

**MINUTES OF THE 5<sup>th</sup> EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) MEETING HELD  
ON 27<sup>th</sup> MARCH, 2019**

**Venue: Brahmaputra Hall, First Floor, Vayu Wing, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-3**

**Time: 10:30 AM**

**5.1 Opening Remarks by the Chairman**

**5.2 Confirmation of the Minutes of the 4<sup>th</sup> Meeting of the EAC (Industry-2) held during 26-28 February 2019 at Indira Paryavaran Bhawan, New Delhi.**

The EAC, having taken note that no comments were offered on the minutes of its 4<sup>th</sup> meeting held during 26-28 February 2019 at New Delhi, confirmed the same.

**5.3 Environmental Clearance**

**Agenda No.5.3.1**

**PVA Emulsion & Synthetic Wood Adhesive manufacturing unit at 65-F & G Soham Industrial park, Part-2, Block No.312 & 313, Timba village, Daskroi, Bareja-Mahijda, Navapura, Dholkaroad, Ahemdabad (Gujarat) by M/s Ratankamal Industries- For Environmental Clearance**

**[IA/GJ/IND2/63130/2017, IA-J-11011/125/2017-IA-II(I)]**

The project proponent and accredited consultant M/s Rightsource Industrial Solutions Pvt. Ltd, gave a detailed presentation on the silent features of the project.

**5.3.1.1 During deliberations, the EAC noted the following: -**

The proposal is for environmental clearance to the project for setting up PVA Emulsion & Synthetic Wood Adhesive manufacturing unit of capacity 1200 TPM (PVA Emulsion-800 TPM & Synthetic Wood Adhesive- 400 TPM) by M/s Ratankamal Industries in an area of 1869 sqm at 65-F&G Soham Industrial park, Part-II, Block No.312 & 313, Village Timba, Tehsil Daskroi, Bareja-Mahijda, Navapura, Dholkaroad, Ahemdabad (Gujarat). Main raw materials include Vinyl Acetate Monomer, Dibutyl Phthalate, etc.

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

ToR for the project was granted on 7<sup>th</sup> July, 2017. Public hearing was conducted by the State Pollution Control Board on 30<sup>th</sup> June, 2018. The main issues raised during public hearing are related to air pollution and employment. The SPCB vide letter dated 1<sup>st</sup> December, 2017, has granted consent to establish under the Air Act, 1981 and the Water Act, 1974.

Total land area will be required for the proposed project will be 1869 sqm. Green belt will be developed in an area of 34.8% i.e 650 sqm of the total area of the project. The estimated project cost is Rs.1.25 crores. Total capital cost earmarked towards environmental pollution control

measures is Rs.17.5 lakhs and the recurring cost (O&M) will be about Rs.8 lakhs per annum. Total employment generation will be 15 persons as direct & 5 persons indirect.

There are no National parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. River Sabarmati flows at a distance of 1.60 km in South.

The total water requirement is estimated to be 34.11 cum/day which includes fresh water requirement of 31.11 cum/day, proposed to be met from ground water sources. Application in this regard has been submitted with CGWA. In view of highly polluted ground water, the Committee suggested not to use the ground water but to explore other resources. The project proponent has proposed to use DM water through private suppliers from tankers.

Effluent of 3 cum/day will be generated, of which 1 cum/day washings effluent generated will be reused back in the process. Effluent generated from boiler blow down and from cooling tower blow down will be treated through forced evaporation and reused for cooling tower makeup. Domestic effluent of 0.8 cum/day will be sent to septic tank followed by soak pit. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Total power requirement will be 30 kVA proposed to be met from GEB. DG sets of 30 kVA will be setup for power back up Stack (height 10m above the roof level of D.G. Set) will be provided as per CPCB norms to the proposed DG sets.

Briquettes fired boiler of 0.8 TPH capacity will be installed in the proposed unit. Multi cyclone separator with a stack height of 11 m will be installed to control the particulate emissions within the statutory limit of 115 mg/ Nm<sup>3</sup>.

Ambient air quality monitoring was carried out at 8 locations during October, 2017 to December, 2017 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (58.5 - 63.3 µg/ m<sup>3</sup>), PM<sub>2.5</sub> (23.4 - 26.3 µg/ m<sup>3</sup>), SO<sub>2</sub> (12.6 - 14.9 µg/ m<sup>3</sup>), NO<sub>x</sub> (19.9 - 23.6 µg/ m<sup>3</sup>), CO (0.39 -0.58 mg/ m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> would be 1.29 µg/ m<sup>3</sup>, 0.77 µg/m<sup>3</sup>, 1.02 µg/m<sup>3</sup>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The expenditure towards CER for the project would be 2% of the project cost as committed by the project proponent.

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.

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

- *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 already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*

- 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.
- 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. Fugitive emissions shall be controlled at 99.98% with effective chillers.
- No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- 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.
- 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) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
  - (d) Solvents shall be stored in a separate space specified with all safety measures.
  - (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  - (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- Total fresh water requirement (as DM water) shall not exceed 31.11 cum/day shall be met through private suppliers. No ground water shall be used.
- 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.
- 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.
- 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 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.
- 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.
- 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.
- The green belt of at least 5-10 m width shall be developed in nearly 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.
- At least 2% 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.

- 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.
- 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.
- Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- 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.5.3.2**

**Establishment of Pesticides industry and pesticide specific intermediates (excluding formulations) & Synthetic organic chemicals manufacturing unit at Plot No.FS-30, Addl Mahad MIDC situated in Raigad District, Maharashtra by M/s Prasol Chemicals Limited- For Environmental Clearance.**

**[IA/MH/IND2/87128/2017, J-11011/70/2017-IA. II (I)]**

The project proponent and accredited consultant M/s Aditya Environmental Services Pvt Ltd, gave a detailed presentation on the silent features of the project.

**5.3.2.1** During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up Pesticide Specific Intermediates (Capacity 13000 TPA) and synthetic organic chemicals (Capacity 16000 TPA) manufacturing unit by M/s Prasol Chemicals Private Limited (Formerly known as M/s Prasol Chemicals limited) in an area of 45,000 sqm at Plot No. FS-30, Additional MIDC Mahad, Tehsil Mahad, District Raigad (Maharashtra).

The details of proposed products/by-products are as under:-

<b>S. No.</b>	<b>Product</b>	<b>Capacity (MT/Year)</b>
<b>Products under activity 5(b) (Pesticide specificintermediate)</b>		
1	Diethyl Thiophosphoric Acid (DETA)	12,000 (Combined capacity will be manufactured on Campaign basis)
2	Diethyl Thiophosphoryl Chloride (DETC)	
3	Dimethyl Thiophosphoryl Chloride (DMTC)	
4	Dimethyl Phosphoramidothioate (DMPAT)	1000
<b>Activity 5 (b) Sub Total (1 to 4)</b>		<b>13,000</b>
<b>Products under 5 (f)(Synthetic Organic Chemicals)</b>		
<b>Dithiophosphates</b>		6,000 (Combined capacity will be
5	Zinc DialkylDithiophosphate (ZDDP)	

6	Dithiophosphate Alkyl Sodium	manufactured on Campaign basis)
7	Sodium Dithiophosphate	
	<b>Organic Acetates</b>	5,000 (Combined capacity will be manufactured on Campaign basis)
8	2-Methyl Adrohol Acetate	
9	Trimethyl Cyclohexyl Acetate	
10	Styrallyl Acetate	
11	Phenethyl Acetate	
	<b>Hydrogenated Products</b>	5,000 (Combined capacity will be manufactured on Campaign basis)
12	O-Methyl Cyclohexanol	
13	O-Methyl Cyclohexanone	
14	Styrallyl Alcohol	
15	3,3,5 Trimethyl Cyclohexanol	
16	3,3,5 Trimethyl Cyclohexanone	
	<b>Sub Total Activity 5 (f) (5 to 16)</b>	<b>16,000</b>
	<b>Grand Total (1 to 16)</b>	<b>29,000</b>

