

MINUTES OF THE 10th EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) MEETING HELD DURING 29-31 July, 2019

Venue: Narmada 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

10.1 Opening Remarks by the Chairman

10.2 Confirmation of the Minutes of the 9th Meeting of the EAC (Industry-2) held during 26-28 June, 2019 at Indira Paryavaran Bhawan, New Delhi

The EAC, having taken note that no comments were offered on the minutes of its 9th meeting held during 26-28 June, 2019 at New Delhi, confirmed the same.

Day One: 29th July, 2019

10.3 Environmental Clearance

Agenda No.10.3.1

Setting up of pigments manufacturing unit of capacity 2310TPM by M/s J K INDUSTRIES at Khasra No.57/1, Madhya Pradesh Audyogik Kendra Vikas Nigam(AKVN), Village Dungariya, Tal & District Seoni (MP) -Environmental Clearance

[IA/MP/IND2/72950/2018, IA-J-11011/55/2018-IA-II(I)]

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

10.3.1.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up of pigments manufacturing unit of capacity 2310TPM by M/s J K Industries at Khasra No.57/1, Madhya Pradesh Audyogik Kendra Vikas Nigam(AKVN), Village Dungariya, Tal & District Seoni (MP).

The details of products are as under:

Sr. No.	Name of Product	Quantity (MTPM)
1	Copper Phthalocyanine Blue	1000
2	Alpha Blue-15.0, 15.1 & 15B	200
3	Beta Blue-15.3 & 15.4	400
4	Copper Phthalocyanine Green	300
5	Pigment Violet 23	10
6	Azo Pigment-Red	100
a	Red – 3	
b	Red – 4	
c	Red – 8	
d	Red - 48.2	

e	Red - 49.1	
f	Red - 53.1	
g	Red - 57.1	
h	Red - 63.1	
i	Red – 112	
7	Azo Pigment-Yellow	60
a	Yellow – 12	
b	Yellow – 13	
c	Yellow – 74	
d	Yellow – 83	
8	Azo Pigment-Orange	40
a	Orange – 5	
b	Orange – 13	
9	Metallic Pigments	200
a	Lemon Chrome/Middle Chrome	
b	Scarlet Chrome	
Total		2310

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 in the Ministry.

The standard ToR for the project was granted on 22nd March, 2018. Public hearing for the project was conducted by the State Pollution Control Board on 6th October, 2018. The main issues raised during the public hearing are related to employment to locals and proper treatment of wastewater.

Total land area is estimated to be 1,18,000 sqm. Green belt will be developed in 33% i.e. 40000 sqm out of total project area. The estimated project cost of proposed unit is Rs.48 crore. Total capital cost earmarked towards environmental pollution control measures is Rs.12 crore and the recurring cost (operation and maintenance) will be about Rs.6.6 crore per annum. Total employment including direct and indirect will be 175 persons.

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

Total water requirement is estimated to be 2311 cum/day, which includes fresh water requirement of 633 cum/day, proposed to be met from MPAKVN water supply.

Total trade effluent generation will be 1723.0 KLD. Process effluent will be taken into ETP along with wastewater generated from scrubber, washing effluent, utility and reject of water treatment (50 KLD). Then it will be taken in to RO/Microfiltration. RO reject will be sent to MEE. RO permeate and condensate of MEE will be reused. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 600 HP and will be met from Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Ltd (MPPKVVCL). Unit will install one DG Set of 1000 kVA capacity and will be used as standby during power failure. Stack (height 11 meters) will be provided as per CPCB norms to the proposed DG set.

Two Steam boilers (8TPH), one Thermic Fluid Heater (25 Lakhs KCal/hr) and one Hot Air Generator (25 lakhs Kcal/hr) will be installed. Coal will be used as fuel in proposed Boiler, TFH &

HAG. Cyclone and bag filter with a stack height of 41 m (Common stack for boilers), 25 m & 25 m respectively will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm³ for the proposed utilities.

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: PM₁₀ (50.2–63.0 µg/m³), PM_{2.5} (30.1–34.6 µg/m³), SO₂ (10.5 –13.3 µg/m³) and NO_x (14.1–17.4 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.761 µg/m³, 1.537 µg/m³, 1.268 µg/m³, 0.675 µg/m³, 0.102 µg/m³ and 0.034 µg/m³ respectively with respect to PM₁₀, SO₂, NO_x, NH₃, HCl, & Cl₂. 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.

10.3.1.2 *The EAC, in the first instance, observed that the unit was proposed within the notified industrial area of AKVN, and thus the project/activity covered under category B of item 5(f) 'Synthetic Organic Chemicals' of schedule to the EIA Notification, 2006, requires appraisal at State level.*

The Committee asked the project proponent to submit proposal to SEAC/SEIAA, Madhya Pradesh for consideration. The proposal was, therefore, deferred.

Agenda No.10.3.2

Manufacturing of Synthetic Organic Chemicals Plot No.E-67, RIICO, Phase-II, Maval, Abu Road, District Sirohi (Rajasthan) M/s Paras Industries- Environmental Clearance

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

The project proponent and their consultant B. S. Rana (High Court stay), made a detailed presentation on the salient features of the project.

10.3.2.1 During deliberations, the EAC noted the following: -

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

The details of products are as under:

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

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 SEIAA.

The standard ToR for the project was granted on 4th January, 2019. Public hearing is exempted as the project site is located inside the notified industrial area.

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

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. River Banas flows at 2.6 km in North.

Total fresh water requirement is estimated to be 12 cum/day, proposed to be met from tankers supply.

Effluent of 8.07 m³/day will be treated in ETP followed by R.O. system. Treated effluent will be recycled. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 125 kVA proposed to be met from Jodhpur Vidyut Vitran Nigam Ltd. (JVVNL). Unit will install one D.G. Set of 125 kVA capacity and will be used as standby during power failure. Stack (height 5 meters) will be provided as per CPCB norms to the proposed DG set.

One Agro waste boiler of 0.8 TPH capacity will be installed along with multi cyclone and bag filter and stack of 13 m height to control the particulate emissions within the statutory norms.

Ambient air quality monitoring was carried out at 10 locations during 1stDecember, 2018 to 28th February, 2019 and the baseline data indicates the ranges of concentrations as:PM10 (46 - 64µg/m³), PM2.5 (25-44µg/m³), SO₂ (3-14µg/m³) and NO₂ (10- 25µg/m³). AAQ modeling study for point source emissions indicates that themaximum incremental GLCs after the proposed project would be 72.08 µg/m³,12.76 µg/m³ and24.09 µg/m³ with respect to PM10, SO_xandNO_x. The resultantconcentrations 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.

10.3.2.2*The EAC, in the first instance, observed that the project details mentioned in the EIA report were not consistent with that presented during the meeting. In view of substantive deviations, the Committee suggested the Ministry to take action against the EIA consultant for submitting misleading information.*

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

- Incremental values for PM_{10} , SO_2 and NO_x ($72.08 \mu\text{g}/\text{m}^3$, $12.76 \mu\text{g}/\text{m}^3$ and $24.09 \mu\text{g}/\text{m}^3$) were reported to be much higher side, and needs to be confirmed.
- Notification status for the said industrial area.
- EIA report to be revised as per the terms of reference granted for the project.

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

Agenda No.10.3.3

Setting up Synthetic organic chemical manufacturing unit by M/s Mahaveer Surfactants Pvt Ltd at Plot No. A6/2Part,C4, SIPCOT Industrial Park, Village Thervoy Kandigai, Taluk Gummidipoondi, District Tiruvallur (Tamil Nadu) - Environmental Clearance

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

The project proponent and the accredited consultant M/s Vimta Labs Limited, made a detailed presentation on the salient features of the project.

10.3.3.1 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for setting up synthetic organic chemical manufacturing unit by M/s Mahaveer Surfactants Pvt Ltd in an area of 2.62 ha at Plot No. A6/2Part, C4, SIPCOT Industrial Park, Village Thervoy Kandigai, Taluk Gummidipoondi, District Tiruvallur (Tamil Nadu).

The details of proposed products are as under:-

S. No	Product Details	Quantity (TPA)
1	Linear Alkyl Benzene Sulphonic Acid (LABSA)	28800
2	Alcohol Ether Sulfates (AES)	4968
3	Alfa Olefin Sulfonates (AOS)	4162
4	Sodium Lauryl Sulphate (SLS)	3744

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. Due to applicability of general condition (interstate boundary of Andhra Pradesh within 5 km), the proposal requires appraisal at central level by the sectoral EAC in the Ministry.

Standard Terms of Reference for the project was granted on 30th July 2018. Public hearing is exempted as the project site is located inside the notified industrial area.

Total land area is estimated to be 2.62 ha. Green belt will be developed in 34% i.e. 0.89 ha out of total project area. The estimated project cost is Rs. 1596.6 Lakhs. The total capital cost earmarked towards environmental pollution control measures is Rs. 390.0 Lakhs and the recurring cost (operation and maintenance) will be about Rs. 63.0 Lakhs per annum. Total employment will be 30 persons as direct & 50 persons indirectly.

There are No National parks, Wildlife sanctuaries, Biosphere reserves, Tigers/Elephant reserves, Wildlife corridors etc within 10 km. Arani river flows at a distance of 7.7 km in South.

Total water requirement is estimated to be 94.6 cum/day, which includes fresh water requirement of 77.86 cum/day, proposed to be met from SIPCOT water supply.

The total wastewater generation from the industrial process will be 15.5 KLD and from the domestic generation will be 3.24 KLD. The wastewater generated from the processes will be treated in the Effluent Treatment Plant (ETP) of capacity 25 KLD and domestic wastewater will be combined with aeration tank of the ETP, subsequently treated and reused for cooling tower and alkali scrubber. The scrubber bleed generation of quantity 13.0 KLD consists of major proportion of Sodium Sulphate lean solution, which will be concentrated and sent to detergent industries. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 1800 kW proposed to be met from Tamilnadu State Grid. To meet the emergency power requirement during the grid failure, a DG set having capacity of 1000 KVA is proposed along with stack of 18 m height will be provided as per CPCB norms.

One boiler of 2 TPH capacity will be installed. Bag filter with a stack of height of 18 m will be provided to control the particulate emissions within the statutory norms.

Ambient Air Quality Monitoring (AAQM) was carried out at eight (8) locations during 1st June to 31st August 2018 and the baseline data indicates the ranges of concentrations as PM10 – 37.0 to 58.3 µg/m³; PM2.5 – 19.0 to 30.2 µg/m³; SO₂ - 7.0 to 17.5 µg/m³; NO_x - 15.6 to 29.6 µg/m³ and CO – 263 to 348 µg/m³. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.137 µg/m³, 5.82 µg/m³ and 0.097 µg/m³ with respect to PM10, SO_x 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.

10.3.3.2 *The EAC, after deliberations, asked for clarification/inputs and revision in the EIA/EMP report in respect of the following:-*

- *Revised layout plant with green belt of 10 m all around.*
- *Detailed rainwater harvesting system, and the water balance to be revised accordingly.*
- *Plan for raw materials storage, with the maximum of three days.*
- *Occupational health plan.*
- *Change of boiler fuel.*

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

Agenda No.10.3.4

Expansion of existing herbicides/ fungicides/PGRS manufacturing unit at Plot Nos:E- 24, E-24 (Part) and E-23/1, MIDC, Lote Parshuram, Taluka Khed, District Ratnagir (Maharashtra) by M/s Goderej Agrovet Limited - Environmental Clearance

[IA/MH/IND2/104821/2003, J-11011/231/2003-IA-II(I)]

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

10.3.4.1 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for expansion of pesticide manufacturing unit from 100.60 TPA to 471.5 TPA by M/s Goderej Agrovet Limited in an area of 10742 sqm at Plot Nos.E-24, E-24 (Part) and E-23/1, MIDC, Lote Parshuram, Taluka Khed, District Ratnagir (Maharashtra).

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

S. No.	Products	Quantity (MT/A)		
		Existing	Proposed	Total
1.	GOD –HH001 Pyrethioback Sodium Tech.	40	20	60
2.	Homobrassinolide (HBR)	0.6	0.9	1.5
3.	Bispyribac Sodium Technical	40	20	60
4.	Florchlorfenuron Technical	20	30	50
5.	Quizalofap-P-Ethyl Technical	00	60	60
6.	Dimethomorph Technical	00	60	60
7.	Metribuzin Technical	00	60	60
8.	Thiophanate Methyl technical	00	60	60
9.	Trifloxystrobin Technical	00	60	60
TOTAL (A)		100.60	370.90	471.50
Formulation Products which are not required Prior Environment Clearance as per EIA Notification, 2006				
1.	Bispyribac Sodium Formulation	144.405	0	144.405
2.	Florchlorfenuron Formulation	10.12	0	10.12
3.	Achook Nimin	36	0	36
4.	Bumper Bountee	12	0	12
5.	Combined (PGR) like super shakti & Diamore combine & double	12	0	12
6.	Dapcoat	24	0	24
7.	Agroneem	200	0	200
8.	Liquid Vipul, Vipul granules, Diamore Suruchi, Ruchira	36	0	36
9.	Neem oil Emulsifiable	24	0	24
10.	Hitweed Pyrethiobac Sodium (10%)	36	0	36
TOTAL (B)		534.525	0.0	534.525
GRAND TOTAL (A+B)		635.125	370.90	1006.025

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 granted on 31st January, 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 10742 sqm, and no additional land is required for the proposed expansion. Industry has already developed greenbelt in an area of 2346.17 sq. m and proposed greenbelt in an area of 1225.15 sqm. Total greenbelt area is 3571.32 sqm i.e. >33% of total area of the project. The estimated project cost is Rs.10 Crores excluding existing investment of Rs 13.47

Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 0.62 Crore and the Recurring cost (operation and maintenance) will be about Rs 0.11Crore per annum. Direct Employment will be 10 persons and indirect employment would be 20 persons 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. River Vashishti flows at 4.15 km in South.

Total water requirement is estimated to be 52.12 m³/day including fresh water requirement of 37.18 m³/day proposed to be met from MIDC water supply.

Effluent of 18.09 m³/day is segregated into HTDS (5.98 m³/day) and LTDS (12.11 m³/day). HTDS effluent will be sent to MEE system followed by BTP and LTDS effluent will be treated in BTP followed by RO Plant. RO Rejects to MEE System and RO permeate to reuse, Condensate from MEE to reuse and MEE concentrated to ATFD, ATFD salts will be sent to TSDF and will achieve Zero Liquid Discharge (ZLD).

Power requirement after expansion will be 400 KVA including existing 135 KVA and will be met from Maharashtra State Electricity Distribution Company Limited (MSEDCL). Existing unit has 1 DG sets of 200 KVA capacity, DG set is used as standby during power failure. Stack (height 10 m) will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 1* 0.6 TPH FO fired boiler and 100000 kcal/hr Thermic fluid heater. Additional 1* 0.6 TPH FO fired boiler will be installed. Stack of height 21 meters is already installed for 0.6 TPH FO fired boiler and additionally stack of height 21 meters will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm³ for the proposed boilers.

