MINUTES OF THE 9th EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) MEETING HELD DURING 26-28 June, 2019

Venue: Indus Hall, Ground Floor, Jal Wing, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-3.

Time: 10:30 AM

9.1 Opening Remarks by the Chairman

9.2 Confirmation of the Minutes of the 8th Meeting of the EAC (Industry-2) held during 30-31 May, 2019 at Indira Paryavaran Bhawan, New Delhi.

The EAC, having taken note that no comments were offered on the minutes of its 8th meeting held during 30-31 May, 2019 at New Delhi, confirmed the same.

Day One: 26thJune 2019

9.3 Environmental Clearance

Agenda No. 9.3.1

Expansion of chlor-alkali plant–caustic soda and allied products at Survey Nos. 129/1, 129/2, 130/1A, 130/2A, 104 Part, 105/1, 209/1B, 209/2B, 209/3B, 210/1A, 210/2A, 210/3A, 210/1B, 210/2B, 210/3B, 214/1A, 214/1B, 214/2A, 214/4, 215/4A Village Kalapet, Taluk Oulgaret, District Puducherry (Puducherry) by M/s Chemfab Alkalis Limited - For Environmental Clearance

[IA/PY/IND2/95155/2019, J-11011/371/2007-IA II (I)]

The project proponent and their accredited consultant M/s Eco Chem Sales & Services, made a detailed presentation on salient features of the project

9.3.1.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Chlor-Alkali plant (Caustic soda and allied products) from 125 TPD to 200 TPD by M/s Chemfab Alkalis Limited in an area of 154248.035 sqm located at Survey No.129 and 130, Gnanananda Place, Village Kalapet, Taluk Oulgaret, District Puducherry (Puducherry).

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

S.No	Product	EC (F.No.J-11011/371/2007-IA II (I)) (valid till 15.08.2017) TPD	Existing capacity TPD (TPA) As per CTO	Proposed capacity TPD (TPA)	Total capacity TPD(TPA)
1	Caustic Soda (at a concentration of 33%, 48% and Flakes)	200	125 (45600)	75 (27400)	200 (73000)
By-products					

2	Chlorine	176	111 (40400)	65 (23088)	176 (63488)
3	Hydrochloric acid	76	50 (18250)	100 (36500)	150 (54750)
4	Hypo (Sodium hypochlorite)	12	8 (2950)	4 (1430)	12 (4380)
5	Barium/ Sodium Sulphate*	2	1.2 (450)	0.8 (280)	2 (730)
6	Hydrogen (Bottled) **Nm^3/Annum**	18000	11500 (4.2)	6500 (1.8)	18000 (6.0)
7	Soda ash	-	4 (1460)	Nil	4 (1460)
8	Sodium Sulphate	-	Nil	8 (2920)	8 (2920)

The project/activity is covered under category B2 of item item 4(d) 'Chlor-alkali industry' of the schedule to the EIA Notification, 2006. Due to absence of SEIAA/SEAC in Puducherry, the project requires appraisal/approval at central level in the Ministry.

As the project is considered under category B2, there is no requirement of ToR, public hearing and assessment of baseline environmental parameters.

Existing land area is 36.516 acres (154248.035 sqm). No additional land is required for the proposed expansion. Industry has developed greenbelt in an area of 95048.52 sqm (23.487 acres) covering 64.32% of total project area. The estimated project cost is Rs.60 crore. Total capital cost earmarked towards environmental pollution control measures is Rs.7.17 crore and the recurring cost (operation and maintenance) will be about Rs. 71.7lakh per annum. Employment opportunity will be for 240 persons directly and 160 persons indirectly

There are no National parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc located within 10 km distance. Bay of Bengal is located at 0.5 km (E) and Kuliveli lake is at 4.26 km (NNW) from the project site.

Total water requirement is estimated to be 1303 cum/day, which includes fresh water requirement of 986 cum/day, proposed to be met from Seawater Desalination plant or Treated sewage water from PWDRO plant. The unit has permission to draw 490 cum/day from the existing open/ dug wells.

Effluent of 12 cum/day will be treated through existing ETP, and the treated water shall be discharge to marine outfall.

Power requirement will be 25 MW, proposed to be met from Pondicherry Electricity Department. Existing unit has 1 x380 KVA&1 x750 KVA DG sets. Existing unit has 1 x 2.0 milion Kcal/Hr TFH and 1x2 MT/hr & 1x6 MT/hr Hydrogen/FO fired boilers. No additional DG set/boilers are required for the proposed expansion.

Ministry has issued EC earlier vide letter dated 16th August, 2007 to the project 'Expansion of Chlor Alkali Plant' in favour of M/s Chemfab Alkalis Limited. Later the validity of EC was extended till 15th august, 2017 vide letter dated 31st October, 2016. Monitoring report on compliance status of the EC conditions was forwarded by Ministry's Regional Office vide letter dated 8th December, 2017 (site inspection on 26 & 27th October, 2017).

9.3.1.2 *The EAC, after deliberations, asked for clarifications/inputs in respect of the following:-*

- *The project involves desalination plant, laying of intake pipeline and modification of existing pipeline for marine outfall. These facilities are proposed in CRZ areas and require prior clearance under the CRZ Notification, 2011/2019. The project proponent was asked to obtain recommendations of the State Coastal Zone Management Authority (SCZMA).*
- *Comprehensive Plan for Corporate Environment Responsibility.*
- *Risk assessment using advanced model and the proposed mitigation measures accordingly.*
- *Details of Court matter in NGT and the outcome, if any.*

The proposal was deferred for the needful.

Agenda No.9.3.2

Manufacturing of synthetic organic chemicals (Acrylate Polymers) at Survey No. 473 & 481, Borisana Village, Kadi Thol Road, Kadi, District Mehsana, Gujarat by M/s Corel Pharma Chem Pvt Ltd- For Environmental Clearance

[IA/GJ/IND2/65363/2017, IA-J-11011/313/2017-IA-II(I)]

The project proponent and their consultant made a detailed presentation on the salient features of the project.

9.3.2.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for Manufacturing of synthetic organic chemicals (Acrylate Polymers) by M/s Corel Pharma Chem Pvt Ltd in an area of 56,129sqm located at Survey No. 473 & 481, Village Borisana, Kadi Thol Road, Kadi, District Mehsana (Gujarat).

The details of products and capacity as under:

S. No.	Product	Production Capacity MT/Month	Name of raw material	Raw Materials Consumption MT/MT of product	Total raw Material Consumption MT/ Month
1.	Polymethacrylate dispersion	400	Methactylic acid	0.100	40
			Methyl methacrylate	0.050	20
			Ethyl Acrylate	0.150	60
			Water	0.700	280
	Total				**400**
2.	Polymethacrylate powder	200	Methactylic acid	0.500	100
			Methyl methacrylate	0.300	60
			Ethyl Acrylate	0.200	40
			Dimethylaminoethyl Methacrylate	0.002	0.4
			Water	2	400
	Total				**550**
3.	Polyacrylate powder (by solvent	400	Industrial Solvent (EA/Cyclo Hexane	0.008*	3.2*

	method)		EDC/MDC etc)		
			Acrylic Acid	1.0	400
	Total				**400**
4.	Polyacrylate powder (by aqueous method)	100	Methactylic acid	0.180	18
			Acrylic Acid	0.600	60
			Methyl Acrylate	0.020	2
			Divinyl Benzene	0.100	10
			Pottasium Carbonate	0.100	10
			Sodium Chloride	0.020	2
			Water	2.000	200
	Total				**302**
5.	Polyacrylate dispersion	600	Methactylic acid	0.120	72
			Acrylic Acid	0.050	30
			Ethyl Acrylate	0.150	90
			Butyl Acrylate	0.030	18
			Water	0.65	390
	Total				**600**
6.	Hydrogenated castor oil 400	200	Hydrogenated castor oil 400	1.000	200
	Total				**200**
7.	Hydrogenated castor oil powder	100	Hydrogenated castor oil 400	1.000	100
	Total				**100**

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 at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

The Terms of Reference (ToR) for the project was granted on 17thAugust, 2017. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 26th February, 2019. The main issues raised during the public hearing are related to environment management system, air pollution etc.

Land area available for the project is 56,129sqm. Industry will develop greenbelt in an area of 18,750sqm, covering 33 % of total project area. The estimated project cost is Rs. 20 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.41 lakhs and the recurring cost (operation and maintenance) will be about Rs.6.75 lakhs per annum. Employment opportunity will be for 220 persons.

There are National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, etc. within 10 km distance from the project site. Narmada riveris flowing at a distance of 2 km from the project site.

Total water requirement is estimated to be 129cum/day, which includes fresh water requirement of109cum/day, proposed to be met from Borewell.

Power requirement of 2000 KVAwill be met from UGVCL. Unit will install DG sets of 250 KW& 500, with stack height of 5 m.

Ambient air quality monitoring was carried out at 8 locationsduring November, 2017 to 31January, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (60-78

µg/m^3), PM2.5 (30-38 µg/m^3), SO2 (10-18 µg/m^3) and NO2 (17-32 µg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 78.00µg/m3,18.00 µg/m^3 and 32.01µg/m^3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

9.3.3.2 *The EAC, after deliberations, took serious note on the inconsistency in the data presented by the project proponent and discrepancy in the information provided, asked for clarifications and inputs in respect of the following:-*

- *Details of products and capacity vis-à-vis the items of the EIA Notification, 2006.*
- *Additional one month baseline data and prediction for air quality to be carried out by recognized labs/institution.*
- *Details of different pollution control measures and detailed justification for their efficacy and adequacy.*
- *Revised water balance and permission for ground water withdrawal.*
- *Details of effluent treatment plan/scheme as to achieve ZLD.*
- *Issues raised during public hearing and reply.*
- *Original analysis reports of AAQ monitoring & Modelling results of GLC submitted.*

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

Agenda No. 9.3.3

Establishment of Molasses / Grain based distillery (unit - 2) having capacity 160KLD molasses based or 120.0 KLD molasses based + 40.0 KLD Grain based distillery at village: Bhikki, Dhandheda, Sikhreda, Tehsil & District Muzaffarnagar (UP) By M/s Triveni Engineering and Industries Ltd-For Environmental Clearance

[IA/UP/IND2/72081/2018, IA-J-11011/14/2018-IA-II(I)]

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

9.3.3.1 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for Setting up Molasses/Grain based distillery of 160 KLD (molasses-160 KLD or molasses-120 KLD + Grain-40 KLD) by M/s Triveni Engineering & Industries Ltd (Unit-2) in an area of 124700 sqm located at Village Bhikki, Dhandheda, Sikhreda,Tehsil & District Muzaffarnagar (UP). The project also involves installation of 7 MW Co-generation power plant.

The details of proposed products are as under:-

Product	Quantity	Mode of transport of product
Distillery (Rectified Spirit/Extra Neutral Alcohol/Absolute Alcohol)	160 KLD	Road / Tankers
Co - gen Power	7.0 MW	-

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

Standard Terms of Reference for the project was issued on 10th February 2018. Public Hearing

for the proposed project has been conducted by the State Pollution Control Board on 27thDecember, 2018. The main issues raised during the public hearing are related to road construction, air pollution, water pollution, fly ash disposal and employment in the local area.

Land area available for the project is 124700 sqm. Industry will develop greenbelt in an area of 41200 sqm, covering 33 % of total project area. The estimated project cost is Rs. 200 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 56 crores and the recurring cost (operation and maintenance) will be about Rs. 3.20 crores per annum. Employment opportunity will be for 80 persons directly and 68 persons indirectly.

There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Kali nadi is flowing at a distance of 9.9 km in west direction.

Total water requirement for molasses based operation is estimated to be 3584 cum/day, which includes fresh water requirement of 960 cum/day (6KL/KL of alcohol), proposed to be met from ground water. During molasses/grain based operation, total water requirement shall be 3408 cum/day, which includes fresh water requirement of 944 cum/day (5.9 KL/KL of alcohol), proposed to be met from ground water. It has been now informed that the fresh water requirement will be further reduced and now for complete molasses based operations will be 800 cum/day and for molasses/grain based operation will be 796 cum/day. The NOC has been accorded by the CGWA vide letter dated 12th March, 2019 for withdrawal of 427680 cum /year.

Spent wash generated during molasses based operation of 1080 cum/day will be treated through concentration in MEE, and concentrate from MEE will be incinerated in Slop fired boiler of 60 TPH capacity. Spent wash generated in grain based operation will be treated and concentrated in Multi-effect evaporators to form a thick (protein) syrup and mixed with the wet cake DWG. DDGS (Distillers Dried Grains with solubles) of 18 TPD will be sold. Other effluents will be treated in Condensate Polishing Unit and treated water from all sources will be reused in the plant.

Power requirement is estimated to be 2725 KW. Two DG sets of 1000 KVA & 500 KVA capacity shall be used as standby during power failure with stack height of 6m.

Slop fired boiler of 60 TPH capacity will be installed. Bag filter with a stack of height of 60 m will be installed to controlthe particulate emissions within the statutory limits. Carbon Di Oxide of 120 TPD generated in the process shall be recovered and sold in the market. Ash (67.5/59.3 TPD) shall be mixed with fermenter sludge and utilized as manure due to its high potash content.

Ambient air quality monitoring was carried out at 8 locations during January 2018 to March 2018 and the baseline data indicates the ranges of concentrations as: PM_{10} (56.4 – 89 µg/m3), $PM_{2.5}$ (32.7 – 51.4 µg/m3), SO_2 (10 – 24.8 µg/m3) and NO_2 (14 – 26.4 µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.23µg/m^3, 0.48 µg/m^3, 1.23 µg/m^3 and 1.04 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards.

The expenditure towards CER for the project would be 5% of the project cost as committed by the project proponent. In view of the issues/concerns raised during public hearing, the Committee stressed for improvement of roads and development of storm water drainage to be taken up on priority as a part of CER.

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 public hearing have been properly addressed by the project proponent.

9.3.3.2 *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 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.*
- *Concentrated spent wash shall be incinerated and not to be released in open space.*
- *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.*
- *Odour shall be prevented at the source and effective odour management scheme shall be implemented.*
- *Total fresh water requirement during complete molasses based operation shall not exceed 800 cum/day, and during molasses/grain based operation shall not exceed 796 cum/day, proposed to be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *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 5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Priority shall be given for construction/repair of the village roads.*
- *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 stored 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_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*

Agenda No. 9.3.4

Expansion of Molasses based distillery from 120 KLPD to 140 KLPD by modernization and efficiency improvement along with installation of incineration boiler and 6.5 MW Co-generation Power plant at village Jawaharpur, Tahsil Misrikh, District Sitapur (Uttar Pradesh) by M/s Dalmia Chini Mills Distillery Unit- For Environmental Clearance

[IA/UP/IND2/98239/2019, J-11011/341/2006-IA-II (I)]

The project proponent and their accredited consultant M/s J M EnviroNet Pvt Ltd made a detailed presentation on the salient features of the project and informed that:

9.3.4.1 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for expansion of Molasses based distillery from 120 KLPD to 140 KLPD by modernization and efficiency improvement by M/s Dalmia Chini Mills, Distillery Unit - Jawaharpur (A unit of Dalmia Bharat Sugar and Industries Limited) in an area of 20.23 ha located at Village Jawaharpur, Tehsil Misrikh, DistrictSitapur (Uttar Pradesh). The project also involves installation of 6.5 MW Co-generation Power Plant.

The details of products and capacity as under:

S. No.	Product	Existing	Proposed	Total
1.	Distillery (Ethanol/Rectified Spirit/Extra Neutral Alcohol)	120 KLPD	20 KLPD	140 KLPD
2.	Co-generation Power Plant	---	6.5 MW	6.5 MW

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

The proposal has been submitted for consideration as per the provisions contained in para 7 (ii) of the EIA Notification, 2006.

Existing land area is 20.23 ha (50 acres). No additional land will be required for proposed

expansion. Industry has developed greenbelt in an area of 6.68 ha covering 33% of total project area. The estimated additional project cost is Rs. 80 crores. Employment opportunity will be for 69 persons directly and 10 persons indirectly after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site. Saunri nadi is flowing at a distance of 7 km (S) and Sarayan river is flowing at a distance of 8.5 km (ENE).

The existing fresh water requirement of 1302 cum/day was proposed to be reduced to 1221 cum/day after modernization. Due to process improvement and rationalization, the same will be further reduced to 700 cum/day for distillery and 200 cum/day for cogeneration power plant, which will be met from ground water.

Effluent of 1252 cum/day will be treated through state of art CPU of capacity 1500 cum/day and treated water will be reused in the plant. 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 2.6 MW including existing 1.4 MW, proposed to met met from Co-generation Power Plant. Existing unit has 1 DG set of 1000 KVA which is used as standby during power failure, and no additional DG set is proposed.

There is no boiler in the existing distillery unit. Incineration boiler of 50 TPH shall be installed for the treatment of spent wash. Bag Filter with a stack height of 84 m will be installed to control the particulate emissions within the statutory limits. Concentrated spent wash will be burnt in incineration boiler with auxiliary fuel (bagasse/ biomass/ coal).

CO_2 generated during the fermentation process will be collected. Sludge recovered from decanter process shall be used with press mud to make bio-compost within existing facility. Fly ash generated from the boiler will be utilized for in house brick manufacturing/ soil amendment or sold to fertilizer manufacturers. Used oil & grease generated from plant machinery/gear boxes as hazardous waste will be given to authorized recyclers.

There shall be no increase in environmental parameters, effluent load due to the proposed project.

Earlier the Ministry has issued environmental clearance vide letter dated 4th December, 2006 to the project for 120 KLD Distillery unit in favour of M/s Ramnagar Chini Mills Pvt Ltd, and amended was granted on 23rd December, 2008 in favour of M/s Dalmia Chini Mills. Monitoring report on compliance status of the EC conditions forwarded by the Ministry's Regional Office at Lucknow (after conducting site visit on 13th February, 2019) vide letter dated 1st March, 2019.

The expenditure towards CER for the project would be 5% of the project cost as committed by the project proponent.

Presently, spent wash generated is concentrated in MEE and then used for bio-composting along with press mud. The proposed expansion is 16.66% by modernization and efficiency improvement. There is no additional land, water, steam, storage and machinery. The expansion is achieved by improvement in fermentation technology.

PESO has given approval for the site and layout plan of storage facilities (Petroleum storage Class A installation) vide letter dated 5th September, 2016 to enable the mandatory licence in Form XV as per the Petroleum Rules, 2002.

Consent to Operate for the existing industrial operations have been obtained from UP PCB vide letter dated 21st December, 2017 which is presently valid up to 31st December, 2019.

9.3.4.2 *The EAC, after deliberations, recommended the project for grant of environmental clearance, as per the provisions contained in para 7(ii) of the EIA Notification, 2006, exempting ToR, fresh EIA and public hearing, and subject to compliance of terms and conditions as under:-*

- *Prior approval shall be obtained from the Petroleum & Explosives Safety Organization (PESO) for the site and layout plan submitted to this Ministry along with the proposal for EC. In case of any change therein post PESO approval, the proposal shall require fresh appraisal by the sectoral EAC.*
- *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.*
- *Concentrated spent wash shall be incinerated and not to be released in open space.*
- *Odour shall be prevented at the source and effective odour management scheme shall be implemented.*
- *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 900 cum/day proposed to be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *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:-*
  (j) 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.
  (w) 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.*
- *At least 5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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 stored in silos or in covered areas to prevent dust pollution and other fugitive emissions. Hazardous chemicals shall not be stored for more than three days in the premises.*
- *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_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*

Agenda No. 9.3.5

Expansion of Sugar Plant Cane Crushing Capacity from 10,000 TCD to 15,000 TCD & Cogeneration Plant Power Generation Capacity from 45 MW to 80 MW, Molasses Based Distillery Plant Capacity from 60 KLD to 120 KLD, installation of 4.0 MW Cogeneration Power Plant Based on Spent wash incineration Boiler at Beerangaddi & Hunshyal P.G. Villages, Gokak Taluka, Belagavi District (Karnataka) by M/s Satish Sugars Limited- For reconsideration of Environmental Clearance

[IA/KA/IND2/32579/2012, J-11011/341/2012-IA II (I)]

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

9.3.5.1 The proposal was earlier considered by the EAC in its meetings held on 8-9 December, 2016 and 29-31 January, 2019. The additional information desired by the Committee in the last meeting and the response of the project proponent is as under:

S. No	Information desired by the EAC	Reply by the PP
1	Baseline data collected during Dec, 2013 to Feb, 2014 and is more than three years data. Hence insisted for fresh baseline data to be collected for one month	Fresh baseline data collected and enclosed in the revised EIA report
2	Incremental concentration of SO_2 on higher side (21.72 $\mu g/m^3$), which was reported to be due to the use of coal in the boilers. Hence it is insisted not to use coal as fuel	Now, fresh air quality modeling studies have been carried out using bagasse only fuel in the cogeneration boiler and slop and bagasse as fuel in the incineration boiler. Maximum GLC Concentration of SO_2 with mitigation measures observed to be 1.1 $\mu g/m^3$. The study details are enclosed in the EIA report.

9.3.5.2 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for Expansion of Molasses based Distillery from 60 KLPD to 120KLPD, Sugar cane crushing capacity from 10,000 TCD to 15,000 TCD, Co-generation plant power capacity from 45 MW/Hr to 80 MW/Hr by M/s Satish Sugars Ltd in a total area of 64.4 ha located at Villages Beerangaddi and Hunshyal PG, Taluk Gokak, District Belagavi (Karnataka). The project also involves installation power plant of 4 MW/Hr based on spent wash incineration boilers.

The details of products and capacity asunder:

S.No	Product	Existing	Proposed	Total
1	Sugar cane crushing Capacity (Sugar)	10000 TCD (1200 TPD Sugar production)	5000 TCD (600 TPD sugar production)	15000TCD (1800 TPD- Sugar production)
2	Power	45 MW	35 MW + 4 MW from spent wash incineration boiler)	84 MW/Hr (80 MW/Hr cogeneration + 4 MW/Hr from spent wash incineration boiler)
3	Distillery (Ethanol/ ENA/ RS)	60 KLPD	60 KLPD	120 KLD

The project/activity is covered under category A of item 5 (g) 'Molasses based distilleries', item 5 (j) 'Sugar Industry' and item 1 (d) 'Thermal Power Plant' 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 30th April, 2013. Public hearing was conducted by the SPCB on 24th March, 2015. The main issues raised during the public hearing are related to proper management and development of roads and CSR activities.

Existing land area is 64.4 ha. No additional land is required for the proposed expansion. Industry has developed greenbelt in an area of 20.60 ha, covering 32% of the total project area. The estimated project cost is Rs.691.96 crores including existing investment of Rs 425.96 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.45 crores and the recurring cost (operation and maintenance) will be about Rs. 1.14 crores per annum. Employment opportunity will be for 235 persons directly and 1000 persons indirectly after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors located within 10 kms radius of the project site. Ghataprabha river is flowing at a distance of 3.1 km in S direction & Hire nalla is flowing at a distance of 0.9 km in N direction.

Total water requirement is estimated to be 8541 cum/day, which includes which fresh water requirement of 675 cum/day for sugar and cogen, and 600 cum/day for distillery during season, proposed to be met from Ghataprabha River. Necessary permission in this regard has been obtained from Karnataka Niravari Nigam Ltd., Vide letter dated 27th July 2017. During offseason stored treated effluent of 1778 cum/day from sugar unit shall be utilized.

Effluent of 1299 cum/day during season and 958 cum/day during off season will be treated through Effluent Treatment Plant of capacity 1700 cum/day. The treated process water will be

diluted with the treated non process wastewater in polishing pond. The outlet of the polishing pond conforming to the GSR 422 (E) on land discharge standards is utilized for greenbelt development and sugarcane cultivation. Also permeate from RO will be utilized in distillery and rest 296 cum/day will be stored for offseason usage.

Power requirement shall be met from own co-generation plant. Power requirement during season is co-gen unit (7 MW/Hr), sugar unit (13 MW/Hr) and during off season is sugar & Co-gen unit (10 MW/Hr). Power requirement for the distillery is 2 MW/Hr. Surplus power shall be exported. Existingunithas4DGsetsof 1x40 KVA, 2x250 KVA & 1x 650KVAcapacity, additionally 2x 500 KVA DG sets are used as standby during power failure. Stack (height 30m) will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 90 TPH, 60 TPH bagasse fired boiler, 130 TPH bagasse and biomass fired boiler, 14 TPH coal and biogas fired boiler. Additionally, 2 X 100 TPH bagasse fired boiler, 2X 20TPH slop and bagasse fired boiler will be installed. Electro Static Precipitator with a stack of height of 75m will be installed to control the particulate emissions within the statutory limits. After the installation of new boilers, existing 90 TPH, 60 TPH and 14 TPH boilers will be scrapped.

Ambient air quality monitoring was carried out December, 2013 to February, 2014, and fresh one month monitoring was carriedoutat8 locations during 04/02/2019 to 28/02/2019 and the baseline data indicates the ranges of concentrations are as: PM_{10} (46.3 µg/m^3-74.2 µg/m^3), $PM_{2.5}$ (20.2 µg/m^3-29.2 µg/m^3), SO_2 (5.19 µg/m^3-9.25 µg/m^3), NO_2 (12.95 µg/m^3-17.54 µg/m^3). AAQ modeling study for point source emissions indicates that the maximumincrementalGLCsaftertheproposedprojectwouldbe4.1µg/m^3, 1.1µg/m^3 and 2.6 µg/m^3 with respect to PM, SO_2 and NO_2 respectively. The resultant concentrations are within the National Ambient Air Quality Standards.

Earlier, the Ministry has issued EC vide letter dated 5th September, 2007 for the 60 KLPD Molasses based distillery unit by M/s Satish Sugars Ltd and SEIAA vide letter dated 17th December, 2009 for expansion for sugar factory capacity from 5000TCD to 10,000TCD and cogeneration from 20 to 45MW. The monitoring report on compliance status of EC conditions (site visit conducted on 2nd August, 2016) was forwarded by the Ministry's Regional Office at Bangalore vide letter dated, which was found to be satisfactory.

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 public hearing have been addressed by the project proponent. Additional information submitted by the project proponent found to be addressing the concerns raised by the Committee.

As committed and presented by the project proponent, CER shall be 3% of the total project cost.

PESO has given approval for the site and layout plan of storage facilities (Petroleum storage Class A installation) vide letter dated 8th November, 2018 to enable the mandatory licence in Form XV as per the Petroleum Rules, 2002.

Consent to Operate for the present industrial operations, Distillery (60 KLPD), Sugar (10,000 TCD) and CPP (45 MW) issued by SPCB vide letter dated 29th November, 2016 is valid till 28th November, 2021.

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

- *Prior approval shall be obtained from the Petroleum & Explosives Safety Organization (PESO) for the site and layout plan submitted to this Ministry along with the proposal for EC. In case of any change therein post PESO approval, the proposal shall require fresh appraisal by the sectoral EAC.*
- *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.*
- *Concentrated spent wash shall be incinerated and not to be released in open space.*
- *Odour shall be prevented at the source and effective odour management scheme shall be implemented.*
- *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 1275 cum/day proposed to be met from surface water/* Ghataprabha river*. 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:-*
  (k) 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.
  (x) 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 3% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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 stored 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_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*

Agenda No. 9.3.6

Expansion of pesticides technical (200 TPM) specialty chemicals (912 TPM) in existing unit at Plot No.518, GIDC Industrial Estate, Panoli, Tal. Ankleshwar Dist. Bharuch, Gujarat, Bharuch, Gujarat by M/s Wanksons Chemical Industries Pvt Ltd- For reconsideration of Environmental Clearance

[IA/GJ/IND2/79057/2014, GPCB/BRCH/CCA-172(40/ID-15783/218554]

The project proponent and their consultant M/s Aqua-Air Environmental Engineers Pvt Ltd, made a detailed presentation on the salient features of the project.