S. No.	By Product	Capacity (MT/Year)
1	Sodium Hydrogen Sulphide (NaHS)	8,500
2	Hydrochloric Acid (HCl)	19,500
3	Wettable Sulphur	3,000
4	Ammonium Hydroxide (NH <sub>4</sub> OH)	150
5	Sodium Sulphite Na <sub>2</sub> SO <sub>3</sub>	650
6	Dilute Acetic acid	3000
	<b>Grand Total By-products</b>	<b>34,800</b>

Synthetic organic chemicals industry located in notified industrial area is covered under category B of item 5(f) of the schedule to the EIA Notification, 2006 and requires appraisal at State level. However, in case of pesticides, only those units producing technical grade pesticides, are covered under category A of item 5(b). Pesticide specific intermediates, which are essentially synthetic organic chemicals, are not specifically mentioned either under category A or B of the items 5(f) & 5(b), and need to be looked into on case to case basis depending upon their proportion.

ToR for the project was granted on 10<sup>th</sup> July 2017. Public hearing is exempted as per the para 7.III.Stage (3)(i)(b) of the EIA Notification, 2006 in view of the project site located within the notified industrial area.

Total land area will be required for the proposed project will be 45,000 sqm. Green belt will be developed in an area of 33% i.e. 14,900 sqm of the total area of the project. The estimated project cost is Rs.50 crores. Total capital cost earmarked towards environmental pollution

measures is Rs.300 Lakhs & the Recurring cost (operation & maintenance) will be about Rs.175 Lakhs per annum. Total employment will be 60 persons as permanent & 40 persons as contract for proposed project.

There are no National parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. A Reserve forest is at a distance of 1 km in North- East. River Kal flows at a distance of 0.14 km in North to South.

The total water requirement is estimated to be 506 cum/day which includes fresh water requirement of 355 cum/day, proposed to be met from MIDC.

Effluent of 171 cum/day will be treated through ETP, RO & MEE. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Total power requirement will be 2400 kVA proposed to be met from Maharashtra State Electricity Distribution Company Limited (MSEDCL). Two DG sets of 400 kVA each will be setup for power back up. Stack will be provided as per CPCB norms to the proposed DG sets.

Two coal or furnace oil fired boiler of 10 TPH capacity each will be installed in the proposed unit. Mechanical dust collector/bag filter with a stack height of 46 m will be installed to control the particulate emissions within the statutory limit of 150 mg/Nm<sup>3</sup>.

Ambient air quality monitoring was carried out at 8 locations during March to May 2017 and baseline data indicates that ranges of concentrations of PM<sub>10</sub> (41.7 to 71.3 µg/m<sup>3</sup>), PM<sub>2.5</sub> (12.9 to 23 µg/m<sup>3</sup>), SO<sub>2</sub> (10.2 to 13.8µg/m<sup>3</sup>), NO<sub>x</sub> (12.6 to 17.8 µg/m<sup>3</sup>), CO (0.1 to 0.5 mg/m<sup>3</sup>), nMHC (BDL to 0.05 ppm) respectively. Ammonia & Benzene in the study area found to be BDL. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.1 µg/m<sup>3</sup>, 2.6 µg/m<sup>3</sup> & 0.1 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub>& NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The expenditure towards CER for the project would be 2% of the project cost as committed by the project proponent.

The project proponent has informed that the company name has been changed from Prasol Chemicals limited to M/s Prasol Chemicals Private Limited.

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.

**5.3.2.2** *The EAC, after deliberations and as resolved earlier in similar other cases, desired that the Ministry may take a comprehensive view on categorization of such projects, taking into consideration its observations in para 5.3.2.1 above.*

*In case of the project identified/decided to be covered under category A of item 5(b) of the schedule to the EIA Notification, 2006, environmental clearance may be granted, subject to compliance of terms and conditions as under: -*

- *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 already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. During emergency period waste water shall be sent to CETP.*
- *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.*
- *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.*
- *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. Fugitive emissions shall be controlled at 99.98% with effective chillers.*
- *No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having LD50<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.*
- *Coal less than 0.5% sulphur content shall be used in the boiler.*
- *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.*
- *Solvent management shall be carried out as follows:*
  - (i) Reactor shall be connected to chilled brine condenser system.*
  - (ii) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - (iii) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
  - (iv) Solvents shall be stored in a separate space specified with all safety measures.*
  - (v) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - (vi) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  - (vii) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed 355 cum/day to be met from MIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP/RO to meet the prescribed standards.*
- *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.*
- *Raw material storage shall not exceed more than one week.*
- *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.*
- *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 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.*
- *The company shall undertake waste minimization measures as below:-*
  - (i) Metering and control of quantities of active ingredients to minimize waste.*
  - (ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*

- (iii) Use of automated filling to minimize spillage.
- (iv) Use of Close Feed system into batch reactors.
- (v) Venting equipment through vapour recovery system.
- (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- The green belt of at least 5-10 m width shall be developed in nearly 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.
- As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 2% of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- Safety and visual reality training shall be provided to employees.
- 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.
- 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.
- Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- 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.
- Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.

### **Agenda No.5.3.3**

#### **Onshore Oil & Gas development drilling and production in District Bharuch (Gujarat) by M/s Mercator Petroleum Limited - For Environmental Clearance**

**[IA/GJ/IND2/71624/2017, IA-J-11011/576/2017-IA-II(I)]**

The project proponent and accredited consultant M/s Kadam Environmental Consultant, gave a detailed presentation on the silent features of the project.

**5.3.3.1** During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for onshore development and production of oil & gas from wells by M/s Mercator Petroleum Limited (in Block CB-ONN-2005/9, District Bharuch (Gujarat). The project involves development drilling of 15 wells and conversion of two existing exploratory wells (Jyoti-1 & Jyoti-2) to development/production wells through appropriate work over jobs and Early Production System (EPS) near Jyoti-1 well site.

Products and capacity will be as under:

<b>Product</b>	<b>Proposed production</b>
Crude Oil	6500 BOPD
Natural Gas	1 MMSCFD

The project/activity is covered under category A of item 1(b) 'Offshore and onshore oil and gas exploration, development & production' of schedule to the Environment Impact Assessment (EIA)

Notification under category 'A' and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

Land requirement will be ~ 110 m X 110 m for each proposed well. Green belt will be developed in an area of 33% area out of total area of the project. The estimated project cost is Rs.200 crore. The one-time expenditure for environmental management and mitigation is estimated to be approx. Rs.1, 12, 20,000 per well and the recurring cost (O&M) will be about Rs.20,50,000 per annum.

There are no National parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. River Narmada and Bhuki is flowing through the block.

The standard ToR for the project was granted on 26<sup>th</sup> January, 2018. Public hearing for the project has been conducted by the SPCB on 12<sup>th</sup> July, 2018. The main issues raised during public hearing are related to road construction, CSR and employment.

Total water requirement is 40 cum/day/well proposed to be met from ground water.

Effluent of 5 cum/day will be sent to CETP/solar evaporation pit. Domestic effluent will be sent to septic tank followed by soak pit. During production waste water generation will be 1050 cum/day which will be treated in adequate sized ETP and treated water will be re-injected in well at 1000 m below the ground level.