Ambient air quality monitoring was carried out at 8 locations during 1st March 2018 to 31st May 2018. The baseline data indicates the ranges of concentrations as: PM₁₀ (67.66-79.52 µg/m³), PM_{2.5} (32.46-42.55 µg/m³), SO₂ (27.3-40.31 µg/m³) and NO_x (29.25-39.12 µg/m³). AAQ modeling study for point source and Line Source emissions indicates that the maximum GLCs after the proposed project would be 0.021 µg/m³, 1.62 µg/m³ and 0.235 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The Ministry, had issued EC earlier vide letter dated 28thMay, 2004 to the project for pesticide manufacturing of capacity 1.25 TPM in favour of M/s Bahar Agrochem and Feeds Pvt. Limited. Later the EC was transferred on 6th March, 2014 in the name of M/s Godrej Agrovet Ltd from M/s Bahar Agrochem and Feeds Pvt. Ltd. The monitoring report on compliance status of EC conditions forwarded by the Regional Office vide their letter dated 29th January, 2019.

10.3.4.2 *The EAC, after deliberations, noted that the existing environmental clearance dated 28th May, 2004 granted by the Ministry was for manufacturing capacity @1.25 TPM. The unit is, however, engaged in production @ 100.60 TPM, and as such, amounts to violation of the EIA Notification, 2006. The proposal was, therefore, not taken forward for the necessary clarifications in this regard to the satisfaction of the Ministry.*

Agenda No.10.3.5

Expansion of bulk drug intermediates, pesticide specific intermediates & specialty chemicals manufacturing unit of at plot No.127/1, GIDC Estate, Ankleshwar, District Bharuch (Gujarat) by M/s Gujarat Organics Ltd. (Unit-1)- Environmental Clearance

[IA/GJ/IND2/73407/2018, IA-J-11011/97/2018-IA-II(I)]

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

10.3.5.1 The proposal was earlier considered by the EAC in its meeting held during 19-20 December, 2018 wherein the EAC after deliberations, resolved that the Ministry may take a comprehensive view on categorization of such projects, taking into consideration its observations in para 1.3.4.2. In case of greenbelt also, the Committee was not convinced with the proposed approach/planning in view of the deviation from the practice in similar other projects.

In response, the project proponent has informed that the product list which is submitted in EIA report covers both 5(b) & 5(f) category products. Out of 107 Products there are 8 Products which fall under 5(b) category, but the production capacity is on campaign basis so either of the products can be manufactured to the tune of 175 MT/Month.

10.3.5.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project for expansion of bulk drug intermediates, pesticide specific intermediates & specialty chemicals manufacturing unit from 94.5 TPM to 175 TPM by M/s Gujarat Organics Ltd (Unit-1) in an area of 10,468.88 sqm located at Plot No.127/1, GIDC Estate, Ankleshwar, District Bharuch (Gujarat).

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

S. No.	Product	CAS No.	LD ₅₀	Category	Existing (TPM)	Proposed (TPM)
1.	Salicylic Acid	69-72-7	500 mg/Kg	5 (b)	94.5	175
2.	Zinc Salicylate	16283-36-6	300 mg/Kg	5 (f)		
3-a.	2-Hydroxy Benzonitrile – 60% of 94.5	611-20-1	410 mg/kg	5 (b)		
3-b.	Sodium Formate (S)/ Sodium Formate (Aq.60-70 %) - 40% of 94.5 (Byproduct)	141-53-7	11200 mg/Kg	5 (f)		
4.	2- Hydroxy Phenyl Acetic Acid	614-75-5	3600 mg/kg	5 (b)		
5.	2-Hydroxy Phenyl Acetic Acid Methyl Ester	22446-37-3	3380 mg/kg	5 (f)		
6.	6 Hydroxy-2-Naphthoic Acid	16712-64-4	3080 mg/Kg	5 (f)		
7.	6 Hydroxy-2-Naphthoic Acid Methyl Ester	17295-11-3	3480 mg/kg	5 (f)		
8.	P-Hydroxy Benzoic Acid	99-96-7	2200 mg/Kg	5 (b)		
9.	O-Cresotic Acid	83-40-9	445 mg/Kg	5 (f)		

10-a.	4-Hydroxy Benzonitrile – 60% of 94.5	767-00-0	450 mg/Kg	5 (f)	
10-b.	Ammonium Sulfate (S)/Ammonium Sulfate (Aq.60-70 %) - 40% of 94.5 (Byproduct)	7783-20-2	3000 mg/Kg	5 (f)	
•	4-Hydroxy Phenyl Acetic Acid	156-38-7	3500 mg/Kg	5 (f)	
•	4-Hydroxy Phenyl Acetic Acid Methyl Ester	14199-15-6	3800 mg/kg	5 (f)	
•	3-Methyl Salicylic Acid	83-40-9	445 mg/Kg	5 (f)	
•	4-Methyl Salicylic Acid	50-85-1	1800 mg/Kg	5 (f)	
•	5-Methyl Salicylic Acid	89-56-5	1000 mg/Kg	5 (f)	
•	3-Hydroxy Benzoic Acid Methyl Ester	19438-10-9	2000 mg/kg	5 (f)	
•	2,4-Dihydroxy Benzoic Acid	89-86-1	800 mg/Kg	5 (f)	
•	2,6-Dihydroxy Benzoic Acid	303-07-1	>4000 mg/Kg	5 (f)	
19-a.	p-Phenol Sulfonic acid – 60% of 94.5	98-67-9	6400 mg/Kg	5 (f)	
19-b.	Ammonium Sulfate (S)/Ammonium Sulfate (Aq.60-70 %) - 40% of 94.5 (Byproduct)	7783-20-2	3000 mg/Kg	5 (f)	
20.	6-Methoxy -2-Naphthoic Acid	2471-70-7	830 mg/kg	5 (f)	94.5
21.	6-Methoxy -2-Naphthoic Acid Methyl Ester	5043-02-7	1040 mg/kg	5 (f)	
22.	6-Methoxy-2-Naphthaldehyde	3453-33-6	14,500 mg/Kg	5 (f)	
23.	3-Chloro Salicylic Acid	1829-32-9	350 mg/kg	5 (f)	
24.	3-Chloro Salicylic Acid Methyl Ester	52159-67-8	400 mg/kg	5 (f)	
25.	3-Chloro -2-Methoxy Benzoic Acid	3260-93-3	350 mg/kg	5 (f)	
26.	3-Chloro -2-Methoxy Benzoic Acid Methyl Ester	N/A	400 mg/kg	5 (f)	
27.	3-Chloro -2-Ethoxy Benzoic Acid	N/A	350 mg/kg	5 (f)	
28.	3-Chloro -2-Ethoxy Benzoic Acid Methyl Ester	N/A	400 mg/kg	5 (f)	94.5
29.	4-Chloro Salicylic Acid	5106-98-	490	5 (f)	

		9	mg/Kg			
30.	4-Chloro Salicylic Acid Methyl Ester	78955-90-5	540 mg/kg	5 (f)		
31.	4-Chloro -2-Methoxy Benzoic Acid	57479-70-6	360 mg/kg	5 (f)		
32.	4-Chloro -2-Methoxy Benzoic Acid Methyl Ester	N/A	410 mg/kg	5 (f)		
33.	4-Chloro -2-Ethoxy Benzoic Acid	N/A	360 mg/kg	5 (f)		
34.	4-Chloro -2-Ethoxy Benzoic Acid Methyl Ester	N/A	410 mg/kg	5 (f)		
35.	5-Chloro Salicylic Acid	321-14-2	250 mg/Kg	5 (f)		
36.	5-Chloro Salicylic Acid Methyl Ester	4068-78-4	300 mg/kg	5 (f)		
37.	5-Chloro-2-Methoxy Benzoic Acid	3438-16-2	350 mg/kg	5 (f)		
38.	5-Chloro-2-Methoxy Benzoic Acid Methyl Ester	33924-48-0	400 mg/kg	5 (f)		
39.	5-Chloro -2-Ethoxy Benzoic Acid	N/A	340 mg/kg	5 (f)		
40.	5-Chloro -2-Ethoxy Benzoic Acid Methyl Ester	N/A	400 mg/kg	5 (f)		
41.	Methyl Salicylate	119-36-8	887 mg/Kg	5 (f)	94.5 MT/Month	
42.	Ethyl Salicylate	118-61-6	1320 mg/Kg	5 (f)		
43.	Phenyl Salicylate	118-55-8	3000mg/Kg	5 (f)		
44.	Methyl-3-Methyl Salicylate	23287-26-5	900 mg/kg	5 (f)		
45.	Methyl-4-Methyl Salicylate	4670-56-8	900 mg/kg	5 (f)		
46.	Methyl-5-Methyl Salicylate	22717-57-3	900 mg/kg	5 (f)		
47.	Benzyl Benzoate	120-51-4	4000 mg/kg	5 (f)		
48-a.	4-Cyano Phenyl Acetate – 60% of 94.5	13031-41-9	400 mg/kg	5 (f)		
48-b.	Sodium Acetate – 40% of 94.5 (Byproduct)	127-09-3	25956 mg/kg	5 (f)		
49.	Methyl Paraben	99-76-3	2,100 mg/kg	5 (f)	94.5 MT/Month	
50.	Ethyl Paraben	120-47-8	3000 mg/kg	5 (f)		
51.	Propyl Paraben	94-13-3	7500 mg/kg	5 (f)		
52.	Butyl Paraben	94-26-8	5000	5 (f)		

			mg/kg			
53.	Iso Propyl Paraben	4191-73-5	1,900 mg/kg	5 (f)		
54.	Iso Butyl Paraben	4247-02-3	2,600 mg/kg	5 (f)		
55.	Benzyl Paraben	94-18-8	2,600 mg/kg	5 (f)		
56.	Sodium Benzyl Paraben	94-19-8	2200 mg/kg	5 (f)		
57.	Sodium Methyl Paraben	5026-62-0	7500 mg/kg	5 (f)		
58.	Sodium Ethyl Paraben	35285-68-8	2200 mg/kg	5 (f)		
59.	Sodium Propyl Paraben	35285-69-9	3,700 mg/kg	5 (f)		
60.	Sodium Butyl Paraben	36457-20-2	4600 mg/kg	5 (f)		
61.	Sodium Iso Propyl Paraben	36457-21-3	1700 mg/kg	5 (f)		
62.	Sodium Iso Butyl Paraben	84930-15-4	2400 mg/Kg	5 (f)		
63.	Gujsol – 1	[2-Phenoxy Ethanol(CAS No. 122-99-6), Methyl Paraben (CAS No. 99-76-3), Ethyl Paraben (CAS No. 120-47-8), Propyl Paraben (CAS No. 94-13-3), Butyl Paraben (CAS No. 94-26-8)]	200 mg/kg	5 (f)		
64.	Gujsol - 2	[2-Phenoxy Ethanol(CAS No. 122-99-6), Methyl Paraben (CAS No. 99-76-3), Ethyl	200 mg/kg	5 (f)		

		Paraben (CAS No. 120-47-8), Propyl Paraben (CAS No. 94-13-3), Butyl Paraben (CAS No. 94-26-8), Iso Butyl Paraben (CAS No. 4247-02-3)]				
65.	Gujsol - 3	[2-Phenoxy Ethanol(CAS No. 122-99-6), Methyl Paraben (CAS No. 99-76-3), Ethyl Paraben (CAS No. 120-47-8), Propyl Paraben (CAS No. 94-13-3)]	200 mg/kg	5 (f)		
66.	Gujsept	[Methyl Paraben (CAS No. 99-76-3), Ethyl Paraben (CAS No. 120-47-8), Propyl Paraben (CAS No. 94-13-3)]	200 mg/kg	5 (f)		
67.	Gujsept Sodium	[Methyl Paraben Sodium (CAS No. 5026-62-0), Ethyl Paraben	200 mg/kg	5 (f)		

		Sodium (CAS No. 35285-68-8), Propyl Paraben Sodium (CAS No. 35285-69-9)]				
68.	Gujstat	[Methyl Paraben (CAS No. 99-76-3), Ethyl Paraben (CAS No. 120-47-8), Propyl Paraben (CAS No. 94-13-3), Butyl Paraben (CAS No. 94-26-8)]	200 mg/kg	5 (f)		
69.	2- Ethoxy Benzoic Acid	134-11-2	800 mg/kg	5 (f)	94.5	
70.	2- Ethoxy Benzoic Acid Methyl Ester	3686-55-3	1000 mg/kg	5 (f)		
71.	2- Ethoxy Benzoic Acid Ethyl Ester	6290-24-0	1000 mg/kg	5 (f)		
72.	4- Ethoxy Benzoic Acid	619-86-3	800 mg/kg	5 (f)		
73.	4- Ethoxy Benzoic Acid Methyl Ester	23676-08-6	1000 mg/kg	5 (f)		
74.	4- Ethoxy Benzoic Acid Ethyl Ester	23676-09-7	1000 mg/kg	5 (f)		
75.	P-Iso Propoxy Benzoic Acid	13205-46-4	800 mg/kg	5 (f)		
76.	P-Iso Propoxy Benzoic Acid Methyl Ester	35826-59-6	1000 mg/kg	5 (f)		
77.	P-Iso Propoxy Benzoic Acid Ethyl Ester	122488-52-2	1000 mg/kg	5 (f)		
78.	P – Anisic Acid	100-09-4	400 mg/kg	5 (b)		
79.	P – Anisic Acid Methyl Ester	121-98-2	5000 mg/kg	5 (f)		
80.	P – Anisic Acid Ethyl Ester	94-30-4	2040 mg/kg	5 (f)		
81.	O-Anisic Acid	579-75-9	300 mg/kg	5 (b)		
82.	O– Anisic Acid Methyl Ester	606-45-1	5000 mg/kg	5 (f)		
83.	O– Anisic Acid Ethyl	7335-26-	300 mg/kg	5 (f)		