9.3.6.1 The proposal was earlier considered by the EAC in its meeting held during 26-28 February, 2019. The Committee, after deliberations, observed that production of technical pesticides (products listed at S.No.1-6) including the presently banned Dichlorovos Technical, started in the year 2014 only without obtaining prior environmental clearance, which amounts to violation of the EIA Notification, 2006 and attracts action under the Environment (Protection) Act, 1986. For further action into the matter, the Committee desired for clarification/comments, and the response from the project proponent is as under:-

S.No.	Clarification desired by the Committee	Reply by the Project Proponent
1	Requirement of prior environmental clearance for the presently manufactured pesticides and other products.	Company obtained the first Consent to Establish for 25 MT/Month in 1990 (Refer Annexure-1). Then company amended the consent to operate for Chloral -300 MT/Month in 2005 (Refer Annexure-2) which is specialty chemicals, not pesticide products. As per EIA notification 1994, there is no requirement to obtain EC for Specialty Chemicals. After EIA Notification 2006, EC is applicable to Specialty Chemicals but company obtained consent to operate for Chloral -300 MT/Month in 2005. Then company applied for Product mix to add some products and total production capacity from 300 MT/Month to 286 MT/Month and without increase in pollution load and obtained on 09/04/2014 from Gujarat Pollution Control Board (Refer Annexure-3). One of the product is Pesticide technical grade in product mix application which is different category but "Endorsement of transfer of Registration

		Certificate from M/s Syschem (India) Limited (Formerly Anil Pesticides Ltd.), Regd. office at Village Bargodam, Tehsil Kalka, Dist. Panchkula, Haryana- 133 302 to M/s Wanksons Chemical Industries Pvt. Ltd., Regd. office at 607, Maker Chamber-V, 5th Floor, J.B' Marg, Nariman Point Mumbai-400 021, Factory Add: Shed No. 518, GIDC Industrial Estate, Panoli, Dist. Bharuch (Gujarat) in respect of Registration Certificate No. CIR/17, 174/93-Dichlorvos (Tech.)-467 dated: 09/03/2011" (Refer Annexure-5) and according to this, DDVP was added to product list and other products are specialty chemicals, so there were no requirement to obtain the environmental Clearance for that. As per pesticide banned products regulation, company stopped the production of DDVP in December, 2018. Then company again obtained Consent to establish for product mix for 283 MT/Month instead of 286 MT/Month vide letter No. GPCB/ANK/CCA-172(6)/ID-15873/426421 dated: 30/10/2017(Refer Annexure-4). Total Production of Existing Organic Products is 283 MT/Month: Total Existing Production is 1433 MT/Month (Manufacturing: 283 MT/Month + Formulation: 1150 MT/Month) instead of 1550 MT/Month as per CCA having CCA No: AWH-89031 dated Oct. 30, 2017 valid up to Apr. 4, 2019. Formulation of Products does not require EC.
2	Justification for the product mix change, which in turn changes categorization vis-à-vis the schedule of the EIA Notification, 2006, duly endorsed by the State Pollution Control Board.	Company obtained the first Consent to Establish for 25 MT/Month in 1990 (Refer Annexure-1). Then company amended the consent to operate for Chloral -300 MT/Month in 2005 (Refer Annexure-2) which is specialty chemicals, not pesticide products. As per EIA notification 1994, there is no requirement to obtain EC for Specialty Chemicals. After EIA Notification 2006, EC is applicable to Specialty Chemicals but company obtained consent to operate for Chloral -300 MT/Month in 2005. Then company applied for Product mix to add some products and total production capacity from 300 MT/Month to 286 MT/Month and without increase in pollution load and obtained on 09/04/2014 from Gujarat Pollution Control Board (Refer Annexure-3). One of the product is Pesticide technical grade in product mix application which is different category but "Endorsement of transfer of Registration Certificate from M/s Syschem (India) Limited (Formerly Anil Pesticides Ltd.), Regd. office at Village Bargodam, Tehsil Kalka, Dist. Panchkula, Haryana- 133 302 to M/s Wanksons Chemical Industries Pvt. Ltd., Regd. office at 607, Maker Chamber-V, 5th Floor, J.B' Marg, Nariman Point Mumbai-400 021, Factory Add: Shed No. 518, GIDC Industrial Estate, Panoli, Dist. Bharuch (Gujarat) in respect of Registration Certificate No. CIR/17, 174/93-Dichlorvos (Tech.)-467 dated: 09/03/2011" (Refer Annexure-5) and according to this, DDVP was added to product list and other products are specialty chemicals, so there were no

		requirement to obtain the environmental Clearance for that. As per pesticide banned products regulation, company stopped the production of DDVP in December, 2018.
3	CTO from the GPCB for the products started production before inception of the EIA Notification, 2006.	Company obtained the first Consent to Establish for 25 MT/Month in 1990 (Refer Annexure-1). Then company amended the consent to operate for Chloral -300 MT/Month in 2005 (Refer Annexure-2) which is specialty chemicals, not pesticide products. As per EIA notification 1994, there is no requirement to obtain EC for Specialty Chemicals. After EIA Notification 2006, EC is applicable to Specialty Chemicals but company obtained consent to operate for Chloral -300 MT/Month in 2005.
4	Safety and risk assessment with advanced models.	Company will submit safety and risk assessment within 6 months.

9.3.6.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Pesticide Technical & Specialty Chemicals from 286 TPM to 1112 TPM by M/s Wanksons Chemical Industries Pvt Ltd in an area of 10,290 sqm located at Plot No.518, GIDC Industrial Estate, Panoli, Taluka Ankleshwar, District Bharuch (Gujarat).

The details of the proposed and existing products are as under:-

S.No.	Products	CAS No.	Production Capacity (MT/Month)			LD_{50} (mg/Kg)	Category
			Existing	Proposed	Total		
Pesticide Technical							
1	Dichlorovos Technical (DDVP)	62-73-7	20	180	200	1100	5 (b)
2	Hexaconzole (T)	79983-71-4	--			2000	5 (b)
3	Tebuconzole (T)	107534-96-3				5000	5 (b)
4	Propioconzole (T)	60207-90-1				4000	5 (b)
5	1,2,4-Triazole	288-88-0				2300	5 (b)
6	Profenofos (T)	41198-08-7				2560	5 (b)
Specialty Chemicals							
7	Chloral (Trichloro Acetaldehyde)	75-87-6	213	400	400	168	5 (f)
8	Meta Chloro Propio Phenone (3-CPP)	936-59-4	10	15	15	482	5 (f)
9	3-(Bromo ethyl)-2-chloro-4-(methyl sulfonyl) Benzoic Acid (PIA-4)	53250-83-2	25	Nil	25	1600	5 (f)
10	S-Benzyl O, O Diisopropyl	26087-47-8	10	Nil	10	790	5 (f)

	Phosphorothioate (PIZ)						
11	Dimethyl Amine Hydrochloride (DMA - HCl)	506-59-2	10	25	25	1600	5 (f)
12	Iso Propyl Alcohol Hydrochloride (IPA HCL)	7647-01-0				IPA - 12870 & HCL - 5010	5 (f)
13	Methanolic Hydrochloride	9004-54-0				15800	5 (f)
14	Ethyl Acetate Hydrochloride	5407-04-5	-			5000	5 (f)
15	Ethyl Alcohol Hydrochloride	9004-54-0	-			5000	5 (f)
16	Propionyl chloride	79-03-8	-	24	24	823	5 (f)
17	Propiophenone	93-55-0	-	30	30	4500	5 (f)
18	2-Bromo 3-Chloro Propiophenone	34911-51-8	-	4	4	2000	5 (f)
19	3-Methoxy Propiophenone	37951-49-8	-	4	4	1950	5 (f)
20	3-Hydroxy Propiophenone	13103-80-5	-	4	4	1310	5 (f)
21	Cyano Acetic Acid	372-09-8	-	10	10	1500	5 (f)
22	7-Ethyl Tryptophol (7-ETP)	41340-36-7	-	5	5	391	5 (f)
23	Closantel Amine	57808-65-8	-	5	5	5780	5 (f)
24	Diethyl Ketone	96-22-0	--	10	10	2900	5 (f)
25	TBPO (Tributyl phosphate)	126-73-8	--	60	60	2000	5 (f)
		Total	286	826	1112		

Note: DDVP technical and 76% is now banned in pesticide list of CIB, so we have discontinued the DDVP technical and 76% from 31/12/2018 from the product list. We undertaken that company will not manufacture DDVP technical and 76%.

By-products

S. No.	By-Products	CAS No.	Capacity (TPM)	
			Existing	Total
1	Regenerated Sulfuric Acid (72%)	7664-93-9	396	653
2	Dilute Hydrochloric Acid (30-32%)	7647-01-0	690*	1200*
	Dilute Hydrochloric Acid (20%)		0.723**	1.257**
3	Ethyl Chloride	75-00-3	104	180
4	Methyl Chloride	74-87-3	2.29	4.58

5	HBr	10035-10-6	6.45	42
6	Poly Aluminium Chloride (PAC) – 100%	1327-41-9	7.5	46
7	Sodium Hypochlorite (10%)	7681-52-9	90	120
* **Existing:**(656 - 11.5 = 644.5 MT). 11.5 MT converts to HCl gas & Consumes as raw material in existing products i.e. DMA – Hydrochloride, IPA HCL and Methaonolic Hydrochloride. * **Total after Proposed Expansion:** (1200 – 25 = 1175 MT). 25 MT will be converted to HCl gas & Consumed as raw material in existing products i.e. 3-CPP, DMA – Hydrochloride, IPA HCL and Methaonolic Hydrochloride and Propiophenone. ** HCl (20%) converts and to be converted to HCl (30-32%) and sell to actual user.				

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

Standard ToR for the project was granted on 10thAugust, 2018. Public hearing is exempted as the project is located in the notified Industrial area.

Existing land area is 10,290 sqm, no additional land is required for the proposed expansion. Industry has developed greenbelt in an area of 2100 sqm, covering 21% of the total project area. The estimated project cost is Rs. 25.81crores. Total capital cost earmarked towards environmental pollution control measures is Rs.1.6 crores and the recurring cost (operation and maintenance) will be about Rs.5.0 crores per annum. Employment opportunity will be for 160 persons directly and 70 persons indirectly after expansion.

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

Total water requirement is estimated to be 179 cum/day, which includes fresh water requirement of 135 cum/day, proposed to be met from GIDC Water Supply.

Total industrial effluent generated from the plant will be 78.5 cum/day. Existing effluent of 6.37 cum/day is treated through ETP consisting of primary treatment facility, and domestic water of 5 cum/day, are being sent to CETP operated by M/s PETL for further treatment. Additional effluent of 48.7 cum/day will be treated in proposed ETP consisting of primary treatment facility and followed by solvent stripper and MEE. MEE condensate of 44 cum/day will be reused in plant premises for boiler feed water, cooling water and washing purpose. Additional domestic wastewater of 23.5 cum/day will be sent to CETP of M/s PETL for further treatment. It is informed that treated water of 29.8 cum/day shall be sent to CETP of M/s PETL, only during emergency. It has been now proposed that existing and proposed unit shall ensure zero liquid discharge and there will be no discharge of treated/untreated waste water from the unit.

Power requirement after expansion will be 1000 KVA including existing and will be met from DGVCL. Existing unit has one DG set of 350 KVA capacity, additionally two DG set of 380 KVA and 250 KVA will be used as standby during power failure. Stack (height 11 m) will be provided as per CPCB norms to the DG sets.

Existing unit has one 3 TPH natural gas fired steam Boiler with dust collector. Additionally, one 4 Lac Kcal/hr Thermic Fluid Heater and two process vent are proposed in the unit.

Ambient air quality monitoring was carried out at 9 locations during March - May, 2017 and the baseline data indicates the ranges of concentrations as: PM10 (73.09-96.39 µg/m3), PM2.5 (43.45-51.28 µg/m3), SO2 (15.75-26.72 µg/m3) and NO2 (18.63-28.53 µg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.32 µg/m3, 0.56 µg/m3 and 0.20 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

The unit has been operational since the year 1990 with CTE/CTO from Gujarat Pollution Control Board and hence EC is not made available for the existing operations. The existing technical pesticides are reported to have been manufactured from the year 2014, under product mix change category. The project proponent has submitted an undertaking stating that the exiting activities are being undertaken in the unit with the consent from the SPCB and the unit has not done any violation of the EIA Notification, 1994 & 2006.

The expenditure towards CER for the project would be 2.5% 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 found to be satisfactory, and addressing the concerns raised by the Committee.

Consent to Operate for the present industrial operations, issued by Gujarat SPCB vide letter dated 30th October, 2017, which is presently valid upto 4th April, 2019, and application for renewal has been submitted.

9.3.6.3 *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.*
- *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.*
- *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.*
- *National Emission Standards for Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th 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_{50}<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.*
- *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 shall not exceed* 135 *cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *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 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.*
- *Process safety and risk assessment studies shall be carried within six months using advanced models, and the mitigating measures shall be undertaken accordingly.*

Agenda No. 9.3.7

Expansion of existing unit at Panoli GIDC Industrial Estate, Ankleshwar, Bharuch (Gujarat) by M/s Cheminova India Limited (Intermediate Division) - For reconsideration of Environmental Clearance

[IA/GJ/IND2/88017/1995, J-11011/000/1995-IA-II(I)]

The project proponent and their accredited consultant M/s Siddhi Green Excellence Pvt Ltd, made a detailed presentation on the salient features of the project.

9.3.7.1 The proposal was earlier considered by the EAC in its meeting held during 8-9th April, 2019 and desired for additional information, with the details as under:

SN	Query	Clarification
1.	There was no consistency in the products details, as mentioned in the Consent to Operate granted and/or the change of product mix allowed by the State Pollution Control Board, ToR granted by the Ministry on 23rd March, 2018 and that presented during meeting. The Committee further noted that the unit has been in operation with consent to operate granted by the SPCB from time to time, and change of product mix category of the products requiring environmental clearance.	During the ToR application, the existing product- Diethyl Thio Phosphoryl Chloride (DETPC) was taken on Sr. No. 3 of the product list. But since it is the only existing product applied for expansion, DETPC was considered on Sr. No. 19 alongwith the other existing products in continuation in the product list during the EC appraisal. This was related to change in sequence of the products to bifurcate the new verses existing. There was no change either in the products or in the quantities applied in the TOR. The product list as per the Standard TOR approved dated 23rd March 2018 is submitted. The unit has valid consent to operate issued by the Gujarat State Pollution Control board. The site had taken change in products in 2010 and 2017 under the permitted product mix route. Taking Environmental Clearance was not applicable as no changes were made in the quantities of the products or in the category within the previously granted overall total limits.
2.	The project proponent to establish that the unit is engaged in production of pesticides and pesticides specific intermediates @19705 TPA, only after obtaining prior environmental clearance as mandated under the EIA Notification, 2006 and thus ensuring no violation of the said Notification.	The unit has Consent To Operate issued vide letter no. GPCB/BRCH/CCA-115(6)/ID-15016/90258 dated 29/08/2011 for production of pesticides and their intermediates @19705 TPA based on Change in product mix obtained as per point no. 1 of the Circular regarding the Change in Product Mix issued by Ministry of Environment and Forest vide F. No. J-11013/41/2006-IA-II (I) dated 14/12/2006. As per point no. 1 of the Circular regarding the Change in Product Mix issued by Ministry of Environment and Forest vide F. No. J-11013/41/2006-IA-II (I) dated 14/12/2006 wherein it is mentioned that in cases of change in Product – Mix, changes in the quantities or numbers of products may be allowed without prior Environmental Clearance by the concerned SPCB provided such changes in the quantities of products are in the same category and are within the previously granted overall total limits, Unit had applied for

		CTE-Change in Product Mix which, after passing through a detailed scrutiny by Regional Officer, HO staff as well as Member Secretary of the SPCB, has been granted by the SPCB Chairman and CPCB Chairman in the Technical Committee Meeting in presence of the Technical Committee members and Member Secretary of the SPCB. The product mix applications made by the site were approved as no changes were made in the quantities of the products or in the category within the previously granted overall total limits. The Amendment in the CTO no. AWH-94667 issued vide letter no. GPCB/ANK/CCA-115(10)/ID-15016/467347 dated 31/08/2018 is submitted. Hence from the above it is evident that there is no violation of the EIA Notification, 2006.
3.	The Committee also desired for confirmation from the State Pollution Control Board that there has been no change in scope of the project, since taking over the unit in 2015 by the project proponent with its capacity of 19705 TPA, and subsequent transfer of CTOs in their name.	From 13/01/2010 up to 25/11/2016, Moratorium had been imposed on the Ankleshwar Industrial cluster declaring it as a critically polluted area. Hence, as an initiative, the unit had applied for CTE- Change in Product Mix & had been granted reduction in the production quantity of its few products through amendment in Consent To Operate issued vide letter no. GPCB/BRCH/CCA-115(6)/ID-15016/90258 dated 29/08/2011. Unit had been acquired by 'FMC Corporation' in the year 2015. As per the group company policy, unit had again applied for the CTE- Change in Product Mix & had been granted reduction in the production quantity of its few products, addition of new product and all the applicable by-products were considered as hazardous waste as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 through amendment in Consent To Operate no. AWH-94667 issued vide letter no. GPCB/ANK/CCA-115(10)/ID-15016/467347 dated 31/08/2018 with no increase in overall capacity or scope of projects. The pollution load sheet indicating no increase in the pollution load due to the Change in Product Mix is submitted**.**

9.3.7.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of pesticides and Pesticide specific intermediates by M/s Cheminova India Limited (Intermediate Division) in an area of 149163.17 sqm at Plot No.(27+28)/A, GIDC Industrial Estate, Panoli, Taluka Ankleshwar, District Bharuch (Gujarat).

The details of existing and proposed products are as under:-

S. No.	Name of Product	CAS No.	Existing (TPA)	Proposed (TPA)	Total (TPA)	End Use	LD50 oral (mg/ kg)	Remarks
1.	Phosphorus Trichloride	7719-12-2/ 10025-	1000	--	1000	Pesticide	--	No change

	(PCl_3)/ Phosphoryl chloride ($POCl_3$)	87-3				Interm ediate		
2.	Tri methyl Phosphite (TMP) or Tri ethyl Phosphite (TEP)	121-45-9 / 122-52-1	100	--	100	Pestic ide Interm ediate	--	No change
3.	Diethyl Thio Phosphoryl Chloride (DETPC) /Sodium salt of Diethyl Thio Phosphoryl Chloride (Na-DETA)	2524-04-1 / 3338 - 24 - 7	5330	2670	8000	Pestic ide Interm ediate	1340 (Rat)	Increas e in produc tion capacit y for DETP C only
4.	Cyhalothrin Acid	76023-99-9	250	--	250	Pestic ide Interm ediate	--	No change
5.	Phosphorus Penta Sulphide (P_2S_5)	1314-80-3	3400	--	3400	Pestic ide Interm ediate	--	No change
6.	Acid based products [2-brornobutyric Acid **(int)**,ethyl 2-(4-hydroxy phenoxy) propionate (O-HPPA) **(int),** Thiocyclam **(I),** Bispyribac-Sodium **(H),**Pyrithiobac-Sodium**(H),** Methoxy Amine Hydrochloride **(int),** 2-hydroxyphenyl Acetic Acid (HPAA) **(int),** amino acid **(int)**] etc.	80-58-0 / 65343-67-1/ 31895-21-3/ 125401-92-5/ 123343-16-8/ 593-56-6/ 614-75-5	150	--	150	I – Insecti cide H-Herbic ide F-Fungi cide Int-Interm ediate	--	No change
7.	Amide group based products [Pretilachlor **(H),** Captan **(F),** Cymoxanil **(F),** Beflubutamide **(H),** Pethoxamide **(H),** Carboxin **(F),**	51218-49-6/ 133-06-2/ 57966-95-7/ 113614-08-7 / 106700-	150	--	150	I – Insecti cide H-Herbic ide F-Fungi	--	No change

	Flubendamide **(I),** Chlorantraniliprole (I), Thiaflusamide **(F),** Zoxamide **(F),** Flufenacet **(H),** 2 Aminosulfonyl-N-N-Dimethylnicotinamide (SNA) **(int),** 2-(Methoxycarbonyl) thiophene thiophene-3 Sulfonamide (MST) **(Int)**] etc.	29-2/ 5234-68-4 / 272451-65-7/ 500008-45-7/ 130000-40-7/ 156052-68-5/ 142459-58-3/ 112006-75-4/ 59337-93-8				cide Int-Intermediate		
8.	Aniline group Bases products [Pendirnethalin **(H),** Fluazinam **(F),** Metaiaxyi **(F),** Famoxadone **(F)**] etc.	40487-42-1/ 79622-59-6/ 57837-19-1/ 131807-57-3	1200	--	1200	I – Insecticide H-Herbicide F-Fungicide Int-Intermediate	--	No change
9.	Azine group based product Fenpyroximate **(I),** Metribuzin **(H),** Pymetrozine **(I),** Arnitraz **(I),**Indoxacarb **(I),** Clofentezine **(I),** 2 Methoxy- 4 - Methyl-6-Methylamino-1,3,5-Triazine (MMMT) **(Int)**] etc.	134098-61-6/ 21087-64-9/ 123312-89-0/ 33089-61-1/ 173584-44-6/ 74115-24-5/ 5248-39-5	300	--	300	I – Insecticide H-Herbicide F-Fungicide Int-Intermediate	--	No change
10.	Azole group based products [Fipronil **(I),** Hexaconazole **(F),** Propiconazole **(F),** Difenoconazole **(F),** Tricydazole **(F),** Myclobutanil	120068-37-3/ 79983-71-4/ 60207-90-1/ 119446-68-3 41814-78-2/	200	--	200	I – Insecticide H-Herbicide F-Fungicide Int-	--	No change

	(F), Florasulam **(H),** Tebuconazole **(F),** Flusilazole **(F),**Tridemefon, Paclobutrazol **(F),** Thiamethoxam **(I),** Flutriafol **(F),** (SafenerIsoxadifen ethyl **(Int),** Irnidacloprid **(I),** 2, 6 DiChloroBenzoxazolone **(Int),** Penoxasulam **(H)**] etc.	88671-89-0/ 145701-23-1/ 107534-96-3/ 85509-19-9/ 43121-43-3/ 76738-62-0/ 153719-23-4/ 76674-21-0/ 163520-33-0/ 138261-41-3/ 5285-41-6/ 219714-96-2				Intermediate		
11.	Carbamate group based product [Thiodicarb **(I),** Propineb **(F),** Metiram **(F),** Thiram **(F),** Cartap hydrochloride **(I),** Thiophanate Methyl **(F)**] etc.	59669-26-0/ 12071-83-9/ 9006-42-2/ 137-26-8/ 15263-52-2/ 23564-05-8	500	--	500	I – Insecticide H- Herbicide F- Fungicide Int- Intermediate	--	No change
12.	Ester group based products [Fenoxaprop-p-Et **(H),** Clodinafop-Pr **(H),** Quizolfop-p-ethyl **(H),** Quinzolfop-p-terfuryl **(H),** Cyhalofop **(H),** Isoprothiolane **(F),** Alphamethrin **(I),** Lambda Cyhaothrin **(I),** Cypermethrin **(I),** Bifenazate **(I),** Phthalide **(Int)** etc.	71283-80-2/ 105512-06-09/ 100646-51-3/ 119738-06-6/ 122008-78-0/ 50512-35-1/ 67375-30-8/ 91465-08-6/ 52315-	300	--	300	I – Insecticide H- Herbicide F- Fungicide Int- Intermediate	--	No change

		07-8/ 149877-41-8/ 87-41-2						
13.	Ether group based products [Propargite **(I),** oxyfiuorfen **(H),** 2 Ethoxy Ethyl Amine **(Int),** S-Cyano MPB **(Int)**] etc.	2312-35-8/ 42874-03-3/ / 38256-95-0	200	--	200	I – Insecticide H-Herbicide F-Fungicide Int-Intermediate	--	No change
14.	Ketone group based product [Mesotrione **(H),** Suctioned **(H),** Isoxanutole **(H),** Dimethomorph **(F),** Isobutyrophenone (IBP) **(Int)**] etc.	104206-82-8/ 153719-23-4/ 141112-29-0/ 110488-70-5/ 611-70-1	1200	--	1200	I – Insecticide H-Herbicide F-Fungicide Int-Intermediate	--	No change
15.	Phosphate group based product [Chlorpyrifos **(I)** or its intermidiate Na-TCP **(Int),** Acephate **(I),**Monocrotophos **(I)** or its intermediates MCMMAA **(Int.),** Dimethoate **(I),** Profenofos **(I),** Ethephon (PGR)] etc.	2921-88-2/ 37439-34-2/ 30560-19-1/ 6923-22-4/ / 60-51-5/ 41198-08-7/ 16672-87-0	5000	--	5000	I – Insecticide H-Herbicide F-Fungicide Int-Intermediate	--	No change
16.	Pyridine group based product [Pyridalyl **(I),** Imazethapyr **(H)** CloquintocctMexyl **(H),** Acetamiprid **(I),** 4, 6-DiChloro Pyridine **(Int)**], Azoxvstrobin **(F)** etc	179101-81-6/ 81335-77-5/ 99607-70-2/ 160430-64-8/ 1193-21-1/ 131860-	250	--	250	I – Insecticide H-Herbicide F-Fungicide Int-Interm	--	No change

		33-8				ediate		
17.	Urea group based product [Buprofezin **(I),**Lufenuron **(I),** Linuron **(H),** Diafenthiuron **(I),** Diuron **(H),** Novaluron **(I),** Chlorimuron **(int),** Hexythiazox **(I),** Spiromesifen **(I),** Azimsulfuron **(H)** ,Sulfonyl Ureas **(H)**] etc.	69327-76-0/ 103055-07-8/ 330-55-2/ 80060-09-9/ 330-54-1/ 116714-46-6/ 99283-00-8/ 78587-05-0/ 283594-90-1/ 120162-55-2/ 35507-37-0	100	--	100	I – Insecticide H-Herbicide F-Fungicide Int-Intermediate	--	No change
18.	Phenol group based product [2- Cyanophenol (Int), 4- Fluro-3 trilluromethylphenole (Int)] etc.	611-20-1/ 61721-07-1	75	--	75	I – Insecticide H-Herbicide F-Fungicide Int-Intermediate	--	No change
19.	Sulfentrazone	122836-35-5	--	2000	2000	Herbicide	2855 (Rat)	New product
20.	F-9600 (2-(2,4-dichlorobenzyl)-4,4-dimethylizoxazolidin-3-one)/Bixlozone	81777-95-9	--	4200	4200	Herbicide	>2000 (Rat)	New product
21.	F 9990 (Fluindapyr)	1383809-87-7	--	1200	1200	Fungicide	>2000 (Rat)	New product
22.	Malathion	121-75-5	--	10000	10000	Insecticide	1000-1350 (Rat)	New product
23.	F-4050 (2-(4-fluoro-3-(trifluoromethyl)p	113614-09-8	--	1500	1500	Herbicide	>5000 (Rat)	New product

	henoxy)-N-benzylbutanamide)							
24.	Beflubutamide	113614-08-7	--	450	450	Herbicide	>5000 (Rat)	New product
25.	Gamma Cyhalothrin	76703-62-3	--	300	300	Insecticide	>2500 (Rat)	New product
26.	Bifenthrin	82657-04-3	--	300	300	Insecticide	>2000 (Rat (dermal))	New product
27.	Clomazone	81777-89-1	--	2000	2000	Herbicide	1369 (Rat)	New product
28.	FMC-57091 (4,4-dimethyl isoxazolidin-3-one)/ (Isoxazolidinone)	81778-07-6	--	2600	2600	Intermediate Herbicide	>541 (Rabbit (dermal))	New product
29.	Thifensulfuron Methyl	79277-27-3	--	205	205	Herbicide	>5000 (Rat)	New product
30.	Tribenuron Methyl	101200-48-0	--	215	215	Herbicide	>5000 (Rat)	New product
31.	Metsulfuron Methyl	74223-64-6	--	200	200	Herbicide	>5000 (Rat)	New product
32.	Ethametsulfuron Methyl	97780-06-8	--	10	10	Herbicide	>5000 (Rat)	New product
33.	Chlorsulfuron	64902-72-3	--	60	60	Herbicide	5545 (Rat)	New product
34.	Triflusulfuron Methyl	126535-15-7	--	50	50	Herbicide	>5000 (Rat)	New product
35.	Azimsulfuron	120162-55-2	--	4	4	Herbicide	>5000 (Rat)	New product
36.	Flupyrsulfuron Methyl Sodium	144740-54-5	--	12	12	Herbicide	>5000 (Rat)	New product
Total			**19705**	**27976**	**47681**			

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

Standard ToR for the project was granted on 23rd March, 2018. Public hearing is exempted as the project site is located inside the notified industrial area.

