	2
3	Quinapyramine Sulfate	1.75	1.75
4	MetaphenoxyBenzyl Alcohol	40	40
5	Alpha Cypermethrin	175	400
6	Cypermethrin		
7	Permethrin		
8	Betacyper		
9	Deltamethrin	20	35
10	Tefluthrin	-	15
11	Dimefluthrin	-	
12	Transfluthrin	-	
13	Meperfluthrin	-	
14	Fipronil	-	55
15	Piperonylbutoxide	-	35
16	Pyriproxyfen	-	20
17	Hexaconazole	20	100
18	Propiconazole		
19	Dicamba		
20	Tricyclazole		
21	Difenoconazole	-	
	<b>Sub Total</b>	<b>273.75</b>	<b>983.75</b>
22	Bio Pesticides*	-	-
	<b>Total</b>	<b>273.75</b>	<b>983.75</b>
1	Sodium Sulphite powder	200	-
2*	Ammonium Chloride	330	616
3*	HCl Solution (30%)	475	627
4*	Sodium Sulphite Solution	1350	2473
5*	AlCl3 Soln	125	219
6*	Mixture of Ortho and Para Bromo Toluene	95	-

<b>S. No.</b>	<b>Product Name</b>	<b>Existing (TPM)</b>	<b>Total Proposed (TPM)</b>
7*	Mixture of Ortho and Para Bromobenzene	-	189
8*	Spent Iso Propyl Alcohol and EDC	30	52
9*	2,2,2 - Trichloroethyl 3,3 Dimethyl-4-Chloro Cyclo butanone	-	87
10*	Spent Solvents	-	10
11*	Cupric chloride solution	-	141
12*	Sodium sulphate solution	-	622
13*	Spent sulphuric acid	-	824
14*	Deltamethrin second crop	-	26
15*	Potassium chloride	-	144
	<b>Grand Total</b>	<b>2645</b>	<b>6030</b>

*\*Note:*

1. The manufacturing facility has already obtained CTO for the manufacture of pesticide formulations. (F.0616CUD/OS/DEE/TNPCB/CUD/W/2018, dated 31/05/2018, F.0616CUD/OS/DEE/TNPCB/CUD/A/2018 Dated 31/05/2018)
2. Due to market situation, bio-pesticides was dropped from the proposed products.
3. In above product table, by product Sl No: 2 to 15 are coming under hazardous chemicals. But the unit is selling the by products in the market as a raw material.
4. In DV acid chloride, 50 MT as salable and remaining 230 MT is captive consumption.

The Terms of References (TORs) for the Project has been issued by the Ministry vide letter dated 26<sup>th</sup> August, 2019. Public hearing is exempted as per para 7(i), III. Stage (3), (i)(b) of the EIA Notification, 2006, and in accordance with the Ministry's OM dated 27<sup>th</sup> April 2018, as the project site is located in the notified industrial area.

Existing land area is 24,159.73 sqm. 9516.38 sqm more land will be required for proposed expansion. Industry has already developed greenbelt in an area of 33 % i.e., 11,126 sqm out of total area of the project. Additionally, green belt will be developed in 3 Acres of OSR Land. The committee suggested to develop green belt in 40% area. The project proponent was agreed with it. The estimated project cost is Rs. 319.82 Crores including existing investment of Rs 169.82 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.37.47 crores and the recurring cost (operation and maintenance) will be about Rs.13.03 crores per annum. Total Employment will be 913 persons as direct & 150 persons indirect after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, rivers etc. within 10 km distance. Uppanar River flows at 0.84 km in East.