	Ester	4				
84.	O - Anisic Acid Phenyl Ester	N/A	300 mg/kg	5 (f)		
85.	m-Anisic Acid	586-38-9	400 mg/kg	5 (f)		
86.	2-Ethoxy Benzamide	938-73-8	700 mg/kg	5 (f)		
87.	Ethyl Benzoate	93-89-0	2100 mg/kg	5 (f)		
88.	3-Methoxy Phenol	150-19-6	682 mg/Kg	5 (f)		
89.	2-Ethoxy Phenol	94-71-3	682 mg/Kg	5 (f)		
90.	2,6-Dimethoxy Benzoic Acid	1466-76-8	> 500 mg/kg	5 (b)		
91.	4-[N-(2-Methoxy Benzoyl)Sulfomoyl]Benzoyl Chloride	816431-72-8	200 mg/kg	5 (b)		
92.	2,4-Dihydroxy Benzoic Acid Methyl Ester	2150-47-2	600 mg/kg	5 (f)		
93.	2,6-Dihydroxy Benzoic Acid Methyl Ester	2150-45-0	600 mg/kg	5 (f)		
94.	1-Hydroxy -2 - Naphthoic Acid	86-48-6	800 mg/kg	5 (f)		
95.	1-Hydroxy -2 - Naphthoic Acid Phenyl Ester	132-54-7	820 mg/kg	5 (f)		
96.	1-Methoxy-2-Naphthoic Acid	883-62-5	830 mg/kg	5 (f)		
97.	1-Methoxy-2-Naphthoic Acid Methyl Ester	N/A	1040 mg/kg	5 (f)		
98.	1-Ethoxy-2-Naphthoic Acid	N/A	800 mg/kg	5 (f)	25.0 MT/Month	
99.	1-Ethoxy-2-Naphthoic Acid Methyl Ester	N/A	1020 mg/kg	5 (f)		
100	4-Cyano -2-Nitro Phenol	3272-08-0	437 mg/kg	5 (f)		
101-a.	Cyanuric Acid – 60% of 25	108-80-5	> 5,000 mg/kg	5 (f)		
101-b.	Ammonium Sulfate (S)/Ammonium Sulfate (Aq.60-70 %) - 40% 25 (Byproduct)	7783-20-2	2840 mg/kg	5 (f)		
102	3-Amino Salicylic Acid	570-23-0	4000 mg/kg	5 (f)		10.0 MT/Month
103	3-Amino Salicylic Acid Methyl Ester	35748-34-6	878 mg/kg	5 (f)		
104	4-Amino Salicylic Acid	65-49-6	4000 mg/kg	5 (f)		
105	4-Amino Salicylic Acid Methyl Ester	4136-97-4	880 mg/kg	5 (f)		
106	5-Amino Salicylic Acid	89-57-6	4000	5 (f)		

			mg/kg			
107	5-Amino Salicylic Acid Methyl Ester	42753-75-3	887 mg/kg	5 (f)		
	Total				94.5 MT/Month (Any one or Cumulative)	175 MT/Month
	By Products					
1.	Sodium Sulfate	7757-82-6	5989 mg/kg	-	100	185.18
2.	Potassium Sulfate	7778-80-5	6600 mg/kg	-	100	185.18
3.	Sodium Bromide	7647-15-6	3500 mg/kg	-	60	111.11
	Total				260	481.47

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

Terms of Reference for the project was granted on 14th April, 2018. Public hearing is exempted as the project site is located inside the notified industrial area.

Existing land area is 10,468.88 sqm. No additional land required for expansion. Greenbelt will be developed in an area of 1,294 sqm out of 10,468.88 sqm total area of the project. The estimated project cost for proposed expansion is Rs. 45 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 12.04 crores and the Recurring cost (operation and maintenance) will be about Rs 15.93 crores Per annum.

The project proponent has committed that they will develop the remaining 21% green belt within 5 km.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc within 10 km distance from the project site. ChinnaMusi River flows at 5.8 km in North West.

Total water requirement is estimated to be 276m³/day including fresh water requirement of 189 m³/day proposed to be met from GIDC Water Supply.

Industrial wastewater (88 KL/day) is discharged in to NCT pipeline after treatment for deep sea disposal via FETP. Domestic wastewater (10 KL/day) is disposed in septic tank and soak pit.

Power requirement for proposed project will be 2500 KVA including existing 750 KVA and will be met from DGVCL. State power distribution corporation limited (SPDCL). 1 No. DG sets of 320 KVA*1 capacity shall be used as standby during power failure. Stack (height 15 m) will be

provided as per CPCB norms to the proposed DG sets of 320 KVA*1 which will be used as standby during power failure.

Unit shall have 3 Nos. of 1 TPH, 3 TPH & 4 TPH Natural Gas/Furnace Oil fired boiler & 5 Nos. of 2 Lakh Kcal/Hr, 4 Lakh Kcal/Hr & 6 Lakh Kcal/Hr Thermic Fluid Heaters will be installed. Multi cyclone separator/ bag filter/ESP with a stack of height of 30 m will be installed for controlling the Particulate emissions (within statutory limit of 150 mg/Nm³) respectively.

Ambient air quality monitoring was carried out at 9 locations during March to May, 2017 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (72.04-95.94 µg/m³), PM_{2.5}(42.46-57.51µg/m³), SO₂ (16.42-26.72 µg/m³) &NO_x (18.16-28.53 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 1.01 µg/m³, 1.77 µg/m³ and 0.635 µg/m³ with respect to PM₁₀, SO₂&NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Existing unit was established before the EIA Notification, 2006 and prior EC was not required at that time.

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 addressing the concerns raised by the Committee.

10.3.5.3 The EAC, in the first instance, took note of the order dated 10th July, 2019, passed by Hon'ble NGT, Principal Bench, New Delhi in OA No.1038 of 2018 in the matter of News item published in the Asian Age authored by Sanjay Kaw titled 'CPCB to rank industrial units on pollution levels'.

Para 28 of the said order quotes-

'No further industrial activities or expansion be allowed with regard to 'red' and 'orange' category units till the said areas are brought within the prescribed parameters or till carrying capacity of area is assessed and new units or expansion is found viable having regard to the carrying capacity of the area and environmental norms.'

10.3.5.4 *The EAC, after deliberations and in view of the above and the project site in GIDC Ankleshwar (having CEPI score 80.21) covered under the said orders of NGT, preferred not to take the proposal forward for the present, but to seek advice of the Ministry for appropriate course of action in such cases. The Committee also opined that in case, such proposals are to be considered on merits, environmental conditions and other stringent measures would have to be looked into comprehensively in complete perspective and in consultation with CPCB.*

The proposal was, therefore, deferred.

Agenda No.10.3.6

Expansion of molasses distillery 60 KLPD to 150 KLPD (integrated project complex of 5500 TCD Sugar factory, 32 MW Co-gen plant & at Najik Babhulgaon, Po-Rakshi TAL-Shvgaon, District Ahmednagar (Maharashtra) by M/s Gangamai Industries and Constructions Ltd - Environmental Clearance

[IA/MH/IND2/55812/2014, J-11011/14/2015/IA II (I)]

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

10.3.6.1 The proposal was earlier considered by the EAC in its meeting held during 6-8 May, 2019, wherein the EAC after deliberations, insisted for compliance status of the conditions stipulated in the environmental clearance dated 11th March, 2015 granted by SEIAA Maharashtra to the project for expansion of sugar plant within the same premises.

In response, the project proponent has submitted the certified compliance report issued by the Regional office of the Ministry.

10.3.6.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of molasses based distillery from 60 KLPD to 150 KLPD by M/s Gangamai Industries And Constructions Ltd (GIACL) in a total area of 27.06 ha at Village NajikBabhulgaon, Post Rakshi, Taluka Shvgaon, District Ahmednagar (Maharashtra). The unit is also engaged in sugar production @5500 TCD and co-generation power plant of 32 MW.

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

Industrial Unit	Product	Quantity		
		Existing (60 KLPD)	Expansion (90 KLPD)	Total (150 KLPD)
Distillery	Rectified Spirit	1800 KL/M	2700 KL/M	4500 KL/M
	Extra Neutral Alcohol	1800 KL/M	2700 KL/M	4500 KL/M
	Ethanol	1800 KL/M	2700 KL/M	4500 KL/M
	By-product			
	Fusel Oil	34 KL/Annum	47 KL/Annum	81KL/Annum
	CO ₂ gas	1380 MT/M	2036 MT/M	3416 MT/M
	Compost (from Spent wash treatment)	20935 MT/Annum	--	20935 MT/Annum
	Spentwash Dry Powder (99% Solids)	--	--	3000 MT/M
	Spentwash Dry Powder (95% Solids)	--	--	2190 MT/M

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

Standard Terms of Reference for the project was issued on 14th April, 2018. Public hearing has been conducted by the Maharashtra Pollution Control Board, (MPCB) on 17th October, 2018. Main issues raised during the public hearing are related to developmental plan of GIACL under expansion, pollutants generated under distillery project and its disposal or treatment facilities etc.

Total plot area acquired by industry is 27.66 ha. Green belt will be developed in an area of 38% i.e.10.18 ha out of the total project area. The estimated project cost for expansion will be Rs.19.18 Cr to that of existing investment for distillery is Rs. 55.93 Cr. Total capital cost

earmarked towards environmental pollution control measures under expansion is Rs.7.70 Crores and the recurring cost (operation and maintenance) will be about Rs.0.53 Crores per annum. Total Employment will be 50 persons as direct as well as indirect for 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 will be 1619 cum/day proposed to be met from Jayakwadi dam.

Spent wash generated from 150 KLPD molasses based distillery will be to the tune of 1182 M3/Day shall be primarily treated in bio-methanation plant followed by concentration in MEE. Conc. Spent wash will be forwarded to Agitator Thin Film Dryer (ATFD) for drying and forms dry powder 95% or 99% solids. 95% powder would be mixed with boiler ash to form manure during crushing season. 99% powder bagged and sold during non-crushing season. Spentlees to the tune of 339 M3/Day, MEE condensate 1086 M3/Day and Other effluents (viz. cooling blow down, lab & washing shall be forwarded to CPU along with spent lees (339 M3/Day) and MEE condensate (1086 M3/Day) will be treated in Condensate Polishing Unit (CPU). Treated water from CPU will be used in process for dilution of molasses. This achieved Zero Liquid Discharge (ZLD) of process effluent.

Power required for GIACL project complex shall be met from its own co-gen plant. Existing unit has 1 DG set of 900 KVA. No new DG set will be installed under expansion project.

Existing distillery has 8 TPH biogas fired boiler. Also, a boiler from existing co-gen plant having capacity 30 TPH will be modified to 40 TPH under distillery expansion. Steam from both boilers (8 TPH and 40 TPH) will be used during operation of 150 KLPD distillery. A stack of 45 M height is provided to 8 TPH biogas fired distillery boiler. For, existing 30 TPH bagasse fired boiler which will be modified to 40 TPH; Electrostatic Precipitator (ESP) along with stack of 76 m height is installed as Air Pollution Control (APC) Equipment. ESP will be installed to control the particulate emission within the statutory limit of 115 mg/Nm³ for the propose boiler.

Ambient air quality monitoring was carried out at 8 locations during March 2018 – December 2018 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (61.16 – 64.6 µg/m³), PM_{2.5} (17.05 – 22.13 µg/m³), SO₂ (19.02 – 27.35 µg/m³) and NO₂ (26.9 – 35.75 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.013 µg/m³ and 0.0031 µg/m³ with respect to PM₁₀ and PM_{2.5} respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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

Earlier, the Ministry has issued EC vide letter dated 18th October, 2017 for 60 KLPD molasses based distillery and in favour of M/s Gangamai Industries And Constructions Ltd. The monitoring report on compliance status of EC conditions has been forwarded by the Ministry's Regional Office at Nagpur vide letter dated 21st December, 2018. The Committee found the certified compliance report to be satisfactory.

SEIAA Maharashtra, vide letter dated 11th March, 2015, has granted environmental clearance in favour of M/s Gangamai Industries And Construction Ltd for expansion of sugar factory from 2500 to 5500 TCD and co-generation from 12 to 32 MW. The monitoring report on compliance status of EC conditions has been forwarded by the Ministry's Regional Office at Nagpur vide letter dated 21st June, 2019. The Committee found the certified compliance report to be

satisfactory.

The expenditure towards CER for the project would be 1.5% of the project cost as committed by the project proponent.

10.3.6.2 The EAC, after deliberations, observed that as per the Form-1 (prescribed for ToR), total plot area was 27.06 ha. However, during presentation, project proponent informed that they have purchased the adjacent plot of area 6 ha for the proposed expansion. Accordingly, total plot area would be increased to 33.06 ha, which is not consistent with the ToR granted by the Ministry and also renders the public hearing conducted by SPCB (for an area of 27.06 ha) meaningless. The Committee suggested the project proponent to first submit the proposal for amendment in ToR.

The proposal was, therefore, deferred.

Agenda No.10.3.7

Expansion of Bulk Drugs and Intermediates Manufacturing Unit by M/s Hazelo Lab Pvt Ltd (formerly known as Venlar Labs Pvt Ltd) at Sy.No. 240, 242, 243, 247, 248 & 249, Village Dhotigudem, Mandal Pochampally, District Nalgonda (Telangana) - Environmental Clearance

[IA/TG/IND2/36540/2015, J-11011/19/2016-IA II (I)]

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

10.3.7.1 The proposal was earlier considered by the EAC in its meeting held during 25-27 June, 2018, wherein the EAC after deliberations, insisted for more inputs, clarifications and/or necessary actions in respect of the following:

- Existing environmental clearance dated 23rd November, 2010 to be transferred from M/s Venlar labs (P) Ltd to M/s Hazelo Lab Pvt Ltd. The same was already stipulated in the ToR dated 31st March, 2016, but no proposal for the same has been submitted so far on the Ministry's portal.
- Compliance of terms and conditions of the earlier EC dated 23rd November, 2010 from the concerned Regional Office of the Ministry.
- Revised water balance for the fresh water requirement reduced by 20%.
- Addressing the issues raised during public hearing to be supported with comments from SPCB/State Government.

In response, the project proponent has submitted point wise reply as under:

S. No.	Information sought by the EAC	Reply submitted by the project proponent
1.	Existing environmental clearance dated 23 rd November, 2010 to be transferred from M/s Venlar labs (P) Ltd to M/s Hazelo Lab Pvt Ltd. The same was already stipulated in the ToR dated 31 st March, 2016, but no proposal for the same has been submitted so far on the Ministry's portal.	The proposal for transfer of environmental clearance from M/s Venlar Labs (P) Ltd to M/s Hazelo Lab Pvt Ltd has been submitted on Ministry portal on 20 th March, 2019.
2.	Compliance of terms and conditions of the	The Certified compliance report for the terms

	earlier EC dated 23rd November, 2010 from the concerned Regional Office of the Ministry.	and conditions stipulated in EC dated 23.11.2010 has been submitted
3.	Revised water balance for the fresh water requirement reduced by 20%.	Revised water balance has been submitted. Total water consumption is reduced from 468.3 KLD to 396.27 KLD. The total fresh water required is reduced from 298.27 KLD to 236.27 KLD
4.	Addressing the issues raised during public hearing to be supported with comments from SPCB/State Government.	Comments from Telangana State Pollution Control Board (TSPCB) on issues raised during public hearing has been submitted.

10.3.7.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of synthetic organic chemicals (Bulk Drug and Intermediates) manufacturing unit from 105 TPA to 5183 TPA by M/s Hazelo Lab Pvt Ltd (Formerly known as M/s Venlar Labs (P) Ltd) in a total area of 33.485 acres at Sy.Nos.240, 242, 243, 247, 248 & 249, Dothigudem Village, Pochampally Mandal, District Yadadri Bhuvanagiri (Telangana).