Existing land area is 149163.17 sqm. No additional land area will be required. Industry has already developed greenbelt in an area of 33.18 % i.e., 49497 sqm out of total area of the project. The estimated project cost is Rs.790.36 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 25.05 Crores and the recurring cost (O&M) will be about Rs.102crores per annum. Total employment generation will be 178 nos. persons as direct & 422 nos. persons indirect after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Rivers etc. within 10 km from the project site. Ukai Canal is at a distance of 1.66 km in west.

Total water requirement is estimated to be 1351 cum/day including fresh water requirement of 764 cum/day proposed to be met from GIDC supply.

Effluent of 206 cum/day will be treated through Effluent Treatment Plant (ETP) having Primary, Secondary & Tertiary Treatments & treated effluent of 181 cum/day is discharged into underground conveyance pipeline connected to Final Effluent Treatment Plant (FETP) of M/s Narmada Clean Tech (NCT). It has been now proposed \that after expansion of the project, existing and proposed unit shall ensure zero liquid discharge and there will be no discharge of treated/untreated waste water from the unit.

Power requirement after expansion will be 3500 kVA proposed to be met from Dakshin Gujarat Vij Company Limited (DGVCL). Existing unit has one DG set of 1250 kVA. Two more DG sets of 1250 & 1500 kVA will be required under proposed expansion.

Existing unit has two natural gas based Boilers of 10 TPH capacity each, one Briquettes/ Bagasse/ Groundnut shell based boiler of 18 TPH capacity. Incinerator (for waste gas) and one natural gas based thermic fluid heater of 10 lakh Kcal/h will be installed in the expansion.

Ambient air quality monitoring was carried out at 9 locations during February 2017 to April 2017 and the baseline data indicates the ranges of concentrations of PM10 (74-91 µg/m3), PM2.5 (19-33 µg/m3), SO2 (19-26 µg/m3) and NOx (21-32 µg/m3) (98th percentile values) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 0.227 µg/m3, 1.215 µg/m3 and 1.123 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

Proponent has obtained NOC in year 1997 from the SPCB and subsequently operated with consent from the SPCB. Presently unit is in operation with CTO dated 23rd May, 2017 and amendments issued by SPCB. The project proponent has submitted an undertaking stating that since the time the unit was taken over by FMC Corporation on 21st May, 2015 (name was retained as M/s Cheminova India Limited) there is no increase in production capacity and due to changes in management many time earlier, records of 22 years could not be traced out. It was confirmed that there was no change in the total production quantity and all the changes in the product mix were granted to the unit by the SPCB keeping the total production same.

The expenditure towards CER for the project would be 3% 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 found to be satisfactory and addressing concerns raised by the Committee.

Consent to Operate for the present industrial operations issued by Gujarat PCB is valid up to 4th March, 2022.

9.3.7.2 *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 Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th 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_{50}<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.*
- *To control source and the fugitive emissions (at 99.98%), suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *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 764 cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *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:-*

(vii) *Metering and control of quantities of active ingredients to minimize waste.*
(viii) *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
(ix) *Use of automated filling to minimize spillage.*
(x) *Use of Close Feed system into batch reactors.*
(xi) *Venting equipment through vapour recovery system.*
(xii) *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 3% 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.*
- *Mitigating measures suggested during process safety and risk assessment studies shall be undertaken accordingly.*

Agenda No. 9.3.8

Active Pharmaceutical Ingredients (APIs) and API Intermediates Manufacturing Unit at A-106/1, MIDC Paithan Industrial Area, Village Mudhalwadi, Taluka- Paithan, Aurangabad (Maharashtra) by M/s Quantinental Pharmachem Private Limited- For reconsideration of Environmental Clearance

[IA/MH/IND2/84252/2018, IA-J-11011/366/2018-IA-II(I)]

The project proponent and their consultant M/s Green Circle Inc, made a detailed presentation on the salient features of the project.

9.3.8.1 The proposal was earlier considered by the EAC in its meeting held during 6-8 May, 2019. The Committee observed that the EIA Coordinator was not present during the meeting and the consultant presenting the proposal was not having accreditation for the projects covered under item 5(f).

9.3.8.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up Active Pharmaceutical Ingredients (APIs) and API Intermediates manufacturing unit of capacity 247 TPA by M/s Quantinental Pharmachem Pvt Ltd in an area of 2499 sqm located at A-106/1, MIDC Paithan Industrial Area, Village Mudhalwadi, Taluka Paithan, Aurangabad (Maharashtra).

The details of products are as under:

S. No.	Product	Quantity (TPA)
1.	m- Bromoanisole	9.6
2.	Etorocoxib	2.4
3.	Ethyl Triphenylphosphonium Bromide	120
4.	Fluconazole	5.7
5.	Linezolid	1.128
6.	Telmisartan	4.8
7.	Tetrabutyl Ammonium Bromide	1.56
8.	Glimepiride	1.8
9.	Tri-Ortho Tolyl Phosphine	24
10.	Cilnidipine	1.8
11.	Triclabendazole	0.984
12.	Voglibose	0.06
13.	Darunavir	1.2
14.	Montelucast Sodium	9
15.	Losartan	11.7
16.	Sparfloxacin	0.6
17.	Salbutamol Sulphate	24
18.	Pantoprazole Sodium	5.4
19.	Fenofibrate	6
20.	Clopidogrel Hydrogen Sulphate	2.1
21.	Rosuvastatin Calcium	6
22.	Domeperidone	1.2
23.	Nebivolol Hydrochloride	4.32
24.	R&D Products	1.2
	Total	246.552

The project/activity is covered under category B of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at State level by the concerned SEAC/SEIAA. However, due to applicability of general condition (Jayakwadi Bird Sanctuary within 2 km), the proposal requires appraisal at central level by the sectoral EAC in the Ministry.

The standard ToR for the project was granted on 14th December, 2018. Public hearing is exempted as the project site is located inside the notified industrial area.

The total land requirement is estimated to be 2499 sqm. Green belt will be developed in an area of 33 % i.e., 828 sqm out of total area of the project. The estimated project cost is Rs.2.59 crores. Total capital cost earmarked towards environmental pollution control measures is

Rs.54.5 lacs and the recurring cost (operation and maintenance) will be about Rs.5.67 lacs per annum. Employment will be provided to 20 persons.

Jayakwadi Bird Sanctuary is located at a distance of 2 Km. Godavari River is flowing at a distance of 7.6 Km in the South. Application for necessary recommendations from wildlife angle has been submitted with the Standing Committee of NBWL.

Total fresh water requirement is estimated to be 28.1 cum/day, proposed to be met from MIDC Water Supply.

Effluent of 8.8 cum/day will be treated through Primary, Secondary and Tertiary treatment unit. High COD effluent will be treated in solvent stripper, MEE. Treated effluent shall be reused in the process. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 150 kVA proposed to be met from Maharashtra State Electricity Distribution Company Limited (MSEDCL). DG set of80 kVA will be used as standby during power failure. Stack (height 6.5 m) will be provided as per CPCB norms to the proposed DG sets.

One agricultural briquette fired boiler of 1 TPH capacity will be installed for this unit. Multi cyclone separator/ bag filter with a stack of height of 26 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

Ambient air quality monitoring was carried out at 8 locations during October 2018 to December 2018 and the baseline data indicates the ranges of concentrations as: PM10 (52.3- 56.9 µg/m3), PM2.5 (16.1-20.8 µg/m3), SO2 (13.1-18.7 µg/m3) and NO2 (22.1-27.7 µg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.42 µg/m3 for PM_{10} and 0.27 µg/m3 for SOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The expenditure towards CER for the project would be 5 % 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.

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

- *The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposals for Wildlife Clearance will be considered by the respective authorities on their merits and decision taken.*
- *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 Bulk drugs Manufacturing Industry issued by the Ministry vide G.S.R.149(E) dated 4th March, 2009 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 shall not exceed* 28.1 *cum/day, proposed to be met from MIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *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 5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*

- *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. 9.3.9

Organic and speciality chemicals manufacturing unit at Plot No.F-104, Chincholi MIDC, Taluka Mohol District Solapur (Maharashtra) by M/s Balaji Amines Ltd (Unit-IV)-For reconsideration of Environmental Clearance

[IA/MH/IND2/75223/2018, IA-J-11011/189/2018-IA-II(I)]

The project proponent and the accredited consultant M/s Equinox Environments (I) Pvt Ltd, made a detailed presentation on the salient features of the project.

9.3.9.1 The proposal was earlier considered by the EAC in its meeting held during 29-31 January, 2019 and desired additional information, with the details as under:

S. No	Information sought by the EAC	Reply by the PP
1	Base line air quality not consistent in terms of the core parameters namely PM_{10}, SO_2 & NO_X and needs to be checked with ambient air quality data of CPCB.	For the BAL(Unit IV) project, AAQ was monitored at eight locations in the study area including the proposed project site at Plot No. F-104, Chincholi MIDC, Solapur. The results of monitoring observed are as follows - Site: PM_{10}: 60.28$\mu g/M^3$, $PM_{2.5}$: 17.27 $\mu g/M^3$, SO_2: 29.54 $\mu g/M^3$, NOx: 39.52 $\mu g/M^3$. Study Area Locations (range): PM_{10}: 48.38-73.15 $\mu g/M^3$, $PM_{2.5}$: 11.20 - 21.57$\mu g/M^3$, SO_2: 13.30 - 26.09 $\mu g/M^3$, NOx: 17.83 - 34.55 $\mu g/M^3$. The AAQ Monitored by CPCB for Solapur region has also been considered for evaluating comparative status. For this, reference has been taken from CPCB & MoEF (January 2012), National Ambient Air Quality Status & Trends in India – 2010, NAAQMS/35/2011-12, page no. -43, 61& 78. Refer Annexure – I. Also the AAQ Monitored by Maharashtra Pollution Control Board (MPCB) for the Solapur region has been considered. For this reference has been taken from Maharashtra Pollution Control Board 2016-17, Air Quality Status of Maharashtra, page no. -197-199. Refer Annexure- II. At a glance status of AAQ monitoring results w.r.t. core parameters namely PM_{10}, $PM_{2.5}$, SO_2 & NO_x has been given in Annexure - III. Therein, graphical presentation (histogram) is done

		to show concentrations of the four core parameters at all eight monitoring locations for the three monitoring months namely February-March-April 2018. Also, in the same figure a Table is presented which gives- Maximum24 Hourly concentrations observed, during EIA study, for the four core parameters. Names of the villages (locations) at which the maximum concentrations were recorded during the particular month of the monitoring for EIA. Concentrations of the core parameters (24 Hourly) as presented by CPCB in its publication vide NAAQS/35/2011-12. Concentrations of the core parameters (24 Hourly) as presented by MPCB in its publication – Air Quality Status of Maharashtra 2016-17. Limits of the core parameters for 24 Hourly Monitoring protocol. From analysis of data on AAQM generated during the EIA study & that presented in CPCB & MPCB publications for the Solapur region, following conclusions are drawn- For all the three months namely February-March-April 2018, the SO_2 concentrations are observed to be more at the Industrial Site in MIDC as well as in the nearby Chicholikati village. SO_2 concentration ranged between 29.21 $\mu g/M^3$ to 35.42$\mu g/M^3$ at the two stations stated. This was somewhat more than the CPCB & MPCB readings of 20 $\mu g/M^3$& 14 $\mu g/M^3$ respectively. *Despite this, the SO_2 concentrations monitored during EIA study were very much lesser than the limit of 80 $\mu g/M^3$.* The reason for somewhat high concentration of SO_2 in the MIDC area as well as in the adjacent village Chincholikati is quite evident as there are number of operating industries which are using fuels as Coal, FO, LDO & Biomass briquettes etc. The sulfur content of these fuels range from 0.3% to 4.5% which after burning give rise to SO_2. The continuous operations of the said industries in MIDC is a source of SO_2 pollutant. This could be the reason that SO_2 concentration is somewhat higher than that found in ambient air of Solapur city where the CPCB & MPCB stations are located in urban non-industrial area (Walchand Institute of Technology (WIT) Campus). The values for other two parameters namely PM_{10} (70.60 $\mu g/M^3$ to 75.37 $\mu g/M^3$) & NOx (36.3$\mu g/M^3$to 41.41$\mu g/M^3$) monitored during the EIA study have been observed to be either less than or very close to those recorded by CPCB (PM_{10} -118 $\mu g/M^3$ & NOx -49 $\mu g/M^3$) and MPCB (PM_{10} -82$\mu g/M^3$ & NOx - 39 $\mu g/M^3$). From the above analysis of monitoring data collected during EIA study and the data collected & published by CPCB as well as MPCB w.r.t. Air quality of Solapur city; it could be concluded that there is consistency in the baseline air quality as far as the core parameters namely PM_{10}, SO_2 and NOx are concerned.
2	Products/ By-products details to	The list of Products and By-products, under proposed project, has been revised as per schedule to the EIA notification 2006. The

	be revised in terms of the schedule to the EIA Notification, 2006.	same is presented at Annexure - IV. As discussed in EAC, hydrogen has been removed from the main products list & added to by products.
3	Storm Water Management	All the internal roads & manufacturing plant areas as well as open yard shall be provided with RCC flooring of adequate thickness. This will avoid fugitive emissions of dust & prevent leakage and percolation of wash waters & discharge into ground underneath. A peripheral storm water collection & diversion network shall be provided along all plot sides. This will collect the storm water from industrial premises & discharge the same in to MIDC's main drain. Thus, entire run off from industrial premises shall be diverted appropriately to the storm drainage network of MIDC. A drawing showing the storm water collection channels is attached at Annexure V.
4	Firm commitment for expenditure towards CER	Implementation of CER plan under the proposed project contemplates a budgetary allocation of Rs. 600 Lakh (1.5% of Capital Investment of Rs. 400 Cr. as per the OM No. F No. 22-65/2017-IA.III dated 1st May 2018). The details of CER plan are presented in Annexure –VI.
	Present status of wildlife clearance to be obtained from the Standing Committee of NBWL.	BAL (Unit-IV) has submitted online Wild life Clearance application on PARIVESH Portal of MoEFCC; New Delhi on 21.09.2018. Status of the same is *"Under Examination - Proposal is pending at Wildlife Warden".* Screen shot of the same is attached herewith at Annexure – VII for your reference.

9.3.9.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up organic and specialty chemicals manufacturing unit of capacity 874.2 TPD by M/s Balaji Amines Ltd (Unit IV) in an area of 36 ha located at Plot No. F-104, Chincholi MIDC, Taluka Mohol, District Solapur (Maharashatra). The project also involves installation of Captive Power Plant of total capacity 10 MWH.

The details of products and by-products are as under:

No	**Product/ By-product**	**Quantity** (TPD)
1.	Mono Iso Propyl Amine (MIPA)	50
2.	MIBK	100
3.	Di Phynel Amine (DPA)	35
4.	N Butyl ThiophosphoricTriamide NBPT	10
5.	Iso Propyl Alcohol (IPA)	165.6
6.	Di-isopropyl ether	6.6
7.	Propane	32.2
8.	Di Methyl Carbonate (DMC)	55.2
9.	Propylene Carbonate	14.4
10.	Propylene Glycol	55.2
11.	Methyl Amines	120
12.	Choline Chloride 75 %	70
13.	Choline Chloride 60%	50
14.	Choline Chloride 98%	10

15.	Ethyl Amines	100
	Total	**874.2**
16.	Captive Power Plant (CPP) 5 MWH X 2	10 MWH
	By Products	
1	Hydrogen	15
2	Hydrochloric acid	6.37
3	Spent Caustic Solution (20%) (SCS)	2.4
4	2,6 Dimetyal-4-Hptanone	1.2
5	Higher Boiler.	1.5
	Total	**26.47**

The project/activity is covered under category B of item 5(f) 'Synthetic organic chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006. Due to applicability of general condition (location of Great Indian Bustard Sanctuary within 5 km distance), the project requires appraisal at central level by sectoral EAC in the Ministry.

The Terms of Reference (ToR) for the project was granted on 09th August 2018.Public hearing is exempted as the project site is located in the notified Industrial area/estate.

Land area available for the project is 36 ha. Industry will develop greenbelt in an area of 11.87 ha covering 33 % of total project area. The estimated project cost is Rs.400 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.54.70 crores and the recurring cost (operation and maintenance) will be about Rs. 7.0 crores per annum. Employment opportunity is for 700 persons.

Great Indian Bustard (GIB) Sanctuary is located within 5 km distance. River Sina is flowing at a distance of 6 Km in south direction from the project site.

Total water requirement is estimated to be 5076.18 cum/day. Out of this, 4986.18 CMD will be for industrial purpose, 50 CMD for domestic purpose and 40 CMD of gardening. Water required for proposed operations shall be taken from MIDC water supply scheme.

The Stream I effluent of 278.93 cum/day shall be treated in ETP comprising of Primary, Secondary &Tertiary treatment units and treated water shall be recycled for cooling tower makeup thereby achieving 'Zero Discharge'. Stream - II effluent shall be 740cum/day. DM water regeneration water (50 cum/day) shall be neutralized and the supernatant shall be forwarded to Evaporator. Salts left over after evaporation would be bagged for dispatch to 'Common Hazardous Waste Treatment Storage and Disposal Facility (CHWTSDF). RO reject, cooling blow down and boiler blow down (690 cum/day) shall be treated in RO pre-treatment tank. RO reject shall be forwarded to evaporator and the permeate shall be used for cooling tower make up. Stream-II evaporator condensate shall be used in cooling make up and the salts leftover would be disposed off to CHWTSDF. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement of 10 MW will be met from MSEB grid. Five DG sets of capacity 200 KVA will be installed to be used as standby during power failure.

Three coal fired boilers of capacity 60 TPH each will be installed in the project. Electrostatic Precipitator (ESP) along with stack of 50 M height each will be installed to controlthe particulate emissions. Two TFH of 30 Lakhs Kcal/Hr capacity each will be installed, with a stack of 35 M along with MDC as APC.

Ambient air quality monitoring was carried out at 8 locations during February -April 2018 and submitted baseline data indicates that ranges of concentrations of PM_{10} (48.38–73.15µg/m^3), $PM_{2.5}$(12.22 – 22.78µg/m^3), SO_2 (16.48 – 29.54 µg/m^3) and NO_2 (21.39 – 39.52 µg/m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.98 µg /m^3, 0.99 µg /m^3, and 31.74 µg /m^3, with respect to PM_{10}, $PM_{2.5}$ and SO_2 respectively. The resultant concentrations are within the National Ambient Air Quality Standards.

The expenditure towards CER for the project would be 3 % of the project cost as committed by the project proponent.

9.3.9.3 *The EAC, after deliberations, noting discrepancy in the information provided especially on the incremental GLCs due to the proposed project, asked for clarifications and inputs in respect of the following:-*

- *Revised modelling of the environmental parameters, and analysis of incremental GLCs due to the project.*
- *Revised layout plan with details of greenbelt development all along the periphery.*
- *Plan for Corporate Environmental Responsibility.*
- *Environmental and Social Plan.*

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

9.4 Any Other

Agenda No. 9.4.1

Manufacturing Plant of Technical Grade Pesticides at Kh. No. 60//22/2, 69//2, 3,8,9,12/1/1, Village Kalanwali Tehsil Dabwali, District Sirsa, Haryana by M/s Maheswari Bio-chemicals Pvt Ltd-Extension of validity of ToR

[IA/HR/IND2/93841/2015, J-11011/102/2015-IA II(I)]

9.4.1.1 The proposal is for amendment in the terms of reference granted by the Ministry vide letter dated 13th July 2015 to the project 'Manufacturing plant of Technical Grade Pesticides' located at Kh. No.60/22/2, 69/2, 3, 8, 9, 12/1/1, Village Makha, Tehsil Dabwali, District Sirsa (Haryana) in favour of M/s Maheswari Biochemicals Private Limited.

9.4.1.2. The project proponent has requested for extension in the validity of ToR letter dated 13th July 2015 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	4	You are requested to kindly submit the EIA/EMP prepared as per ToR and incorporating all the issues raised during	To extend the validity of	Public hearing yet to conducted and thereafter have to

		Public hearing / Public Consultation to the Ministry for considering the proposal for environmental clearance within 3 years as per the MoEF O.M No. J-11013/41/2006-IA.II (I) dated 8th October 2014	ToR for 2 years	apply for EC.

9.4.1.3. *The EAC, after detailed deliberations, taking note that the proposal has been submitted after expiry of the ToR validity period and the present consideration not serving the purpose, suggested to submit the proposal afresh for ToR.*

The proposal was accordingly not accepted by the Committee.

Agenda No. 9.4.2

Modernization and capacity enhancement to produce multiple grade fertilizers at Spic Nagar, Mullakadu Village, Thoothukudi Taluka, Tuticorin District (Tamil Nadu) by M/s Greenstar Fertilizer Limited - For amendment in ToR

[IA/TN/IND2/88866/2018, J-11011/620/2009 IA II (I)]

9.4.2.1 The proposal is for amendment in the Terms of Reference granted by the Ministry vide letter dated 22nd January, 2019 to the project 'Modernization and capacity enhancement to produce multiple grade fertilizers' at SPIC Nagar, Village Mullakadu, Taluka Thoothukudi, DistrictTuticorin (Tamil Nadu) in favour of M/s Greenstar Fertilizers Limited

9.4.2.2. 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/reason
1	---	Standard ToR Approval Letter last paragraphs : "the Standard TOR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed with public consultation"	Standard ToR Approval Letter last paragraphs:"the Standard ToR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed without public consultation"	M/s Greenstar Fertilizers Limited has conducted public consultation for previous project on 20thJuly 2017.

9.4.2.3. *The EAC, having taking note that the public hearing conducted* 20thJuly 2017 *is for a different project and the scope of the presently submitted project being different, insisted for conducting fresh public hearing.*

Accordingly, the project was not recommended by the Committee.

Day Two: 27th June, 2019

9.5 Environmental Clearance

Agenda No.9.5.1

LPG bottling plant (capacity 3 X 1450 MT in Phase I&II each) at Rasayani with receipt by pipeline/tank lorries at Parade, Tehsil Khalapur, District Raigad (Maharashtra) by M/s Bharat Petroleum Corporation Limited- Environmental Clearance

[IA/MH/IND2/73343/2018, IA-J-11011/202/2018-IA-II(I)]

The project proponent and their consultant M/s Ultra Tech made a detailed presentation on the salient features of the project.

9.5.1.1 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Setting up LPG bottling plant of 3 x 1450 MT capacity by M/s Bharat Petroleum Corporation Limited in an area of 48.3 acres located at Rasayani Tehsil Khalapur, District Raigad (Maharashtra). The project also involves laying of LPG receipt pipeline.

The project/activity was covered under category B of item 6(b) 'Isolated storage & handling of hazardous chemicals (As per threshold planning quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules1989 amended 2000)' of schedule to the Environment Impact Assessment (EIA) Notification, 2006. Due to applicability of general condition (Karnala Wildlife Sanctuary within 5 km), the project required appraisal at central level by the sectoral EAC in the Ministry.

The project site is reportedly located at 2.5 km outside the ESZ of Karnala Wildlife Sanctuary as notified vide S.O. 230(E) dated 22nd January, 2016 & is approx. The proposed receipt pipeline for LPG from SV-2 to Rasayani does not pass through any National park/Sanctuaries/Coral reefs/Ecologically sensitive areas.

9.5.1.2 *The EAC, after deliberations, noted that the Ministry vide Notification S.O 1960(E) dated 13th June, 2019 has omitted entries relating to the item 6(b) of the EIA Notification, 2006, implying that the project shall not require prior environmental clearance, and decided not to consider the proposal.*

Agenda No.9.5.2

Proposed Development Drilling wells and Testing of Hydrocarbons in Charaideo Block in District Charaideo (Assam) by M/s Oilmax Energy Private Limited - Environmental Clearance

[IA/AS/IND2/71708/2017, IA-J-11011/571/2017-IA-II(I)]

The project proponent and their accredited consultant M/s ABC Technolabs India Pvt Ltd, made a detailed presentation on the salient features of the project.

9.5.2.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for onshore development and production of oil & gas along with associated facilities by M/s Oilmax Energy Private Limited in an area of 11.48 sq km of Charaideo Block under Charaideo Nahophabi PML in Upper Assam Basin in District Charaideo (Assam).

The project involves development of three wells already drilled by M/s ONGC Ltd followed by production of oil & gas from the Block, installation of Early Production System (EPS), laying of pipelines, etc. Mines and Minerals Department of the State Government of Assam has, vide letter dated 26th July, 2017, transferred Petroleum Mining Lease (PML) for an area of 11.48 sq km from M/s ONGC Ltd to the project proponent with the same validity period i.e. up to 29th January, 2021.

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, 2006, and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC).

Terms of Reference for the project was issued on 28thJanuary 2018. Public Hearing for the proposed project has been conducted by the Assam State Pollution Control Board on 3rd March, 2019. The main issues raised during the public hearing are related to indirect /direct employment, land compensation, etc.

The block area available for the project is 11.48 sqkm. The estimated project cost is Rs.35.7 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.3.20 crores and the recurring cost (operation and maintenance) will be about Rs. 2.8 crores per annum. Employment opportunity will be for 10 persons directly &90 persons indirectly.