DG set of 440 kVA (3 Nos in use and one standby) capacity will be required. Stack will be provided as per CPCB Norms to the proposed DG sets. At production facility power of 650 kVA will be sourced through DGVCL (Daksin Gujarat Vij Company Limited), emergency power (DG set) back up will be kept as 770 kVA.

The proposed activity is for Onshore Oil & Gas development drilling and production hence, no boiler will be required.

Ambient air quality monitoring was carried out at 11 location during winter season 2017-18 and baseline data indicates that ranges of concentration of PM10 (60.0  $\mu\text{g}/\text{Nm}^3$  to 71.0  $\mu\text{g}/\text{Nm}^3$ ), PM 2.5 (19  $\mu\text{g}/\text{Nm}^3$  to 27  $\mu\text{g}/\text{Nm}^3$ ), SO<sub>2</sub> (8.4  $\mu\text{g}/\text{Nm}^3$  to 11.8  $\mu\text{g}/\text{Nm}^3$ ) and NO<sub>x</sub> (15.6  $\mu\text{g}/\text{Nm}^3$  to 19.4  $\mu\text{g}/\text{Nm}^3$ ). AAQ modeling study for point source emission indicates that the maximum incremental GLCs after the proposed project would be 0.96  $\mu\text{g}/\text{m}^3$ , 4.06  $\mu\text{g}/\text{m}^3$  and 0.96  $\mu\text{g}/\text{m}^3$  for SO<sub>2</sub>, NO<sub>x</sub> and Particulate matter. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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.

Earlier, the Ministry granted EC vide letter dated 26<sup>th</sup> September, 2012 in favour of M/s. Mercator Petroleum Limited for exploratory drilling (Onshore) for Oil and Gas in Block CB-ONN-2005/9 in Taluka Bharuch, District Bharuch and Taluka Karjan, Vadodara (Gujarat). The monitoring report on compliance status of above EC conditions issued by the Regional office at Bhopal vide letter dated 3<sup>rd</sup> December, 2018, was found to be satisfactory.

The expenditure towards CER for the project would be 0.75% of the project cost as committed by the project proponent.

**5.3.3.2** *The Committee, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under: -*

- *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 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.*
- *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.*
- *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.*
- *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.*
- *During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.*
- *The project proponent also to ensure trapping/storing of the CO<sub>2</sub> generated, if any, during the process and handling.*
- *Approach road shall be made pucca to minimize generation of suspended dust.*
- *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.*
- *Total fresh water requirement shall not exceed the proposed quantum of 40 cum/day/well proposed to be met from ground water.*
- *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.*
- *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.*
- *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.*
- *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.*
- *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.*
- *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.*

- *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.*
- *Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.*
- *The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.*
- *All the commitments made to the public during public hearing/consultation shall be satisfactorily implemented.*
- *At least 0.75% 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.*
- *Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.*
- *Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office.*
- *Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.*
- *An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to the Ministry's Regional Office.*
- *Company shall have own Environment Management Cell having qualified persons with proper background.*
- *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.*
- *On completion of drilling, the wells shall be suitably plugged obtain certificate from environment safety angle from the concerned authority.*

#### **Agenda No.5.3.4**

**Expansion of Distillery unit from 120 KLPD to 150 KLPD and co-generation Power plant 5MW at Sy No.18, 19 at Malapur Village, Mudhol Taluka, Bagalkot District (Karnataka) by M/s Nirani Sugars Ltd (Distillery Division)- For reconsideration of Environmental Clearance.**

**[IA/KA/IND2/81992/2009, J-11011/290/2017-IA-II (I)]**

The project proponent and accredited consultant M/s Environmental Health and Safety Consultants Pvt Ltd made a detailed presentation on the salient features of the project.

**5.3.4.1** The proposal was earlier considered by the EAC in its meeting held during 26-27 November, 2018. The Committee deferred the proposal, taking note of public hearing proceedings, observed that the waste/treated water from the distillery was being discharged outside and thus not resorting to Zero Liquid Discharge. That has reportedly affected agriculture in the surrounding area, and for that, concerns were raised during the public hearing.

Further, the Committee in view of fresh water consumption on higher side (10 kl/kl of alcohol), desired for clarifications/inputs in respect of the following: -

- Revised water balance plan with reduction in fresh water requirement at 6KL/KL of alcohol.
- Effluent treatment plan and commitment to achieve zero liquid discharge system
- Response and commitment on the issues raised during public hearing
- Plan for Corporate Environment Responsibility.

**5.3.4.2** The clarifications/inputs desired by the EAC and the response submitted by the project proponent are as under:

Clarifications/inputs desired by the EAC	Reply by the PP
Revised water balance plan with reduction in fresh water requirement at 6KL/KL of alcohol.	Revised water balance with reduction in fresh water requirement has been submitted
Response and commitment on the issues raised during public hearing	Response and commitment on the issues raised during public hearing has been submitted.
Plan for Corporate Environment Responsibility.	Detailed CER Action Plan has been submitted.

**5.3.4.3** During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of molasses based distillery from 120 KLPD to 150 KLPD along with 5 MW Power Plant by M/s Nirani Sugars Ltd in a total area of 29 acres at Sy No.18, 19 of Village Malapur, Taluk Mudhol, District Bagalkot (Karnataka).

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

The ToR for the project was granted on 11<sup>th</sup> August, 2017. Public hearing was conducted by the Karnataka State Pollution Control Board on 29<sup>th</sup> June, 2018.

Existing land area is 29 acres and no additional land shall be required. Greenbelt has already developed in an area of 33 % i.e., 9.57 acres out of total area of the project. The estimated project cost is Rs.126.93 crores (for expansion investment is Rs.30 crores) including existing investment of Rs.96.92 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.29.59 crores (Rs.29.51 crores already spent during 120 KLPD establishment) and the recurring cost (O&M) will be about Rs.54 lakhs per annum. Total employment will be 120 persons as direct and 30 persons indirect after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife corridors etc within 10 km. River Ghataprabha flows at a distance of 3.5 kms in S direction.

Total water requirement is estimated to be 1983 cum/day, including fresh water requirement of 900 cum/day proposed to be met from Ghataprabha River. The Permission for surface water withdrawal of 128 Mcft/year for a period of 5 years from Ghataprabha River has been obtained from the Karnataka Neeravari Nigam Ltd, Government of Karnataka vide letter dated 23<sup>rd</sup> October, 2017.

Effluent of 933 KLD will be treated through ETP and CPU. Spent wash will be concentrated and used as fuel in the incineration boiler. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Existing unit has 32 TPH capacity incineration boiler. No additional boiler will be required. ESP with stack height of 80 m installed to control the particulate emissions (within statutory limit of 115mg/Nm<sup>3</sup>).

Ambient air quality monitoring was carried out at 8 locations during October to December, 2017 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (44 µg/m<sup>3</sup>- 74 µg/m<sup>3</sup>), PM<sub>2.5</sub> (10 µg/m<sup>3</sup> - 25µg/m<sup>3</sup>), SO<sub>2</sub> (7.80 µg/m<sup>3</sup>-9.96µg/m<sup>3</sup>) and NO<sub>2</sub> (15.14 µg/m<sup>3</sup>-19.22µg/m<sup>3</sup>) respectively. AAQ modeling study for the point source emissions indicates that the maximum incremental GLC after the proposed project would be 2.2 µg/m<sup>3</sup>, 0.8 µg/m<sup>3</sup> and 1.3 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Earlier, the Ministry had issued EC vide letter dated 4<sup>th</sup> December, 2009 for 120 KLPD molasses based distillery in favour of M/s Nirani Sugars Limited. The monitoring report on compliance status of EC conditions has been forwarded by the Regional Office vide letter dated 24<sup>th</sup> January, 2018, after conducting site visit on 7<sup>th</sup> December, 2017. The same was found to be satisfactory.