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

S. No.	Product	Quantity (Kg/day)
Group - A		
1	N-(2-Methyl-5-aminophenyl)-4-(3-pyridyl)-2-pyrimidine amine	116.7
2	4-[(4-Methylpiperazin-1-yl) methyl] benzoic acid dihydrochloride	133.3
3	2, 3-Epoxy-2-methyl-N-[4-cyano-3-(trifluoromethyl) phenyl] propanamide	61.1
4	Ethyl-N- phthaloyl-p-amino -L- phenyl alaninate Hydrochloride	16.7
5	2-Deoxy- 2,2- Difluoro -D- Erythro- Pentafuranousulose- 3,5- Dibenzoate	22.2
	Total Group -A	350
Group - B		
1	Bis- (2- Chloroethyl) Amine Hydrochloride	83.3
2	N-Acetyl Cytosine	41.7
3	Benzonitrile 4- (1h- 1,2,4 - Triazol-1-yl Methyl)	55.6
4	N-Phthaloyl,D, L Glutamic Acid anhydride	69.4
5	2', 3' - Di-O-acetyl - 5' - deoxy -5- fluorocytidine	100
	Total Group -B	350
	Total Production capacity on worst case i.e., for Group - A or Group - B	340

Manufacturing Capacity– After Expansion

S.No	Name of Product	CAS No.	Capacity (TPD)
1	Amlodipine Besylate	88150-42-9	0.33
2	Bupropion HCl	34841-39-9	0.83
3	Clopidogrel Hydrogen Sulfate	113665-84-2	0.33
4	Desvelofloxin Succinate	386750-22-7	0.17

5	Divolproex Sodium	76584-70-8	0.57
6	Duloxetine HCl	136434-34-9	0.17
7	Esomeprazole Mg Dihydrate	217087-09-7	0.33
8	Glimepiride	93479-97-1	0.17
9	Mesalamine	89-57-6	0.17
10	Metoprolol Succinate	37350-58-6	0.5
11	Pantoprazole Sodium Sesquihydrate	138786-67-1	0.5
12	Pragabalin	148553-50-8	0.5
13	Rosuvastatin Calcium	287714-41-4	0.1
14	Sertraline HCl	79559-97-0	0.33
15	Tramadal	27203-92-5	0.67
16	Valcyclovir Hydrochloride Monohydrate	124832-27-5	0.33
17	4-[4-Chloro-1-oxobutyl]-2,2- dimethyl phenyl acetic acid methyl ester	154477-54-0	0.1
18	N2-(1-(S)-ethoxy carbonyl-3-phenyl propyl-N6-trifluoro acetyl-L-lysine	116169-90-5	0.17
19	2-[2-[3(S)-[3-[2-(7-Chloro-2-Quinoliny)]ethenyl]phenyl]-3-hydroxypropyl]phenyl-2-propanol	142569-70-8	0.1
20	2,8-Diazo bicycloNonane	151213-42-2	0.17
21	2,3,4,5-Bis-O- (1- methylethylidene)-b-D-fructopyranose	20880-92-6	0.83
22	2- Acetyl Ethoxy acetyl methoxy ether		1.13
23	N,N-Carbonyl di imidazole	530-62-1	1.67
24	(2S,3S,5S)-2-Amino-3-Hydroxy-5-Tert-Butylcarbonyl Amino 1,6-diohenyl	183388-64-9	0.1
25	Trans-4-(4-chlorophenyl)-cyclohexane carboxylic acid	49708-81-8	0.1
26	Guanine	73-40-5	1.67
27	Poly allyl amine HCl	71550-12-4	0.5
28	Tert-butyl 2-((4R,6S)-6-((E)-2-(4-(4-fluorophenyl)-6-isopropyl-2-(N- methylmethanesulfonylamido) Pyrimidin -5-yl)vinyl)-2,2-dimethyl-1,3-dioxane-4-yl-) acetate		0.17
29	5-Cyano phthalide	82104-74-3	0.67
30	1,1-Cyclohexanediactic acid	07-11-4335	1.67
31	Carbamyl Methyl-5-Methyl hexanoic Acid	181289-15-6	0.5
32	2',3'-Di-O-acetyl-5'-deoxy-5-fluorocytidine	161599-46-8	0.13
33	N-(2-Methyl-5-aminophenyl)-4-(3-pyridyl)-2-pyrimidine amine		0.33
34	4-[(4-Methylpiperazin-1-yl)methyl]benzoic acid dihydrochloride		0.33
35	2, 3-Epoxy-2-methyl-N-[4-cyano-3-(trifluoromethyl) phenyl] propanamide		0.17
	Worst Case: 20 products on Campaign basis		14.20

List of By-Products – After Expansion

S. No	Name of Product	Stage	Name of By-Product	Quantity	
				Kg/day	TPM
1	Clopidogrel hydrogen sulfate	I	p-toluene sulfonic acid	180.8	5.4
2	1,1-Carbonyl diimidazole	I	Trichloromethanol	2782.5	83.5

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

The ToR for the project was granted on 31st March, 2016. Public hearing was conducted by SPCB on 12th July, 2017

Existing land area is 4.325 acres., additional 29.16 acres (Total 33.485 acres) land will be used for proposed expansion. Industry will develop greenbelt in an area of 34.34% i.e.11.5 acres out of 33.485 acres of area of the project site.The estimated project cost for proposed expansion is Rs.45 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 12.04 crores and the recurring cost (O&M) will be about Rs 15.93 crores Per annum. Total Employment will be 80 persons as direct and 20 persons indirect after expansion. Industry proposes to allocate Rs. 112.5lakhs @ of 2.5% towards Corporate Social Responsibility

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc within 10 km distance from the project site. Chinna Musi River flows at 5.8km in North West.

Total water requirement is estimated to be 396.27 m³/day including fresh water requirement of 236.27 m³/day proposed to be met from ground water.

The wastewater generation will be 172.06 m³/day. The high COD/TDS stream of 127.56 m³/day is segregated and sent to stripper. Stripper condensate shall be disposed to cement industries for co-processing/TSDF. Stripper bottom is sent to multiple effect evaporators (MEE) and agitated thin film dryer (ATFD). Condensate from MEE and ATFD is mixed with low TDS/COD from utility blow downs and domestic wastewater of 44.5 KLD in biological treatment plant followed by Reverse Osmosis. RO rejects are sent to MEE and permeate is reused in cooling towers make-up and scrubbers. 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 2250 kva including existing 250 kva and will be met from TS Transco. Existing unit has 1 no. DG sets of capacity 1 x 250kva, additionally 2 x 1000kvaDG set is proposed as standby during power failure. Stack (height 10 m) will be provided as per CPCB norms to the proposed DG set of 2 x 1000 kva in addition to existing DG sets stack(height 4 m for 250kva) which will be used as standby during power failure.

Existing unit has 1 x 2 TPH coal fired boiler, 1 lakh K.cal.hr thermic fluid heater and proposed 2 x 10 TPH coal fired boilers as part of expansion. Bag filters and a stack with height of 35 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm³) for proposed 2 x 10 TPH and 15m for existing 1 x 2 TPH coal fired boiler respectively.

Ambient air quality monitoring was carried out at 9 locations during March, 2017 to May, 2017 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (72.04-95.94 µg/m³), PM_{2.5} (42.46-57.51 µg/m³), SO₂ (16.42-26.72 µg/m³) &NO_x (18.16-28.53 µg/m³)

respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 1.01 µg/m³, 1.77 µg/m³ and 0.635 µg/m³ with respect to PM₁₀, SO₂&NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Earlier, the Ministry has issued EC vide letter dated 23rd November, 2010 for change in product mix from drug intermediate to bulk drug by M/s Venlar Laboratories Pvt Ltd. The monitoring report on compliance status of EC conditions (site visit conducted on 6th September, 2018) was forwarded by the Ministry's Regional Office at Chennai vide letter dated 19th March, 2019, wherein it is mentioned that the said project was not yet implemented. The project proponent has informed that the unit is operating at existing capacity i.e. 105 TPA.

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.

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

Consent to Operate for the existing capacity has been obtained from the Maharashtra PCB vide letter dated 30th May, 2017 which has validity up to 31st January, 2022.

10.3.7.3 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to transfer of environmental clearance dated 23rd November, 2010 from M/s Venlar Labs (P) Ltd to M/s Hazelo Lab Pvt Ltd, and the terms and conditions as under: -*

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *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 236.27 m³/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 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.

10.4 Amendment in Environmental Clearance

Agenda No.10.4.1

Expansion of Exploration and production of CBM gas in Raniganj (South) CBM Block, west Bengal for 20 exploratory shale gas well by M/s Great Eastern Energy Corporation Limited

[IA/WB/IND2/106657/2019, J-11011/352/2010-IA-II(I)]

10.4.1.1 The proposal is for amendment in environmental clearance granted by the Ministry vide letter dated 24th November, 2011 in favour of M/s Great Eastern Energy Corporation Limited for expansion of exploration and production of Coal Bed Methane gas in Raniganj (South) CBM Block at Burdwan, Bankura and Purulia Districts (West Bengal). The validity of the said EC was extended till 24th November, 2021 vide Ministry's letter dated 1st May, 2019.

10.4.1.2 The project proponent has requested for amendment in EC with the details as under;

S. No.	Details as per the EC	To be revised /read as	Justification / Reason
1	<ul style="list-style-type: none">• 200 CBM wells (1.5 to 2.0 Acres / per well) in 210 sq km upto depth of 1100 meters• 5 Gas Gathering Stations (GGS),• 5 Central Gas Stations (CGS) and• MDPE pipeline for connecting wells to GGS• Steel pipeline from GGS to CGS• Steel pipeline from CGS to various gas consumers• Total land requirement of 425 acres	20 Exploratory Shale Gas Wells will be drilled	GEECL has been allowed exploration and production of Shale gas in existing Raniganj (South) CBM block as per the new notification of MoPNG dated 20 th August 2018 GEECL wish to explore the possibility of Shale Gas availability within the same area. We request the Ministry to grant an Amendment in the existing Environmental Clearance for drilling of 20 Exploratory Shale Gas wells

10.4.1.3 *The EAC, after deliberations, observed that exploration of shale gas by drilling of additional 20 wells, would involve significant change in scope of work envisaged under the existing EC dated 24th November, 2011. Accordingly, the project would actually be covered under expansion category, and not admissible in its present form. The project proponent was asked to submit the proposal accordingly.*

Agenda No.10.4.2

Expansion of Grain Based Distillery from 100 KLPD to 200 KLPD and Cogeneration Power Plant (from 5 MW to 10 MW) at Village Machchana and Sangat Kalan, Tehsil and District Bathinda, Punjab by M/s BCL Industries and Infrastructure Ltd

[IA/PB/IND2/27543/2014, J-11011/348/2014-IA II (I)]

10.4.2.1 The proposal is for amendment in environmental clearance granted by the Ministry vide letter dated 8th April, 2016 in favour of M/s BCL Industries and Infrastructure Ltd for expansion of grain based distillery from 100 to 200 KLPD and Cogeneration Power Plant (from 5 MW to 10 MW) at Village Machchana and Sangat Kalan, Tehsil and District Bathinda (Punjab).

10.4.2.2 The project proponent has requested for amendment in the said EC in respect of the following:-

- (i) Addition of word Anhydrous Alcohol in the list of products manufactured by the distillery unit.
- (ii) Deletion of condition No. xii i.e. spent wash storage tanks.
- (iii) Modification of land area from 141600 sqm to 259484.43 sqm.

10.4.2.3 *The EAC, after deliberations, recommended for inclusion of 'Anhydrous Alcohol' in the product list and deletion of condition regarding spent wash storage tanks, but with the additional environmental condition 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.*

The Committee was not agreed for amendment to effect increase in land area.

Day Two: 30th July, 2019

10.5 Environmental Clearance

Agenda No.10.5.1

Proposed pesticide technical manufacturing unit at PLOT NO.A-2/2115, PHASE-III, GIDC, VAPI, DistrictValsad (Gujarat) by M/s H M Industries - Environmental Clearance

[IA/GJ/IND2/78855/2018, IA-J-11011/281/2018-IA-II(I)]

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

10.5.1.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up Technical Pesticide manufacturing unit of capacity 400 TPM by M/s H M Industries in an area of 1809 sqm located at Plot No.A-2/2115, Phase-III, GIDC, Vapi, DistrictValsad (Gujarat).

The details of products are as under:

S. No.	Products	CAS No.	Capacity (TPM)	End Use	LD50 (mg/Kg)
	Group I: Fungicide		100		

1	Hexaconazole	79983-71-4		Crop care Chemical of Fungicide Category with varied application	6071	
2	Tebuconazole	107534-96-3			1700	
3	Tricyclazole	41814-78-2			2000	
4	Metalaxyl	57837-19-1			3100	
5	Thiophenate Methyl	23564-05-8			5000	
6	Azoxystrobin	131860-33-8			2000	
7	Picoxystrobin	117428-22-5			387	
8	Trifloxystrobin	141517-21-7			2000	
	GROUP II - Herbicide					
9	2,4 D Sodium / 2,4 D Acid/ 2,4 D Amine/2,4 D Ester		100	Crop care Chemical of Herbicide Category with varied application	666	
	2,4 D Sodium	7084-86-8				
	2,4 D Acid	94-75-7				
	2,4 D Amine	2008-39-1				
	2,4 Ester	533-23-3				
10	Atrazine	1912-24-9				2200
11	Metribuzin	21087-64-9		1100		
12	Pretilachlor	51218-49-6		2200		
	GROUP III - Insecticide					
13	Acetamiprid	135410-20-7	100	Crop care Chemical of Insecticide Category with varied application	2000	
14	Imidacloprid	138261-41-3				5000
15	Thiamethoxam	153719-23-4				1563
16	Bifenthrin	82657-04-3				2000
17	Cypermethrin	52315-07-8				1600
18	Permethrin	52645-53-1				2000
	GROUP IV - Specificity Chem					
19	Tri ethyl benzyl ammonium chloride (TEBA)	56-37-1	100	Phase Transfer Catalyst	2219	
	Total		400			

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 9th November, 2018. Public hearing is exempted as the project site is located inside the notified industrial area.

Land area available for the project is 1809 sqm. Industry will develop a greenbelt in an area of 650 sqm out of total project area. The estimated project cost is Rs. 7.50 crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 1 crore and the recurring cost (O&M) will be about Rs.3.50 Crore per annum. Employment opportunity will be 30 people as direct and 20 people indirect.

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. Damanganga River flows at 7 km.

Total water requirement is estimated to be 91.5 cum/day, which includes fresh water requirement of 46.47 cum/day, proposed to be met through GIDC Water Supply.

Effluent of 57.13 cum/day will be segregated into high COD and low COD stream. The high COD stream and High TDS effluent (42.33m³/day) will be treated in primary ETP and then treated effluent will be sent to MEE and MEE Condensate will be treated in ETP. Final MEE Condensate (40.23 KL/Day) + Treated effluent (4.8 KL/Day) shall be reused in plant premises. Low COD/Low TDS stream (9.8m³/day) will be treated in the ETP and treated effluent (5 KL/Day) will be sent to CETP, Vapi for disposal. Domestic Waste water will be treated in secondary treatment or disposed by septic tank & soak pit. The committee suggested, not to send the effluent to the CETP, but to reuse within the plant after treatment. The project proponent was agreed with it.