There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the block area. Disang River is flowing through the block area.

Total fresh water requirement is 20cum/day, proposed to be met from bore well. Effluent of 4 cum/day will be treated through mobile ETP system. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement for operation will be 1500 KVA proposed to meet from captive sources. DG sets (4 X 1250 KVA) shall be used as standby during developmental drilling activities.
There is no process emissions generation due to the proposed activities. Drill cutting will be separated from water based mud (WBM) and unusable drilling fluid will be stored in HDPE lined pit for solar drying for temporary storage. The cuttings/mud residues so stored will then be treated and disposed in accordance with CPCB regulations specified for onshore oil & gas industry.

Ambient air quality monitoring was carried out at 8 locations during December 2017 to March 2018 and the baseline data indicates ranges of concentrations as:PM10 (14.1-48.7 µg/m3), PM2.5 (13.1-24.1 µg/m3), SO2 (5-7 µg/m3) and NOx (6.2-13.1 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.27 µg/m3,0.075 µg/m3 and 0.21 µg/m3 with respect to PM10, SOx and NOx. The resultantconcentrations are within the National Ambient Air Quality Standards.

The project proponent has confirmed the expenditure towards CER @ 2% of the total project cost.

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 public hearing have been addressed by the project proponent.

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

- *No drilling shall be carried out in Forest areas.*
- *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 16thNovember, 2009 for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, CH_4, 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_2 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* 20 *cum/day/well proposed to be met from tube wells, and prior permission shall be obtained from the concerned regulatory authority/CGWA.*
- *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 30th 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_2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided*

with personal H_2S 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, and the drilling site shall be restored the area in original condition. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.*
- *All the commitments made to the public during public hearing/consultation 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.*
- *No lead acid batteries shall be utilized in the project/site.*
- *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 persons with Post Graduate degree in Environmental Science/Environmental Engineering.*
- *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 company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.*

Agenda No.9.5.3

Proposed Development Drilling wells and Testing of Hydrocarbons in Duarmara Block in Margherita, DistrictTinsukia (Assam) by M/s Oilmax Energy Private Limited - Environmental Clearance

[IA/AS/IND2/71746/2017, IA-J-11011/575/2017-IA-II(I)]

The project proponent and their accredited consultant M/s ABC Technolabs India Pvt Ltd, made a detailed presentation on the salient features of the project.

9.5.3.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for onshore development and production of oil & gas along with associated facilities by M/s Oilmax Energy Private Limited in an area of 8.91 sqkm located of Duarmara Block under Duarmara PML of Upper Assam basin, District Tinsukia (Assam).

The project involves development of three wells already drilled by M/s OIL followed by production of oil & gas from the Block, installation of Early Production System (EPS), laying of pipelines, etc. Mines and Minerals Department of the State Government of Assam has, vide letter dated 26th July, 2017, transferred Petroleum Mining Lease (PML) for an area of 8.91 sq km from M/s Oil India Ltd to the project proponent with the same validity period i.e. up to 25th November, 2029.

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, 2006, and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC).

Terms of Reference for the project was issued on 22nd February 2018. Public Hearing for the proposed project has been conducted by the Assam State Pollution Control Board on 28thJanuary 2019. The main issues raised during the public hearing are related to indirect /direct employment, land compensation, etc.

The block area available for the project is 8.91 sqkm.The estimated project cost is Rs.120 crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 4.15 crores and the recurring cost (operation and maintenance) will be about Rs.1.8 crores per annum. Employment opportunity will be for 10 persons directly &90 persons indirectly.

There are no National parks, Wildlife sanctuaries within 10 km distance from the block area. The Duarmara block is within reserve forest. Doom Dooma river is flowing through the block area.

Total fresh water requirement is 20cum/day, proposed to be met from bore well. Effluent of 4 cum/day quantity will be treated through mobile ETP system. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 2000 KVA, which will be met from captive sources. DG sets (4 x 2000 KVA) are used as standby during developmental drilling activities.

There is no process emissions generation. Drill cutting will be separated from water based mud (WBM) and unusable drilling fluid will be stored in HDPE lined pit for solar drying for temporary storage. The cuttings/mud residues so stored will then be treated and disposed in accordance with CPCB regulations specified for onshore oil & gas industry.

Ambient air quality monitoring was carried out at 8 locations during January to March 2018 and the baseline data indicates the ranges of concentrations as: PM10 (22.8-50.1 µg/m3), PM2.5 (12.2-26.1 µg/m3), SO2 (<5.0- 6.5 µg/m3) and NO2 (6.6-14.1 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.48 µg/m3, 0.105 µg/m3 and 0.39 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

The project proponent has confirmed the expenditure towards CER @ 2% of the total project cost.

The project involves diversion of forest area of 9.31 ha in the Duarmara Block. Application for diversion of the forest land for non-forestry purpose has been submitted as per the Forest (Conservation) Act, 1980.

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 public hearing have been addressed by the project proponent.

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

- *Stage-1 forest clearance shall be submitted for the forest area involved under the project as per the provisions of the Forest (Conservation) Act, 1980.No drilling/installation of associated facilities shall be carried out in forest areas without prior permission from the concerned regulatory authority.*
- *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 16thNovember, 2009 for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, CH_4, 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_2 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* 20 *cum/day/well proposed to be met from tube wells, and prior permission shall be obtained from the concerned regulatory authority/CGWA.*
- *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 30th 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_2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H_2S 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, and the drilling site shall be restored the area in original condition. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.*
- *All the commitments made to the public during public hearing/consultation 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.*
- *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.*
- *No lead acid batteries shall be utilized in the project/site*
- *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 persons with Post Graduate degree in Environmental Science/Environmental Engineering.*
- *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 company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.*

Agenda No.9.5.4

Proposed speciality chemical manufacturing plant at 902/1, Jhagadia GIDC, Taluka Jhagadia, District Bharuch (Gujarat) by M/s Metropolitan Eximchem Pvt Ltd – For Environment Clearance

[IA/GJ/IND2/75861/2018, IA-J-11011/242/2018-IA-II(I)]

The project proponent and their consultant M/s Kadam Environmental Consultants, made a detailed presentation on the salient features of the project.

9.5.4.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for Setting up speciality chemical manufacturing plant of capacity 3925 TPA by M/s Metropolitan Eximchem Pvt Ltd in an area of 70242.11 sqm located at 902/1, Jhagadia GIDC, Taluka Jhagadia, District Bharuch (Gujarat).

The details of products and capacity are as under:

S. No.	Name of Products	Capacity (MTPA)	Category
1	4-Amino-3-Methoxy Azobenzene-3-Sulphuric Acid	140	5(f) B
2	5-Nito 2-Amino Phenol	150	5(f) B
3	5 Amino 6 Methyl Benzimidazolone	150	5(f) B
4	5 Chloro 8 Hdroxy quinolene	200	5(f) B
5	2,5 Dichloro p-Phenylene diamine	120	5(f) B
6	4-(2 Chloro-Ethyl Sulfonyl) Butric Acid	50	5(f) B
7	2-Chloro 4-(2 Chloro Ethyl sulfonyl) Butric Acid	100	5(f) B
8	2,4,6-Tri[(2,4-Dihydroxy3-Methyl) Phenyl] 1,3,5- Trizine	100	5(f) B
9	2-(4,6-Di Phenyl-1,3,5-Triazine-2-yl)-5(2-Hydroxyethoxy) Phenol	50	5(f) B
10	2,3-Dibromo propanyl chloride	50	5(f) B
11	2-Amino 4[(2,3,-Di Bromo 1-oxypropyl)amine],Benzene Sulfonic Acid	30	5(f) B
12	3-Amino-4-[(4-Amino 2 sulfophenyl)-Diazynyl]5 hydroxynapthalene,2,7 Disulfonic acid	20	5(f) B
13	4,4'-Diamino Diphenyl Amine Sulphate	20	5(f) B
14	Anilino methane sulfonic acid	25	5(f) B
15	Cuprate{2-[1-amino-4-hydroxyl 3-(2 hydroxyl-5-sulfophenyl)azo-4,5-dimethoxy phenyl]}azo-2-Naphthalene sulfonic acid	20	5(f) B
16	3-(4-Chloro-2-Fluro-5-mercaptophenyl)-1-Methyl-6-triflurомethyl,H-pyrinidine-2-,4-dione	300	5(f) B
17	3(2-Chloro ropionyl aniline)propionic acid methyl ester	200	5(f) B
18	Diamino Benzoic Acid	10	5(f) B
19	3,3 Dinitro di Phenyl Sulfone	20	5(f) B
20	2,2-Bis(4-hydroxy-3-nitrophenol,hexafluro) propane	20	5(f) B
21	3-(Dibromo Propionyl)Amido-Benzoyl K Acid	10	5(f) B
22	3,7-Diamino-2-,8-Dimethyl dibenzothiophenne 5,5 dioxide hyrochloride	10	5(f) B
23	3-(2,4-Dichlorophenyl)-6-Fluroquinazoline-2,4 (1H,3H-Dione	10	5(f) B
24	Di Phenyl Sulfone	150	5(f) B
25	2-Amino di methyl terephthalate	150	5(f) B
26	Zinc tetraisopropyl bis(dithiophosphate)	150	5(f) B
27	Zink O,O- Dibutyl DiThiophosphate	100	5(f) B
28	Dipropyleneglycol methyl-n-propylether	30	5(f) B

29	2,3 Dichloro 6-quinoaline carbonyl chloride	30	5(f) B
30	Direct yeoolw F6GZ	100	5(f) B
31	Diethyl sulfate	200	5(f) B
32	4,4`Thio diphenol	150	5(f) B
33	1,3,benzene diol 4 (4,6,bis 2 dimethyl phenyl) 1,3,5 triazine 2-yl	100	5(f) B
34	2-(2-hydroxy,4- methoxy phenyl) 4,6 diphenyl 1,3,5 triazine	100	5(f) B
35	BTCA(1,2,3,4-Butanetetracarboxylic acid)	100	5(f) B
36	2 anilino 6 dibutyl amino, 3 methyl fluoran	500	5(f) B
37	Ipfencarbazone	150	5(b) A
38	m-cresol pure	10	5(f) B
39	Oligomer of Phenyl phthalimide para bis phenol	100	5(f) B
	Total	**3925**	
	Co-product		
1	Ortho toludine Diamine	225	

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

Standard ToR for the project was granted on 2nd September 2018. Public hearing is exempted as the project is located in the notified Industrial area.

Land area available for the project is 70242.11 sqm. Industry will develop greenbelt in an area of 23291.67 sqm, covering 33.2% of total project area. The estimated project cost is Rs. 60 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 898.48lakhs and the recurring cost (operation and maintenance) will be about Rs. 1102.15 lakhs per annum. Employment opportunity will be for 300 persons directly and 200 persons indirectly.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Amaravati river is flowing at a distance of 2.93 km in SW direction.

Total water requirement is estimated to be 807 cum/day, which includes fresh water requirement of528 cum/day, proposed to be met from GIDC water supply.

Effluent of 395 cum/day will be treated through ETP and 77 cum/day shall be sent to MEE-RO.

Power requirement will be2000 KW, which will be met from Dakshin Gujarat Vij Company Limited (DGVCL). Unit will have a DG set 1000 KVA capacity, with stack height as per norms.

Coal fired boiler of 6 TPH & FO fired boiler of 3 TPH will be installed. Multi cyclone separator/Bag filter with a stack of height of 30 m will be installed to control the particulate emissions within the statutory limits.

Ambient air quality monitoring is carried out at 8 locations during December, 2017 to February 2018 and the baseline data indicates the ranges of concentrations as: PM10 (61-86 µg/m3), PM2.5 (19-28 µg/m3), SO2 (9.3-15.5 µg/m3) and NO2 (12.6-18.4 µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.82 µg/m^3, 9.93µg/m^3 and 0.96µg/m^3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

9.5.4.2 *The EAC, after deliberations, asked for clarifications and inputs in respect of the following:-*

- *Revised layout plan with greenbelt development all along the periphery.*
- *Revised product list vis-à-vis the EIA Notification, 2006, along with toxicity details,*
- *Plan for Corporate Environmental Responsibility.*
- *Plan for solvent recovery at 99.5%.*
- *Process safety, risk, chemical and health management plan and mitigation measures*
- *Revised water balance and plan to achieve to ZLD.*

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

Agenda No.9.5.5

Agrochemical and Intermediates manufacturing plant at Plot No. B-15 to B-22, UPSIDC, Tehsil Sandila, District Hardoi (Uttar Pradesh) by M/s Swarup Chemicals Pvt Ltd - Environmental Clearance

[IA/UP/IND2/58942/2016, J-11011/324/2016-IAII (I)]

The project proponent and their consultant M/s EQMS India Pvt Ltd, made a detailed presentation on the salient features of the project.

9.5.5.1 The proposal was earlier considered by the EAC in its meetings held during 25-27 July, 2018, 24-26 September, 2018. The Committee in its last meeting desired for additional information, and the details submitted by the project proponent is as under:

S.No.	Information desired by the EAC	Reply by the project proponent
1	Earlier replies submitted by the project proponent were actually not in line with its observations/concerns in respect of revised water balance, revision of product list vis-a-vis the LD_{50} values.	Revised water balance submitted. Product list has been revised considering the LD_{50} values.
2	The desired risk assessment study using 3D modelling was also not carried out and reported to be in progress. As such, none of the earlier observations was reported to be complied with.	Risk assessment using 3D modelling has been carried out.
3	There are discrepancies in the procedural requirements viz. EIA/EMP report finalized in September, 2017 before the public hearing conducted by SPCB on 30th December, 2017, Final EIA/EMP documents submitted without any authenticity/covering letter, etc.	It was a typographical error. The same has been corrected and revised EIA/EMP report has been submitted with correct details.

9.5.5.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up agrochemicals and intermediates manufacturing plant of capacity 30 TPD by M/s Swarup Chemicals Pvt Ltd in an area of 26930 sqm located at Sandila II, Plot B, 15-22, UPSIDC Industrial area, Tehsil Sandila,District Hardoi (Uttar Pradesh).

The details of products and capacity as under:

S. No	Product	Chemical Name	Capacity	CAS No.
1	Kresoxim methyl	methyl (2E)-2-methoxyimino-2-[2-[(2-methylphenoxy)methyl]phenyl]acetate	30 TPD	143390-89-0
2	Dinotefuran	2-methyl-1-nitro-3-(oxolan-3-ylmethyl)guanidine		165252-70-0
3	Difenthiuron	1-tert-butyl-3-[4-phenoxy-2,6-di(propan-2-yl)phenyl]thiourea		80060-09-9
4	Pyriproxyfen	2-[1-(4-phenoxyphenoxy)propan-2-yloxy]pyridine		95737-68-1
5	ZDC	zinc;N,N-diethylcarbamodithioate		14324-55-1
6	Thiram	dimethylcarbamothioylsulfanyl N,N-dimethylcarbamodithioate		137-26-8
7	Captan	2-(trichloromethylsulfanyl)-3a,4,7,7a-tetrahydroisoindole-1,3-dione		133-06-2
8	Metam sodium	sodium;N-methylcarbamodithioate		137-42-8
9	Zineb	zinc;N-[2-(sulfidocarbothioylamino)ethyl]carbamodithioate		12122-67-7
10	Folpet	2-(trichloromethylsulfanyl)isoindole-1,3-dione		133-07-3
11	DMCC	N,N-dimethylcarbamoyl chloride		79-44-7
12	DMTC	N,N-dimethylcarbamothioyl chloride		16420-13-6
13	Phthalide	3H-2-benzofuran-1-one		87-41-2

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

Standard ToR for the project was granted on 31st January 2017. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 30th December, 2017. The main issues raised during the public hearing are related to employment, impact on agriculture crop, additional pollution load, etc.

Land area available for the project is 26930 sqm. Industry will develop green belt on an area of 8887 sqm, covering 33% of total project area. The estimated project cost is Rs.15 crore. Total capital cost earmarked towards environmental pollution control measures is Rs.2 crores and the recurring cost (operation and maintenance) will be about Rs.30 Lakhs per annum. Employment opportunity will be for 75 persons.

There are no National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife corridors etc. within 10 km from the project site. Bahca river is flowing at 7.6 km, Loni nala and sharda canal is at distance of 2.8 and 5.2 km respectively.

Ambient air quality monitoring was carried out at 8 locations during October 2016 to December 2016 and the baseline data indicates the ranges of concentrations as: PM_{10}(62-80 µg/m^3),$PM_{2.5}$ (32-43µg/m^3), SO_2 (6.1-8.0 µg/m^3) and NO_2 (13.5- 17.6 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be ranges between 0.05-0.50 µg/m^3, 0.01-1.0 µg/m^3 and 0.005-0.180 µg/m^3 with respect

to PM_{10}, SO_2&NO_x. The resultant concentrations are within the National Ambient Air Quality Standards.

Total water requirement is 90 cum/day, proposed to be met from ground water. Effluent of 56 cum/day will be treated through ETP and treated water shall be reused in the plant. 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 800 KVA during operation phase, which will be met from UP State Electricity Board. Unit proposed 2 DG sets of 350 KVA capacity each, with stack height as per CPCB norms.

The unit will have 3 TPH HSD/Rice husk fired boiler. Bag filter with a stack of height of 27.5 m will be installed to control the particulate emissions within the statutory limits.

The expenditure towards CER for the project would be 3 % 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 found to be satisfactory and addressing the concerns raised by the Committee.

9.5.5.3 *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 Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th 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_{50}<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.*
- *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 shall not exceed 90 cum/day to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *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:-*
  - *(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.*
- *As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 3% 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.*
- *Mitigating measures suggested through process safety and risk assessment studies shall be carried out.*

Agenda No.9.5.6

Proposed bulk drug intermediated manufacturing unit at Sy No: 173/B1, Obulapuram Village, D.Hirehal Mandal, District Anantapur (Andhra Pradesh) by M/s Clarus Chem pvt Ltd- Environmental Clearance

[IA/AP/IND2/63298/2017, IA-J-11011/144/2017-IA-II(I)]

The project proponent gave a detailed presentation on the salient features of the project.

9.5.6.1 The proposal was earlier considered by the EAC in its meeting held during 6-8 May, 2019, wherein the EAC observed that incremental concentrations for critical air pollutants namely PM_{10}, SO_2 & NO_x, measured as 2.11 ug/m^3, 2.82 ug/m^3& 3.91 ug/m^3, were on higher side and desired for confirmation of the same. The Committee also suggested for changing the boiler fuel from coal to bio-briquette or any other bio-fuel and rework on air quality modeling. The project proponent has provided parawise reply to different observations the Committee with the details as under:-

Clarifications/inputs sought by the EAC	**Reply by the PP**
Incremental concentrations for critical air pollutants namely PM_{10}, SO_2 & NO_x, measured as 2.11 ug/m^3, 2.82 ug/m^3& 3.91 ug/m^3, were on higher side and desired for confirmation of the same	The maximum incremental GLCs after the proposed project would be PM_{10}, SO_2, NOx would be 0.102 µg/m^3, 0.35 µg/m^3, 2.49 µg/ m^3 respectively**.**
Changing the boiler fuel from coal to bio-briquette or any other bio-fuel and rework on air quality modeling	The project proponent has confirmed that briquettes will be used as boiler fuel.

9.5.6.2 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for setting up of bulk drugs intermediates manufacturing unit of capacity 45 TPM by M/s Clarus Chem pvt Ltd in an area of 6.2 acres located at Sy. No.173/B1, Village Obulapuram, Mandal D.Hirehal, District Anantapur (Andhra Pradesh).

The details of products/byproducts are as under:-

S. No.	**Product**	**Quantity (TPM)**
1	1-(2,3 Dichlorophenyl) piperazine Hydrochloride (Aripiparazol Intermediate)	6
2	1-(4-Methoxy-Phenyl)-4-(4-Nitro-Phenyl)-Piperazine(Itraconazole Intermediate)	6
3	1-Acetyl-4-(Hydroxy Phenyl) Piperazine(Itraconazole Intermediate)	6
4	4-Phenyl butanol (Intermediate)	2
5	5-Cyano Phthalide (Citalopram Intermediate)	5
6	Bis (2-chloroethyl) amine Hydrochloride (Itraconazole Intermediate)	6
7	Diphenyl (Piperidin-4-yl) Methanol (Fexofenadine	6

	intermediate)	
8	n-Acetyl Piperzine(Intermediate)	2
9	N-Methyl-1-Napthalenemethylamine Hydrochloride(Terbinafine Hydrochloride)	6
	Total	**45**

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.

The standard ToR for the project was granted on 26th May, 2017. Public hearing was conducted by the State Pollution Control Board on 18th May, 2018.

The total land is 6.2 acres. Green belt will be developed in an area of 36% i.e. 2.23 acres out of total area of the project. The estimated project cost is Rs.5.2 crores including investment on proposed project. Total capital cost earmarked towards environmental pollution control measures is Rs. 71 Lakhs and the recurring cost (operation and maintenance) will be about Rs. 15 Lakhs 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.

Total water requirement is estimated to be 62 cum/day, which includes fresh water requirement of 42 cum/day, proposed to be met from ground water. The permission to draw ground water of 62 cum/day for industrial and drinking water purpose was obtained from Ground Water & Water Audit Department, Government of Andhra Pradesh.

Effluent of 24.5 cum/day quantity will be treated through treated through stripper followed by MEE/ATFD, Biological Treatment Plant followed by RO plant. Treated effluent of 20 cum/day shall be reused in the plant. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 500 KVA and will be met from APSPDCL. DG set of 350 KVA capacity, Stack (height 10 mts) will be provided as per CPCB norms to the proposed DG set.

Two briquettes fired boilers of 1 TPH & 2 TPH are proposed with stacks of height 30 m each. Multi cyclone separator/ bag filter each will be installed for controlling the particulate emissions (within statutory limit of 115 mg/ Nm3).

Ambient air quality monitoring was carried out at 8 locations during October, 2017 - December, 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (54.7-60.8 µg/ m3), $PM_{2.5}$ (20.7-26.4 µg/ m3), SO_2 (12.6-15.9 µg/ m3), NO_x (20.7-23.8 µg/ m3), CO (0.41-0.56 mg/ m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be PM_{10}, SO_2, NO_x would be 0.102 µg/m^3, 0.35 µg/m^3, 2.49 µg/m^3 respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NQQS).

The expenditure towards CER for the project would be 2.5% 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. The

Committee also found additional information submitted by the project proponent to be satisfactory.

9.5.6.3 *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 21stJuly, 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:*
  - *(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 42 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- *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:-*
  - *(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.*
- *All the commitments made to the public during public consultation/hearing shall be satisfactorily implemented.*
- *At least 2.5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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 including dental checkup 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.9.5.7

Expansion of Viscose Staple Fibre (2,55,500 to 4,38,000 TPA), Sulphuric Acid (1,82,500 to 3,46,750 TPA) and Carbon-Disulphide (34675 to 65,700 TPA) by M/s. Grasim Industries Ltd. (Grasim Cellulosic Division) in an area of 222.63 ha at Plot No.1, GIDC Industrial Area, Vilayat, Taluka Vagra, District Bharuch (Gujarat) -Environmental Clearance

[IA/GJ/IND2/58913/2016, J- 11011/321/2016-IA.II(I)]

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

9.5.7.1 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for expansion of Viscose Staple Fibre (2,55,500 to 4,38,000 TPA), Sulphuric Acid (1,82,500 to 3,46,750 TPA) and Carbon-Disulphide (34675 to 65,700 TPA)by M/s Grasim Industries Ltd (Grasim Cellulosic Division) in an area of 222.63 ha at Plot No.1, GIDC Industrial Area, Vilayat, Taluka Vagra, District Bharuch (Gujarat).

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

S. No.	Name of Products (Unit)	Existing Capacity (as per EC dated 20th Dec., 2007)	Granted Capacity (as per EC dated 15th Jan., 2018)	Project Proposal / Additional Capacity	Total Capacity after Expansion
Project Proposal					
1.	Viscose Staple Fibre (TPA)				
	Existing	1,27,750	1,27,750	*No change*	
	De-bottlenecking	-	*36,500*	*No change*	
	New Machines	-	*91,250*	*1,82,500*	*1,82,500*
	TOTAL	**1,27,750**	***2,55,500***	***1,82,500***	***4,38,000***
2.	Solvent Spun Cellulosic Fibre (Excel Fibre) (TPA)	Nil	36,500	Nil	36,500
Associated Activities*					
3.	Sulphuric Acid (TPA)	1,02,200	1,82,500	1,64,250	3,46,750 *(182500 + 164250)*
4.	Carbon-Disulphide (TPA)	23,725	34,675	31,025	65,700 *(34675+ 31025)*
5.	Sodium Sulphate (By Product) (TPA)	83,038	1,66,076 - 2,10,788	1,82,500	3,48,576 - 3,93,288 *(166076 - 210788 + 182500)*
6.	Captive Power Plant (MW)	25	55	Nil	55

*****EC is not required as per EIA Notification, 2006; as amended from time to time.

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

Standard Terms of Reference for the project was issued on 24th August, 2018. Public hearing is exempted as the project site is located inside the notified industrial area.

Existing land area is 222.63 Ha (2226300 m2). No additional land will be required for proposed expansion. The estimated project cost is Rs. 3500 crores against previously envisaged Rs. 2560 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 420 Crores against Rs 150 Cr and the recurring cost (operation and maintenance) will be about Rs. 70 Crores against Rs 15 Cr per annum.Total Employment will be 1400 persons as regular & 1300 persons on contract 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. Narmada River flows at 9 km in SSW direction.

Total water requirement is 52, 500 m3/day including fresh water requirement of 38,500 m3/day proposed to be met from Gujarat Industrial Development (GIDC) Pipeline.
Effluent - 40,000 m3/day will be treated in the Effluent Treatment plant of which around 14000 m3\day of treated effluent will be recycled back to VSF Plant and remaining 26000 m3/day will be discharged through GIDC common Pipeline into deep Sea after recovery of water from the effluent.

Power requirement after expansion will be 60 MW, which will be met from Captive Power Plant. There is/are no DG set/s requirement.

Ambient air quality monitoring was carried out at 8 locations during Winter Season (Dec., 2016 to Feb., 2017) and the baseline data indicates the ranges of concentrations as: PM10 (55.2 to 88.2 µg/m^3), PM2.5 (26.5 to 48.7 µg/m^3), SO2 (11.3 to 28.7 µg/m^3), NO2 (11.9 to 32.5 µg/m^3), CS2 (18.6 to 31.9 µg/m^3) & H2S (6.2 to 10.6 µg/m^3) respectively. During the additional one month study period (October, 2018) the concentrations of PM10 and PM2.5 for all the 8 AAQM stations were found between 52.4 to 91.1 µg/$m^3$and 24.9 to 48.8 µg/m^3 respectively while concentrations of CS2 and H2S were found between 16.9 to 34.5 µg/m^3 and 7.0 to 12.8 µg/m^3respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.2 µg/m3, 5.3 µg/m3, 0.9 µg/m3, 8.5 µg/m3 & 5.1 µg/m3 with respect to PM10, SO2, NO2, CS2 & H2S. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The expenditure towards CER for the project would be 0.25% of the project cost as committed by the project proponent.