The expenditure towards CER for the project would be 1 % of the project cost as committed by the project proponent.

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. Issues raised during the public hearing have been duly addressed by the project proponent. Additional information submitted by the project proponent found to be in order, suitably addressing observations of the Committee.

Consent to Operate for the present industrial operations issued by Karnataka State PCB vide letter dated 16<sup>th</sup> February, 2017 valid up to 30<sup>th</sup> June, 2021.

PESO has given approval for the site and layout plan of storage facilities (Petroleum storage Class A installation) vide letter dated 12<sup>th</sup> November, 2018 to enable the mandatory licence in Form XV as per the Petroleum Rules, 2002.

**5.3.4.4** *The Committee, after deliberations, was not convinced with the response to the issues raised during public hearing in respect of discharge of industrial effluent in the nearby agricultural fields. The Committee insisted for a status report in this regard from the State Pollution Control Board to satisfy the concerns of the affected people. The Committee also desired to know about the complaint case filed in district court and the order of Hon'ble NGT relating to industrial operations in violation of statutory norms.*

*The proposal was deferred.*

#### **Agenda No.5.3.5**

**Liquid Choline Chloride Manufacturing Unit at Survey No.1288, Village Lavad, Taluka Dehgam, District Gandhinaga (Gujarat) by M/s Happiness Pharmaceuticals Ltd - For reconsideration of Environmental Clearance**

**[IA/GJ/IND2/67932/2017, IA-J-11011/449/2017-IA-II(I)]**

**5.3.5.1** In view of the proposal already considered by the EAC (Industry-2) in its meeting held during 26-28 February, 2019, no fresh deliberations were made. The Committee desired that the Ministry should take the proposal forward based on its earlier recommendations.

**Agenda No.5.3.6**

**Expansion of pesticides, pesticide specific intermediates and synthetic organic chemicals manufacturing unit from 7430 to 16055 TPA at Plot No.3501-3515, 6301-6313 & 16 M Road/ B1, and Plot No.6008-6010, GIDC Industrial Estate Ankleshwar, District Bharuch (Gujarat) by M/s Deccan Fine Chemicals (India) Pvt Ltd - For reconsideration of Environment Clearance**

**[IA/GJ/IND2/84526/2008, J-11011/749/2008-IA II(I)]**

The project proponent and accredited consultant M/s Precitech Laboratories Pvt Ltd, made a detailed presentation on the salient features of the project.

**5.3.6.1** The proposal was earlier considered by the EAC (Industry-2) in its meeting held on 29-31 January, 2019. The EAC observed that some of the pesticides/chemicals mentioned in the list of products (existing/proposed) requiring environmental clearance, have been banned by the Ministry of Agriculture and Family Welfare Committee for their manufacture, import, formulation, transport, sell, use, etc. Even, some of the banned pesticides/chemicals, have been identified as those not requiring environmental clearance. The Committee deferred the proposal for want of additional information.

The details of information sought by the Committee and the reply submitted by the project proponent are as under:

Additional information sought by the EAC	Reply by the PP
Exclude banned pesticides/chemicals from the scope of the project, and to revise the proposal.	Triazophos, one of the 27 products proposed is banned by M/o Agriculture and Farmers Welfare vide notification dated 8 <sup>th</sup> August, 2018.  Manufacturing of Triazophos was stopped by the company and the product is excluded from the scope of the project.
Undertaking from the PP to the effect that none of the pesticides/chemicals presently manufactured or the proposed, is covered under banned category. That needs to be duly endorsed by the concerned regulatory authority and the fresh certificate of registration to be obtained.	The undertaking in this regard has been submitted and uploaded.  Consolidated Consent and Authorization from Gujarat Pollution Control Board has been amended in this line on 3 <sup>rd</sup> February, 2019 removing Triazophos from products list.
Some of the banned pesticides/chemicals have been identified as those not requiring EC.	Banned pesticides and chemicals (formulations) have been removed from the proposal.

**5.3.6.2** During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of pesticides, pesticide specific intermediates and synthetic organic chemicals manufacturing unit from 7430 to 15775 TPA by M/s Deccan Fine Chemicals (India) Pvt Ltd in an area of 76691 sqm located at Plot No.3501-3515, 6301-6313 & 16 M Road/ B1, and Plot No.6008-6010, GIDC Industrial Estate Ankleshwar, District Bharuch (Gujarat).

The revised details of products are as under:-

S. No.	Product	Quantity (TPA)	Category
1	Benfuresate	800	5(b) Pesticides
2	Flupicolide		5(b) Pesticides
3	Anilophos	300	5(b) Pesticides
4	Aclonifen	3400	5(b) Pesticides
5	Oxadiargyl		5(b) Pesticides
6	Pyridate	1500	5(b) Pesticides
7	Amicarbazone		5(b) Pesticides
8	Flucarbazone		5(b) Pesticides
9	Diuron		5(b) Pesticides
10	Deltamethrin	100	5(b) Pesticides
11	Flumethrin		5(b) Pesticides
12	Permethrin		5(b) Pesticides
13	N, 2-(1, 1-dimethyl-2-methyl sulfinylethyl) - N1-(2-methyl-4- (1, 2, 2, 2- tetrafluoro-1-(trifluoromethyl) ethyl) phenyl) phthalamide (SOD)	2000	5(b) Pesticide specific Intermediates
14	Dichlorohydroxyketone-NBA (DS 36)		5(b) Pesticide specific Intermediates
15	Dichlorooxime – NBE (DS 38)		5(b) Pesticide specific Intermediates
16	Dimethyl Dithiophosphoric Acid (DMTA)	800	5(b) Pesticide specific Intermediates
17	Para Benzoquinone (PBQ)	2800	5(b) Pesticide specific Intermediates
18	4-(2-Methoxy-ethoxy)-3-oxo-butyric acid ethyl ester (Methoxy AA)	2000	5(b) Pesticide specific Intermediates
19	5-Amino-N,N'-bis(2,3-dihydroxypropyl) isophthalamide (ABA HCl)		5(b) Pesticide specific Intermediates
20	2-Amino-5,8-dimethoxy-[1,2,4]triazol [1,5-C] pyrimidine (DAT)		5(b) Pesticide specific Intermediates
21	Azura 5		5(b) Pesticide specific Intermediates
22	Propiconazole	900	5(b) Pesticides
23	Tricyclazole		5(b) Pesticides

24	Fenbuconazole		5(b) Pesticides
25	Vulcuren	1175	5(f) Synthetic Rubbers
26	Vulkalent – E		5(f) Synthetic Rubbers
Total		15775	

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 EAC in the Ministry.

ToR for the project was granted on 25<sup>th</sup> July 2017. Public hearing is exempted as the project site is located inside the notified industrial area.

Existing land area is 76691 sqm. No additional land will be required for proposed expansion. Industry will develop greenbelt in an area of 27393 sqm covering 35.72% of total project area.

The estimated project cost is Rs.437.7crores. Total capital cost earmarked towards environmental pollution control measures is Rs.19.81 crores and the recurring cost (O&M) will be about Rs.12.96 crores per annum. Employment opportunity will be for 390 persons directly & 425 persons indirectly after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc within 10 km distance from the project site. Amla Khadi is flowing at a distance of 4.3 km in WSW direction.