Ambient air quality monitoring was carried out at 8 locations during August to October 2019 and the baseline data indicates the ranges of concentrations as: PM10 (50.44 – 63.26  $\mu\text{g}/\text{m}^3$ ), PM2.5 (27.16 – 33.61  $\mu\text{g}/\text{m}^3$ ), SO<sub>2</sub> (8.39 – 12.85  $\mu\text{g}/\text{m}^3$ ), NO<sub>2</sub> (18.77 – 27.67  $\mu\text{g}/\text{m}^3$ ). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.46644  $\mu\text{g}/\text{m}^3$ , 3.97335  $\mu\text{g}/\text{m}^3$  & 1.77604  $\mu\text{g}/\text{m}^3$  with respect to PM10, Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 1290 cum/day of which fresh water requirement of 794 cum/day and will be met from SIPCOT Water Supply. Effluent of 612 cum/day quantity will be treated through ETP, FO, RO, HPRO and MEE. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 6725 kVA including existing 3725 KVA and will be met from Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO). Existing unit has 3DG sets of 725, 1500 & 2000 kVA capacity, additionally 1x 1500 & 1x 3000 DG sets are used as standby during power failure. Stack (height-35m) will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 1x6, 1x8 & 1x12 TPH Coal and wood fired boiler. Additionally 1 x10 & 1 x25 TPH Coal fired boiler will be installed. Multi cyclone separator/ bag filter with a stack of height of 42 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm<sup>3</sup> for the proposed boilers.

Ministry had issued EC earlier, vide letter No. J-11011/453/2008-IA II(I); dated 31<sup>st</sup> October, 2008, to the project for expansion of pesticides unit from 145.75 to 273.75 and by product of capacity of 2645.00 TPM in favour of M/s Tagros Chemicals India Ltd.

The Certified report dated 2<sup>nd</sup> December, 2019 on the compliance status of the EC conditions has been forwarded by the Ministry's Regional Office at Chennai. The Committee deliberated the compliance report and found in order. The project proponent has proposed to allocate Rs. 7 crore towards CER activities.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will

be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i) Consent to Establish/Operate (CTE/CTO) for the project shall be obtained from the State Pollution Control Board (SPCB) as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, and the SPCB shall follow the mechanism/protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24<sup>th</sup> October, 2019 and forwarded by Central Pollution Control Board vide letter dated 25<sup>th</sup> October, 2019 to the SPCB's, while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13<sup>th</sup> June, 2011, as amended from time to time, shall be followed.
- (v) No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having LD<sub>50</sub><100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.

- (vi) To control source and the fugitive emissions (at 99.98%), suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (vii) Solvent management shall be carried out as follows:
  - (a) Reactor shall be connected to chilled brine condenser system.
  - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  - (c) Solvents shall be stored in a separate space specified with all safety measures.
  - (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  - (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  - (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (viii) Total fresh water requirement shall not exceed 794 cum/day and will be met from SIPCOT Water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (ix) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system
- (x) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (xi) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.
- (xiii) The company shall undertake waste minimization measures as below:-
  - (a) Metering and control of quantities of active ingredients to minimize waste.

- (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (c) Use of automated filling to minimize spillage.
  - (d) Use of Close Feed system into batch reactors.
  - (e) Venting equipment through vapour recovery system.
  - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiv) The green belt of at least 5-10 m width shall be developed in not less than 40% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. In addition, the project proponent shall develop greenbelt outside the plant premises also such as avenue plantation, plantation in vacant areas, social forestry etc.
- (xv) As committed, fund allocation for the Corporate Environment Responsibility (CER) shall be Rs. 7 crore. The CER plan shall be completed within two years and activities as proposed like drinking water supply to nearby villages etc. shall be implemented.
- (xvi) Safety and visual reality training shall be provided to employees.
- (xvii) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xviii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xix) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xx) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxi) Mitigating measures suggested during process safety and risk assessment studies shall be undertaken by advance model accordingly.