Total Power Requirement –250 KVA from DGVCL from Dakshin Gujarat Vij Company Limited (DGVCL). 1 No. of DG Set (125 KVA) will be used as standby during power failure. Adequate Stack Height will be provided as per CPCB norms to the proposed DG Set.

Proposed unit will have Natural Gas based 1 No. steam boiler (2 TPH). Adequate Stack Height will be provided as per CPCB norms.

Ambient air quality monitoring is carried out at 7 locations during October, 2017 to December, 2017 and the baseline data indicates the ranges of concentrations as: PM₁₀ (76.9-82.5µg/m³), PM_{2.5} (41.1-44.2µg/m³), SO₂ (13.9-17.4µg/m³), NO_x (17.5-20.1µg/m³), HCl (BDL), Cl₂ (BDL), HBr (BDL), NH₃ (BDL), O₃ (BDL), HC (BDL). AAQ modeling study for point source emissions indicates that maximum incremental GLCs after the proposed project would be 0.042 µg/m³, 0.029 µg/m³, 0.000 µg/m³, 0.000 µg/m³ with respect to PM₁₀, SO_x, NO_x, HCl. 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.

10.5.1.2 The project to be set up in one of the critically polluted areas identified by CPCB, the EAC was informed about the NGT orders, presently in force, as under:-

(i) Order dated 16th November, 2017 passed by Hon'ble NGT, Principal Bench, New Delhi in OA No.100 of 2016 in the matter of Dr. A. Kishan Rao Vs CPCB & others, setting aside the Ministry's OM dated 10th December, 2014 which provided for keeping the Ministry's OM dated September, 2017 for re-imposition of moratorium in 8 CPAs (including Vapi) in abeyance.

(ii) Order dated 10th July, 2019, passed by Hon'ble NGT, Principal Bench, New Delhi in OA No.1038 of 2018 in the matter of News item published in the Asian Age authored by Sanjay Kaw titled 'CPCB to rank industrial units on pollution levels'.

Para 28 of the said order quotes-

'No further industrial activities or expansion be allowed with regard to 'red' and 'orange' category units till the said areas are brought within the prescribed parameters or till carrying capacity of area is assessed and new units or expansion is found viable having regard to the carrying capacity of the area and environmental norms.'

10.5.1.3 *In view of the above and the project site in GIDC Vapi (having CEPI score 79.95) covered under the said orders of NGT, the Committee preferred not to take the proposal forward for the present, but to seek advice of the Ministry for appropriate course of action in such cases. The Committee also opined that in case, such proposals are to be considered on*

merits, environmental conditions and other stringent measures would have to be looked into comprehensively in complete perspective and in consultation with CPCB.

The Committee In addition, the committee also asked for submission of additional information in respect of the following:-

- Revised layout plan showing green belt,
- Revised water balance to reduce fresh water requirement and to achieve ZLD,
- Report on safety/ Risk analysis to be submitted.

The proposal was, therefore, deferred.

Agenda No.10.5.2

Proposed establishment of Synthetic Organic Chemicals Manufacturing Facility at Gut No./Survey No.150, 151, 166 to 172 of village Lakhmapur and Gut No./Survey No. 239A, 242, 286 (Part), 287 (Part), 289 (Part), 290(2), 291 (Part), 292 to 296 of village Jamghar, Taluka Wada, District Palghar (Maharashtra) by M/s Aarav Fragrances & Flavors Pvt Ltd- Environmental Clearance

[IA/MH/IND2/94966/2019, IA-J-11011/49/2019-IA-II(I)]

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

10.5.2.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up synthetic organic chemicals manufacturing unit of capacity 372 TPM by M/s Aarav Fragrances & Flavors Pvt. Ltd at Gut No./ Survey No.: 150, 151, 166 to 172 of village Lakhmapur and Gut No./ Survey No. 239A, 242, 286 (Part), 287 (Part), 289 (Part), 290(2), 291 (Part), 292 to 296 of village Jamghar, Taluka Wada, District Palghar (Maharashtra).

The details of products are as under:

S. No.	Products	Existing, TPM	Proposed, TPM	Total, TPM
1.	R & D for fragrances and Flavors	--	--	--
2.	Perfumery & Flavor Esters Products in various grades	Nil	372	372
3	Perfumery & Flavor Alcohol Products in various grades			
4	Perfumery & Flavor Aldehyde and Aldehyde derivatives Products in various grades			
5	Dimerization and Trimerization of simple olefins Products in various grades			
6	Ketals / Acetals / substituted 1,3-propanediols Products in various grades			
7	Macro cyclic and polycyclic musks derived from propylene/ butadiene and other propylene derivatives Products in various grades			
8	Aldehydes & Ketones by Aldol Condensation Products in various grades			
9	Acetylene and other alkyne derivatives Products in various grades			

10	Cyclo Alkylation/Acetylation, Diel Alders Reactions: Cyclization Reaction, Etherification of Alkyl Halide and Alcohol, Epoxidation of Alkenes /Friedel Craft Reactions Products in various grades			
11	Hydrogenation Products in various grades			
	Total	0	372	372

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 in the Ministry.

The standard ToR for the project was granted on 18th March 2019. Public hearing for the project was conducted by the State Pollution Control Board on 26th July 2017.

Total land area is estimated to be 97,750 sqm. Green belt will be developed in 33% i.e. 41,481.65 sqm out of total project area. The estimated project cost is Rs.20 crores and the existing project investment cost is Rs.25.96 crores. Total capital cost earmarked towards environmental pollution measures is Rs.98.5 Lakhs & the recurring cost (operation & maintenance) will be about Rs. 30 Lakhs per annum.

Tansa wildlife sanctuary lies within 10 km distance. RiverTansaflows at 3.5 km in north direction.

Total water requirement is 118 m³/day out of which fresh water requirement of 79 m³/day will be met from borewell & incase of emergency from tanker. The NOC has been obtained by the CGWA vide letter dated 11th December, 2018 for abstract ground water of 115.50 cum/day.

Industrial effluent will be treated through ETP followed by flash distillation for high organic effluent load. Treated effluent will be reused. Domestic effluent will be treated in the STP and treated effluent will be used for gardening. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement for establishment project will be 500 KVA &330 KVAand will be met fromMSEDCL (Maharashtra State Electricity distribution corporation limited. Existing unit has 2 DG sets of 63 KVA & 160 KVA each. Additionally two DG sets of 500 KVA & 160 KVA are used as standby during power failure. Stack (height) will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 700 Kg/H furnace oil Fired boiler. Additionally,5 TPH Agricultural Waste OR Bio briquette OR Furnace oil Fired boiler &3 Lac kcals/ hr Agricultural Waste OR Bio briquette OR Furnace oil fired Thermic Fluid Heater will be installed. Scrubber with a stack height of 30 m for boiler & 27 m for TFH will be installed for controlling the Particulate emissions within statutory limit of 115 mg/Nm³respectively.

Ambient air quality monitoring was carried out at 8 locations during Winter 2015 to 2016 (Dec-15, Jan & Feb- 16) and baseline data indicates that ranges of concentrations of PM₁₀ (40.8 to 78.9 µg/m³), PM_{2.5} (20.3 to 39.5 µg/m³), SO₂ (10.2 to 14.3 µg/m³), NO_x (10.9 to 14 µg/m³), CO (0.41 to 1.38 mg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.72 µg/m³, 2.10 µg/m³ & 1.26 µg/m³ with respect to PM₁₀, SO₂ & NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). The committee noted that the base line data is old more than 3 years and the same cannot be considered. However, the project

proponent has informed that they have conducted the one month base line data for air quality in the month of April. The committee accepted the same.

The expenditure towards CER for the project would be 2.5 % of the project cost as committed by the project proponent.

Existing unit is engaged in manufacturing products by mixing and blending for which prior environmental clearance is not required.

The project proponent has informed that Standing Committee of NBWL in its 53rd meeting held on 25th February, 2019, has recommended for wildlife clearance for the project.

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.

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed.*
- *No raw material/solvents prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines. Fugitive emissions shall be controlled at 99.5% with effective chillers.*
- *Solvent management shall be carried out as follows:*
 - (a) *Reactor shall be connected to chilled brine condenser system.*
 - (b) *Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
 - (c) *The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
 - (d) *Solvents shall be stored in a separate space specified with all safety measures.*
 - (e) *Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
 - (f) *Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
 - (g) *All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed 79 m³/day, proposed to be met from borewell. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*

- *Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE. Low TDS effluent stream shall be treated in ETP/RO to meet the prescribed standards.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Briquettes shall be used as boiler fuel. ESP shall be used to control particulate emissions.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash 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.*
- *All the commitments made regarding issues raised during the public hearing/consultation meeting shall be satisfactorily implemented.*
- *Pucca road shall be maintained in the plant premises and nearby villages to minimize dust pollution.*
- *As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 2% of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *Safety and visual reality training shall be provided to employees.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*
- *Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.*

Agenda No.10.5.3

Capacity augmentation of speciality chemicals from 11,000 TPA to 22,000 TPA within the existing plant at Konnagar, District Hooghly (West Bengal) by M/s Nalco Water India Limited - Environmental Clearance

[IA/WB/IND2/60903/2016, J- 11011/360/2016-IA II(I)]

The project proponent and the accredited consultant M/s Vimta Labs Limited, made a detailed presentation on the salient features of the project.

10.5.3.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the expansion of synthetic organic chemicals manufacturing unit from 11000 TPA to 22000 TPA by M/s Nalco Water India Limited in a total area of 2.02 ha at Konnagar, District Hooghly (West Bengal).

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

S. No.	Products	Existing as per current CTO		Proposed increase	Total (Existing + Proposed)
		Ton per month (maximum)	Ton per year (maximum), (##)	Ton per year	Ton per year
1	Water Treatment Chemicals	600	6600	4400	11000
2	Industrial Additives	250	2750	3750	6500
3	Oil Field Chemical	150	1650	2850	4500
Total		1000	11000	11000	22000

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

The ToR for the project was granted on 28th February, 2017. Public hearing was conducted by SPCB on 9th August, 2018.

Existing land area is 2.02 ha. No additional land will be used for proposed expansion. Green belt has already developed in an area of 0.26 ha out of total area of the project. The estimated project cost for proposed expansion is Rs.10 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.6 lakhs and the recurring cost (O&M) will be about Rs. 0.11 lakhs Per annum. Total 33 nos. of skilled and unskilled manpower will be employed.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc within 10 km distance from the project site. Hooghly river is flows at 1.3 km in East.

Total water requirement is estimated to be 65 m³/day including fresh water requirement of 45 m³/day proposed to be met from ground water.

Effluent of 32 m³/day in operating unit will be generated and additional 20 m³/day will be generated from proposed capacity augmentation project. The additional effluent will be treated in existing ETP and treated water will be utilized in the plant operations. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

The power requirement for the proposed unit will be about 20,00,000 kWh unit per year which will be sourced from Calcutta Electricity Supply Corporation. To support the safe operations during power failure, 1 no of D.G set (1010 KVA) is also provided.

Ambient air quality monitoring was carried out at 8 locations during the period of 1st December, 2016 to 28th February, 2017. And baseline data indicated the ranges of concentrations as PM10 (45.8 µg/m³), PM2.5 (24.8 µg/m³), SO₂ (14.6 µg/m³) and NO₂ (18.3 µg/m³). AAQ modelling for point source emissions indicate that the maximum incremental GLCs after the proposed project would be 46.6 µg/m³, 15.7 µg/m³ and 19.1 µg/m³ with respect to PM10, SO₂ and NO_x. The resultant concentrations are within the National Ambient Air Standards (NAAQS).

Existing unit is operating prior to EIA Notification, 1994/2006 and as per the EIA Notification, 1994 and 2006 prior EC was not required. The NOC was obtained by the Department of Industrial Development for chemical manufacturing of 11000 TPA capacity.

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

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

- *Revised modelling of the environmental parameters, and analysis of incremental GLCs due to the project.*
- *Green belt plan for 33% of the total land area.*
- *Action plan for issues raised during public hearing.*
- *Revised water balance to be submitted*

The proposal was, therefore, deferred.

Agenda No.10.5.4

Proposed Expansion of Coal Tar Distillation and Addition of Carbon Black Plant at Musinayakahalli, Taluk Sandur, District Ballari (Karnataka) by M/s Epsilon Carbon Private Limited - Environmental Clearance

[IA/KA/IND2/105873/2017, IA-J-11011/500/2017-IA-II(I)]

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

10.5.4.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the expansion of Coal Tar Distillation Plant from 300000 to 500000 TPA and setting up of Carbon Black plant of capacity 300000 TPA by M/s Epsilon Carbon Private Limited (ECPL) in a total area of 673870 sqm (140200 sqm + 533670 sqm) at Musinayakahalli, Taluk Sandur, District Ballari (Karnataka).

Earlier, the project for expansion of Integrated Steel Plant from 10 to 16 MTPA and Captive Power Plant (600 MW) in a total area of 8000 acres was granted environmental clearance by the Ministry in favour of M/s JSW Steel Limited vide letter dated 1st October, 2015. The said EC was amended vide letter dated 9th June, 2016 in view of modernization of some of the proposed units with state-of-the-art equipment. Later, one of the constituent unit namely Coal Tar Distillation Plant of capacity 300000 TPA (a part of the EC dated 1st October, 2015, amended on 9th June, 2016) involving an area of 34.5 acres (140200 sqm) was transferred in the name of M/s Epsilon Carbon Private Limited on 1st February, 2018.

Details of existing and proposed products are as under:-

S. NO.	PRODUCTS	PRODUCTION CAPACITY IN TPA		
		EXISTING	ADDITIONAL	TOTAL
COAL TAR DISTILLATION SECTION				
	Distillation capacity	300,000	200,000	500,000
1	Coal Tar Pitch	153000	102000	255000
2	Zero QI/Impregnated Pitch	6000	10000	16000
3	Carbon Black Oil (CBO)	70000	183600	253600
4	Anthracene Oil/Heavy Creosote Oil	42000	57000	99000
5	Wash Oil	25500	16000	41500
6	Naphthalene	18000	17000	35000
7	NSF	33000	0	33000
8	Phenol Oil	6000	8900	14900
9	Light Oil	6000	4000	10000
10	De-hydrated coal tar	291000	192000	483000
11	Phenolics (Phenol, Cresols (ortho, meta, para or mixture thereof), Xylenols)	0	14900	14900
12	Special Graphite/Advanced Graphite	0	50000	50000
By- Product of Coal Tar Distillation Section				
1	Neutral Sodium Phenolate (14%)	15300	10200	25500
2	Ammonical water	90	60	150
3	Calcium Carbonate		17340	17340
Carbon Black Unit Section				
1	Carbon Black	-	300000	300000
2	Lean Gas/ Tail Gas*	-	270000 Nm ³ /hr.	270000 Nm ³ /hr.
Captive Power Plant				
1	Captive Power Plant	-	54 MWH	54 MWH
Lean gas/Tail gas generated in Carbon Black Plant will be either sold to nearby industries or may be converted to power in Captive Power Plant				

The project/activities are covered under category A of item 4(b) (ii) 'Coal tar processing units' and 5(e) 'Petrochemical products and petrochemical based processing such as production of carbon black and electrode grade graphite' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal/approval at central level in the Ministry.