Total water requirement will be 1631 cum/day, of which fresh water requirement of 1483 cum/day is proposed to be met from GIDC water supply.

Effluent of 976 cum/day will be generated after proposed expansion. The high TDS stream will be diverted to MEE & organic stripper. The MEE condensate along with other lean effluent streams like domestic, low COD/ low TDS process stream & plant washing water i.e. about 812 cum/day will be treated in in-house ETP. Total 825 cum/day will be discharged to the effluent management system provided by M/s Narmada Clean Technology (NCT) for final treatment and ultimate disposal to deep sea. Remaining 164 cum/day effluent generated from utility streams like boiler blowdown, cooling tower blowdown, DM plant & softener plant regeneration will be treated in RO system. Permeate from RO (148 cum/day) will be recycled as cooling tower makeup & 16 cum/day RO reject will be sent to MEE. Treated water of 13 cum/day from MEE shall also be sent to M/s NCT, making total effluent quantity to be 825 cum/day (812+13) for final treatment and ultimate disposal to deep sea

Power requirement after expansion will be 18000 kVA including existing 2000 kVA, which will be met from Dakshin Gujarat Vij Co. Ltd. Existing unit has one DG sets of 250 kVA capacity, additionally 10 DG sets of 1000 kVA capacity will be used as standby during power failure. Stack (height-33 m) will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 2x8 TPH steam boilers, two Captive Co-Gen Plants of 1.4 MW & 2.7 MW and Incinerator. Additionally, 2 x 25 TPH steam boilers will be installed. Natural gas will be used as fuel in boilers, Incinerator and Captive Co-Gen Plant. Stack (height-33 m) will be provided to the boilers.

The expenditure towards CER for the project would be 0.75% of the project cost as committed by the project proponent.

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. Additional information submitted by the project proponent also found to be satisfactory, and addressing the concerns raised by the Committee.

Earlier, the Ministry has granted EC vide letter dated 31<sup>st</sup> March, 2006 for expansion of Pesticide and Intermediate manufacturing unit and 8<sup>th</sup> December 2008 for proposed synthetic organic chemical products manufacturing unit in existing pesticide unit in favor of M/s Bayer Crop Science Ltd. The said EC was transferred in favour of M/s Deccan Fine Chemicals (India) Pvt Ltd vide letter dated 25<sup>th</sup> June, 2018. The monitoring report on compliance status of above EC conditions issued by the Regional office at Bhopal to the project proponent vide letter dated 4<sup>th</sup> June 2018 and was found to be satisfactory.

Consent to Operate for the existing capacity has been obtained from the State PCB vide letter dated 3<sup>rd</sup> November, 2018, which is valid up to 11<sup>th</sup> March, 2019. Further, amendment in CTO has been obtained vide letter dated 3<sup>rd</sup> February, 2019, dropping the product Triazophos.

**5.3.6.3** *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to the terms and conditions as under: -*

- *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.*
- *The treated effluent of 825 cum/day shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, for discharge into deep sea through the conveyance system of M/s Narmada Clean Technology.*
- *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.*
- *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.*
- *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.*
- *Asbestos structure shall be dismantled with utmost care and removed immediately from the unit. No asbestos containing products/materials shall be used.*
- *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.*
- *Solvent management shall be carried out as follows:*
  - (i) Reactor shall be connected to chilled brine condenser system.*
  - (ii) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - (iii) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
  - (iv) Solvents shall be stored in a separate space specified with all safety measures.*
  - (v) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - (vi) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*

- (vii) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- Total fresh water requirement shall not exceed 1483 cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
  - Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and organic stripper. Low TDS effluent stream shall be treated in ETP/RO to meet the prescribed standards.
  - 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
  - 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.
  - 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 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.
  - The company shall undertake waste minimization measures as below:-
    - (i) Metering and control of quantities of active ingredients to minimize waste.
    - (ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
    - (iii) Use of automated filling to minimize spillage.
    - (iv) Use of Close Feed system into batch reactors.
    - (v) Venting equipment through vapour recovery system.
    - (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
  - The green belt of at least 5-10 m width shall be developed in nearly 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.
  - As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 0.75% of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
  - Safety and visual reality training shall be provided to employees.
  - 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.
  - 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.
  - Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
  - 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.
  - Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.

### Agenda No.5.3.7

#### **Expansion of molasses based distillery from 35 KLPD to 65 KLPD by M/s Brima Sagar Maharashtra Distilleries Ltd at Shreepur, Taluka Malshiras, District Solapur (Maharashtra) - For reconsideration of Environmental Clearance**

**[IA/MH/IND2/67191/2017, J-11011/192/2017-IA-II (I)]**

The Project Proponent and the accredited Consultant M/s Dr. Subbarao's Environment Center, made a detailed presentation on the salient features of the project.

**5.3.7.1** The proposal was earlier considered by the EAC in its meeting held on 25-27 July, 2018 & 29-31 October, 2018. In response to observations of the Committee during the said meetings, details provided by the project proponent are as under:-

S. No.	Observations of the Committee	Reply by the PP
1	The earlier EC dated 14 <sup>th</sup> May, 2003 issued in favour of M/s Brihan Maharashtra Sugar Syndicate Ltd has not been transferred in the name of M/s Brima Sagar Maharashtra Distilleries Ltd due to submission of the proposal only on 9 <sup>th</sup> October, 2018. As such, admissibility of the proposal is yet to be established.	The EC has been transferred in the name of M/s Brima Sagar Maharashtra Distilleries Ltd on 28 <sup>th</sup> February, 2019.
2	For the alcohol production of 42.46 KLPD during FY 2015-16 i.e. higher than the sanctioned capacity of 35 KLPD, amounting to non-compliance of the existing EC conditions, the reply submitted by the project proponent was not found convincing and needs to be looked into by the Ministry for appropriate action.	<p>The industry does not have its own molasses and purchases molasses from the nearby sugar units for alcohol production.</p> <p>Sugar season in Maharashtra starts every year in November and the winter season is the period for maximum recovery of sugar which reflects in molasses.</p> <p>Due to high content of sugar from November to April, recovery of alcohol is very high. However, as yield of alcohol is high, the effluent concentration shall be low due to maximum extraction. Thus, there will not be any increase in pollution load.</p> <p>However, having noticed this fact, we have taken care to reduce the molasses quantity and maintained the production levels as per the EC conditions.</p> <p>The excess production was only 16-17%. The average production in the year 2015-16</p>

		taking into consideration 270 days of distillery working is 41.045 KLPD.  During the year 2016-17 & 2017-18, average alcohol production was 27.178 KLPD and 25.125 respectively, considering 270 days working of the Distillery.
3	Approval by PESO for the site and layout plan for Ethanol storage facilities from safety considerations.	Approval of PESO has been obtained vide letter dated 7 <sup>th</sup> March 2019.

**5.3.7.2** During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion of molasses based distillery from 35 KLPD to 65 KLPD by M/s Brima Sagar Maharashtra Distilleries Ltd in a total area of 30.60 ha at Shreepur, Taluk Malshiras, District Solapur (Maharashtra).