Earlier, the Ministry has issued EC vide letter dated 15th January, 2018 for existing Project Viscose Staple Fibre Plant(2,55,500 TPA), Solvent Spun Cellulosic Fibre (Excel Fibre) Plant (36,500 TPA) , Captive Power Plant (55 MW), Sulphuric Acid Plant (1,82,500 TPA), Carbon Di-sulphide Plant (34,675 TPA) and By- product An- hydrous Sodium Sulphate (1,66,076 - 2,107,88 TPA) in favour of M/s Grasim Industries Ltd (Grasim Cellulosic Division). Later Amendment of EC grated by the Ministry on 16thAugust, 2018 for fuel and fresh water requirement.The monitoring report on compliance status of EC conditions has been forwarded by the Ministry's Regional Office at Chandigarh vide letter dated 5th December, 2018 The committee found the certified compliance report to be satisfactory.

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.

Consent to Operate for the existing industrial operations have been obtained from Maharashtra PCB vide letter dated 15th April, 2019 which is presently valid up to 23rd March, 2024.

9.5.7.2 *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.*
- *Treated effluent shall be recycled back to VSF Plant and remaining 26000 m3/day will be discharged through GIDC common pipeline into deep sea after recovery of water from the effluent.*

- *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.*
- *Solvent management, if any, 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 98% 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.*
- *Total fresh water requirement shall not exceed 38,500 m3/day proposed to be met from Gujarat Industrial Development (GIDC) Pipeline. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Rain water harvesting structures shall be provided to reduce dependency of fresh surface water for industrial purposes. In any case, no ground water shall be used for the plant.*
- *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 of 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 at least 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.*
- *At least 0.25% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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.*

- *Storage of raw materials shall be either stored 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.*
- *The energy sources for lighting purposes shall preferably be LED based.*
- *Transportation of raw materials/products should be carefully performed using GPS enabled vehicles.*

Agenda No.9.5.8

Manufacturing of New Technical grade pesticide at Plot No. HD 20,21,22 Plot No. HE-27,28,29 and 30, UPSIDC Industrial Area, Sikandrabad, Dist- Bulandshahr (Uttar Pradesh) by M/S Samradhi Crop Chemicals Pvt Ltd- Environmental Clearance

[IA/UP/IND2/87428/2018, IA-J-11011/76/2017-IA-II(I)]

The project proponent gave a detailed presentation on the salient features of the project.

9.5.8.1 The proposal was earlier considered by the EAC in its meeting held during 6-8 May, 2019, wherein the EAC expressed concerns over hazardous nature of different products/pesticides and the risks involved, especially while their field application. The Committee desired for a confirmation on safety aspects from the concerned regulatory authority/Central Insecticides Board. Further, in view of fresh water requirement of 10 cum/day, the Committee desired for revisiting the same, along with detailed plan for achieving ZLD.The project proponent has provided parawise reply to different observations the Committee with the details as under:-

Clarifications/inputs sought by the EAC	**Reply by the PP**
Hazardous nature of different products/pesticides and the risks involved, especially while their field application. The Committee desired for a confirmation on safety aspects from the concerned regulatory authority/Central Insecticides Board	Permission received from Central Insecticides Board for the products namely Thiomethoxam, Glyphosate, Pretilachlor, 2,4-D Ethyl Ester, 2,4-D Sodium Salt and 2,4-D Acid. Already applied to Central Insecticides Board for rest of the products.
fresh water requirement of 10 cum/day, the Committee desired for revisiting the same, along with detailed plan for achieving ZLD	Provision of MEE and RO is made to achieve ZLD.

9.5.8.2 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for Setting up Technical Pesticide manufacturing unit of capacity 760 TPA by M/s Samradhi Crop Chemicals Pvt Ltd in an area of 4800 sqm located at Plot No. HD 20 to 22 & Plot No. HE-27 to 30, UPSIDC Industrial Area, Sikandrabad, District Bulandshahr (Uttar Pradesh).

The details of products are as under:

S. No.	Classification	Product	Quantity (TPA)
1	Weedicides	Glyphosate	30
		Pretilachlor	30
		2,4-D Sodium Salt	150
		2,4-D Acid	300
		2,4-D Ethyl Ester	100
		Metribuzine	15
2	Fungicide	Azoxystrobin	15
3	Insecticide	Thiomethoxam	60
		Bifenthrin	15
		Fipronil	15
		Imidacloprid	15
		Diafenthiuron	15
		Total	**760**

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

Standard ToR for the project was granted on 6th July, 2018. Public hearing is exempted as the project site is located inside the notified industrial area.

Land area available for the project is 4800 sqm. Industry will develop a greenbelt in an area of 1600 sqm covering 33% of total project area. The estimated project cost is Rs.5 crore. Total capital cost earmarked towards environmental pollution control measures is Rs.70 lakhs and the recurring cost (O&M) will be about Rs.16 lakhs per annum. Employment opportunity will be for 50 persons.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors, rivers etc within 10 km distance from the project site. Upper Ganga canal is flowing within 10 km and its distributaries like Sikandrabad and Barauda are flowing within 2 km range.

Total water requirement is estimated to be 14 cum/day, which includes fresh water requirement of 10 cum/day, proposed to be met through bore well. Application in this regard has been submitted to CGWA vide letter dated 1st October, 2018.

Effluent of 4.8 cum/day will be treated through ETP. Treated water of 4 cum/day will be reused in the boiler/cooling tower. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 150 KVA, which will be met from UPVVNL. DG set of 110 KVA will be used as standby during power failure. Stack (height 15 m) will be provided as per CPCB norms to the proposed DG sets. The unit will have 1 TPH Agro-waste/ LDO fired Boiler. In-built internal cyclone separator and bag filter with stack height of 30 m will be installed to control the particulate emissions within the statutory limit of 115 mg/Nm^3.

Ambient air quality monitoring was carried out at 8 locations during 15thMarch to 15thJune 2017 and the baseline data indicates the ranges of concentrations as: PM_{10} (39-88 µg/m^3), $PM_{2.5}$ (18-52 µg/m^3), SO_2 (4.6-12.8 µg/m^3) and NO_2 (8.2-18.6 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project

would be 0.152 µg/m^3, 0.408 µg/m^3 and 0.408 µg/m^3 with respect to PM_{10}, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

The expenditure towards CER for the project would be 2.5% 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. The Committee also found additional information submitted by the project proponent to be satisfactory.

9.5.8.3 *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 Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th 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_{50}<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.*
- *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 10 cum/dayto be met from bore well. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- *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 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.*
- *Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.*

9.6 Any Other

Agenda No.9.6.1

Increasing Ethanol storage by 6000 KL at Panipat Marketing Complex, PO-Panipat Refinery, Vill.-Baholi, Panipat by M/s Indian Oil Corporation Ltd- Amendment in ToR

[IA/HR/IND2/80179/2018, IA-J-11011/300/2018-IA-II(I)]

The project proponent did not attend the meeting.The EAC, noted that the Ministry vide Notification S.O.1960(E) dated 13th June, 2019 has omitted entries relating to the item 6(b) of the EIA Notification, 2006, implying that the project shall not require prior environmental clearance for operations, and decided not to consider the proposal.

Agenda No.9.6.2

Expansion of existing capacity from 460 TPM to 2100 TPM of Pesticides Technical, Intermediate & Pesticides Formulation Products at Durgachak, East Medinipur (West Bengal) by M/s UPL limited UnitIX- Amendment in ToR

[IA/WB/IND2/86650/2018, J-11011/914/2008-IA II (I)]

The project proponent vide email dated has expressed their inability to attend the meeting. The proposal was, therefore, not considered.

Agenda No.9.6.3

Proposed Project of Pharmaceutical APIs and Synthetic Organic Chemicals at Plot No.180, Near Sardar Chowk, Phase II, GIDC, Vapi (Gujarat) by M/s Punagri Organics and Life sciences Pvt Ltd - Amendment in ToR

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

9.6.3.1 The proposal is for amendment in the terms of reference dated 4th August, 2017 granted by the Ministry in favour of M/s Punagri Organics and Life sciences Pvt Ltd to the project for setting up Synthetic Organic Chemicals (Active Pharmaceuticals Ingredients) manufacturing unit in District Valsad (Gujarat).

9.6.3.2 The project proponent has requested for amendment in ToR by changing few products from existing product list (addition of 10 new products, removal of 5 products and change in capacity of 11 products), resulting reduction in the total production capacity from 483 TPM to 385 TPM. Due to changes in production mix and capacity, water consumption would increase from from 320 KLD to 325 KLD and waste water generation reduces from 277 KLD to 254 KLD.

The revised details of products are as under:-

. No.				**Products**	**As per Existing TOR Granted**		**As requested in proposed Amendment**		**Remarks**
					Max. Production Capacity (TPM)	Production Capacity (TPM)	Max. Production Capacity (TPM)	Production Capacity (TPM)	
Group I	**A**			**Anti-ulcer API's**					
		(I)		**Prazole chlorides**					
			1	Omeprazole chloride **OR**	11	11	8	8	Change
			2	Pantoprazole chloride **OR**	7		7		No Change
			3	Rabeprazole chloride	8		8		No Change
		(II)		**Prazole Benzimidazoles**					
			1	2-Mercapto-5-methoxybenzimidazole **OR**	30	30	30	30	No Change
			2	5-Difluoromethoxy-2-mercaptobenzimidazole **OR**	7		7		No Change

			3	2-Mercaptobenzimidazole	9		9		No Change
		(III)		**API's**					
			1	Omeprazole sulphide/Omeprazole salts **OR**	7	10	5	10	Change
			2	Esomeprazole salts **OR**	3		3		No Change
			3	Pantoprazole sulphide/Pantoprazole salts **OR**	10		10		No Change
			4	Rabeprazolesulphide/Rabeprazole salts**OR**	10		10		No Change
	B	**Anti depressant**							
		(II)		**API's**					
			1	Citalopram salts **OR**	10	10	8		Change
			2	Escitalopram salts **OR**	4		4		No Change
		(I)		**Intermediates**					
			1	Cyanodiol salts **OR**	35	35	28	28	Change
			2	5-Cyanophthalide **AND**	28		23		Change
			3	5-Carboxyphthalide	0	-	30	30	New Product Added
	C	**Beta Blocker**							
		(I)		**Intermediates**					
			1	4-Hydroxycarbazole **OR**	14	20	14	30	No Change
			2	4-(2,3-epoxypropoxy)-carbazole **OR**	14		14		No Change
			3	2-(2-Methoxy-phenoxy)-ethylamine **OR**	11		11		No Change
		(II)		**API**					
			1	Carvedilol **OR**	20		20		No Change
	D	**Antiarrhythmic**							
			1	Lidocaine Hydrochloride **OR**	3		30		Change
	E	**Antianginal**							
		(I)		**Intermediates**					
			1	N-(2,6-dimethyl-phenyl)-2-piparazinoacetamide **OR**	3		3		No Change
			2	3-(2-Methoxyphenoxy)-1,2-epoxypropane	2		2		No Change
		(II)		**API**					
			1	RanolazinedihydrochlorideOR	2		2		No Change
	F	**Anti-convulsant**							
		(I)		**Intermediates**					
			1	Isobutylglutaric acid **OR**	10		10		No Change
			2	R-(-)-3-(Carbamoylmethyl)-5-methylhexanoic acid **OR**	4		4		No Change

		(II)	**API**					
			1	Pregabalin **OR**	3		3	No Change
	G	**Muscle relaxant**						
			1	Metaxalone **OR**	3		3	No Change
	H	**Anti HIV/AIDS**						
		(I)	**Intermediates**					
			1	3-Amino-2-chloro-4-methylpyridine **OR**	4		4	No Change
		(II)	**API**					
			1	Nevirapine **OR**	4		4	No Change
	I	**Lipid-lowering**						
		(I)	**Intermediates**					
			1	(4R-cis)-1,1-Dimethylethyl-6-Cyanomethyl-2,2-dimethyl -1,3-dioxane-4-acetate **OR**	2		2	No Change
			2	tert-butyl [(4R,6R)-6-aminoethyl-2,2-dimethyl-1,3-dioxan-4-yl]acetate **OR**				No Change
		(II)	**API**					
			1	Atorvastatin **OR**				No Change
	J	**NSAID**						
		(I)	**Intermediates**					
			1	1-(4-Methylphenyl)-4,4,4-Trifluoro-Butane-1,3-Dione **OR**	7		0	Product Removed
			2	4-Hydrazinobenzene-sulfonamide hydrochloride **OR**	7		0	Product Removed
			3	2-Amino-5-methylthiazole	0		15	New Product Added
			4	Isopropyl 4-hydroxy-2-methyl-2H-1,2-benzothiazine-3-carboxylate 1,1-dioxide	0		21	New Product Added
		(II)	**API**					
			1	Celecoxib **OR**	10		0	Product Removed
			2	Meloxicam	0		7	New Product Added
			3	Piroxicam	0		7	New Product Added
	K	**Anti-diabetic**						
		(I)	**Intermediates**					
			1	(S)-1-(2-chloroacetyl)pyrrolidine-2-carbonitrile **OR**	8		8	No Change
		(II)	**API**					

			1	Vildagliptine**OR**	9		9		No Change
	L	**Anti-histamine**								
		(I)	**Intermediates**							
			1	2-Chlorobenzimidazole **OR**	10		10		No Change
	M	**Cholinesterase inhibitors**								
		(I)	**Intermediates**							
			1	(S)-3-[1-(Dimethylamino)ethyl]phenol **OR**	6		6		No Change
		(II)	**API**							
			1	Rivastigmine Salt **OR**	5		5		No Change
	N	**Anti cancer (Kinase inhibitors)**								
		(I)	**Intermediates**		6		6		No Change
			1	(2-Methyl-5-Nitrophenyl) Guanidine Nitrate **OR**						
			2	3-Dimethylamino-1-(3-Pyridyl)-2-Propen-1-One **OR**	4		4		No Change
			3	N-(5-Amino-2-Methylphenyl)-4-(3-Pyridyl)-2-Pyrimidineamine **OR**	4		4		No Change
		(II)	**API**							
			1	ImatinibMesylate**OR**	3		3		No Change
			2	Axitinib	3		3		No Change
Group II	**Catalytic hydrogenation/dehydrogenation**									
			1	a. Nitro to amino b. Dearomatisation c. Aromatisation d. Debenzoylation e. Keto to alcohol etc.	200	200	100	100	Change
Group III	**Castor Oil & derivatives**									
			1	Undecylenic acid	30	30	0	0	Product Removed
			2	Sebacic acid	5	5	0	0	Product Removed
Group III	**Fine Speciality Chemicals**								New Group Added	
			1	MNPT **OR**	0	-	150	150	New Product Added	
			2	Fast Red B Base **AND**	0		90		New Product Added	

			3	Fast Scarlet R Base	0		12		New Product Added
				OR					
			4	Fast Bordeaux GP Base	0		150		New Product Added
Group IV	**Intermediate for Pigments**								
			1	Fast Red KD Base **OR**	25	30	12	25	Change
			2	Napthol ASLC **OR**	25		23		Change
			3	5-amino-6-methyl benzimidazolone (5-AMBI) **OR**	10		10		No Change
			4	5-Acetoacetylamino-benzimidazolone **OR**	30		19		Change
			5	CLT Acid**OR**	0	-	25		New Product Added
			6	OPDA/ PPDA	100	100	25		Change
Group V	**R&D Centre**								
			1	Research activities of synthetic organic chemicals comprising of various unit processes & unit operations in a pilot reactor (like acetylation, nitration, hydrolysis, bromination, reduction, oxidation, hydrogenation, condensation etc.)	2	2	2	2	No Change
				Total/Month	787	483	1042	413	There is a change in total production capacity.
				Total/Day	26.2	16.1	34.7	13.7	

9.6.3.3 *The EAC after detailed deliberations, opined that given the scope of the revised project involving reduction in total production capacity from 483 to 413 TPM, ToR dated 4th August, 2017 shall remain applicable. The Committee suggested to submit the proposal for environmental clearance to the concerned regulatory authority (SEIAA/MoEF&CC) without waiting for any clarification in this regard.*

Agenda No.9.6.4

Expansion for manufacture of Carbon Black (from 12500 TPM to 18750 TPM) along with Power Plant (From 33.7 MW to 47 MW) at K-16, Phase II, SIPCOT Village Pappankuppam, Gummidipoondi, district Tiruvallur, Tamil Nadu by M/s SKI Carbon Black India Pvt. Ltd - Extension of validity of EC

[IA/TN/IND2/73860/2011, J-11011/350/2010-IA.II(I)]

9.6.4.1 The proposal is for extension of validity of environmental clearance granted by the Ministry vide letter dated 21st September, 2011 to the project 'Expansion of Carbon Black (12,500 MTPM to 18,750 MTPM) alongwith Power Plant (33.7 MW to 47 MW) at K-16, Phase II, SIPCOT Village, Pappakuppam, Gummidipoondi, District Thiruvallur (Tamilnadu)in favour of

M/s Hi-Tech Carbon, India, which was further transferred to M/s SKI Carbon Black (India) Pvt Ltd vide Ministry's letter dated 10th February, 2015.

9.6.4.2 The proposal was earlier considered by the EAC in its meeting held during 27-29 August, 2018, wherein the EAC observed that the project has been already been implemented partly (12500 TPM to 14500 TPM) without obtaining the prior clearance from the Standing Committee of the NBWL, which amounts to non-compliance of the condition stipulated in the environmental clearance dated 21st September, 2011 in this regard. The Committee desired that the Ministry may take a view for further action into the matte*r.*

9.6.4.3 The Committee noted that in view of EAC observation, show cause notice was issued by the Ministryvide letter dated 28th November, 2018. In response, the project proponent vide letter dated 8th April , 2019 has informed that the Standing Committee of NBWL in its 53rdmeeting held on 25th February, 2019 has recommended the proposal subject to certain conditions. The Committee also noted that the Ministry has revoked the show cause notice vide letter dated 29th March, 2019**.**

9.6.4.4 *The EAC, after deliberations and in view of the provisions contained in the EIA Notification, 2006 read with subsequent amendments therein, recommended for extending validity of the EC dated 21st September, 2011 for a period of three years i.e. up to 21st September, 2021.*

Day Three: 28thJune, 2019

9.7 Environmental Clearance

Agenda No.9.7.1

Expansion of Grain based Distillery (60 KLPD to 105 KLPD) & Cogeneration Power Plant (2.5 MW to 4.5 MW) along with installation of 10 KLPD Malt Spirit Plant at Village Bhutiyan, Tehsil Beri, District Jhajjar (Haryana) by M/s ADS Spirits Pvt Ltd - Environmental Clearance

[IA/HR/IND2/103180/2010, J-11011/317/2010-IA II (I)]

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

9.7.1.1 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for expansion of grain based distillery from 60 KLPD to 105 KLPD, co-generation power plant from 2.5 MW to 4.5 MW, and installation of 10 KLPD Malt Spirit Plant M/s ADS Spirits Pvt Ltd in an area of 10.11 ha at Village Bhutiyan, Tehsil Beri, District Jhajjar (Haryana)

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

S.	Units	Existing	Additional	Total	Products & by

No.					products
1.	Grain Based Distillery	60 KLPD	45KLPD	105KLPD	***Products***: - Extra Neutral Alcohol (ENA)/ Rectified Spirit (RS)/ Ethanol/ Absolute alcohol (AA) ***By Product***: - DDGS& CO2
2.	Co-Generation Power Plant	2.5 MW	2.0 MW	4.5 MW	Power
3.	Malt Spirit Plant	NIL	10 KLPD	10 KLPD	Malt Spirit
4.	IMFL/CL Bottling Plant	25000 cases/day	NIL	25000 cases/day	IMFL/CL Bottles

The project/activity is covered under category B of item 5 (g) 'Distilleries' of the schedule to the Environmental Impact Assessment Notification, 2006 and requires appraisal/approval at state level. Due to project was submitted and accepted before the Ministry's Notification dated 13th June, 2019, the project appraised at Central level in the Ministry.

Standard Terms of Reference for the project was issued on 23rd March, 2018. Public hearing was conducted by the State Pollution Control Board on 11th February, 2019. The main issues raised during the publichearing are related to employment, CSR activities in nearby areas, training centres, environmental pollution etc.

Existing land area is 64700 m2 (6.47 ha), additional land 36400 m2 (3.64 ha) will be used for proposed expansion. Total area after expansion will be 101100 m2 (10.11 ha). Green belt will be developed in 33% i.e. 33000 m2 (3.3 Ha) out of total area of the project.

The estimated project cost is Rs.25 crores for expansion project. Total capital cost earmarked towards environmental pollution control measures is Rs.5.0 crores and the Recurring cost (operation and maintenance) will be about Rs.0.5 crores per annum. Total Employment will be 420 persons (250 persons permanent and 170 persons temporary during operation) 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.

Total fresh water requirement will be increased from 760 cum/day to 900 cum/day proposed to be met from ground water. The permission has been accorded by the Central Ground water Authority vide letter dated 9th July, 2018 for withdrawal of 900 cum/day.

Effluent of 312cum/day will be treated through ETP followed by RO. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

The power requirement will be increased from 2 to 3.5 MW proposed to be met from co-generation plant of 4.5 MW.Existing unit has two DG sets 750 kVA capacity each for the power backup. One more DG set of 1000 kVA capacity will be used as standby with stack of 9 m height.

Existing unit has one rice husk or coal fired boiler of 25 TPH capacity. One more rice husk or coal fired boiler of 36 TPH capacity will be installed with Electrostatic Precipitator and stack of 50 m height f 35 m to control the particulate emissions within the statutory limit of 50 mg/Nm3.

Ambient air quality monitoring was carried out at 8 locations during Summer Season (Marchto May, 2018) and the baseline data indicates the ranges of concentrations as:PM10(58.2 to 86.4 µg/m3), PM2.5(23.6 to 42.5 µg/m3), SO2(7 to 15.6 µg/m3) and NO2(11.1 to 24.2 µg/m3). AAQ modelling study for point source emissions indicates that themaximum incremental GLCs after the proposed expansion project would be 0.15µg/m3, 0.86µg/m3, 2.5 µg/m3with respect to PM10, SoxandNOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The expenditure towards CER for the project would be 5% 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.

Earlier, the Ministry has issued EC vide letter dated 12th October, 2011 for Grain Based Distillery Unit (60 KLPD) and CPP (2.5 MW) in favour ofM/s A D S Spirits Pvt. Ltd. The monitoring report on compliance status of EC conditions has been forwarded by the Ministry's Regional Office at Chandigarh vide letterdated 13th March, 2019. The committee found the certified compliance report to be satisfactory.

Consent to Operate for the existing industrial operations have been obtained from Maharashtra PCB vide letter dated 18th December, 2015 which is presently valid up to 30th September, 2020.

9.7.1.2 *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 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 900cum/day proposed to be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *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 5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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 stored 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_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*
- *Every production batch shall take prior approval from the concerned regulatory authority that raw grain is unfit for human consumption*
- *Grain shall be tested for microtoxins from the govt laboratory and aware the workers related to grain dust. Regular medical check up campaign shall be carried out for the same. Mask and gloves shall be provided to the workers along with training.*

Agenda No.9.7.2

Expansion of Agrochemicals and Their Intermediatesat Existing unitat Plot No. 241, 242/2, 241/P, Notified GIDC Industrial Estate, Panoli, District Bharuch (Gujarat) by M/s Cheminova India Limited (Technical Division) - Environmental Clearance

[IA/GJ/IND2/89462/1997, J-11011/000/1997-IA-II(I)]

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

9.7.2.1 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for expansion of pesticide and pesticide intermediates manufacturing unit from 3533 TPA to 15583 TPA by M/s Cheminova India Limited (Technical Division) in an area of 40476.94 sqm at No. 241, 242/2, 241/P, GIDC Industrial Estate Panoli, Taluka Ankleshwar, District Bharuch (Gujarat).