The ToR for the project was granted on 27th July 2018. Public hearing was conducted by SPCB on 5th March, 2019.

Existing land area is 140200 sqm, additional 533670 m² land will be used for proposed expansion. Industry has already developed/will develop greenbelt in an area of 33% i.e. 225228 m² out of total area of the project. The estimated project cost is Rs 900 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. 200 Lacs per annum. Total Employment will be 575 (direct & indirect) persons as direct 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 m³/day including fresh water requirement of 10020 m³/day proposed to be met from JSW Steel water network.

Effluent of 895 quantity will be treated through Existing ETP having capacity 120 kld and proposed ETP/ZLD having capacity 820 kld. And domestic effluent through existing STP having capacity 25 KLD and proposed STP having capacity 50 kld. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 23500 KW including existing 3500 KW and will be met from JSW Network/ in-house co-generation power plant based on lean tail gas. Additionally 1 DG sets are used as standby during power failure. Stack will be provided as per CPCB norms to the proposed DG sets.

Detail of existing and proposed stack as following

S. NO.	FUEL CONSUMING EQUIPMENT	CAPACITY (UNIT)	FUEL TYPE	CONSUMPTION IN M ³ /HR
Existing				
1	Coal Tar Tube furnace-1	38.5 LKcal	Mixed Gas	3850
2	Naphthalene Tube Furnace-1	15 LKcal	Mixed Gas	1500
3	Modified Pitch Furnace-1	10 LKcal	Mixed Gas	1000
4	Boiler-1	15 TPH	Mixed Gas	9950
5	Thermic Fluid Heater-1	20 LKcal	Mixed Gas	2000
6	Thermic Fluid Heater-2	5 LKcal	Mixed Gas	500
7	Coal Tar Tube furnace-2	38.5 LKcal 2.5	Mixed Gas	3850
8	Naphthalene Tube Furnace-2	15 LKcal	Mixed Gas	1500
9	Boiler-2 (Stand By)	15 TPH	Coal/Mixed Gas	3200 kg/hr
10	Thermic Fluid Heater-3	20 LKcal	Mixed Gas	500
Proposed				
1	Coal Tar Tube furnace-	38.5 LKcal	Mixed Gas	3850

S. NO.	FUEL CONSUMING EQUIPMENT	CAPACITY (UNIT)	FUEL TYPE	CONSUMPTION IN M ³ /HR
	3			
2	Naphthalene Tube Furnace-3	15 LKcal	Mixed Gas	1500
3	Modified Pitch Furnace-2	10 LKcal	Mixed Gas	1000
4	Boiler-3	15 TPH	Mixed Gas	9950
5	Thermic Fluid Heater-4	20 LKcal	Mixed Gas	2000
6	Thermic Fluid Heater-5	20 LKcal	Mixed Gas	2000
7	Boiler – 4 (For CPP)	70 TPH	Tail Gas from CB Unit	115000
8	Boiler – 5 (For CPP)	90 TPH	Tail Gas from CB Unit	150000
9	Boiler – 6 (For CPP)	90 TPH	Tail Gas from CB Unit	150000
10	DG Set stand by	1000 kVA	Diesel	147 L/ hr.
11	Dryer stack - 3 No for 6 dryers	180 TPD/ 250 TPD	Tail Gas from CB Unit	12000 / Dryer
12	Flare Stack	Used only in case of CPP breakdown	Tail Gas from CB Unit	-

Ambient air quality monitoring was carried out at 8 locations during December, 2017 to February, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (49-67µg/m³), PM2.5 (24-33µg/m³), SO₂ (8.6-9.5µg/m³) and NO₂ (16.3-19.3µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 6.98 µg/m³, 13.44 µg/m³ and 3.06 µg/m³ with respect to PM10, SO₂ and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The expenditure towards CER for the project would be 0.50% of the project cost as committed by the project proponent.

Earlier, the Ministry had issued EC vide letter dated 1st February 2018 for Coal Tar distillation Plant. The monitoring report on compliance status of EC conditions has been forwarded by the Ministry's Regional Office at Chandigarh vide letter dated 16th August, 2018

10.5.4.2 The EAC observed that the project is proposed within the JSW Steel plant complex, and sharing many of the utilities including those relating to water waste water management. Also, as per the compliance report, many of the conditions are being compiled by JSW Steel plant. The Committee suggested to submit the MOU between M/s Epsilon Carbon Private Limited and M/s JSW Steel plant for utilizing the utilities, and also certified compliance report of M/s JSW Steel plant.

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

- *Revised water balance to be submitted with reduction in fresh water demand.*
- *Plan for Corporate Environment Responsibility.*
- *Action Taken Report on non complied points reflected in the certified compliance report, to be forwarded by the Regional Office of the Ministry.*

- *Authenticated map duly signed by wildlife warden indicating distance between plant and Daroji Bear Sanctuary.*

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

Agenda No.10.5.5

Expansion of Bulk Drugs and Intermediates manufacturing unit at Plot No. B/1085, Lamdapura Road, Village Manjusar, Taluka Savli, District Vadodara (Gujarat) by M/s J R Corporation - Environmental Clearance

[IA/GJ/IND2/83015/2018, J-11011/356/2016-IA-II(I)]

10.5.5.1 The proposal was earlier considered by the EAC in its meeting held on 8-9 April, 2019 and recommended for grant of environmental clearance. The project proponent has proposed to send 15 cum/day of treated water to CETP for further treatment and disposal. During examination of the proposal in the Ministry, it was suggested that such units should follow zero liquid discharge system, or otherwise desired to know full proof system of effluent transfer to CETP, which is accountable and measurable.

10.5.5.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Bulk Drugs and Intermediates manufacturing unit from the present capacity of 2.6 TPM (2 products) to 227.6 TPM (23 nos of products) by M/s J R Corporation in an area of 9765 sqm located at Plot No. B/1085, Lamdapura Road, Village Manjusar, Taluka Savli, District Vadodara (Gujarat).

Total water requirement is 86.525 cum/day, which includes fresh water requirement of 48.025 cum/day will be met from ground water.

Effluent of 53.5 cum/day quantity is proposed to be treated through ETP and MEE, and treated effluent of 38.5 cum/day shall be reused in the plant, and 15 cum/day will be sent to CETP for further treatment and disposal.

The project proponent is utilizing more than 70% of the effluent generated after treatment and proposed discharge only 15 cum/day, meeting norms prescribed under the Environment (Protection) Rules, 1986 to CETP for further treatment and disposal.

10.5.5.3 *The EAC, after detailed deliberations, reiterated its earlier recommendations during its meeting held on 8-9 April, 2019 for grant of environmental clearance to the project, subject to submission of following:*

- *Copy of MoU/Agreement with the CETP operator to ensure inflow/inlet standards, and disposal of effluent after treatment vis-à-vis the norms prescribed in the Environment (Protection) Rules, 1986.*
- *Copy of the environmental clearance for the CETP, and the compliance status thereof.*
- *Details of discharge quality of the effluents and plan for continuous monitoring of quantity and quality of parameters.*

Agenda No.10.5.6

Expansion of Pesticides, Pesticide Specific Intermediates and Synthetic Organic Chemicals Manufacturing Unit by M/s Deccan Fine Chemicals (India) Pvt Ltd at Plot

No.3501-3515, 6301-6313 & 16 M Road/ B1 and Plot No.6008-6010, GIDC Industrial Estate Ankleshwar, District Bharuch (Gujarat) - Environment Clearance

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

10.5.6.1 The proposal was earlier considered by the EAC in its meetings held on 29-31 January, 2019 and 27th March, 2019 and recommended for grant of environmental clearance. The project proponent has proposed to send 825 cum/day of treated effluent to the effluent management system provided by M/s Narmada Clean Technology (NCT) for final treatment and ultimate disposal to deep sea. During examination of the proposal in the Ministry, it was suggested that such units shall follow zero liquid discharge system apart from assessing the capacity for CETP whenever a unit is added.

10.5.6.2 During deliberations, the EAC noted the following: -

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

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

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

During deliberations, the project proponent agreed to reduce total fresh water consumption from 1483 KLD to 1258 KLD and total treated effluent discharge from 825 KLD to 600 KLD, after the proposed expansion. It was also agreed to reduce discharge of treated effluent @ 20% every following year. Accordingly, the Committee suggested for modification in earlier conditions stipulated in its meeting held on 29-31 January, 2019 & 27th March, 2019, as under:-

- (i) Total fresh water requirement shall not exceed 1258 cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (ii) The treated effluent of 600 cum/day shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, for discharge into deep sea through the conveyance system of M/s Narmada Clean Technology.
- (iii) The project proponent shall achieve zero liquid discharge within five years of commissioning of expansion project.

10.5.6.3 The EAC took note of the order dated 10th July, 2019, passed by Hon'ble NGT, Principal Bench, New Delhi in OA No.1038 of 2018 in the matter of News item published in the Asian Age authored by Sanjay Kaw titled 'CPCB to rank industrial units on pollution levels'.

Para 28 of the said order quotes-

'No further industrial activities or expansion be allowed with regard to 'red' and 'orange' category units till the said areas are brought within the prescribed parameters or till carrying capacity of area is assessed and new units or expansion is found viable having regard to the carrying capacity of the area and environmental norms.'

10.5.6.4 *The EAC, after deliberations and in view of the above and the project site in GIDC Ankleshwar (having CEPI score 80.21) covered under the said orders of NGT, preferred not to take the proposal forward for the present, but to seek advice of the Ministry for appropriate course of action in such cases. The Committee also opined that in case, such proposals are to be considered on merits, environmental conditions and other stringent measures would have to be looked into comprehensively in complete perspective and in consultation with CPCB.*

The proposal was, therefore, deferred.

Agenda No.10.5.7

Installation of 100 KLPD Ligno-Cellulosic 2G Ethanol Plant at Gram Panchayat Baholi, Block Madlauda, Panipat Refinery Road, Panipat, District Panipat (Haryana) by M/s Indian Oil Corporation Limited- Environment Clearance

[IA/HR/IND2/72123/2018, IA-J-11011/43/2018-IA-II(I)]

The project proponent and their consultant M/s ABC Techno Labs India Private Limited made a detailed presentation on the salient features of the project.

10.5.7.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for installation of 100 KLPD Ligno-Cellulosic 2G Ethanol Plant by M/s Indian Oil Corporation Limited in an area of 140200 sqm located at Baholi, Block Madlauda, Panipat Refinery Road, District Panipat (Haryana).

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 granted on 5th April, 2018. Public hearing for the proposed project was conducted by the Haryana SPCB on 27th March, 2019. The main issues raised during the public hearing are related to CER, water requirement and effluent management, employment etc.

Land area available for the project is 140200 sqm. Industry will develop greenbelt in an area of 46300 sqm (4.63 ha) covering 33% of total project area. The estimated project cost is Rs. 766 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 35.07 crores and the recurring cost (operation and maintenance) will be about Rs. 1.87 crores per annum. The project will provide employment to 35 persons per shift directly.

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

Total fresh water requirement is estimated to be 109 cum/hr, proposed to be met from Munak Regulator on Western Yamuna Canal.

Effluent of 1000 cum/day will be treated in Effluent Treatment Plant. 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 of 15000 kVA will be met through existing captive power plant. Unit will have two DG sets of 2000 Kvaas standby during power failure. Stack (Height 30 m) will be provided as per CPCB norms to the proposed DG sets.

Unit will have 48 TPH steam generation capacity boiler with lignin rich cake and conc. syrup firing. Multi cyclone separator/bag filter with stack height of 80 m will be installed to control the particulate emissions within the statutory limits. Ash will be sent for co-processing to cement industry.

Ambient Air Quality monitoring was carried out at 8 locations during December 2016 to February 2017 and the baseline data indicates the ranges of concentrations as: PM₁₀ (77-95.76 µg/m³), PM_{2.5} (47.7-58.3 µg/m³), SO₂ (18-25.48 µg/m³) and NO₂ (26-35.15 µg/m³) respectively. Ambient Air Quality (AAQ) modelling study for the Point Source Emissions indicates that the maximum incremental GLCs after the proposed project would be 0.5 µg/m³, 2.5 µg/m³ & 1 µg/m³ with respect to PM₁₀, 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 1 % of the project cost as committed by the project proponent.

The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during the public hearing have been properly addressed in the EIA/EMP report.

10.5.7.2 The Committee took serious note of techno-economic viability of the project in view of negative IRR, and also huge requirement of fresh water. However, considering adverse impact of burning of paddy/rice straw (stubble burning) in NCR, significantly contributing to air pollution especially during winters, the Committee agreed to consider the proposal.

10.5.7.3 *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.*
- *Sludge management plan shall be formulated and ensured.*
- *Ash management shall be ensured by utilizing for manufacturing bricks.*

- 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 109 cum/hr, proposed to be met from Munak Regulator on Western Yamuna Canal. Prior permission shall be obtained from the concerned regulatory authority.
- Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- The company shall undertake waste minimization measures as below:-
 - (i) Metering and control of quantities of active ingredients to minimize waste.
 - (ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (iii) Use of automated filling to minimize spillage.
 - (iv) Use of Close Feed system into batch reactors.
 - (v) Venting equipment through vapour recovery system.
 - (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.
- At least 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 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.
- CO₂ generated from the process shall be bottled/made solid ice and sold to authorized vendors.

10.6 Amendment in Environmental Clearance

Agenda No.10.6.1

Organic chemicals manufacturing unit (240 TPA) at S.y N0.152 at village Rachallapally, Tahsil Midjil, District Mahabubnagar (Andhra Pradesh) by M/s Vision Pharmachem India (P) Ltd- Validity extension of EC

[IA/TG/IND2/109709/2019, J-11011/346/2010-IAII (I)]

10.6.1.1 The Ministry has granted environmental clearance vide letter dated 13th July, 2012 in favour of M/s Vision Pharmachem (India) Pvt Ltd to the project 'Organic Chemicals Manufacturing Unit (240 TPA)' at Sy.No. 152, Village Rachalapally, Tehsil Midjil, District Mahabubnagar (Andhra Pradesh). The project proponent has informed that 50% of the work has been completed and requested for extension of the validity of the said project for a period of three years.