**Agenda No. 18.49:** Any other items with the permission of the Chairman.

**Agenda No. 17.9 of 17<sup>th</sup> EAC meeting held during February 25-27, 2020: Expansion of grain based distillery (45KLPD to 85 KLPD ) and Co-Generation power plant (1.3MW to 1.5 MW) at Plot no.1, Industrial Area Phase III, Sansarpur Terrace, Tehsil Jaswan Kotla, District Kangra, Himachal Pradesh, Jaswan (T), Kangra (Himachal Pradesh) by M/s Premier Alcobev Pvt Ltd. - Consideration of Environmental Clearance. [IA/HP/IND2/136785/2018, J-11011/550/2008-IA II(I)]**

The proposal is for environmental clearance to the project for Expansion of Grain based Distillery from 45 KLPD to 85 KLPD and Co-generation Power Plant from 1.3 MW to 1.5 MW by M/s Premier Alcobev Pvt. Ltd., in an area of 4.05 ha, located at Plot no. 1, Industrial area, Phase III, Sansarpur Terrace, Tehsil Jaswan, District Kangra, Himachal Pradesh.

The TOR was granted on 4th February, 2019. Public hearing has been conducted by the Himachal Pradesh State Pollution Control Board on 11th September, 2019 under the Chairmanship of Additional District Magistrate. The Ministry had issued EC earlier vide letter no. J-11011/550/2008-IA II (I) dated 20th September, 2010 to the existing 45 KLPD Grain based distillery in favour of M/s Premier Alcobev Private Limited. Certified EC compliance report has been forwarded by RO, MOEFCC, Dehradun vide letter no. 6-167/2010-RO(NZ)/639 dated 20th June, 2019 after conducting site visit was 10th April, 2019. No Litigation is pending against the proposal

The Proposal was appraised before the EAC in its meeting held during **February 25-27, 2020** wherein the EAC has **recommended** the proposal for grant of EC. It was suggested by the EAC **that the proposed expansion shall be for bio fuel only.**

Based on the recommendation of the EAC the proposal was processed by the Processing Division and further the Ministry has sought clarification w.r.t. recommendations of the EAC regarding the proposed expansion shall be for bio fuel only. In this context, the Ministry has forwarded the proposal to the EAC for further deliberation as there may be change of scope of the proposal. With the permission of the Chair the proposal is deliberated in the meeting.

It is mentioned that the Ministry has sought the comments of the EAC vide email dated 07.04.2020 on the issues related to amounts of change of Scope of the Project. In this context, the Chairman EAC, vide email dated 16.04.2020, has submitted its comments which, inter-alia, mentioned as below:

- (i) There has been a detailed deliberation on the subject of bio-fuel, rectified spirit and ENA products in the factory.

- (ii) M/s Premier Alcobev Pvt Ltd. proposed production of 5KLPD (ENA and RS) along with Bio-fuel. Committee did not accept the proposal due to the followings, (a) Bio fuel is highly explosive with flash point of MS and is governed by PESO guidelines needing license. Entire layout and tank ages and designs to be approved with minimum distances, (ii) Also, tank ages for the storage of bio fuel is under explosive act where as ENA and RS and ENA do not fall under explosive guidelines, (iii) Bio fuels are provided subsidy by GOVT. and EC granted under Biofuel notification needing no public hearing etc., (iv) Monitoring of the products falling under explosive guidelines and other products will be impossible and serious safety hazard.
  
- (iii) In view of above, decision of the Committee is absolutely correct and fair and is also in the interest of the project proponent as presently do not understand risk factors of catastrophe accidents.

The Committee, after detailed deliberation, **reiterate its earlier recommendation** for grant of EC, **that the proposed expansion shall be for bio fuel only.**

The meeting ended with thanks to the Chair.

\*\*\*\*



**All the projects recommended for grant of environmental clearance by the EAC shall also comply with the following General conditions:**

- (i)** The Project Proponent shall obtain all other statutory/necessary permissions/recommendations/NOCs prior to start of construction/operation of the project, which *inter alia* include, permission/approvals under the Forest (Conservation) Act, 1980; the Wildlife (Protection) Act, 1972; the Coastal Regulation Zone Notification, 2019, as amended from time to time, and other Office Memoranda/Circular issued by the Ministry of Environment, Forest and Climate Change from time to time, as applicable to the project.
- (ii)** The project proponent shall ensure compliance of 'National Emission Standards', as applicable to the project, issued by the Ministry from time to time. The project proponent shall also abide by the rules/regulations issued by the CPCB/SPCB for control/abatement of pollution.
- (iii)** The project authorities shall adhere to the stipulations made by the State Pollution Control Board/Committee, Central Pollution Control Board, State Government and any other statutory authority.
- (iv)** The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.
- (v)** No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (vi)** The energy source for lighting purpose shall be preferably LED based, or advance having preference in energy conservation and environment betterment.
- (vii)** The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- (viii)** The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 shall be followed.
- (ix)** The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall

conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

- (x)** The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and to utilize the same for process requirements.
- (xi)** Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- (xii)** The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (xiii)** The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented.
- (xiv)** The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (xv)** A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xvi)** The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (xvii)** A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (xviii)** The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (xix)** The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board

as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

- (xx)** The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at <https://parivesh.nic.in/>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- (xxi)** The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- (xxii)** This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

\*\*\*\*

**List of the Expert Appraisal Committee (Industry-2) members participated during Video Conferencing (VC) meeting**

<b>S. No.</b>	<b>Name and Address</b>	<b>Designation</b>
1.	Dr. J. P. Gupta	Chairman
2.	Shri R. K. Singh	Member
3.	Shri Ashok Agarwal	Member
4.	Dr. Y.V. Rami Reddy	Member
5.	Dr. Saloni Goel	Member
6.	Dr. J. S. Sharma	Member
7.	Shri S.C. Mann	Member
8.	Dr. Uma Kapoor, CGWA	Member
9.	Shri Dinabandhu Gouda, CPCB	Member
10.	Dr. R. B. Lal, Scientist 'E', MoEFCC	Member Secretary
<b>MoEFCC</b>		
11.	Dr Saurabh Upadhyay	Scientist 'C'
12.	Dr. E.P. Nobi	Research Officer

\*\*\*\*\*

**Approval Email of Chairman EAC**

**From:** jpglobalconsultinggroup@gmail.com  
**To:** "Additional Director MoEFCC Dr R B LAL" <rb.lal@nic.in>  
**Cc:** "Sujit Kumar Bajpayee" <sujit.baju@gov.in>  
**Sent:** Friday, April 24, 2020 4:29:20 PM  
**Subject:** Fwd: Draft Minutes of the 18th EAC (Industry 2 Sector) meeting held during April 13-15, 2020 (through Video Conferencing) after compilation of Comments

Dear Dr. R. B. Lal,

I am extremely pleased to express my appreciation on excellently drafted minutes by you and your team.

With kindest regards,

Dr. J P Gupta

----- Forwarded message -----

**From:** **JEEWAN PRAKASH GUPTA** <jpglobalconsultinggroup@gmail.com>  
**Date:** Fri, Apr 24, 2020 at 4:18 PM  
**Subject:** Re: Draft Minutes of the 18th EAC (Industry 2 Sector) meeting held during April 13-15, 2020 (through Video Conferencing) after compilation of Comments  
**To:** Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in>

Dear Dr. R. B. Lal,  
The minutes stand approved.

With kindest regards,

Dr. J P Gupta

On Fri, Apr 24, 2020 at 4:08 PM Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in> wrote:

Dear Sir,

I have included all the comments (Numaligarh Para deleted). Please find attached herewith copy of compiled minutes for your kind perusal please.

-----

Best Regards,

**(Dr. R. B. LAL)**

Additional Director/Scientist 'E' &

Member Secretary, Expert Appraisal Committee (Industry-2 Sector),  
Impact Assessment Division,

**Ministry of Environment, Forest and Climate Change,  
Government of India,**

Room No. V-304, 3rd Floor, Vayu Wing,

Indira Paryavaran Bhawan

Aliganj, Jor Bagh Road,

New Delhi - 110 003, INDIA Email- [rb.lal@nic.in](mailto:rb.lal@nic.in)

Telephone [+91-11-24695362](tel:+91-11-24695362); Fax [+91-11-24695362](tel:+91-11-24695362)

.....  
Save Environment & Biodiversity & Zero Effect to the Environment  
.....