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

S. No.	Name of Product	CAS No.	Existing (TPA)	Proposed (TPA)	Total (TPA)	End Use
1.	NATURAL GAS BASED CAPTIVE POWER PLANT	---	2.04 Mega Watt hour	---	2.04 Mega Watt hour	---
2.	ORGANO PHOSPHATE: - ACEPHATE TECH. **(I),** DICHLORVOS **(I)**, CHLORPYRIFOS **(I)**, QUINALPHOS **(I)**, TRIAZOPHOS **(I)**, PHOSALONE **(I)**, OMETHOATE **(I)**, PROTHIOFOS **(I)**, TEMEFOS **(I)**, PROFENOFOS **(I)**, ETHION **(I)**, ETHWEPHON (PGR), GLYPHOSATE **(H)**, etc.	0030560-19-1 / 0000062-73-7 / 0002921-88-2 / 0013593-03-8 / 0024017-47-8 / 0002310-17-0 / 0001113-02-6 / 0034643-46-4 / 0003383-96-8 / 0041198-08-7 / 0000563-12-2 / 0016672-87-0 / 0001071-83-6	Either individual or total production of this group shall not exceed 800 TPA	---	Either individual or total production of this group shall not exceed 800 TPA	I – Insecticide H- Herbicide F- Fungicide Int- Intermediate
3.	STROBILURIN: - AZOXYSTROBIN TECH. **(F)**, DES-METHOXYAZOXY (DMA) **(INT.)** KRESOXIM METHYL **(F)**, FLOUXASTROBIN **(F)**, PYRACLOSTROBIN **(F)** etc.	0131860-33-8 / 0478413-45-5 / 0143390-89-0 / 0361377-29-9 / 0175013-18-0	Either individual or total production of this group shall not exceed 1200 TPA	---	Either individual or total production of this group shall not exceed 1200 TPA	I – Insecticide H- Herbicide F- Fungicide Int- Intermediate
4.	NEONICOTINOID/AMIDE: - IMIDACLOPRID TECH **(I)**, THIACLOPRID **(I)**, ACETAMIPRID **(I)**, BEFLUBUTAMIDE	0138261-41-3 / 0111988-49-9 / 0160430-64-8 / 113614-08-7/ 0272451-65-7 /	Either individual or total production of this group shall not	---	Either individual or total production of this group shall not exceed 225	I – Insecticide H- Herbicide F- Fungicide Int- Intermediate

	TECH **(H)**, FLUBENDAMIDE **(I)**, CHLORANTRANILIPROLE **(I)**, RYNEXAPYR **(I)**, CYMOXANIL **(F)**, THIFLUZAMIDE **(F)**, CARBOXIN **(F)**, CAPTAN **(F)**, PRETILACHLOR **(H)**, PROPYZAMIDE **(H)**, PETHOXAMIDE **(H)**, SNA**(INT.),** (2-AMINOSULFONYL-N,N-DIMETHYLNICOTINAMIDE), MST **(INT.)**, (2-METHOXYCARBONYL) THIOPHENE-3-SULFONAMIDE), FLUFENACET **(H)**, BOSCALID **(F)** etc.	0500008-45-7 / 0500008-45-7 / 0057966-95-7 / 0130000-40-7 / 0017757-70-9 / 0000133-06-2 / 0051218-49-6 / 0023950-58-5 / 0106700-29-2 / 0112006-75-4 / 0059337-93-8 / 0142459-58-3 / 0188425-85-6	exceed 225 TPA		TPA	
5.	KETONE: - DIMETHOMORPH TECH. **(F)**, CLETHODIM **(H)**, BUTROXYDIM **(H)**, SPIROMESIFEN **(I)**, MESOTRIONE **(H)**, SULCOTRIONE **(H)**, IBP **(INT.)**, (ISOBUTYROPHENONE), PYMETROZINE **(I)** etc.	0110488-70-5 / 0099129-21-2 / 0138164-12-2 / 0283594-90-1 / 0104206-82-8 / 0099105-77-8 / 0000611-70-1 / 0123312-89-0	Either individual or total production of this group shall not exceed 60 TPA	---	Either individual or total production of this group shall not exceed 60 TPA	I – Insecticide H- Herbicide F- Fungicide Int- Intermediate
6.	ETHER: - PROPARGITE TECH. **(I)**, OXYFLUORFEN **(H)**, ETOXAZOLE **(I)**, EEA **(INT.)**-(2-ETHOXY ETHYL AMINE), S-CYNO-MPB **(INT.)** etc.	0002312-35-8 / 0042874-03-3 / 0153233-91-1 / 0000109-85-3 / 0000067-63-0	Either individual or total production of this group shall not exceed 60 TPA	---	Either individual or total production of this group shall not exceed 60 TPA	I – Insecticide H- Herbicide F- Fungicide Int- Intermediate
7.	ANILINE: - PENDIMETHALIN TECH. **(H)**, METALAXYL **(F)**, FAMOXADONE **(F)**,	0040487-42-1 / 0057837-19-1 / 0131807-57-3 / 0001582-09-	Either individual or total production of this	---	Either individual or total production of this group	I – Insecticide H- Herbicide F- Fungicide Int- Intermediate

	TRIFLURALIN **(H)**, FIPA-OH **(INT.)** etc.	8 / 0010108-64-2	group shall not exceed 60 TPA		shall not exceed 60 TPA	
8.	ESTER/PYRETHROID: - FENOXAPROP-P-ETHYL TECH. **(H)**, BIFENAZATE **(I)**, QUIZALOFOP-P-ET **(H)**, CLODINAFOP-PPG **(H)**, ACRINATHRIN **(I)**, BIFENTHRIN **(I)**, CYHALOTHRIN **(I)**, GAMMA-CYHALOTHRIN **(I)**, LAMDA-CYHALOTHRIN **(I)**, CYPERMETHRIN **(I)**, AND ITS ANALOGS, DELTA-METHRIN **(I)**, --- CYFLUTHRIN **(I)** AND ITS ANALOGS, PERMETHRIN **(I)**, BIOALLETHRIN **(I)**, FENVALERATE **(I)**, IMIPROTHRIN **(I)** etc.	0071283-80-2 / 0149877-41-8 / 0100646-51-3 / 0105512-06-9 / 0101007-06-1 / 0082657-04-3 / 0068085-85-8 / 0076703-62-3 / 0091465-08-6 / 0052315-07-8 / 0052918-63-5 / 0052645-53-1 / 0260359-57-5 / 0072963-72-5	Either individual or total production of this group shall not exceed 150 TPA	---	Either individual or total production of this group shall not exceed 150 TPA	I – Insecticide H- Herbicide F- Fungicide Int- Intermediate
9.	CARBAMATE & THIO BASED PRODUCTS: - CARTAP.HCL TECH. **(I)**, THIODICARB **(I)**, THIOPHANATE-ME **(F)**, PROPINEB **(F)**, METIRAM **(F)**, THIRAM **(F)**, ISOPROTHIOLANE TECH **(I)**, THIOCYCLAM **(I)**, PROTHIOCARB **(F)**, FLUTIANIL **(F)** etc.	0015263-52-2 /0059669-26-0 / 0023564-05-8 / 0012071-83-9 / 0009006-42-2 / 0000137-26-8 / 0050512-35-1 / 0031895-21-3 / 0012125-01-8 / 0958647-10-4	Either individual or total production of this group shall not exceed 100 TPA	---	Either individual or total production of this group shall not exceed 100 TPA	I – Insecticide H- Herbicide F- Fungicide Int- Intermediate
10.	QUATERNARY SALT AND OTHER SALTS, ACID BASED PRODUCTS: - MEPIQUAT	0024307-26-4 / 0000999-81-5 / 0020427-59-2 / 0007758-99-8 / 0011115-	Either individual or total production of this group	---	Either individual or total production of this group shall not	I – Insecticide H- Herbicide F- Fungicide Int- Intermediate

	CHLORIDE TECH. **(I)**, CHLORMEQUAT CHLORIDE **(I)**, OTHER SALTS: COPPER HYDROXIDE **(BACTERICIDE,F)**, COPPER SULPHATE **(ALGICIDE,F)**, etc., FLUPROPANATE-NA TECH **(H)** + HPAA **(INT.)**-(2-HYDROXYPHENYL ACETIC ACID), BBA **(INT.)**-(BROMOBUTYRIC ACID), HPPA-INT.(2-(4-HYDROXYPHENOXY)PROPANATE), PICLORAM **(H)**, DICAMBA **(H)**, 2-CYANOPHENOL **(INT.)** etc.	82-5 / 0002623-87-2 / 0065343-67-1 / 0001918-02-1 / 0001918-00-9 / 0000611-20-1	shall not exceed 68 TPA		exceed 68 TPA	
11.	TRIAZOLS: - 2,6 DICHLOROBENZOXAZOLE **(INT.)**, ISOXAFLUTOLE **(H)**, FLURASULAM **(H)**, TDA **(INT.)**(TRIFLUOROMETHYLTHIADIAZOLE), FLUTRIAFOL TECH **(F)**, PROTHICONAZOLE **(F)**, SULFENTRAZONE **(H)**, CARFENTRAZONE-ET **(H)** etc.	0003621-82-7 / 0141112-29-0 / 0145701-23-1 / 0010444-89-0 / 0076674-21-0 / 0178928-70-6 / 0122836-35-5 / 128639-2-1	Either individual or total production of this group Sr. No. 11 & 12 shall not exceed 400 TPA	---	Either individual or total production of this group Sr. No. 11 &12 shall not exceed 400 TPA	I – Insecticide H- Herbicide F- Fungicide Int- Intermediate
12.	TRIAZOLS: - FIPRONIL TECH **(I)**, PROPICONAZOLE **(F)**, EPOXYCONAZOLE **(F)**, TEBUCONAZOLE **(F)**, DIFENOCONAZOLE **(F)**, HEXACONAZOLE	0120068-37-3 / 0060207-90-1 / 133855-98-8 / 0107534-96-3 / 0119446-68-3 / 0079983-71-4 / 0041814-78-2 / 0088671-89-0 / 0085509-		---		I – Insecticide H- Herbicide F- Fungicide Int- Intermediate

	(F), TRICYCLAZOLE **(F)**, MYCLOBUTANIL **(F)**, FLUSILAZOLE **(F)**, PACLOBUTRAZOLE (PGR), THIAMETHOXAM **(I)**, CHLOROTHALONIL **(F)**, TRIADIMEFON **(F)**, ISOXADIFEN-ET (SF)	19-9 / 0076738-62-0 / 0153719-23-4 / 0001897-45-6 / 0043121-43-3 / 0163520-33-0				
13.	HETROCYCLIC (PYRIMIDINE/PYRIDINE/TRIAZINE): - BISPYRIBAC-NA TECH. **(H)**, PIRIMICARB **(I)**, PYRITHIOBAC-NA **(H)**, FLUMETSULAM **(H)**, CYPRODINIL **(F)**, FLORASULAM **(H)**, PENOXSULAM **(H)**, DCP **(INT.)**-(4,6-DICHLOROPYRIMIDINE), ACMP **(INT.)**-(2-AMINO-4-CHLORO-6-METHOXYPYRIMIDINE), IMAZETHAPYR TECH. **(H)**, PYRIDALYL TECH **(I)**, DIFLUFENICAN **(H)**, CLOQUINTOCET-MEXYL(SF)	0125401-92-5 / 0023103-98-2 / 0123343-16-8 / 0098967-40-9 / 0021552-61-2 / 0145701-23-1 / 0219714-96-2 / 0005413-85-4 / 0005600-21-5 / 0081335-77-5 / 0179101-81-6 / 0083164-33-4 / 0099607-70-2	Either individual or total production of this group Sr. No. 13 & 14 shall not exceed 185 TPA	---	Either individual or total production of this group Sr. No. 13 & 14 shall not exceed 185 TPA	I – Insecticide H- Herbicide F- Fungicide Int- Intermediate
14.	HETROCYCLIC (PYRIMIDINE/PYRIDINE/TRIAZINE): - FLUAZINAM **(F)**, FENPYROXIMATE TECH. **(I)**, METRIBUZIN **(H)**, AMITRAZ **(I)**, CLOFENTEZINE **(I)**, MMMT **(INT.)**-(2-METHOXY-4-	0079622-59-6 / 0134098-61-6 / 0021087-64-9 / 0033089-61-1 / 0074115-24-5 / 0005248-39-5 / 0161050-58-4 / 0003740-92-9 /		---		

	METHYL-6-METHYLAMINO-1,3,5-TRIAZINE, METOXYFENOZIDE **(I)**, FENCHLORIM (SF), 2-HYDROXY-3,5,6-TRYCHLOROPYRIDINE & ITS SODIUM SALT (**INT.** OF CHLORPYRIPHOS) etc.	0006515-38-4 /				
15.	UREA/SULPHONYLUREA: - CHLORIMURON-ET TECH. **(H)**, BUPROFEZIN TECH. **(I)**, INDOXACARB **(I)**, NOVALURON **(I)**, LUFENURON **(I)**, DIAFENTHIURON **(I)**, AMICARBAZONE **(H)**, FLUCARBAZONE **(H)**, THIADIAZURON (PGR), HEXYTHIAZOX **(I)**, LINURON **(H)**, DIURON **(H)**, TEFLUTHRIN **(I)**, METSULFURON-METHYL **(H)**	0090982-32-4 / 0069327-76-0 / 0144171-61-9 / 0116714-46-6 / 0103055-07-8 / 0080060-09-9 / 0129909-90-6 / 0145026-88-6 / 0051707-55-2 / 0078587-05-0 / 0000330-55-2 / 0000330-54-1 / 0079538-32-2 / 0074223-64-6	Either individual or total production of this group shall not exceed 225 TPA	---	Either individual or total production of this group shall not exceed 225 TPA	I – Insecticide H- Herbicide F- Fungicide Int- Intermediate
16.	UREA/SULPHONYLUREA: - THIFENSULFURON-METHYL **(H)**, TRIBURON-METHYL **(H)**, RIMSULFURON **(H)**, IODOSULFURON **(H)**, DIAMURON **(H)**, CHLORSULFURON **(H)**, PYRAZOLESULFURON **(H)**, PYRAZOLESULFURON-ETHYL **(H)**	0079277-27-3 / 0101200-48-0 / 0122931-48-0 / 0144550-36-7 / 0042609-52-9 / 0064902-72-3 / 0098389-04-9 / 0093697-74-6		---		

	etc.					
17.	4S Zeta cypermethrin	52315-07-8	---	200	200	Insecticide
18.	F-2700 Zeta cypermethrin	52315-07-8	---	1000	1000	Insecticide
19.	Ryanxypyr	500008-45-7	---	3000	3000	Insecticide
20.	Cyazypyr	736994-63-1	---	1000	1000	Insecticide
21.	DBC80 / (3-Bromo-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-Carboxylic acid)	500011-86-9	---	1950	1950	Intermediate for Rynaxypyr
22.	Indanamine	1383809-95-7	---	800	800	RM for F 9990
23.	FMC-57091 / Isoxazolidinone	81778-07-6	---	2600	2600	Intermediate for F9600 & Clomazone
24.	Sulfentrazone 2,4-Dichloro / 2,4-dichlorophenyl-4-(difloromethyl)triazolone	111992-16-6	---	1500	1500	Intermediate for Sulfentrazone
GRAND TOTAL			**3533**	**12050**	**15583**	
	Natural gas based captive power plant	**---**	**2.04 Mega Watt hour**	**---**	**2.04 Mega Watt hour**	---

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

Standard Terms of Reference for the project was issued on 8th Aril, 2018. Public Hearing is exempted as per the para 7.III.Stage (3)(i)(b) of EIA Notification, 2006 as the project site is located inside the notified industrial area.

Existing land area is 40476.94 sqm and no additional land area will be required for the proposed expansion. Greenbelt will be developed in 33.23% i.e 13450 sqm of the total project area. The estimated project cost is Rs.365.92 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.17.15 crores and the recurring cost (O&M) will be about Rs.68.15 crores per annum. Total Employment will be 200 nos. persons as direct & 500 nos. persons indirect 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.

Total water requirement is estimated to be 898 m3/day including fresh water requirement of 410 m3/day proposed to be met from GIDC supply.

Industrial effluent of 631 m3/day will be treated through Effluent Treatment Plant (ETP) followed by MEE and RO. Treated effluent of 119 m3/day will besent to M/s. Narmada Clean Tech (NCT) through u/g conveyance pipeline for further treatment. RO permeate of 408 m3/day will be recycle back to process & approximately 72 m3/day reject will be used for MEE utility after

proper treatment. Domestic effluent of 39.5 m3/day will be treated through proposed STP.

Power requirement will be increased from 2200 kVA to 3500 kVA proposed to be be met from M/s. Dakshin Gujarat Vij Company Limited (DGVCL). Existing unit has one DG set of 1250 KVA capacity. One more DG set of 1500 kVA will be used as standby during power failure.

Existing unit has natural gas based WHRB- Captive power plant and two natural gas based boilers of 10 TPH and 5 TPH capacity. Additionally, one natural gas based thermic fluid heater of 10 lakh Kcal/h will be installed under proposed expansion.

Ambient air quality monitoring was carried out at 9 (including project site) locations during February 2017 to April 2017 and the baseline data indicates that ranges of concentrations of PM10 (74-91 µg/m3), PM2.5 (19-33 µg/m3), SO2 (19-26 µg/m3) and NOx (21-32 µg/m3) (98th percentile values) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 0.188 µg/m3, 2.153µg/m3 and 1.025 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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.

Existing unit is operating on the basis of CTO as the said unit was established before the EIA Notification 1994/2006. Hence, the certified compliance report is not required to the unit.

Consent to Operate for the existing industrial operations have been obtained from Maharashtra PCB vide letter dated 25th July, 2017, which is presently valid up to 16th April, 2022.

9.7.2.2 *The EAC, after deliberations, insisted for clarifications/inputs in respect of the following:-*

- *Earlier NOC was obtained on 11th September, 1986 to M/s Lupin Agrochemicals (India) Pvt Ltd for manufacturing agrochemicals at Plot No.242/P. Whereas, the plot nos mentioned in the present proposal are 241, 242/2 & 241/P. The said discrepancy needs adequate clarification along with supporting documents.*
- *There was no consistency in the products details, as mentioned in the Consent to Operate granted and/or the change of product mix allowed by the State Pollution Control Board.*
- *The project proponent needs to establish that the unit is engaged in production of pesticides and pesticides specific intermediates @3533 TPA, only after obtaining prior environmental clearance as mandated under the EIA Notification, 2006 and thus ensuring no violation of the said Notification.*
- *There being no EC for the existing operations and thus no compliance status available, confirmation for compliance of environmental conditions/norms stipulated by the State Pollution Control Board while issuing consent to operate under the Air/Water Act, from time to time.*
- *Revised water balance with plan for Zero Liquid Discharge to be submitted*

The proposal was deferred for the needful.

Agenda No.9.7.3

Integrated Sugar Industry (Sugar 5000 TCD, Co-generation 29.5 MW, Grain based distillery 45 KLPD & Molasses/sugarcane juice/ Sugar Beet based distillery 60 KLPD) District Solapur (Maharashtra) by M/s Vitthal Refined Sugars Ltd - Environment Clearance

[IA/MH/IND2/82830/2018, IA-J-11011/335/2018-IA-II(I)]

The project proponent and the accredited consultant M/s MITCON Consultancy & Engineering Services Ltd, made a detailed presentation on the salient features of the project.

9.7.3.1 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for expansion of sugar plant from 3500 to 5000 TCD and co-generation plant from 14 to 29.5 MW, setting up molasses and grain based distillery of capacity 60 KLPD & 45 KLPD respectively, malt spirit & grape spirit plant of 5 KLPD each by M/s Vitthal Refined Sugars Ltdin an area of 44.33 ha at A/P Pande, Taluka Karmala, District Solapur (Maharashtra).

The details of proposed products are as under:-

S. No.	**Products & Co-products**	**Unit**	**Quantity**
	Sugar Unit (5000 TCD)		
1.	Sugar (sugar recovery@11.5%)	TPD	575
2.	Molasses (@5.5%)	TPD	275
3.	Press Mud (4%)	TPD	200
4.	Bagasse Generation (30%)	TPD	1500
	Total Power Plants Capacity (29.5 MW)		
1.	Co-generation/Spent wash Incineration Boiler	MW	26/3.5
	Molasses based distillery Unit (60 KLPD)		
1.	R S & IS / ENA & TA /Fuel Alcohol	KLPD	60
2.	Fusel oil	KLPD	0.18
	Grain based distillery Unit (45 KLPD)		
1.	Rectified Spirit & IS/ENA &TA	KLPD	45
2.	Fusel oil	KLPD	0.135
3.	DDGS	TPD	33
4.	**Malt Spirit**	**KLPD**	**5**
5.	**Grape Spirit**	**KLPD**	**5**
6.	**Distillery CO_2 RecoveryPlant**	**TPD**	**50**
7.	**Cyclodextrin Plant**	**TPD**	**2.5**
8.	**IMFL Bottling plant**	**Cases/M**	**One lac**
9.	**Country liquor bottling plant**	**Cases/M**	**Two lac**

The project/activity is covered under category B of item 5 (g) 'Distilleries' and 5(j) 'Sugar Industry' of the schedule to the Environmental Impact Assessment Notification, 2006 and requires appraisal/approval at state level. Due to project was submitted and accepted before the Ministry's Notification dated 13th June, 2019, the project appraised by sectoral EAC at Central level in the Ministry.

Standard Terms of Reference for the project was issued on 24th December, 2018. Public hearing was conducted by the State Pollution Control Board on 17th June, 2017. The main issues raised during the publichearing are related to queries on Air, Noise, odour, and water

pollution and its management etc.

Total land area is 44.33 ha. Green belt will be developed in 44% i.e. 198689 sqm out of total area of the project. The estimated project cost is Rs.305.86 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 12.95 Cr.and the recurring cost (operation and maintenance) will be about Rs. 47.35 lakhs per annum. Total employment will be 460 persons as direct >1000persons 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. Sina River flows at 4.5 km in North East.

Total water requirement is 4774 cum/day including fresh water requirement of 1795 cum/day proposed to be met from Mangi Lake.

Total effluent generation will be ~1504.5 cum/day and will treated through Sugar ETP (500 cum/day), Condensate polishing Unit (1200 cum/day). Concentrated spent wash generation will be 175 cum/day. Spent wash will be treated through Multi effect evaporator followed 35 TPH incineration boiler. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 11.5 MW proposed to be met from own cogeneration power plant. Existing unit has three DG sets of 500 kVA each. One DG set of 500 kVA capacity with stack of 3 m height will be used as used as standby during power failure.

Existing unit has one boiler of 150 TPH capacity and additionally 35 TPH (Incineration boiler-Distillery) will be installed. Electrostatic precipitator with 85 m and 70 m stack respectively will be installed for controlling of particulate emission within statutory limit of 115 mg/Nm3 for the proposed boilers.

Ambient air quality monitoring was carried out at nine locations during Dec 2018 to Feb 2019 and the baseline data indicates the ranges of concentrations as: PM_{10} (29.6-49.5 µg/m3), $PM_{2.5}$ (20.1-39.3 µg/m3), SO_2(6.2-13.2µg/m3) and NO_2(10.3-16.5 µg/m3). AAQ modeling study for point source emissions indicates that themaximum incremental GLCs after the proposed project would be 0.6 µg/m3, 8.27µg/m3and 5.3µg/m3 with respect to PM_{10}, SO_2 andNO_x. The resultantconcentrations are within the National Ambient Air Quality Standards (NAAQS).

The expenditure towards CER for the project would be 1.5% 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.

Presently the unit is manufacturing sugar of capacity 3500 TCD and as per the EIA Notification, 2006, prior environmental clearance is not required.

9.7.3.2 *The EAC, after deliberations, asked for clarification/inputs in respect of the following:-*

- *Base line air quality not consistent in terms of the core parameters namely PM_{10}, SO_2 & NO_X and needs to be checked with ambient air quality data of CPCB.*
- *Incremental values for SO_2& NO_x (8.27 ug/m^3& 5.3 ug/m^3) are reported to be on higher side, and needs to be confirmed.*

- *Fresh water requirement on regular basis vis-à-vis effluent generation needs to be confirmed.*
- *Prior approval shall be obtained from the Petroleum & Explosives Safety Organization (PESO) for the site and layout plan submitted to this Ministry along with the proposal for EC. In case of any change therein post PESO approval, the proposal shall require fresh appraisal by the sectoral EAC.*
- *In view of concerns raised during public hearing on 17th June, 2017 regarding damage to Kamala Bhawani temple, acceptance of Gram Sabha for the proposed project.*

The proposal was deferred for the needful.

Agenda No.9.7.4

Expansion project for manufacturing of intermediates chemicals & agro chemical products at plot No.3816, GIDC Estate, Ankleshwar (Gujarat) by M/s Uma Organic & Chemicals- Environment Clearance

[IA/GJ/IND2/105132/2014, IA-J-11011/40/2019-IA-II (I)]

The project proponent and the consultant M/s Jyoti Om Chemical Research Centre Private Limited (High Court stay), made a detailed presentation on the salient features of the project.

9.7.4.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Pesticide Technical and intermediates manufacturing unit from 31.25 TPM to 516.25 TPM by M/s Uma Organic & Chemicals in an area of 2716.54 sqm at Plot No.3816, Opp. ETL,GIDC Estate, Taluka Ankleshwar, District Bharuch (Gujarat).

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

S. No	Products	CAS No.	LD50 mg/kg	Quantity in MT/Month			End Use of Product
				Existing	Proposed	Total	
1	Benzanthrone solvent extraction **AND/OR**	82-05-3	1500	31.25	--	31.25	Dye Intermediates
2	Methyl Acetate **AND/OR**	79-20-9	6482				
3	Ethyl Acetate **AND/OR**	141-78-6	5620				
4	Hexyl Acetate **AND/OR**	142-92-7	>5000				
5	Normal Propyl Bromide **AND/OR**	7789-60-8	3600				
6	Isobutyl Bromide **AND/OR**	78-77-3	1660				
7	Hexyl Bromide **AND/OR**	111-25-1	3300				
8	Tetra Butyl Ammonium Bromide **AND/OR**	1643-19-2	2143				

9	2,4 Di chloro phenoxy acetic acid (2,4 D)	94-75-7	666	0	50	50	Herbicide
10	2,4 D Octyl Ester **AND/OR**	25168-26-7	737	0	160	160	
11	2,4 D Ethyl Ester **AND/OR**	533-23-3	2589				
12	2,4-D Isobutyl Ester**AND/OR**	1713-15-1	600				
13	Methoxy Acetic Acid **AND/OR**	625-45-6	2000	0	100	100	In the manufacturing of agro product Metalaxyl
14	Methoxy Acetic Chloride (MAC) **AND/OR**	38870-89-2	>2500				
15	1,2,4 Tri Azole **AND/OR**	288-88-0	>2500				In the manufacturing of below agro products like Hexaconazole, Tebuconazole, Propiconazole, Metaconazole.
16	Metalaxyl	57837-19-1	Oral: 669 Dermal: >3100	--	25	25	Fungicide
17	Mix Solvent/ Recovered Solvent	--	--	--	150	150	To actual users
	TOTAL			**31.25**	**485**	**516.25**	

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

Standard ToR for the project was granted on 5th March, 2019. Public Hearing is exempted as per the para 7.III.Stage (3)(i)(b) as the project site is located inside the notified industrial area of GIDC.

Existing Land area is 2716.54 m^2 and no additional land shall be required for the proposed expansion. Green belt will be developed in an area of 33% i.e., 877.55 sqm out of total area of

the project. The estimated project cost is Rs. 4.72 crores including existing investment of Rs. 1.5 crores. Total capital cost earmarked toward environmental pollution control measures is Rs. 0.72croreand recurring cost (operation and maintenance) will be about Rs. 0.86 crore per annum. Total employment will be 20 persons as direct and 20 persons indirect after expansion.

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

Total water requirement is estimated to be 51 cum/day including fresh water requirement of 12.5 cum/day proposed to be met from GIDC supply.

Effluent of 40.5 cum/day will be treated through Effluent Treatment Plant & Multi Effect Evaporator plant. Treated effluent will be reused within the premises. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

The power requirement will be increased from 125 kVA to 250 kVA proposed to be met from the DGVCL from Dakshin Gujarat Vij Company Limited (DGVCL). One D.G. set (125 KVA) will be used as standby during power failure. Stack (height9 m) will be provided as per CPCB Norms.

Existing unit has 1.5 TPH Bio-coal fired boiler. One more Bio-coal fired boiler of 2 TPH capacity will be installed.Multi cyclone separator/ bag filterwith a stack height of 12 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boiler.

Ambient air quality monitoring was carried out at 8 locations during March, 2018 to May, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (32-94 µg/m3), PM2.5(23-45 µg/m3), SO2(9-46µg/m3), NO2(15-48 µg/m3), HCl (0-8 µg/m3), NH3(2.5 – 10.6 µg/m3), HBr and Br2 (BDL)respectively. AAQ modeling study for point source emissions indicate that the maximum incremental GLCs after the proposed project would be 0.748 µg/m3, 0.691 µg/m3, 0.558 µg/m3, 0.014 µg/m3, 0.64 µg/m3, 0.03 µg/m3, 0.007 µg/m3 and 0.002 µg/m3with respect to PM_{10}, SO_2, NO_X, HCl, NH_3, HBr, Br_2 and HC. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The expenditure towards CER for the project would be 2.5% of the project cost as proposed 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.

9.7.4.2 *The EAC, in the first instance asked the project proponent to clarify about none of the pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare and/or other regulatory authorities to the satisfaction of the Ministry.*

However, considering the proposal based on the information available, the Committee 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 Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th 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_{50}<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.*
- *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* 12.5 *cum/dayto be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *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:-*
  - *(xiii) Metering and control of quantities of active ingredients to minimize waste.*
  - *(xiv) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(xv) Use of automated filling to minimize spillage.*
  - *(xvi) Use of Close Feed system into batch reactors.*
  - *(xvii) Venting equipment through vapour recovery system.*
  - *(xviii) 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 2.5% 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.*
- *Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.*

Agenda No.9.7.5

Proposed Project of Increase in Production Capacity of Existing Synthetic Organic Chemicals Manufacturing Unit (13752 TPA)-Unit-II, Plot No. 70 A & B, IDA, Jeedimetla, Quthbullapur (M), Medchal-Malkajgiri District (Telangana) by M/s Deepak Nitrite Limited - Environment Clearance

[IA/TG/IND2/95581/2018, SEIAA/TS/OL/MDCL-47/2018-1123]

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 and informed that:

9.7.5.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Synthetic Organic Chemical manufacturing unit from 6239.9 TPA to 13752 TPA by M/s. Deepak Nitrite Limited, Hyderabad Specialties Division, Unit-II in an area of 1.12 ha located at Plot No. 70 A & B, Phase-I, Notified IDA, Jeedimetla, Mandal Quthubullapur, District Medchal–Malkajgiri (Telangana).