10.6.1.2 *The EAC, after detailed deliberations, recommended for extension of validity of the EC dated 13th July, 2012 for a period of three years, i.e. till 13th July, 2022, to complete the work as per scope of the project.*

Agenda No.10.6.2

Addition of Carbon black Manufacturing facility in existing plant at Village Paddhar, Taluka Bhuj, District Kutch by M/s Balkrishna Industries Limited-Amendment in EC

[IA/GJ/IND2/63420/2017, IA-J-11011/162/2017-IA-II(I)]

10.6.2.1 The proposal is for amendment in the environmental clearance granted by the Ministry vide letter dated 8th January, 2018 in favour of M/s Balkrishna Industries Limited to the project for Carbon Black manufacturing facility of capacity 11500 TPM at Village Paddhar, Taluka Bhuj, District Kutch (Gujarat).

10.6.2.2 The project proponent has requested for amendment in EC with the details as under:

S. No	Para of EC	Details as per the EC			To be revised / read as			Justification / Reasons		
		Product	Production Capacity		Product	Production Capacity				
			Existing	Additonal	Total		Existing	Additonal	Total	
1	2	Tyres & Tubes (not requi	10,000 TPM	-	10,000 TPM	Tyres & Tubes (not requiring EC)	10,000 TPM	5,000 TPM	15,000 TPM	At the time of detailed engineering we came to know that we will have excess steam in system from new 95 TPH and 45 TPH Boilers Off Gas based (already approved in EC). To utilize the excess steam we proposed

		ring EC)				CPP	20 MW	20 MW	40 MW	to increased Power Generation Capacity and Production of Tire Plant (non EC Product)
		CPP	20 MW	-	20 MW	Carb on Black	-	11,500 TPM	11,500 TPM	
		Carb on Black	-	11,500 TPM	11,500 TPM					
2	7	The power requirement, after expansion shall be 23.5 MW including existing 18 MW proposed to be supplied by Paschim Gujarat Vij Company Ltd. (PGVCL) (sanction load is 7.5 MVA) and CPP (20 MW). Existing unit has 4 D.G Set, 2 of 250 KVA, 1 of 2000 KVA and one 4.2 MW capacities as stand by. No additional D.G. Sets shall be required for proposed carbon plant.				The power requirement, after expansion shall be 38 MW, proposed to be supplied by 40 MW (2 X 20 MW Turbine) and Paschim Gujarat Vij Company Ltd. (PGVCL) (sanction load is 15 MVA). Existing unit has 7 D.G Set, 2 of 250 KVA, 2 of 2500 KVA, 1 of 125 KVA, 1 of 20 KVA and one 4.2 MW capacities as stand by. No additional D.G. Sets shall be required for proposed carbon plant.				With inclusion of new Turbine and increased production of tire plant (non EC product) the connected power load will be 38 MW. The proposed new D.G. Sets to cater the emergency load of Tire Plant.
3	8	At present, there are 6 Boiler and 3 D.G. Sets. Due to proposed Carbon Black plant, there will be additional 7 boilers and 3 dryers with the details as under Table -1				At present, there are 5 Boiler and 7 D.G. Sets. Due to proposed Carbon Black plant, there will be additional 7 boilers and 3 dryers with the details as under Table -2				

Table -1 (As mentioned in EC)

Sr. NO	Stack Attached to	Capacity	Operating Schedule	Type of Fuel used	Fuel Consumption	Stack No	Stack Height (m)	APCM
Existing as per CCA								
1	Boiler – 1	20 TPH	Standby	Coal	2.9 MT/h	1	40	ESP
2	Boiler – 2	2.8 TPH	Standby	FO	2000 Ltrs/day	1	30	
3	Boiler – 3 for power plant	66 TPH	24 h	Coal	Indigenous coal : 11,880 TPM. Imported coal : 9480 TPM. Lignite : 2376 TPM	1	84	ESP
4	Boiler – 4 Power	66 TPH	24 h	Coal	Indigenous coal : 11,880	1	84	ESP

	plant				TPM. Imported coal : 9480 TPM. Lignite : 2376 TPM			
5	D.G Set stand by for 20 MW CPP	250 KVA	Stand by	HSD / LDO	15 KL/Year	NA	NA	Muffler
6	D.G Set Stand	250 KVA	Stand by	Diesel	53 Litre/h	NA	NA	Muffler
7	D.G Set	4.2 MW	Stand by	HSD/LDO	14700 Litre/h	1	54	
Provided in CTE and is under construction								
8	Boiler – 5	20 TPH	Stand by	Coal	2.9 MT/h	1	40	ESP
9	Boiler – 6	1.5 TPH	Stand by	FO	155 Litre/h	1	30	
10	D.G Set	2000 KVA	Stand by	HSD	450 Litre/h	1	30	
Proposed								
11	Boiler – 7	95 TPH	24 h	Offgas	92000Nm3/h	1	105	
12	Boiler – 8	45 TPH	24 h	Offgas	19000 Nm3/h	1	80	
13	Boiler – 9	2.5 TPH	24 h	Waste heat	Waste heat recovery boiler	NA	NA	
14	Boiler – 10	2.5 TPH	24 h	Waste heat	Waste heat recovery boiler	NA	NA	
15	Boiler – 11	2.5 TPH	24 h	Waste heat	Waste heat recovery boiler	NA	NA	
16	Boiler – 12	2.5 TPH	24 h	Waste heat	Waste heat recovery boiler	NA	NA	
17	Boiler – 13	2.5 TPH	24 h	Waste heat	Waste heat recovery boiler	NA	NA	
18	Dryer – 1	240 TPD	24 h	Offgas	9000 NM3/h	1	50	Bag filter
19	Dryer – 2	180 TPD	24 h	Offgas	7250 NM3/h			
20	Dryer – 3	80 TPD	24 h	Offgas	3353 Nm3/h	1	50	Bag filter

Table -2 (To be revised / read as)

Sr. NO	Stack Attached to	Capacity	Operating Schedule	Type of fuel used	Fuel Consumption	Stack No	Stack Height (m)	APC M	Remarks
Existing as per CCA									
1	Boiler – 1	20 TPH	Standby	Coal	2.9 MT/h	1	40	ESP	
2	Boiler – 2	2.8 TPH	Standby	FO	2000 Ltrs/day	1	30		
3	Boiler – 3 for power plant	66 TPH	24 h	Coal	Indigenous coal : 11,880 TPM. Imported coal : 9480 TPM.	1	84	ESP	

					Lignite : 2376 TPM				
4	Boiler – 4 Power plant	66 TPH	24 h	Coal	Indigenous coal : 11,880 TPM. Imported coal : 9480 TPM. Lignite : 2376 TPM	1	84	ESP	
5	D.G Set No 1	250 KVA	Stand by	HSD / LDO	15 KL/Year	NA	NA	Muffler	Stand by for CPP – Auxiliary
6	D.G Set No -2	250 KVA	Stand by	Diesel	53 Litre/h	NA	NA	Muffler	Stand by for 4.2 MW D.G Set– Auxiliary
7	D.G Set - 3	4.2 MW	Stand by	HSD/LDO	14700 Litre/h	1	54		Stand by for Tire Plant – Emergency Load
Provided in CTE and is under construction									
8	Boiler – 5	20 TPH	Stand by	Coal	2.9 MT/h	1	40	ESP	
9	Boiler – 6	1.5 TPH	Stand by	FO	155 Litre/h	1	30		Withdrawn from CTE
10	D.G Set	2000 KVA	Stand by	HSD	450 Litre/h	1	30		
Proposed									
11	Boiler – 7	95 TPH	24 h	Offgas	92000Nm3/h	1	105		Bag filters are to be installed to clean / filter the gas prior to use in boiler.
12	Boiler – 8	45 TPH	24 h	Offgas	19000 Nm3/h	1	80		
13	Boiler – 9	2.5 TPH	24 h	Waste heat	Waste heat recovery boiler	NA	NA		
14	Boiler – 10	2.5 TPH	24 h	Waste heat	Waste heat recovery boiler	NA	NA		
15	Boiler –	2.5	24 h	Waste	Waste heat	NA	NA		

	11	TPH		heat	recovery boiler				
16	Boiler – 12	2.5 TPH	24 h	Waste heat	Waste heat recovery boiler	NA	NA		
17	Boiler – 13	2.5 TPH	24 h	Waste heat	Waste heat recovery boiler	NA	NA		
18	Dryer – 1	240 TPD	24 h	Offgas	9000 NM3/h	1	50		Bag filters are to be installed to clean / filter the gas prior to use in dryer.
19	Dryer – 2	180 TPD	24 h	Offgas	7250 NM3/h				
20	Dryer – 3	80 TPD	24 h	Offgas	3353 Nm3/h				
21	D.G Set - 4	2500 KVA	Stand By	HSD	500 ltrs/Hr	1	11	NA	Stand by for Tire Plant – Emergency Load
22	D.G Set - 5	2500 KVA	Stand By	HSD	500 ltrs/Hr	1	11	NA	
23	D.G Set - 6	125 KVA	Stand By	HSD	30 ltrs/Hr			Muffler	
24	D.G Set - 7	30 KVA	Stand By	HSD	15 ltrs/Hr			Muffler	
25	Flare System	1,00,000 Nm3/Hrs	Stand By	Self Ignition	1,00,000 Nm3/Hrs	1	55		For standby as safety precaution.

10.6.2.3 The EAC, after deliberations, noted that the changes sought by the project proponent are substantive, and may not be admissible under amendment category. The Committee suggested the project proponent to submit the proposal afresh for grant of ToR/EC to the project involving change in scope of work as above.

The proposal was, therefore, not accepted.

Agenda No.10.6.3

Expansion of Pesticides Manufacturing Plant (620 MTPM to 1862 MTPM) at Plot No.CH-5, GIDC Industrial Estate, Dahej, Taluka Vagra, District Bharuch(Gujarat) by M/s Hemani Intermediates Private Limited - Amendment in EC

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

10.6.3.1 The proposal is for merger of the environmental clearance granted by the Ministry vide letter dated 30th August, 2012 in favour of M/s Hemani Intermediates Pvt Ltd to the project for expansion of pesticide manufacturing plant (620 TPM to 1862 TPM) at Plot No. CH-5, GIDC

Industrial Estate, Dahej, Taluka Vagra, District Bharuch (Gujarat) and environmental clearance dated 10th January, 2018 granted in favour of M/s Hemani Intermediates Pvt Ltd (Unit-IV) to the project for setting up pesticide manufacturing plant (900 TPM) at Plot No. E-362, GIDC Estate, Dahej-I, Taluka Vagra, District Bharuch (Gujarat).

10.6.3.2 The project proponent has requested for merger of the Environmental Clearance with the details are as under;

S. No.	Point of EC issued by MoEFCC, New Delhi	Details as per the EC	To be revised	Justification/Reasons
1.	Merger of EC - Environmental Clearance granted by the Ministry vide letter No.J-11011/442/2008 – IA II (I) dated: 25/10/2008 and second EC - letter no. J-11011/583/2010 – IA II (I) dated: 30/04/2012 of M/s Hemani Intermediates Private Limited & Environmental Clearance granted by the Ministry vide letter no. J-11011/378/2013 – IA II (I) dated: 10/01/2018 -M/s. Hemani Intermediates Private Limited (Unit-IV)	Name of Unit: M/s Hemani Intermediates Private Limited & M/s Hemani Intermediates Private Limited (Unit-IV)	New name of Unit after merger: Hemani Industries Ltd (Unit-III & IV)	Units are adjoined, MOU of Hemani Industries Ltd is done, So Hemani Industries Ltd need to merge of both units.

Point wise merger application

S. No.	Parameter	M/s Hemani Intermediates Private Limited, Plot No. CH-5, GIDC Industrial Estate – Dahej, Tal: Vagra, Dist: Bharuch	M/s Hemani Intermediates Private Limited (Unit-IV), Plot No. E-362, GIDC Industrial Estate – Dahej, Tal: Vagra, Dist: Bharuch	After merger of M/s Hemani Intermediates Private Limited & M/s Hemani Intermediates Private Limited (Unit-IV)	Remarks
1	Plot Area	52432.22 m ²	9705 m ²	62137.22 m ²	Merge of both plant
2	List of Products & Produ	m-Phenoxy Benzaldehyde (MPBAD) – 300 MT/Month	1. Fungicides (Hexaconazole, Tebuconazole, Propioconazole) –	m-Phenoxy Benzaldehyde (MPBAD) – 300 MT/Month	After merger of both plant, Company could

Production Capacity		300 MT/Month		manufacture anyproduct in both EC.
	m-BromoNitrobenzene - 100 MT/Month	2. Herbicides (Dicamba, Metribuzine, Pendimethalin) – 300 MT/Month	m-BromoNitrobenzene - 100 MT/Month	
	m-Bromo Anisole - 100 MT/Month	3. Insecticide (Transfluthrin, Cyfluthrin& Beta Isomers, Bifenthrin, Cypermethrin& Beta/Zeta/Theta Isomers, Imidacloprid) – 300 MT/Month	m-Bromo Anisole - 100 MT/Month	
	Lambda-Cyhalothrin - 50 MT/Month Deltamethrin (T) -12 MT/Month	--	Lambda-Cyhalothrin - 50 MT/Month Deltamethrin (T) -12 MT/Month	
	DV-Acid Chloride/CMAC - 200 MT/Month		DV-Acid Chloride/ CMAC - 200 MT/Month	
	Cypermethrin (T) - 150 MT/Month		Cypermethrin (T) - 150 MT/Month	
	Alphamethrin (T)/ Permethrin (T) - 100 MT/Month OR		Alphamethrin (T)/ Permethrin (T) - 100 MT/Month OR	
	Acephate Tech.- 100 MT/Month		Acephate Tech.- 100 MT/Month	
	Metamitron Tech./Glyphosate Tech. OR other Herbicides– 100 MT/Month CPP -1.5 MW		Metamitron Tech./Glyphosate Tech. OR other Herbicides– 100 MT/Month CPP -1.5 MW	
			1. Fungicides (Hexaconazole, Tebuconazole, Propioconazole) – 300 MT/Month	
			2. Herbicides (Dicamba, Metribuzine,	

				Pendimethalin) – 300 MT/Month	
				3. Insecticide (Transfluthrin, Cyfluthrin& Beta Isomers, Bifenthrin, Cypermethrin& Beta/Zeta/Theta Isomers, Imidacloprid) – 300 MT/Month	
	Total Pestic ide Produ ction Capac ity	1212	900	2112	
	Inorga nic Chemi cals				
	Thiony Chlori de	450	--	450	
	Sulph ur Chlori de	100	--	100	
	Acid Chlori de like Valero yl Chlori de, Phenyl Acetyl Chlori de	100	--	100	
	Total Inorga nic Chemi cals Produ ction Capac ity	650	--		
	Total	1862	900	2762	