The details of products and capacity as under:

S. No	Product	Existing (KLPD)	Proposed (KLPD)	Total (KLPD)
1	Rectified Spirit	35	30	65
2	ENA	10	55	65
3	Malt Spirit	2.5	2.5	5
4	Grape Spirit	1.5	3.5	5
5	Ethanol	Nil	30	30
6	Potable Liquor	1600 cases/day	2400 cases/day	4000 cases/day

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

Terms of Reference (ToR) for the project was earlier granted on 31<sup>st</sup> January, 2014, followed by amendment on 8<sup>th</sup> May, 2015. Public hearing was conducted by the SPCB on 2<sup>nd</sup> December, 2016. Fresh ToR was issued on 31<sup>st</sup> July, 2017. The main issues raised during the public hearing are related to pollution due to spentwash, supply of drinking water etc.

Existing land area is 30.60 ha and no additional land is required for the proposed expansion. Industry has developed greenbelt in an area of 10 ha, covering 33% of total project area. The estimated project cost is Rs 48 crores including existing investment of Rs 6 crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 9.46 crore and the recurring cost (O&M) will be about Rs.0.722 crores per Annum. Employment opportunity will be for 200 persons directly and 200 persons indirectly 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. Bhima river is flowing at a distance of 5 Km in NE direction.

Total water requirement is estimated to be 1193 cum/day, out of which fresh water requirement of 417 cum/day will be met from Nira right bank canal.

Spent wash of 260 cum/day (4 KL/KL of Alcohol) will be generated and treated by bio-methanation followed by RO and bio-composting. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement after expansion will be 0.90 MW including existing 0.5 MW and will be met from cogeneration plant. Additionally, 2 x380 KVA DG sets will be used as standby during power failure. Stack height of 6.5 meters will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 10 TPH and 4 TPH Biogas/ Coal/ Pet coke/ Bagasse fired boilers. Multi cyclone separators with a stack of height of 35 m were installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm<sup>3</sup> for the boilers. No additional Boilers are required for the proposed expansion.

Ambient air quality monitoring was carried out at 8 locations during 1<sup>st</sup>March 2014 to 31<sup>st</sup>May 2014 and on 16<sup>th</sup>September, 2017 to 15<sup>th</sup>December, 2017. The latest baseline data indicates the ranges of concentrations as: PM<sub>10</sub>(32.07-59.27 µg/m<sup>3</sup>), PM<sub>2.5</sub> (17.71-36.64µg/m<sup>3</sup>), SO<sub>2</sub> (21.62-42.12µg/m<sup>3</sup>) and NO<sub>2</sub>(18.75-31.58µg/m<sup>3</sup>). AAQ modeling study for point source and Line Source emissions indicates that the maximum GLCs after the proposed project would be 0.82 µg/m<sup>3</sup>, 7.45 µg/m<sup>3</sup> and 8.56 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 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. Issues raised during the public hearing have been duly addressed by the project proponent. The additional information submitted by the project proponent also found to be satisfactory, and addressing the concerns raised by the Committee.

Ministry had earlier issued EC vide letter dated 14<sup>th</sup> May, 2003 in favour of M/s Brihan Maharashtra Sugar Syndicate Ltd for 35 KLD distillery, which was transferred in the name of M/s Brima Sagar Maharashtra Distilleries Ltd on 28<sup>th</sup> February 2019. The monitoring report on compliance status of EC conditions forwarded by the Regional Office vide their letter dated 10<sup>th</sup>August, 2016, was found to be satisfactory.

Regarding alcohol production @ 42.46 KLPD during FY 2015-16 i.e. higher than the sanctioned capacity of 35 KLPD, reply submitted by the project proponent was found to be convincing. The Committee, however, desired that the Ministry may take action as appropriate in the matter, as in similar other cases and as per the extant rules/regulations.

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

- *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.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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.*

- *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.*
- *Total fresh water requirement shall not exceed 417 cum/day proposed to be met from Nira right bank canal. Prior permission shall be obtained from the concerned regulatory authority.*
- *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.*
- *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 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.*
- *The company shall undertake waste minimization measures as below:-*
  - (i) Metering and control of quantities of active ingredients to minimize waste.*
  - (ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - (iii) Use of automated filling to minimize spillage.*
  - (iv) Use of Close Feed system into batch reactors.*
  - (v) Venting equipment through vapour recovery system.*
  - (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *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.*
- *All the commitments made regarding issues raised during the public hearing/consultation meeting shall be satisfactorily implemented.*
- *At least 2% 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.*
- *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.*
- *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.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *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.*
- *Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *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.*
- *CO<sub>2</sub> generated from the process shall be bottled/made solid ice and sold to authorized vendors.*
- *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.*

### **Agenda No.5.3.8**

**Manufacturing Active Pharmaceutical Ingredients from API intermediates by M/s Saiteja Drugs and Intermediates Pvt Ltd at Sy No. 543/A, 544/A, Village Seetavani Gudem, Mandal Bhoodan Pochampally, District Yadadri (Telangana) - For reconsideration of Environment Clearance**

**[IA/TG/IND2/65449/2017, J-11011/316/2017-IA-II(I)]**

The project proponent and their accredited Consultant M/s KKB Envirocare Consultants Pvt Ltd, made a detailed presentation on the salient features of the project

**5.3.8.1** The proposal was earlier considered by the EAC (Industry-2) in its meeting held on 26-28 February, 2018, and was deferred for want of certain clarification/inputs. The observations of the Committee and reply submitted by the project proponent are as under:

S. No.	Observations of the Committee	Reply submitted by the PP
1	Revision of the proposal for the project limited to manufacturing of APIs of 108 TPA (three products at a time @36 TPA) for the present.	Revised proposal has been submitted
2	Revised Form-1	Revised Form 1 has been submitted
3	Monitoring report on compliance status of the conditions stipulated in the EC dated 22 <sup>nd</sup> August, 2007	Report from the MoEF&CC RO Chennai issued vide letter dated 24 <sup>th</sup> July, 2018 has been submitted.
4	Addition of reservoir for raw water storage	Raw water storage of facility of 480 KL is proposed.

**5.3.8.2** During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Active Pharmaceutical Ingredients manufacturing from 18 TPA (any one product on campaign basis out of four products) to 108 TPA (any three products on campaign basis out of six products) by M/s Saiteja Drugs and Intermediates Pvt Ltd in a total area of 2.49 ha located at Sy No. 543/A, 544/A, Village Seetavanigudem, Mandal Bhoodan Pochampally, District Yadadri (Telangana).

The details of products are as under:

S. No.	Product	Existing (TPA)	Proposed (TPA)	Total (TPA)
<b>Existing</b>				

1	1-Acetyl-4-(4-HydroxyPhenyl) Piperzine	18	-	-
2	5-Cyano Phthalide	18	-	-
3	Cis-Bromo Benzoate	18	-	-
4	Cis-Tosylate	18	-	-
<b>Proposed</b>				
1.	Sildenafil Citrate	-	36	36
2.	Omeprazole	-	36	36
3.	Lansoprazole	-	36	36
4.	Pantoprazole	-	36	36
5.	Glimepiride	-	36	36
6.	Clopidogrel Hydrogen Bisulfate	-	36	36
<b>Any 3 products on campaign basis out of 6 products at a time</b>			<b>108</b>	<b>108</b>

The project/activity is covered under category A of item 5(f) 'Synthetic Organic chemical' of Schedule of Environmental Impact Assessment (EIA) Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 14<sup>th</sup> November, 2017. Public hearing was earlier conducted by the SPCB on 7<sup>th</sup> June, 2006.

Existing land area is 2.4897 ha. No additional land will be used for proposed expansion. Industry has developed greenbelt in an area of 0.825 ha (8250 sqm) covering 33.13 % of total project area. The estimated project cost Rs.18.38 crores including existing investment of Rs.14.82 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 3.56 crores including existing Rs. 0.96 crores and recurring cost (O&M) will be about Rs.2.71 crores per annum. Employment opportunity will be for 25 persons directly and 40 persons indirectly after expansion.