The details of existing and proposed products are as under:-

Sl. No.	Product	Existing Quantity (TPA)	Additional Quantity (TPA)	Total Quantity (TPA)
1.	Di-Nitro Stilbene Di-Sulphonic Acid (DNSDA)	6239.9	7512.1	13752
2.	Sodium Sulphate (byproduct)	--	9860	9860

The project/activity is covered under category B of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires

appraisal at State level by the concerned SEAC/SEIAA. In absence of SEIAA in the State, the project was appraised at Central level in the Ministry.

Terms of Reference for the project was granted by the SEIAA, Telangana vide letter dated 26th April, 2018. While granting the ToR, a sub- committee was constituted to inspect the unit, verify records and submit a report in respect of certain key issues including distance of the industry from the nearest boundary of Patancheru and Bollaram Industrial Areas, project modification, project cost, ZLD system & its adequacy, ETP modifications, products - comparison of existing and proposed, verify production details with respect to permitted for the past one year, raw materials comparison, solid waste comparison, impact on surroundings, justification of project w.r.to GOMs No.95 dated 21st September, 2007 & GOMs No.64 dated 25th July, 2013, applicability of the MoEF&CC Notification dated 14th March, 2017. The report submitted by the sub-committee requires authentication from the State authorities.

Public hearing is exempted as the project site is located inside the notified industrial area.

Existing land area is 1.12 ha and no additional land will be required for proposed expansion. Greenbelt will be developed in an area of 23.5% i.e. 0.2636 ha out of total area of the project. The estimated project cost Rs.40.59 crores including existing investment of Rs.22.2 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 4.31 crores including existing Rs. 3.01 crores and Recurring cost (Operation and maintenance) will be about Rs.5.71 crores per annum. Total Employment will be 90 persons as direct & 95 persons indirect after expansion.

There are no National parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc within 10 km area. Water bodies viz., Fox sagar (Kotta cheruvu) – 1.4 km in NE direction; Amber cheruvu – 5.5 km in WSW direction; Yellammakunta – 5.7 km in SW direction; Vennelagadda cheruvu – 2.4 km in SE direction; Kattamysamma lake – 3.7 km in NNW direction; Kistappa vagu – 4 km in SW direction; Hussain sagar– 9 km in SSE direction; Pond near Kukkatpally (IDL Lake) – 5.6 km in SSW direction; Kamunoni cheruvu – 7.6 km in SSW direction; Maisamma cheruvu – 6.9 km in SSW direction; Boncheruvu (Hasmathpet Lake) – 6.1 km in SE direction.

Total water requirement is *557* m3/day including fresh water requirement of 107 m3/day proposed to be met from Hyderabad Metropolitan Water Supply & Sewerage Board (HMWS&SB) supplied in industrial area.

Effluent of 158 m3/day will be treated through Effluent Treatment plant. Treated effluent will be recycled/reused within the premises. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be increased from 1499 kVA to 2500 kVA proposed to be met from Telangana State Power Distribution Corporation Limited (TSPDCL). Existing unit has 3nos. DG sets of 600kVA capacity. One more DG set of 600 kVA capacity will be installed with stack of 9 m height will be used as standby during power failure.

Existing unit has 10 TPH coal fired boiler and 8 TPH capacity oil fired boiler. Additionally, 20 TPH Coal fired boilers will be installed. Multi cyclone separator & bag filter with a stack of height of 40 m will be installed for controlling the Particulate emissions within statutory limit of 115 mg/Nm3 for proposed 20 TPH Coal fired boiler. Existing 10 TPH coal fired boiler will be removed in proposal and another existing 8 TPH boiler will be standby. Additionally 1.8 TPH Saw dust fired Crude Sodium sulphate Fluidized bed recovery system will be installed in addition to the existing 1.8 TPH Furnace oil fired Crude Sodium sulphate Fluidized bed recovery system with a stack height of 30m will be installed.

Ambient air quality monitoring was carried out at 9 locations during Marchto May 2017and submitted baseline data indicates that ranges of concentrations of PM10 (43-77µg/m3), PM2.5 (16-38µg/m3), SO2 (4 -12µg/m3) and NO2 (10-28µg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.315 µg/m3, 0.14µg/m3, 3.264 µg/m3 and 1.986 µg/m3 with respect to PM10, PM2.5, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The unit was originally established in the year 1996 in the name of M/s. Vasant Organics Private Limited, Unit-II for manufacturing of Para Nitro Benzoic Acid (PNBA). PNBA is an API (Bulk Drug) intermediate and is exempted from Environmental Clearance as per EIA Notification 1994. Subsequently changed its name to M/s. Vasant Chemicals Ltd., Unit-II and obtained CFE for Product change to manufacture Dinitro Stilbene Disulphonic Acid (DNSDA) in 1999 which is also an API (Bulk Drug) intermediate. M/s Vasant Chemicals Limited later obtained CFE expansion for the same product DNSDA without increase in Pollution load by SPCB in 2002.

M/s Deepak Nitrite Limited has taken over the assets of M/s Vasant Chemicals Limited prior to EIA Notification 2006 and regularly obtaining Consents for Operation for manufacturing DNSDA with a production capacity of 6239.9 TPA (17333 kg/day).

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.

Consent to Operate for the existing capacity has been obtained from the Maharashtra PCB vide letter dated 27th June, 2016 which has validity up to 31st July, 2021.

9.7.5.2 *The EAC, after deliberations, recommended the project for grant of environmental Clearancesubject 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 21st 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:*
  (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 107 cum/day, proposed to be met from Hyderabad Metropolitan Water Supply & Sewerage Board (HMWS&SB). Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *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:-*
  (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.*
  (vii) *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 1% 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 including dental check up 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.*
- *No Asbestos, in any form, shall be used in the plant premises.*

Agenda No.9.7.6

Proposed 125 KLPD Grain based Distillery, 25KLPD Malt Spirit Plant and 4.5 MW Cogeneration Power Plant at Village Chiraura, Tehsil Akbarpur, District Kanpur Dehat (UP) by M/s Rajasthan Liquors Limited - Environmental Clearance

[IA/UP/IND2/91819/2018, J-11011/58/2018-IA-II(I)]

The project proponent gave a detailed presentation on the salient features of the project.

9.7.6.1 The proposal was earlier considered by the EAC in its meeting held during 6-8 May, 2019, wherein the EAC desired for clarification/inputs in respect of the following:-

(i) Details of proposed feed stock/non edible grains, their source and firmed up plan for procurement.
(ii) Test report from a Govt recognized laboratory to ensure non edibility of the grains.
(iii) Plan for Corporate Environment Responsibility.

The project proponent has provided parawise reply to different observations the Committee with the details as under:-

Clarifications/inputs sought by the EAC	**Reply by the PP**
Details of proposed feed stock/non edible grains, their source and firmed up plan for procurement.	The company will use non- edible/ waste grain - broken rice, sorghum, bajra, maize etc. as raw material which will be sourced through grain suppliers from Uttar Pradesh & neighboring states (Chhattisgarh, Jharkhand, Bihar, Rajasthan & MP) via road/rail. To ensure continuous supply of raw material the company has also signed MoU with various grain suppliers.
Test report from a Govt recognized laboratory to ensure non edibility of the grains.	Tests on the non-edible grains which will be used as raw material has been conducted from a Govt. recognized laboratory. As per the test report sample tested were damaged/ broken rice with high sand/ foreign content, higher viable count & higher organic matter other than starch and therefore not fit for consumption.
Plan for Corporate Environment Responsibility.	As per Office Memorandum dated 1st May, 2018 issued by MoEFCC on Corporate Environment Responsibility, being a greenfield project, the CER percentage allocated was 1.5 % of the total project cost (Rs.175 Crores) i.e. Rs. 2.6 Crores. During Final Technical Presentation (for EC) in the 7th EAC Agenda dated 8th April, 2019, EAC (Industry II) recommended for increasing CER cost from 1.5% to 3.5%, to which the company's management agreed to. Thus, the company will now allocate Rs. 6.1 Crores for CER activities.

9.7.6.2 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for setting up grain based distillery of 125 KLPD, malt spirit plant of 25 KLPD and co-generation Power Plant of 4.5 MW by M/s

Rajasthan Liquors Limited in an area of 73500 sqm located at Village Chiraura, Tehsil Akbarpur, District Kanpur Dehat (UP).
The details of proposed products/by-products are as under:-

S.No	Unit/Product	Capacity
1	Grain based Distillery (Extra Neutral Alcohol/ Grain Neutral Spirit)	125 KLPD
2	Malt Spirit Plant	25 KLPD
3	Co-generation Power Plant	4.5 MW
4	IMFL/CL bottling unit	12000 cases/day

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

Standard Terms of Reference for the project was issued on 24th March, 2018. Public Hearing for the proposed distillery project has been conducted by the Uttar Pradesh Pollution Control Board on 14th November, 2018. The main issues raised during the public hearing are related to construction of roads, storm water drainage system, benefits to farmers, employment, etc.

Land area available for the project is 73500 sqm (7.35 ha). Industry will develop greenbelt in an area 24200 sqm(2.42 ha) covering 33% of the total project area. The estimated project cost is Rs.175 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.20 crores and the recurring cost (operation and maintenance) will be about Rs.1.45 crores per annum. Employment opportunity will be for 585 persons.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site. Ghatampur distributary is at 0.5 km (N), Rind nadi is at 1.5 km (SSW), Supanala is at 3.5 km (NNE) from the project site.

Total water requirement is estimated to be 3509 cum/day, which includes fresh water requirement of 1354 cum/day, proposed to be met from groundwater. The proposal in this regard has been recommended to CGWA by CGWB (Northern Region), Lucknow vide letter dated 12th March, 2019.

Effluent of 549 cum/day quantity will be treated through Effluent Treatment Plant (aerobic treatment, anaerobic treatment, filtration system and RO plant). Treated water of will be reused/recycled in the process/cooling tower. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement for the proposed project will be 3MW, which will be met from own Co-generation Power plant. Two DG sets of 1000 KVA capacity each will be installed as standby during power failure with a stack height of 9 m.

Rice husk/Indian coal fired boiler of 40TPHwill be installed. Electrostatic Precipitator with a stack ofheight55m will be installed to control the particulate emissions within the statutory limits.

By-products from the grain based operations (DDGS) shall be sold as cattle feed. Yeast sludge shall be sent to the sludge drying beds/added to the wet cake.ETP sludge will be dewatered using filter press and used as manure. Ash from the boiler will be given to brick manufacturing unit or used in soil amelioration.

Ambient air quality monitoring was carried out at 8 locations during March to May, 2018and the baseline data indicates the ranges of concentrations as: PM_{10} (60.3-µg/m3), $PM_{2.5}$ (25.9-51.9 µg/m3), SO_2 (6-16.9 µg/m3) and NO2 (12-25.2 µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.28 µg/m3, 2.78 µg/m3, 3.47 µg/m3 with respect to PM10, SO2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The expenditure towards CER for the project would be 3.5% 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. The Committee also found additional information submitted by the project proponent to be satisfactory.

9.7.6.3 *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.*
- *Coal shall not be used as fuel in boiler.*
- *Total fresh water requirement shall not exceed 1354 cum/day proposed to be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *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 3.5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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 stored 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_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*
- *Every production batch shall take prior approval from the concerned regulatory authority that raw grain is unfit for human consumption.*
- *Grain shall be tested for microtoxins from the govt laboratory and aware the workers related to grain dust. Regular medical check up campaign shall be carried out for the same. Mask and gloves shall be provided to the workers along with training.*

Agenda No.9.7.7

Proposed expansion of dyes & new pigments in existing premises survey no. 192/4, VillageSokhada, TalukaKhambhat, District Anand(Gujarat) by M/s S M Industries - Environmental Clearance

[IA/GJ/IND2/82964/2017, IA-J-11011/371/2017-IA-II(I)]

The project proponent gave a detailed presentation on the salient features of the project.

9.7.7.1 The proposal was earlier considered by the EAC in its meeting held during 6-8 May, 2019, wherein the EAC noted that for the existing dyes production @ 5 TPM, Consolidated Consent and Authorization (CC&A) was issued by the SPCB on 16th December, 2003, without obtaining environmental clearance under the EIA Notification, 1994. The Committee insisted for adequate justification/clarification on non applicability of the EIA Notification, 1994.

The Committee further noted that for dyes manufacturing (blending & grinding) @10 TPM, Consent to Establish was obtained from the GPCB vide letter dated 21st March, 2016, but CTO for the same was yet to be obtained. In such a case, the instant proposal for expansion from 15 TPM to 100 TPM is not justified. The project proponent has provided parawise reply to different observations the Committee with the details as under:-

Clarifications/inputs sought by	Reply by the PP

the EAC	
Existing dyes production @ 5 TPM, Consolidated Consent and Authorization (CC&A) was issued by the SPCB on 16th December, 2003, without obtaining environmental clearance under the EIA Notification, 1994. The Committee insisted for adequate justification/clarification on non applicability of the EIA Notification, 1994.	As per EIA Notification, 1994 of MoEF EC was applicable to Dyes Industries but Small Scale Industries (having investment less than Rs. 1 crore) were exempted from obtaining EC. M/s. S. M. Industries was a tiny enterprise in 1997 and its status was 'tiny enterprise' and certificate was received on Aug. 12, 1999 from District Industries Centre, Anand vide Letter No. DIC/IND/2655 (Annexure-1). Thus, EC was exempted to M/s. S. M. Industries and we obtained Site Clearance Certificate (NOC or CTE) from GPCB, Gandhinagar vide letter No. PC/NOC/KH-466/35873 dated Dec. 29, 1997 (Annexure-2) & Consent to operate under Air Act, 1981 vide Order No. 10671 dated Sept. 16, 1998 (Annexure-3) from GPCB, Gandhinagar & Consent to operate under Water Act, 1974 vide Order No. 15851 dated Sept. 21, 1998 from GPCB, Gandhinagar.
Dyes manufacturing (blending & grinding) @10 TPM, Consent to Establish was obtained from the GPCB vide letter dated 21st March, 2016, but CTO for the same was yet to be obtained. In such a case, the instant proposal for expansion from 15 TPM to 100 TPM is not justified	The Gujarat Pollution Control Board has already granted CTO vide dated 1st May, 2018 and the copy of the same is attached herewith.

9.7.7.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Dye and pigment manufacturing unit from 15 TPM to 100 TPM by M/s S M Industries in an area of 4452 sqm located at Sy. No.192/4, Village Sokhada, Taluka Khambhat, Distt Anand (Gujarat).

The details of existing and proposed products are as under:-

S. No.	Product	CAS No.	LD50 – Oral -Rat (mg/Kg)	Production Capacity (MT/Month)	
				Existing	Total after Proposed Expansion
1	Azo Dyes (Crude)*	--	--	5	100
Azo Dyes (Blending &Grinding)*				10	
2	AMARANTH	915-67-3	1000		
3	BISMARK BROWN	8005-77-4	2750		
4	CARMOSINE	3567-69-9	>8000		
5	CHROM BLACK T	1787-61-7	17590		
6	CHRYSODINE	532-82-1	>2000		
7	CRYSOPHYNINE	2870-32-8	>3200		
8	MORDENT YELLOW 20	6471-07-4	>1750		
9	SUNSET YELLOW	2783-94-0	10000		

	LIQUID DYES SOLN OF ABOVE MATERIAL	--	--		
PIGMENTS				--	
10	PIGMENT ORANGE 5	3468-63-1	8000		
11	PIGMENT ORANGE 13	3520-72-7	>5000		
12	PIGMENT ORANGE 34	15793-73-4	>5000		
13	PIGMENT RED 2	6041-94-7	3200		
14	PIGMENT RED 12	6410-32-8	8000		
15	PIGMENT RED 48	7023-61-2	3200		
16	PIGMENT RED 53	5160-02-1	>2000		
17	PIGMENT RED 57.1	5281-04-9	4200		
18	PIGMENT RED 63	6417-83-0	>5000		
19	PIGMENT RED 112	6535-46-2	8000		
20	PIGMENT RED 170	2786-76-7	>1500		
21	PIGMENT VIOLET 23	6358-30-1	>5000		
22	PIGMENT YELLOW 1	2512-29-0	>10000		
23	PIGMENT YELLOW 12	6358-85-6	>5000		
24	PIGMENT YELLOW 14	5408-75-7	>5000		
25	PIGMENT YELLOW 17	4531-49-1	8230		
26	PIGMENT YELLOW 61	12286-65-6	8160		
	PIGMENT PASTE OF ALL ABOVE PIGMENTS	--	-		
SOLVENT DYES*					
27	SOLVENT ORANGE 1	2051-85-6	>5000		
28	SOLVENT RED 24	85-83-6	8110		
29	SOLVENT RED 27	1320-06-5	>2000		
30	SOLVENT YELLOW 2	60-11-07	2000		
31	SOLVENT YELLOW 14	842-07-09	2000		
ACID DYES*					
32	ACID RED 1	3734-67-6	>2000		
33	ACID RED 4	2611-82-7	>2000		
34	ACID RED 18	5413-75-2	>2000		
35	ACID RED 73	1658-56-6	>2000		
36	ACID RED 88	10169-02-5	>2000		
37	ACID RED 97	6459-94-5	5000		
38	ACID RED 114	12220-20-1	1060		
39	ACID RED 119	6548-30-7	>8000		
40	ACID RED 128	6222-63-5	>5000		
41	ACID RED 137	2611-82-7	>8000		
42	ACID RED 214	6656-02-6	2000		
43	ACID RED 231	6360-06-01	>5000		
44	ACID YELLOW 1	846-70-8	2200		
45	ACID YELLOW 11	6359-82-6	1900		

46	ACID YELLOW 17	6359-98-4	>5000		
47	ACID YELLOW 23	1934-21-0	>2000		
48	ACID YELLOW 36	587-98-4	5000		
49	ACID YELLOW 42	6375-55-9	>2000		
50	ACID YELLOW 59	5601-29-6	2750		
51	ACID YELLOW 79	12220-70-1	>5000		
52	ACID BLACK 1	1064-48-8	2000		
53	ACID BLACK 18	6227-09-4	>8000		
54	ACID BLACK 21	10142-78-6	>5000		
55	ACID BLACK 26	6406-45-7	>5000		
56	ACID BLACK 41	5850-37-33	2000		
57	ACID BLACK 52	5610-64-0	5000		
58	ACID BLACK 58	12218-949/ 71839-85-5	2200		
59	ACID BLACK 63	32517-36-5	2000		
60	ACID BLACK 194	61931-02-0	>5000		
61	ACID BLACK 210	99576-15-5	>5000		
62	ACID BLUE 158	6370-08-7	1870		
63	ACID BROWN 14	5850-16-8	3200		
64	ACID BROWN 28	12238-94-7	>2000		
65	ACID BROWN 121	6487-04-3	>5000		
66	ACID GREEN 19	4587-81-2	>2000		
67	ACID ORANGE 7	633-96-5	>3200		
68	ACID ORANGE 10	1936-15-8	>3000		
69	ACID ORANGE 30	5572-43-0	>5000		
70	ACID ORANGE 72	6408-27-1	>3200		
	LIQUID DYES SOLN OF ABOVE MATERIAL	--	-		
DIRECT DYES*					
71	DIRECT BLACK NB	--	-		
72	DIRECT BLACK 19	6428-31-5	4900		
73	DIRECT BLACK 22	6473-13-8	2000		
74	DIRECT BLACK 168	85631-88-5	2000		
75	DIRECT BLUE G	--	-		
76	DIRECT BLUE 15	6428-60-0	2000		
77	DIRECT SKY BLUE FB	--	-		
78	DIRECT FAST VIOLET 2RL	--	-		
79	DIRECT ORANGE 34	12222-37-6	2000		
80	DIRECT RED 7	70209-93-7	2000		
81	DIRECT RED 23	3441-14-3	>5000		
82	DIRECT RED 26	3617-80-7	2000		
83	DIRECT RED 80	2610-10-8	>2000		
84	DIRECT RED 81	2610-11-9	1048		
85	DIRECT RED 89	12217-67-3	>2000		
86	DIRECT RED 239	60202-35-9	2000		
87	DIRECT YELLOW 4	3051-11-4	>2000		
88	DIRECT BROWN NB	--	-		
REACTIVE DYES*					
89	REACTIVE BLACK	--	2000		

	CNN				
90	REACTIVE BLACK 5	12225-25-1	2500		
91	REACTIVE BLACK 8	12225-26-2	9120		
92	REACTIVE ORANGE 7	12225-83-1	2000		
93	REACTIVE ORANGE 122	12220-12-1	2000		
94	REACTIVE RED 3BS	93050-79-4	>5000		
95	REACTIVE RED M 5B	12226-03-8/ 17804-49-8	7460		
96	REACTIVE RED 120	61951-82-4	>6800		
97	REACTIVE YELLOW 15	12226-47-0	>2000		
98	REACTIVE YELLOW 37	12237-16-0	5000		
99	REACTIVE YELLOW 145	93050-80-7	>5000		
100	REACTIVE YELLOW 160	129898-77-7	2000		
Total				**15**	**100**

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.

Terms of Reference for the project was granted on 24th August, 2017. Public Hearing for the project has been conducted by the State Pollution Control Board on 7th August, 2018.

Existing land area is 4452 m2, no additional land required for expansion. Greenbelt will be developed in an area of 2600 m2 out of 4452 m2 total area of the project. The estimated project cost is Rs.4 Crores (Existing –Rs.1.05 Crore + Proposed - Rs. 2.95 Crore). Total Capital cost earmarked towards environmental pollution control measures is Rs.1 Crore and recurring cost (Operation and Maintenance) will be around Rs.0.85 Crore per annum. Total employment generation will be 15 people as direct and 5 person indirect 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.

Total water requirement is estimated to be 31 m3/day including fresh water requirement of 18 m3/day proposed to be met from ground water.

The wastewater generation will be 16.3 m3/day (Industrial Effluent -13.3 m3/day + Domestic -3 m3/day).

Industrial waste water of 16.3 m3/day will be treated in Effluent Treatment Plant (ETP) of primary treatment (neutralization) facility. Treated effluent will be sent to Spray Dryer/Single Stage Vacuum Evaporation system to achieve zero discharge of waste water. Waste water converted in steam/clean water through condenser of single stage evaporation system will be recycled in process or used for makeup water in cooling tower. Domestic Waste water will be disposed through septic tank & soak pit.

The power requirement will be increased from 60- 80 kVA, proposed to be met from Madhya Gujarat Vij Company Limited (MGVCL). One D.G. Set (75 KVA) will be used as standby during

power failure. Stack (Height – 10 m) will be provided as per CPCB norms to the proposed DG Set.

Existing unit have 1 TPH Agro-waste/ Bio-fuel (white coal) based boiler and PNG based Hot Air Generator. One more Agro-waste/ Bio-fuel (white coal) based boiler of 1 TPH capacity and 1.2 KL/hr PNG based Spray Dryer will be installed. Cyclone Separator, Water immersed cyclone separator will be installed to control the particulates matter (PM).

Ambient air quality monitoring is carried out at 10 locations during October, 2017 to December, 2017 and the baseline data indicates the ranges of concentrations as PM10 (69.35 – 78.83 µg/m3), PM2.5 (40.35 - 47.28 µg/m3), SO2 (8.57 – 12.92 µg/m3), NOx (11.94 – 17.09 µg/m3), Cl2 (BDL), NH3 (BDL), O3 (10.37 – 14.33 µg/m3), HCl (BDL). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.143 µg/m3, 0.255 µg/m3 and 0.091 µg/m3 with respect to PM_{10}, SO_2 and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The expenditure towards CER for the project would be 2.5% 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. The Committee also found additional information submitted by the project proponent to be satisfactory.
Consent to Operate for the existing capacity has been obtained from the Maharashtra PCB vide letter dated 1st May, 2018 which has validity up to 11th March, 2023.

9.7.7.3 *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 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 21st 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:*
  - *(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 18 cum/day*, proposed to be met from ground water*. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- *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:-*
  (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.*
- *All the commitments made to the public during public consultation/hearing shall be satisfactorily implemented.*
- *At least 2.5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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 including dental check up 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.9.7.8

Floating Storage Unit (FSU)/Floating Storage and Regasification Unit (FSRU) based Liquefied Natural Gas (LNG) Terminal at Hooghly Estuary, West Bengal by M/s Bengal Concessions Private Limited- Environmental Clearance

[IA/WB/IND2/69588/2017, IA-J-11011/472/2017-IA-II(I)]

The project proponent and their accredited consultant M/s ERM India Pvt Ltd made a detailed presentation on the salient features of the project.

9.7.8.1 The proposal was earlier considered by the EAC in its meeting held during 6-8 May, 2019, wherein the EAC desired for clarifications/inputs in respect of the following:-

- For the proposed LNG storage/re-gasification, approval to be obtained from the Petroleum & Explosives Safety Organization (PESO) for the site and layout plan.
- Permission required for the project, if any, from the Inland Water Ways Authority of India.
- Issues raised during public hearing to be adequately addressed along with the time bound action plan and firm commitments.
- Process safety and risk assessment studies shall be carried out using advanced models, and the mitigating measures shall be undertaken accordingly.
- Formulation of occupational health programme.

9.7.8.2 The project proponent has provided parawise reply to different observations the Committee with the details as under:-

Clarifications/inputs sought by the EAC	**Reply by the PP**
The EAC, in the first instance observed that baseline air quality values in terms of critical air pollutants namely Particulate Matter, SO_2& NOx, were already exceeding the prescribed standards. Also, incremental concentrations for these pollutants due to the proposed project, were also found to be on much higher side. The Committee insisted for confirmation of the air quality values from the CPCB data and also revisiting the modeling exercise.	The air quality values have been confirmed with CPCB data by our accredited EIA consultants M/s ERM. Our accredited EIA consultants M/s ERM have confirmed air quality values & revisited the modelling exercise and their report is attached as **Annexure -1**
For the proposed LNG storage/re-gasification, approval to be obtained from the Petroleum & Explosives Safety Organization (PESO) for the site and layout plan.	An application has been submitted to PESO on 04.06.2019.
Permission required for the project, if any, from the Inland Water Ways Authority of India.	An application was submitted to IWAI Noida on 20.05.2019.
Issues raised during public hearing to be adequately addressed along	A time bound action plan with firm commitments on the issues raised during public hearing is

with the time bound action plan and firm commitments.	submitted
Process safety and risk assessment studies shall be carried out using advanced models, and the mitigating measures shall be undertaken accordingly.	A Quantitative Risk Assessment (QRA) report has been submitted.
Formulation of occupational health programme.	Occupational Health Management Procedure has been submitted

9.7.8.3 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up LNG storage and re-gasification terminal of capacity 5 MMTPA by M/s Bengal Concessions Private Limited in an area of 48.5 acres on the banks of Hooghly Estuary at Kukrahati, District East Medinipur (West Bengal).

The project/activity is covered under category A of item 6(a) 'Oil & gas transportation pipe line (crude and refinery/ petrochemical products)**,** passing through national parks /sanctuaries/coral reefs /ecologically sensitive areas including LNG Terminal' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at central by the sectoral EAC in the Ministry.