There are no National parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Musi River is flowing at a distance of 6 km in NW direction & Chinna Musi River is flowing at a distance of 2.3 km in SE direction.

Total water requirement is estimated to be 57.5 cum/day, which includes fresh water requirement of 46 cum/day proposed to be met from tanker supply.

Effluent of 13cum/day quantity will be treated through upgraded Effluent Treatment plant. There shall be no discharge of treated/untreated water outside the plant premises, and thus conforming to Zero Liquid discharge system.

Power requirement after expansion will be 650 HP including existing 150 HP, proposed to be met from Telangana State Power Distribution Corporation Limited (TSPDCL). Existing unit has one DG set of 62.5 KVA capacity, additionally 2 x 125 KVA DG sets are used as standby during power failure. Stack (height 7 m each) will be provided as per CPCB norms to the DG sets.

Existing unit has 1 lakh Kcal/hr Diesel fired Thermic Fluid Heater and additionally another 2 lakh Kcal/hr Diesel fired Thermic Fluid Heater is proposed. Existing unit has 1 TPH coal fired boiler. Additionally 3 TPH Coal fired boiler will be installed. Multi cyclone separator & bag filter with a

stack of height of 30 m will be installed for controlling the Particulate emissions within statutory limit of 115 mg/Nm<sup>3</sup>.

Ambient air quality monitoring was carried out at 9 locations during May 2017 and the baseline data indicates that ranges of concentrations as: PM<sub>10</sub> (32-54 µg/m<sup>3</sup>), PM<sub>2.5</sub> (19-29 µg/m<sup>3</sup>), SO<sub>2</sub> (BDL – 9.4 µg/m<sup>3</sup>) and NO<sub>2</sub> (6.2-14.1 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 0.409 µg/m<sup>3</sup>, 2.929 µg/m<sup>3</sup> and 1.735 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 unit was established in the year 2000 i.e. prior to EIA Notification, 2006 and thus not requiring prior EC. The Ministry, vide letter dated 22<sup>nd</sup> August, 2007, had granted EC to the expansion of bulk drugs/APIs manufacturing unit of capacity 108 TPA (any three products on campaign basis out of six products) in favour of M/s Saiteja Drugs & Intermediates Private Limited. However, the project could not be implemented. The monitoring report on compliance status of EC conditions forwarded by the Regional Office vide their letter dated 24<sup>th</sup> July, 2018, was found to be satisfactory, which categorically mentions about no activity started for the proposed expansion.

Consent to Operate for the existing products/utilities has been obtained from the Telangana PCB vide letter dated 23<sup>rd</sup> April, 2018, which is presently valid up to 31<sup>st</sup> January, 2023.

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

- *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 already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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.*
- *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.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *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. Fugitive emissions shall be controlled at 99.5% with effective chillers.*
- *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) *The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
  - (d) *Solvents shall be stored in a separate space specified with all safety measures.*
  - (e) *Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - (f) *Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*

- (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- Total fresh water requirement shall not exceed 46 cum/day proposed to be met from tanker supply. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
  - Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE. Low TDS effluent stream shall be treated in ETP/RO to meet the prescribed standards.
  - 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
  - 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.
  - 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 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.
  - 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 & dust should be avoided.
  - 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.
  - The green belt of at least 5-10 m width shall be developed in nearly 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.
  - All the commitments made regarding issues raised during the public hearing/consultation meeting shall be satisfactorily implemented.
  - As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 2.5% of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
  - Safety and visual reality training shall be provided to employees.
  - 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.
  - 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.
  - Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
  - 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.

**Item at Agenda No.5.3.9 was considered by the EAC with the permission of the Chair.**

**Agenda No.5.3.9**

**Expansion of molasses based distillery from 30 KLPD to 45 KLPD by M/s Karmaveer Shankarrao Kale Sahakari Sakhar Karkhana Limited (formerly known as M/s The Kopergaon Sahakari Sakhar Karkhana Limited) at Gautamnagar, Kolpewadi, Taluka Koparagaon, District Ahmednagar (Maharashtra) - For Environmental Clearance.**

**[Proposal No: IA/MH/IND2/53009/2009; File No. J-11011/690/2008-IA II (I)]**

The project proponent and their consultant M/s Dr. Subbarao's Environment Center, made a detailed presentation on the salient features of the project.

**5.3.9.1** During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project for expansion of molasses based distillery from 30 KLPD to 45 KLPD by M/s Karmaveer Shankarrao Kale Sahakari Sakhar Karkhana Limited in an area of 95 ha located at Gautamnagar, Kopelwadi, Taluka Kopergaon, District Ahmednagar (Maharashtra).

The Ministry has earlier granted EC vide letter dated 30<sup>th</sup> January, 2009 in favour of M/s The Kopergaon Sahakari Sakhar Karkhana Limited to the project for expansion of molasses based distillery from 30 KLPD to 45 KLPD at Gautamnagar, Kopelwadi, Taluka Koparagaon, District Ahmednagar (Maharashtra). The validity of the EC was extended up to 29<sup>th</sup> January, 2019 vide Ministry's letter dated 28<sup>th</sup> March, 2017.

The project proponent has reportedly completed 95% of the work with the existing EC (validity up to 29<sup>th</sup> January, 2019), but yet to obtain Consent to Operate and start the production. There is no increase in production, addition of land, utilities, etc. The project proponent has requested for consideration of the proposal under para 7(ii) of the EIA Notification, 2006 to complete the project and start the production.

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

The proposal has been submitted for consideration under para 7 (ii) of the EIA Notification, 2006 for consideration without any ToR, public hearing and EIA/EMP report.

Existing land area is 95 ha and no additional land is required for the proposed expansion. Industry has developed greenbelt in an area of 31.35 ha covering 33% of total project area. The estimated project cost is Rs.41crore. The capital cost earmarked towards environmental pollution control measures is Rs.35crore and the recurring cost (O&M) will be about Rs. 2.5 crores per annum. Employment opportunity will be for 130 persons directly and 200 persons indirectly 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. Godavari river is flowing at a distance of 4 Km in NW-SE direction.

Total water requirement is 500 cum/day, proposed to be met from Godavari right bank canal.

Effluent of 415 cum/day will be treated through MEE followed by incineration boiler to achieve Zero Liquid discharge.

Power requirement after expansion will be 1.2 MW, which will be met from proposed 1.5 MW TG Set attached to the incinerator boiler. Stack of 72 meters and ESP is provided for controlling the air emissions. DG sets of 675 KVA and 250 KVA will be used as standby during power failure. Stack height of 6.5 meters is provided as per CPCB norms to DG sets.

Incinerator boiler of 10 TPH along with 1.5 MW TG Set is installed to fulfill the steam and power requirement. ESP and Stack height of 72 meters is provided to control the particulate emissions to achieve the statutory limit of 150 mg/Nm<sup>3</sup>.

CO<sub>2</sub> from fermenter house shall be recovered and sold as by-product. Solid waste generated is yeast sludge of around 3 MT/Month from fermentation tanks shall be used as manure.

The project proponent has submitted the proposal for transfer of EC in the name of the present applicant on 4<sup>th</sup> November, 2015 and again in January, 2019, within the validity period of the EC.