The project earlier involved installation of floating storage unit/floating storage and re-gasification unit (FSRU) of capacity 4 MMTPA based Liquefied Natural Gas in an area of 37 acres, and accordingly standard ToR was granted on 16th November, 2017. The scope of the project was later changed to LNG storage and re-gasification terminal of capacity 5 MMTPA with 600 m long jetty in an area of 48.5 ha. The same was discussed during the EAC meeting held on 24-26 September 2018, wherein the Committee confirmed that the ToR dated 16th November, 2017 shall remain applicable to the modified project description. Public hearing was conducted by the SPCB on 15th February 2019. The main issues raised during the public hearing are related to road, local benefit, impact to crematorium and nallah, safety of school children during etc.

Total land area available for the project is 48.5 acres. Industry will develop greenbelt in an area of 65000 sqm covering 33% of total project area. The estimated project cost is Rs.1500 crores. Total recurring cost (operation and maintenance) will be about Rs.0.2057 crores per annum. Employment opportunity will be for 200 persons directly and 400 persons indirectly.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Rivers etc. within 10 km from the project site. Hooghly River is flowing is flowing adjacent to the site.

There is no fresh water requirement for the Industrial operations. Domestic water requirement is estimated to be 3 cum/day proposed to be met through approved suppliers. Domestic effluent will be disposed through septic tank.

Power requirement is estimated to be 23000 kVA, which will be met from West Bengal State Electricity Development Corporation Limited (WBSEDCL). In emergency, Gas turbines of 2 x 11.5 MW capacity will be provided as back up and 2 x 500 KW DG sets for the auxiliary equipment. Stack height will be provided as per CPCB norms to the proposed DG sets.

Process emission from flaring, fugitive emissions from the terminal will be controlled with stacks as per CPCB norms. Solid and hazardous wastes generated from the LNG terminal will be disposed in onshore waste facilities available with the West Bengal Waste Management Limited (WBWML), Haldia, through authorized vendors. Hazardous waste expected to be generated at the terminal include oil sludge (from maintenance operation), paints, varnishes and thinners, rags and filter materials, Packages containing hazardous wastes (i.e. drums for oil and diesel), solvents etc. All these wastes will be temporarily stored at dedicated areas inside the terminal. Wastes will be further sent to WBWML, Transfer Storage and Disposal Facility (TSDF) at Haldia through an authorized vendor.

Ambient air quality monitoring was carried out at 8 locations during October 2017-January 2018 and the baseline data indicates the ranges of concentrations as: PM_{10} (23-134.µg/m^3), $PM_{2.5}$ (13-73µg/m^3), SO_2 (4.2-11.8µg/m^3) and NO_2 (13.3- 36.5µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 8.84 µg/m^3, 4.28 µg/m^3 and 24.94 µg/m^3 with respect to PM_{10}, SO_2 and NO_2.

As per the letter dated 24th September, 2018 from the West Bengal State Coastal Zone Management Authority, the proposed project site is not falling within CRZ areas. The Authority has further informed that determination of CRZ in this area is yet to be finalized by the Ministry.

The expenditure towards CER for the project would be 2.5% 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.

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

- *Prior approval shall be obtained from the Petroleum & Explosives Safety Organization (PESO) for the site and layout plan submitted to this Ministry along with the proposal for EC. In case of any change therein post PESO approval, the proposal shall require fresh appraisal by the sectoral EAC.*
- *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.*
- *No fresh water shall be required for the industrial operations.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *During construction phase, air pollution and the solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016.*
- *The green belt of 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 and in consultation with the State Forest Department.*
- *All the commitments made to the public during public hearing/consultation shall be satisfactorily implemented.*

- *At least 2.5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *Regular monitoring of VOC and HC in the work zone area in the plant premises should be carried out and data to be submitted to Ministry's Regional Office, CPCB and State Pollution Control Board. Quarterly monitoring for fugitive emissions should be carried out as per the guidelines of CPCB and reports submitted to Ministry's Regional Office.*
- *Necessary approvals from Chief Controller of Explosives, as applicable, shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans shall be prepared and implemented.*
- *OISD standards for Liquefied Petroleum Gas (LPG) Installations (OISD-STD-144) and Design and Safety Requirements For Liquefied Petroleum Gas Mounded Storage Facility (OISD-STD-150) shall be followed.*
- *Emergency Response Plan should be based on the guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once a month.*
- *The Petroleum and Natural Gas Regulatory Board (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG) Regulations, 2018, shall be followed, as applicable.*
- *Additional safety measures should be taken by using remote operated shut off valve, Double Block &Bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.*
- *Occupational health surveillance of worker should be done on a regular basis and records maintained as per the Factory Act.*
- *Road tankers should be equipped to the standard specified in national regulations reputable code. Vehicles should be mobilized during transfer operations and equipped to prevent untimely movement. Loading/unloading bays should be protected against impact. Fire-resistant coatings shall be provided to tanks/vessels.*
- *High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.*
- *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.*
- *Water sprinkling shall be undertaken on regular basis to control the polluting particles.*
- *Approach road shall be made pucca to minimize generation of suspended dust.*
- *The energy sources for lighting purposes shall preferably be LED based.*
- *Emergency preparedness plan based on the Hazard identification and Risk Assessment and guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once in a month. onsite and off-site Disaster Management Plan shall be implemented.*
- *Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.*
- *High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.*
- *Unit should carry out safety audit and report submitted to the Regional Office. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.*
- *Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.*

Agenda No.9.7.9

Establishment of new distillery plant 160 KLD (RS/ENA/Ethanol) based on molasses along with 8.0 MW Power at Village-Rudrapur Gularia, PO-Nausar Gularia, Block-Bijua,Tehsil-Golagokarannath, District-Lakhimpur Kheri (Uttar Pradesh) by M/s Gularia Chini Mills Unit-Distillery (A unit of Balrampur Chini Mills Limited)- Environmental Clearance

The project proponent and their accredited consultant M/s Ascenso Enviro Pvt Ltd made a detailed presentation on the salient features of the project and informed that:

9.7.9.1 The proposal was earlier considered by the EAC in its meeting held during 6-8 May, 2019, wherein the EAC observed that incremental concentrations for critical air pollutants namely PM_{10}&SO_2 were on much higher side and asked for confirmation of the same. Further, in view of increased transportation activities due to the project and thus more vehicular emissions, the Committee desired for prediction of maximum GLC for NO_x also.

9.7.9.2 The project proponent has provided parawise reply to different observations the Committee with the details as under:-

Clarifications/inputs sought by the EAC	**Reply by the PP**
Incremental concentrations for critical air pollutants namely PM_{10}&SO_2 were on much higher side and asked for confirmation of the same.	The earlier prediction was based on an emission concentration of 12.60 g/sec taking into consideration the sulphur content in slop (0.6%). We have now rerun the air model based on an air emission (SO_2) of 11.2 g/sec considering the nature of fuel being a mixed fuel. With the above emission load, the maximum incremental concentration works out to be 1.03 µg/m3. Similarly, in case of PM10 where the emission is expected to be 3.42 g/sec taking into consideration the removals of particulate matter in the air pollution control system. The maximum ground level concentration works out to be 1.34 µg/m3. We have also remodeled the air emission on revised stack height of 80 meter instead of 72 mdiameter of 2.2 meter against earlier diameter of 4.0 meters. Regarding the incremental NOX concentration due to the proposed project, the traffic analysis performed by us suggests an incremental load of only 13.43 PCU/hour after the proposed project. The 2 way 2 lane road (SH-90) has carrying capacity of 625 PCU per hour as per IRC 64-1990 guidelines. The current density is 72.5 PCU/hr and expected values after proposed establishment work out to be 83.93 PCU/hr. incremental concentrations are expected to be negligible and neither the carrying capacity for the road is being exceeded. We have however estimated the incremental

	NOX concentration from stack emissions. The maximum incremental works out to be 0.58 µg/m3 .
In view of increased transportation activities due to the project and thus more vehicular emissions, the Committee desired for prediction of maximum GLC for NO_x also	The Incremental Concentrations due to proposed project will be 1.34 µg/m3, 1.005 µg/m3, 1.03 µg/m3 and 0.58 µg/m3 with respect to PM_{10},$PM_{2.5}$, SO_x andNO_x

9.7.9.3 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for setting up molasses based distillery of 160 KLD (Rectified Spirit/Extra Neutral alcohol/Ethanol) by M/s Gularia Chini Mills, Distillery Unit (A unit of Balrampur Chini Mills Limited) in an area of 8.747 ha located at Village Rudrapur Gularia, Tehsil Golagokarannath, District Lakhimpur Kheri (UP). The project also involves installation of 8 MW Co-generation power plant.

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

Standard Terms of Reference for the project was issued on 24th August, 2018. Public Hearing for the proposed distillery project has been conducted by the State Pollution Control Board on 22nd February, 2019. The main issues raised during the public hearing are related to employment, health issues, waste water, water sources and odour issues, etc.

Land area available for the project is 8.747 ha. Industry shall develop greenbelt in an area of 2.88 ha, covering 33% of total project area. The estimated project cost is Rs 208.742 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 110 crores and the recurring cost (operation and maintenance) will be about Rs 11 crores per annum. Employment opportunity will be for 160persons.
There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site. Sharda River is flowing 6.6 Km in the East direction from the project location.

Total water requirement is estimated to be 2816 cum/day, which includes fresh water requirement of 960 cum/day, proposed to be met from Ground water. The proposal in this regard has been recommended to CGWA by CGWB (Northern Region), Lucknow vide letter dated 22nd February, 2019.

Spent wash of 800 cum/day shall be treated in MEE and concentrate from MEE will be incinerated in Slop fired boiler. Other effluent of 1139 cum/day shall be treated through Condensate Polishing unit. Treated effluent shall be reused/recycled in the process/boiler/cooling tower. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement of 4.5 MW shall be met from own Co-Generation plant. Unit will install Slop fired boiler of 60 TPH capacity. Electro static precipitator with a stack of height of 72m will be installed to control particulate emissions.

Carbon di oxide will be generated from fermentation process shall be recovered from the process and sold to beverage industry. Ash of 60.03 TPD will be mixed with fermenter sludge and utilized as manure, in the proposed granulation plant.

Ambient air quality monitoring was carried out at 8 locations during 15th September 2018 to 15th December 2018 and the baseline data indicates the ranges of concentrations as: -PM_{10} (67.5-88.2 µg/m^3), $PM_{2.5}$ (40.8-58.2 µg/m^3), SO_2 (13.6-15.7 µg/m^3) and NO_2 (21.5-26.4 µg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs due to the proposed project would be 1.34 µg/m3, 1.005 µg/m3, 1.03 µg/m3 and 0.58 µg/m3 with respect to PM_{10},$PM_{2.5}$,SO_x andNO_x respectively.

The expenditure towards CER for the project would be 5% of the project cost as proposed by the project proponent.

PESO has given approval for the site and layout plan of storage facilities (Petroleum storage Class A installation) vide letter dated 13th December, 2018 to enable the mandatory licence in Form XV as per the Petroleum Rules, 2002.

9.7.9.4 *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.*
- *Coal shall not be used as fuel in boiler.*
- *Total fresh water requirement shall not exceed* 960 cum/day, proposed to be met from Ground water*. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *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 5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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 stored 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_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*

Agenda No.9.7.10

Expansion of Multiple Grades of NPK Fertilizers Manufacturing at DFPCL complex, Plot K1-K5, MIDC Industrial Area, Taloja, Distt. Raigad, Maharashtra by M/s Deepak Fertilisers and Petrochemicals Corporation Limited - Environmental Clearance

[IA/MH/IND2/53379/2016; J-11011/167/2016-IA II (I)]

9.7.10.1 The proposal was earlier considered by the sectoral EAC in its meeting held during July 5th-7th July, 2017, wherein the Committee recommended the project for grant of environmental clearance. However, during processing the case, it was desired by the Ministry vide letter dated 29th January, 2018 to submit information in respect of the following:-

(i) Stringent mitigating measures to minimize the incremental concentration of air pollutants (mainly PM_{10} & $PM_{2.5}$) to the extent possible due to the proposed industrial operations.
(ii) Action plan submitted to this Ministry's Regional Office at Nagpur for each of their observations on EC conditions, reported to be either partly complied or not complied.
(iii) Plan for ETP/ CETP waste disposal.

9.7.10.2 In response of the same the project proponent vide letter dated vide letter dated 3rd August, 2018has submitted point wise reply as under:

(i) The baseline data of PM_{10} and $PM_{2.5}$ was high only at project site due to full scale project activities were going on at that time but after the completion of the project these levels are well below the prescribed standards for both PM_{10} and $PM_{2.5}$. In this regards analysis reports from September 2017 to January, 2018 has been submitted. Also, project proponent has informed that they have provided engineering controls like:-

(a) Two stage scrubber for scrubbing of fumes from reactor and granulators.

(b) Fugitive emissions from the vulnerable sources are connected to multi cyclone separator & Scrubbers.
(ii) Project proponent has confirmed that they have taken actions and now complying all the conditions. The Regional office, Nagpur vide letter dated 3rd July, 2018 has also submitted their remarks on action plan submitted by the project proponent for non/partial complied points.
(iii) Project proponent has informed that they have got the membership with Mumbai Waste Management Limited (MWML), Taloja for disposal of hazardous waste. Effluent is being discharged to CETP after treatment meeting prescribed parameters. PP has also informed that they have installed the RO plant of capacity 4800 cum/day for recycle of treated water.

9.7.10.3 The remarks of Ministry's Regional office at Nagpur on action plan submitted by the project proponent for non/partial complied points as under:

S. No.	Conditions	Observation by Regional office during inspection dated 28.12.2016	Remarks submitted by Regional office, Nagpur vide letter dated 3rd July, 2018
EC Letter No. J-11011/218/2004-IA II (I) dated 24th February, 2006			
1.	**Specific Condition No. x** Green belt shall be provided in at least 25% of the plant area to mitigate the effects of fugitive emissions all around the plant. Development of green belt shall be as per the Central Pollution Control Board guidelines.	**Not Complied** PA submitted that green belt has been developed with 7681 saplings within the plant and around the boundary wall. Green belt found to be inadequate.	PA submitted that green belt is being maintained over 13 acres in and around the plant. Additional green belt will be developed in other plot of MIDC over 7 acres. Photographs showing the green belt in and around the plant area enclosed **(Annexure-1)**
2.	**Specific Condition No. i** The gaseous emissions (SO_2, NO_x, NH_3, HC and Fluoride) and particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. The stack height shall be as per the Central Pollution Control Board guidelines. In the event of failure of any pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Further, the company shall interlock the production system	**Partially complied** Monitoring of HCl is not being carried out.	PA submitted that HCL will be included in monitoring schedule.

	with the pollution control devices.		
3.	**Specific Condition No. iii** The fugitive emissions in the work zone environment, product, raw material storage area shall be regularly monitored. The emissions shall be controlled and conform to the limits prescribed by the CPCB.	**Partially Complied.** Fugitive emissions monitoring is not being carried out.	PA submitted that 11 nos. of hydrocarbon detectors were installed.
4.	**General condition No. ix** The implementation of the project vis-a-vis environmental action plans shall be monitored by the Ministry's Regional Office at Bhopal/MPCB/CPCB. A six-monthly compliance status report shall be submitted to monitoring agencies.	**Partially Complied** PA submitted the six-monthly compliance reports regularly only after January 2014	PA submitted the latest six monthly compliance report dated 1.12.2017.
EC Letter No. SEAC 2010/CR.656/TC-2 Dated 11th May, 2011			
1.	**Condition No. xiv** Greenbelt shall be developed & maintained around the plant periphery. Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/Agriculture Dept.	**Not Complied** Greenbelt needs to be improved.	PA submitted that green belt is being maintained over 13 acres in and around the plant. Additional green belt will be developed in other plot of MIDC over 7 acres. Photographs showing the green belt in and around the plant area enclosed (Annexure-1)
2.	**Condition No. iii** 'Consent for Establishment' shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environmental Department before start of any construction work at the site.	**Partially Complied** No details provided regarding submission of the copy of consent to establish to Environment Department.	PA submitted that copy of the consent to establish was submitted to Environment Department.
3.	**Condition No. xii** Proper Housekeeping programs shall be implemented.	**Partially Complied** Housekeeping needs to be improved	PA submitted that 5S programme has been implemented for housekeeping.
4.	**Condition No. xxx** The environmental statement for each financial year ending 31m March in Form – V as is mandated to be submitted by the project proponent to the	**Partially Complied** Copy of latest environment statement need to be uploaded to company website	Form-V has been uploaded to company website.

	concerned State Pollution Control Board as prescribed under the Environment (protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC by email.		
EC Letter No.J-11011/320/2012-IA II (I) Dated 12th October, 2015			
1.	**Specific Condition No. xiv** Regular monitoring of ground water by installing peizometric wells around the guard pond and sludge disposal sites shall be periodically monitored and report shall be submitted to the concerned Regional office of the Ministry, CPCB and SPCB.	**Not Complied** Ground water levels are not being monitored near ETP.	Enclosed (**Annexure-2)**
2.	**Specific Condition No. iv** The gaseous emissions (SO_2, NO_x, NH_3, HC and Fluoride) and particulate matter from various process units shall conform to the norms prescribed by the CPCB/SPCB from time to time. At no time, the emission levels shall go beyond the prescribed standards. Air emission shall be monitored online (24x7) by the Company. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Stack emissions shall be monitored regularly.	**Partially complied** HC and Fluoride levels are not being monitored.	PA submitted that HC and Fluoride will be included in the monitoring schedule.
3.	**General Condition No. xiv** The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environment Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC,	**Not Complied** PA submitted only one six monthly compliance report since the grant of the EC. Six monthly compliance report pertaining to this environmental clearance was not uploaded to the website	Copy of the six monthly compliance report has been uploaded to company website.

	the respective Zonal Office of CPCB and the Maharashtra Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.		
4.	**General Condition No. xvii** The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project	**Not Complied** Financial closure, final approval details not provided to Regional Office of the Ministry	Copy of CA certificate is enclosed (**Annexure-3)**

9.7.10.4 The project proponent, vide email dated 15th October, 2018, has submitted further clarification as under:-

(i) The current capacity of NPK Fertilizer granulation plant is 600,000 MTPA for the same environmental clearance was received on dated 12th October, 2015.

(ii) DFPCL also has prilled ANP plant of capacity 325000 MTPA installed in 1992-93 i.e. prior to EIA Notification, 2006. Earlier DFPCL had planned to discontinue the ANP plant, however, due to demand of prilled ANP fertilizer of farmers, DFPCL had decided to continue the production of ANP and accordingly it was requested to include ANP manufacturing in the proposed EC.

(iii) The total proposed production capacity is as under:

Existing Granulated NPK plant Capacity	Old ANP Plant Capacity	NPK Plant Capacity Enhancement due to in- built margins	Total capacity (ANP + Multiple Grades of NPK)
600,000 MTPA	325,000 MTPA	200,000 MTPA	11,25,000 MTPA

9.7.10.5 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for expansion of fertilizer manufacturing unitfrom 6 Lakh MTPA to 11.25 Lakh MTPA by M/s Deepak Fertilizers and Petrochemicals Corporation Limited in an area of 3,03,619.4 m^2 at Plot K1-K5, MIDC Industrial Area, Taloja, District Raigad (Maharashtra).

The details of the products presently manufactured and after the proposed expansion are reported to be as under:-

S. No.	Name of Product	Production Capacity (MTPA) unless mentioned		
		Existing	**Proposed**	**Total**
	Proposed Expansion			
1.	**NPK fertilizers**	**6.0 Lakh***	**3.25** +2 Lakh**	**11.25 Lakh**
	Existing Products			
1	Liquid CO_2	72,000	-	72,000
2	Ammonia	1,40,400	-	1,40,400
3	Methanol	99,996	-	99,996
4	Weak Nitric Acid	4,45,500	-	4,45,500
5	Concentrated Nitric Acid	1,29,600	-	1,29,600
6	** *Ammonium Nitrate Phosphate*	*3,24,900*	-	*3,24,900*
7	Low Density Ammonium Nitrate Plus Ammonium Nitrate Melt	1,44,000	-	1,44,000
8	Iso Propyl Alcohol (IPA)	70,200	-	70,200
9	Electric Power	9.4 MW	-	9.4 MW
10	Steam	1,056	-	1,056
11	Bentonite Sulphur Pastilles	25,000	-	25,000
12	Ammonium Nitrate Prills (Low Density)	2,00,000	-	2,00,000
13	Ammonium Nitrate Prills (High Density)	1,00,000	-	1,00,000
14	Iso Propyl Alcohol (For drum filling operation) – Packaging operation only	15,000	-	15,000
15	Di Iso Propyl Ether (DIPE) (For drum filling operation Packaging operation only)	15,000	-	15,000
16	Gas Based Power Generation (Excluding DG Sets)	17.9 MW	-	17.9 MW
	BY – PRODUCT			
1	Propane	33,000	-	33,000
2	Calcium Phosphate	210	-	210
3	Crude DIPE	1,440	-	1,440
4	Hydrogen Gas	960	-	960
5	Crude IPA/NPA Mixture	1,080	-	1,080

* EC for 6 Lakh MTPA multiple grades NPK fertilizer (granulation) received on 12.10.2015.
** Existing 3.25 Lakh MTPA ANP (Prilling) operating plant to be considered for continuous operation.

The project/activities are covered under category A of item 5(a) 'Chemical Fertilizer' and item of the schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal/approval at central level by the sectoral EAC in the Ministry.

Existing land area is 3,03,619.4 m2 within MIDC, no additional land will be used for proposed expansion. Industry already having well developed greenbelt in an area of 33% i.e., 95480+6000 m^2 out of 3,03,619.40 m2 of area of the project. The estimated project cost for expansion unit is Rs.190 crores Total capital cost earmarked towards environmental pollution control measures is Rs.1.975 Crores and the Recurring cost (O&M) will be about Rs.0.19 Crores per annum.

Total Employment will be 35 Persons as direct & 20 persons indirect after expansion. Industry proposes to allocate Rs.4.75 Crores @ of 5/2.5 % towards Corporate Social Responsibility.

It is reported that as per form-1, no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River Karsadi flows at 1 Km in SW.
The Terms of references (ToR) for the project was granted on 21st September, 2016. Public hearing was conducted by the State Pollution Control Board on 31st January, 2017.

Total water requirement for the overall complex after the expansion is 20,346 m3/day of which fresh water requirement of 19,196 m3/day and will be met from MIDC.

Total effluent generated from the overall NPK & ANP plants will be 2,876 CMD including domestic sewage and it will be treated in existing ETP followed by RO of capacity 4,800 m3/day. Permeate water from the RO will be reused in plant while RO reject will be discharged into CETP. Part of RO reject as Brackish water will be reused in NPK & existing plants.

Power requirement after expansion will be 315.5 MW including existing 314.65 MW and will be met from MSDECL. Existing unit has 7 DG sets of 5,710 KVA capacity used as standby during power failure. No additional DG sets are required. Adequate Stack height varying from 3 m upto 30 m is provided as per CPCB norms to various existing DG sets will be used as standby during power failure.

Existing unit has various boilers. Adequate APCM like ESP/Multi cyclone separator/ bag filter with adequate stack of heights are installed for controlling the Particulate emissions (within statutory limit). No new boiler is required for the expansion unit, Process steam / fresh steam from existing facilities will be used for NPK.

The expenditure towards CER for the project would be 5% of the project cost as proposed by the project proponent.
The details of environmental clearances granted by the Ministry & SEIAA, Maharashtra are as under:-

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

The monitoring report on compliance status of EC conditions has been forwarded by the Ministry's Regional Office at Nagpur vide letter dated 11th April, 2017 and remarks on non/partial complied points vide letter dated 3rd July, 2018. The committee found the action taken report forwarded by the Regional office at Nagpur vide letter dated 3rd July, 2018 to be satisfactory.
Consent to Operate for the existing industrial operations have been obtained from Maharashtra PCB vide letter dated 27th June, 2016 which is presently valid up to 31st July, 2021.

9.7.10.6 *The Committee, after deliberations, reiterated its earlier recommendations for grant of environmental clearance to the project during its meeting held on 5-7 July, 2017, subject to compliance of same set of conditions with minor changes therein 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.*
- *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.*
- *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.*
- *National Emission Standards for Fertilizer Industry issued by the Ministry and amended from time to time shall be followed.*

Agenda No.9.7.11

Expansion of Molasses based Distillery from 30 KLPD to 45 KLPD by M/s Karmaveer Shankarrao Kale Sahakari Sakhar Karkhana Limited at Gautamnagar, Taluka Kopergaon, District Ahmednagar (Maharashtra)- Environmental Clearance

[IA/MH/IND2/53009/2009, J-11011/690/2008-IA-II(I)]

9.7.11.1 The proposal was earlier considered by the EAC in its meeting held on 27th March, 2019 and recommended for grant of environmental clearance.

Subsequent to recommendations of the EAC, the project proponent vide letter dated 19th April, 2019 has requested for correction in the minutes of the meeting, stating that the boiler capacity is 15 TPH instead of 10 TPH.
Considering all aspects, it was noted that since the project is already complete, the issue of EC to the existing project of 30 KLPD is irrelevant. As far as the issue of expansion is concerned, recommendations of the EAC shall be considered. However, regarding the revisions requested by the project proponent, it was desired to take the proposal to the EAC for reconsideration for ascertaining proper environmental norms and conditions.

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

Existing land area is 95 ha. 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 from the project site. Godavari river is flowing at a distance of 4 Km in NW-SE direction.

Total water requirement is estimated to be 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. 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 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 15 TPH will be installed to fulfill the steam and power requirement. ESP and stack height of 72 m will be provided to control particulate emissions.

CO_2 from fermenter house shall be recovered & sold and yeast sludge shall be used as manure.

The Ministry has earlier granted environmental clearance vide letter dated 30th 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), and the validity was extended up to 29thJanuary, 2019. The unit is now taken over by M/s Karmaveer Shankarrao Kale Sahakari Sakhar Karkhana Limited.

The project proponent has reportedly completed the work with the existing EC, 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 distillery of 30 KLPD has been in operation before the EIA Notification, 1994 and thus requiring no prior environmental clearance at that stage. The project proponent has obtained environmental clearance for the proposed expansion from 30 KLPD to 45 KLPD vide letter dated 30th January, 2009 and completed the work. However, the same was not implemented and commissioned within validity period of the said EC, and the Consent to Operate was not obtained.
There being no increase in land area, production and/or addition of utilities, requirement of fresh EIA is irrelevant.

9.7.11.3*The EAC, after deliberations, reiterated its recommendation for grant of environmental clearance to the project, with the same terms and conditions for compliance. The Committee suggested that the project will operate on ZLD principle and spent wash shall be incinerated in the proposed boiler of 15 TPH capacity, which is more environmental friendly than composting*

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

S. No.	Name and Address	Designation
1.	Dr. J. P. Gupta	Chairman
2.	Dr. Y.V. Rami Reddy	Member
3.	Dr TudiIndrasen Reddy	Member
4.	Dr J S Sharma	Member
5.	Shri Dinabandhu Gouda	Member
6.	Dr T K Joshi	Member
7.	Dr Ajay Gairola	Member
8.	Shri Ashok Agarwal	Member
9.	Shri Sanjay Bist	Member
10.	Shri S.K. Srivastava	Member Secretary