**5.3.9.2** *The EAC, after deliberations and in exercise of the provisions contained in para 7(ii) of the EIA Notification, 2006, exempted the project from fresh EIA studies and public hearing, and recommended the project for grant of environmental clearance, with the same terms and conditions stipulated in the existing environmental clearance dated 30<sup>th</sup> January, 2009 granted in favour of M/s The Kopargaon Sahakari Sakhar Karkhana Limited.*

## 5.4 Any Other

### Agenda No.5.4.1

**Merger of EC of M/s Hemani Industries Limited (unit-3) & M/s Hemani Intermediates Pvt Ltd (unit-4) located at plot No. CH-5 & E-362, GIDC Dahej, Distt Bharuch (Gujarat) - For amendment in EC**

**[IA/GJ/IND2/63876/2010, J-11011/583/2010-IA II (I)]**

**5.4.1.1** The proposal is for merger of environmental clearance granted by the Ministry vide letter dated 30<sup>th</sup> April, 2012 to the project for expansion of pesticide technical and specialty chemicals in existing unit of M/s Hemani Industries Ltd (Unit-III) at plot no.CH-5, GIDC Estate, Dahej, District Bharuch (Gujarat) and the environmental clearance dated 10<sup>th</sup> January, 2018 granted in favour of M/s Hemani Industries Ltd (Unit-IV) for Pesticide Technical manufacturing unit at plot no. E-362, GIDC Estate, Dahej, District Bharuch (Gujarat).

**5.4.1.2** The project proponent has requested for merger of the environmental clearances with the details are as under;

S. No.	Point of EC issued by MoEFCC, New Delhi	Details as per the EC	To be revised	Justification/Reasons
1.	Merger of Unit-3 & Unit-4	Hemani Industries Ltd (Unit-III)	Hemani Industries Ltd (Unit-III & IV)	Units are adjoined, MOU of Hemani Industries Ltd is done,

		&Hemani Industries Ltd (Unit-IV).		So Hemani Industries Ltd need to merge of both units.
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**5.4.1.3** During deliberations, the EAC noted about the earlier environmental clearances granted by the Ministry to the above units, with the details as under:-

- (i) EC dated 25<sup>th</sup> October, 2008 to the project 'Pesticide Unit of capacity 620 TPM' located at Plot No.CH-5, GIDC Dahej, Taluka Vagra, District Bharuch (Gujarat) in favour of M/s Hemani Intermediates Pvt Ltd (Unit II),
- (ii) EC dated 30<sup>th</sup> August, 2012 to the project 'Expansion of Pesticides Manufacturing Plant from 620 TPM to 1862 TPM' located at Plot No.CH-5, GIDC Industrial Estate, Dahej, Taluka Vagra, District Bharuch (Gujarat) in favour of M/s Hemani Intermediates Private Limited,
- (iii) EC dated 10<sup>th</sup> January, 2018 to the project 'Setting up Pesticide Manufacturing Plant of capacity 900 TPM' located at Plot No.E-362, GIDC Estate, Dahej-I, Taluka Vagra, District Bharuch (Gujarat) in favour of M/s Hemani Intermediates Pvt Ltd (Unit-IV).

The instant proposal has been submitted by M/s Hemani Industries Ltd, without getting the said ECs transferred in their name. The Committee also noted that the project proponent has submitted misleading information regarding name of the company in the existing ECs, and desired that the Ministry may take appropriate action into the matter.

**5.4.1.4** *The EAC, after detailed deliberations, desired for information/inputs in respect of the following:-*

- *Transfer of EC dated 30<sup>th</sup> August, 2012 and 10<sup>th</sup> January, 2018 in favour of M/s Hemani Industries Ltd (the present applicant).*
- *Certified report on compliance status of the ECs dated 30<sup>th</sup> August, 2012 and 10<sup>th</sup> January, 2018 from the Regional Office of the Ministry,*
- *Comments of the Regional Office of the Ministry regarding location of the two units and feasibility of merger vis-a-vis environmental angle and monitoring.*
- *Addendum to the EIA report combining the production, raw materials and utilities.*
- *Technical justification for merger of ECs.*

*The proposal was deferred for the needful on the above lines.*

#### **Agenda No.5.4.2**

**Offshore and onshore oil and gas exploration, development & production at Village/PO Gopalpur, Near RajendraNath Polytechnic College, Gopalpur Saranga Road, Burdwan (West Bengal) M/s Essar Oil and Gas Exploration and Production Limited - For amendment in ToR**

**[IA/GJ/IND2/83297/2018, IA-J-11011/356/2018-IA-II(I)]**

**5.4.2.1** The proposal is for amendment in the Terms of Reference granted by the Ministry vide letter dated 29<sup>th</sup> November 2018 to the project for Test and Development Wells and Surface Facilities of Coal Bed Methane (CBM) in Block CB-ON/3, Mehsana CBM Block, located at Mehsana (Gujarat) in favour of M/s Essar Oil and Gas Exploration and Production Limited.

**5.4.2.2** The project proponent has requested for amendment in the ToR with the details are as under:

S. No	Para of ToR issued by MoEF&CC	Details as per the ToR	To be revised/ read as	Justification/ reasons
1	Second para	The standard ToR for the purpose of preparing Environment Impact Assessment report and Environment Management Plan for obtaining prior Environment Clearance is prescribed <b>with public consultation</b> as follows:	The standard ToR for the purpose of preparing Environment Impact Assessment report and Environment Management Plan for obtaining prior Environment Clearance is prescribed <b>without fresh public consultation</b> as follows:	<p>Environment Clearance for “Exploratory Drilling and Production of Oil and carrying out CBM R &amp; D Activity in the Block was issued vide MOEF Letter No. J-11011/56/2008 IA II (I) dated 4<sup>th</sup> February, 2010.</p> <p>However, due to lack of a Policy on simultaneous exploration and exploitation in India, EOGEP was not allowed for CBM Development.</p> <p>As per the New MOPNG notification dated 20<sup>th</sup> August 2018, EOGEP allowed to Explore and Exploit Unconventional Hydrocarbons (Coal Bed Methane) in existing block.</p> <p>It is pertinent to mention that the said EC already permits the CBM R&amp;D Activity in Mehsana.</p> <p>The present project will be Modernization of the activities already permitted under the EC granted in 2010.</p> <p>No significant difference/ changes been observed in the Environmental Baseline Data of the Project Area since 2008. Industrial Activity of the area and the site surroundings remain unchanged. Considering all these aspects there has not been any change in the Impact on the Local Public &amp; the Area involved.</p> <p>Therefore taking all these aspects into account and considering Section 7 (ii) of EIA Notification 2006 we would request MOEF&amp;CC to exempt Fresh Public Hearing for the Proposed CBM Project.</p>

**5.4.2.3** During deliberations, the EAC noted that there was substantive change in scope of work proposed now (due to increase in drilling wells and production of CBM) from that envisaged earlier

and for which EC was granted by the Ministry on 4<sup>th</sup> February, 2010. Further the said EC being more than 3 years old, and that too in the name of a different entity (M/s Essar Oil Ltd), the present proposal for amendment in ToR dated 29<sup>th</sup> November, 2018 may not be acceptable.

**5.4.2.4** *The EAC, after deliberations, was not inclined to accept the rationale for exemption from public hearing, and not recommended the proposal for amendment in the said ToR.*

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

<b>S. No.</b>	<b>Name</b>	<b>Designation</b>
1.	Dr. J. P. Gupta	Chairman
2.	Dr T K Joshi	Member
3.	Dr TudilIndrasen Reddy	Member
4.	Dr J S Sharma	Member
5.	Shri S C Mann	Member
6.	Sanjay Bisht	Member
7.	Shri. Dinabandhu Gouda	Member
8.	Shri S.K. Srivastava	Member Secretary

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