	Production Capacity				
3.	List of By - Products & Their Capacity	HCL (30%) - 13.75 MT/Month	HCL (32%) -250 MT/Month	HCL (32%) - 263.75 MT/Month	
		Sodium Sulphite Cake (80%) -405.25 MT/Month	Sodium Sulphite Solution -600 MT/Month	Sodium Sulphite Cake (80%)/solution - 1005.25 MT/Month	
		Ammonium Chloride (75% - 80%) wet cake/20% solution-100/425 MT/Month	--	Ammonium Chloride (75% - 80%) wet cake/20% solution-100/425 MT/Month	
		Cupric Chloride solution - 85 MT/Month	--	Cupric Chloride solution - 85 MT/Month	
		Aluminium Chloride Solution -1500 MT/Month	Aluminium Chloride (25%) - 1000 MT/Month	Aluminium Chloride Solution -2500 MT/Month	
		Potassium Chloride Solution - 750 MT/Month	Potassium Chloride Solution - 860 MT/Month	Potassium Chloride Solution - 1610 MT/Month	
		Spent Sulphuric Acid (55%) - 600 MT/Month	Spent Sulphuric Acid (70%) - 100 MT/Month	Spent Sulphuric Acid (55-70%) - 700 MT/Month	
		Bromobenzene - 54.5 MT/Month	--	Bromobenzene - 54.5 MT/Month	
		HBr - 18.9 MT/Month	--	HBr - 18.9 MT/Month	
	--	Sodium Sulphate Solution (30% to 35%) -2000 MT/Month	Sodium Sulphate Solution (30% to 35%) -2000 MT/Month		
3	Water Consumption	2100 m ³ /Day	366 m ³ /Day	2466 m ³ /Day	Max. Waterconsumption will be 2466 m ³ /Day after merger of both unit.
4	Sourc	GIDC Water	GIDC Water	GIDC Water	--

	e of water	Supply Fresh water requirement – 2100 m ³ /Day	Supply (Fresh water requirement – 316 m ³ /Day + Reuse - 50 m ³ /Day)	Supply (Fresh water requirement – 2416 m ³ /Day + Reuse - 50 m ³ /Day)	
5	Waste water generation	1046 m ³ /Day (Industrial Effluent -921 m ³ /Day + Domestic Wastewater - 125 m ³ /Day). Industrial Effluent -921 m³/Day: • Low COD /TDS effluent (640 m ³ /Day) • High COD/Toxic stream (50 m ³ /Day) • High TDS (231 m ³ /Day)	139 m ³ /Day (Industrial Effluent -119 m ³ /Day + Domestic Wastewater -20 m ³ /Day) Industrial Effluent -119 m³/Day: • Low COD /TDS effluent (69 m ³ /Day) • High COD/TDS(50 m ³ /Day)	1185 m ³ /Day (Industrial Effluent -1040 m ³ /Day + Domestic Wastewater -145 m ³ /Day) Industrial Effluent -1040 m³/Day: • Low COD /TDS effluent (709 m ³ /Day) • High COD/Toxic stream (50 m ³ /Day) • High TDS (281 m ³ /Day)	
6	Capacity of ETP	Capacity of existing ETP – 1008 m ³ /Day Capacity of existing MEE – 2 Nos. of MEE. MEE Plant -1: 100 KL/Day MEE Plant -2: 250 KL/Day	--	Capacity of existing ETP – 1008 m ³ /Day Capacity of existing MEE – 2 Nos. of MEE. MEE Plant -1: 100 KL/Day MEE Plant -2: 250 KL/Day	Company will utilize the existing ETP as well as existing MEE for both unit. Company has adequate capacity of ETP and MEE. Total wastewater generation of both unit = 1040 m ³ /Day. Low COD/TDS Stream of both unit = 709 m ³ /Day. High COD/Toxic

					<p>stream = 50 m³/Day. High COD/TDS = 281m³/Day.</p> <p>Capacity of existing ETP for Low COD/TDS-1008 m³/Day, So it is adequate. Capacity of Existing Incinerator – 50 m³/Day, So it is also adequate for high toxic stream. Capacity of Existing MEE – 350 m³/Day which is also adequate for High COD/TDS.</p>
7	Treatment & Disposal Scheme	<p>Low COD/TDS effluent (640 m³/Day) will be treated in ETP then discharge into deep sea through GIDC Pipeline.</p> <p>High COD/Toxic stream (50 m³/Day) will be incinerated. High TDS (231 m³/Day) will be passes through stripper and evaporated into MEE and discharge into deep sea</p>	<p>Low COD /TDS effluent (69 m³/Day) will be treated in ETP then discharge into deep sea through GIDC Pipeline.</p> <p>High COD/TDS(50 m³/Day) will be passes through stripper and evaporated into MEE and condensate will be reused in plant premises.</p>	<p>Total Low COD/TDS effluent (709 m³/Day) of both unit will be treated in existing ETP and High TDS (231 m³/Day) will be passes through stripper and evaporated into MEE and then discharge into deep sea through GIDC Pipeline. Then it will discharge into deep sea through GIDC Pipeline.</p> <p>High COD/Toxic</p>	<p>Company will utilize the existing guard pond to collect treated effluent and also utilize the existing pipeline to dispose the treated effluent into deep sea.</p>

		through GIDC Pipeline.		stream (50 m ³ /Day) will be incinerated. High COD/TDS (50 m ³ /Day) will be passes through stripper and evaporated into MEE and condensate will be reused in plant premises.	
8	Flue gas emission	Coal fire Steam Boiler-1 : 25 TPH Coal fire Steam Boiler-2 : 8 TPH Thermic Fluid Heater -1: 8 TPH Incinerator- 1 D.G. Set -4 Nos. (1500 KVA, 1250 KVA, 1010 KVA, 500 KVA)	Thermic Fluid Heater & Boiler -20 TPH D.G. set (1010 KVA)	Coal fire Steam Boiler-1 : 25 TPH Coal fire Steam Boiler-2 : 8 TPH Thermic Fluid Heater & Boiler - 20 TPH Thermic Fluid Heater -1: 8 TPH Incinerator- 1 D.G. Set -5 Nos. (1500 KVA, 1250 KVA, 1010 KVA, 500 KVA)	Company will utilize the existing as well as proposed utility for both units.
9	Process Gas emission	Process Vent-1, Process Vent-2, Process Vent-3	Process Vent-1 (Fungicide), Process Vent-2 (Herbicide), Process Vent-3 (Insecticide)	Total process vent -6 Nos.	
10	Air Pollution Control Measures	ESP, Multi Cyclone separator with bag filter and adequate scrubber system	ESP and adequate scrubber system	Total ESP -2 Nos., 1 MCS with bag filter, 6 Nos. of adequate scrubber system	
11	List of Hazardous Waste and their Quantity	ETP Sludge - 100 MT/Month Date of expired & off specification – 20 MT/Month Incinerable Liquid Waste - 295 MT/Month Distillation Residue -145	ETP Sludge -120 MT/Month Date of expired & off specification – 3 MT/Month Distillation Residue -50	ETP Sludge -220 MT/Month Date of expired & off specification – 23 MT/Month Incinerable Liquid Waste - 295 MT/Month Distillation Residue -195	Company has two hazardous waste storage area to store hazardous waste. Total hazardous waste

		MT/month Used Oil – 200 Liter/Month	MT/month Used Oil – 200 Liter/Month	MT/month Used Oil – 400 Liter/Month	<p>storage area = 2352 m² + 3601 m² = 5953 m².</p> <p>Total hazardous waste for 3 Months = ETP Sludge – 660 MT + Date of expired & off specification – 69 MT + Distillation Residue -585 MT, MEE Salt – 900 MT + Fly Ash -900 MT = 3114 MT.</p> <p>5953 m² hazardous waste storage area is adequate to store 3114 MT hazardous waste for 3 Month (90 Days).</p>
		Discarded Containers/Bags -1000 Nos./Month	Discarded Containers/Drums -500 Nos./Month Discarded Bags - 1000 Nos./Month	Discarded Containers/Drums -1000 Nos./Month Discarded Bags - 1500 Nos./Month	
		Incineration Ash -7.5 MT/Month	--	Incineration Ash -7.5 MT/Month	
		Salts of MEE – 300 MT/Month	--	Salts of MEE – 300 MT/Month	
		--	Fly Ash – 300 MT/Month	Fly Ash – 300 MT/Month	
1 2	Storage Area of Raw Materials	<p>Quantity of RM = 55860 MT/Month.</p> <p>RM warehouse -1 Area = 2250 m²</p> <p>RM warehouse -2 Area = 1500 m²</p> <p>RM warehouse -3 Area = 1500 m²</p> <p>Total Storage</p>	<p>27000 MT/Month</p> <p>RM warehouse -1 Area = 2250 m²</p> <p>Total Storage area of RM = 2250 m²</p> <p>Company can store the RM 4 MT/m²</p> <p>Company can store RM 2250 m² x 4 = 9000</p>	<p>82860 MT/Month</p> <p>Total storage area of RM warehouse = 7500m² =120000 MT/Month</p> <p>Total storage area of RM tank = 28000 MT/Month</p>	<p>Company will require storage area for 82860 MT/Month.</p> <p>Company will require storage area for 20715 MT/Week.</p> <p>Company has total storage area = 7500 m² to store the RM, which is</p>

		<p>area of RM = 5250 m²</p> <p>Company can store the RM 4 MT/m²</p> <p>Company can store RM 5250 m² x 4 = 21000 MT/week.</p> <p>Company can store RM 21000 MT x 4 = 84000 MT/Month.</p> <p>Company has 44 Nos. of tanks to store the liquid raw materials and total capacity = 1440 MT/day.</p> <p>Total capacity per Month in tank = 28000 MT/month.</p>	<p>MT/ week.</p> <p>Company can store RM 9000 MT x 4 = 36000 MT/ Month</p>		<p>adequate area to store the 20715 MT/Week and company has 44 nos of tank to store liquid raw materials.</p> <p>So Company has adequate store area of both unit.</p>
13	Storage Area of Products	<p>1862 MT/Month</p> <p>Company has FG storage area = 1800 m² to store FG.</p>	<p>900 MT/Month</p> <p>--</p>	<p>2762 MT/Month</p> <p>Company has FG storage area = 1800 m² to store FG.</p>	<p>Company can store the Products 4 MT/m²</p> <p>Storage area for FG = 1800 m² x 4 = 7200 m².</p> <p>So Company has adequate existing store area of both unit to store FG.</p>
14	Monitoring System	<p>Company has installed the Censor for Cl₂, Br₂,</p>	<p>--</p>	<p>Company has installed the Censor for Cl₂, Br₂,</p>	<p>Company will utilize existing the Censor for</p>

		Hydrocarbon, TOC Analyzer, Online Stack monitoring system, Flow Meter, pH Meter in Plot No. CH-5, GIDC Dahej-1, Tal: Vagra, Dist: Bharuch. Company has appointed the NABL approved the Lab to monitor and analyse the ambient air quality, Stack & vent, water, noise and soil.		Hydrocarbon, TOC Analyzer, Online Stack monitoring system, Flow Meter, Meter in Plot No. CH-5, GIDC Dahej-1, Tal: Vagra, Dist: Bharuch.	Cl ₂ , Br ₂ , Hydrocarbon, TOC Analyzer, Online Stack monitoring system, Flow Meter, pH Meter for both units. Company has appointed the NABL approved the Lab to monitor and analyse the ambient air quality, Stack & vent, water, noise and soil.
15	Power Requirement and Source	2000 KVA – DGVCL D. G. Set -2 Nos. (1010 KVA Each)	1000 KVA – DGVCL D. G. Set -1 Nos. (1010 KVA)	3000 KVA – DGVCL D. G. Set -5 Nos. (1500 KVA, 1250 KVA, 1010 KVA, 500 KVA)	Common Power connection Transformer, etc.
16	Fuel Requirement	Natural Gas: 1150 SM ³ /Day Coal: 40 MT/Day LDO: 20 KL/Day FO: 15 KL/Day HSD: 5 KL/Month	Coal -35 MT/Day LDO -10 KL/Day HSD – 1000 Liter/Day	Natural Gas: 1150 SM ³ /Day Coal: 75 MT/Day LDO: 30 KL/Day FO: 15 KL/Day HSD: 6 KL/Month	Common Supplier
17	Utility	Cooling Tower : Cooling Tower – 300 TR (1 No) Cooling Tower – 400 TR (3 No)	--	Cooling Tower : Cooling Tower – 300 TR (1 No) Cooling Tower – 400 TR (3 No) Cooling Tower – 500 TR (3 No)	Company will utilize the existing Cooling Tower, Chilling Plant, Brine Plant,

	<p>Cooling Tower – 500 TR (3 No) Cooling Tower – 600 TR (6 No) Cooling Tower – 800 TR (1 No) Cooling Tower – 1200 TR (2 No)</p> <p>Chilling Plant: Chilling Plant -310 TR (3 Nos.)</p> <p>Brine Plant: Brine Plant - 250 TR (2 Nos.) Brine Plant - 150 TR 1 No.) Brine Plant - 100 TR 1 No.)</p> <p>Nitrogen Plant: Nitrogen Plant -7.5 m3/Hr (1 Nos.) Nitrogen Plant -12.5 m3/Hr (1 Nos.) Nitrogen Plant -20 m3/Hr (1 Nos.) Nitrogen Plant -30 m3/Hr (1 Nos.) Nitrogen Plant -50 m3/Hr (1 Nos.)</p>		<p>Cooling Tower – 600 TR (6 No) Cooling Tower – 800 TR (1 No) Cooling Tower – 1200 TR (2 No)</p> <p>Chilling Plant: Chilling Plant - 310 TR (3 Nos.)</p> <p>Brine Plant: Brine Plant -250 TR (2 Nos.) Brine Plant -150 TR 1 No.) Brine Plant -100 TR 1 No.)</p> <p>Nitrogen Plant: Nitrogen Plant - 7.5 m3/Hr (1 Nos.) Nitrogen Plant - 12.5 m3/Hr (1 Nos.) Nitrogen Plant - 20 m3/Hr (1 Nos.) Nitrogen Plant - 30 m3/Hr (1 Nos.) Nitrogen Plant - 50 m3/Hr (1 Nos.)</p> <p>Air Plant: Air Plant -7 m3/Hr (1 Nos.) Air Plant -2 m3/Hr (1 Nos.) Air Plant -15 m3/Hr (2 Nos.) Air Plant -12 m3/Hr (2 Nos.)</p>	<p>Nitrogen Plant, Air Plant for both unit.</p>
--	---	--	---	---

		Air Plant: Air Plant -7 m3/Hr (1 Nos.) Air Plant -2 m3/Hr (1 Nos.) Air Plant -15 m3/Hr (2 Nos.) Air Plant -12 m3/Hr (2 Nos.)			
1 8	Green Belt	14000 m ²	5000 m ²	19000 m ²	After merger of both unit, company will have 30% green belt of total plot area.

10.6.3.3 The proposal was earlier considered by the EAC in its meeting held on 27th March, 2019, wherein the Committee desired for more information/inputs. In response, details submitted by the project proponent are as under: -

S. No.	Query as per minutes of meeting	Reply
1	Transfer of EC dated 30 th August, 2012 and 10 th January, 2018 in favour of M/s Hemani Industries Ltd (the present applicant).	Company has applied for Transfer of EC dated 30 th August, 2012 and 10 th January, 2018 in favour of M/s Hemani Industries Ltd.
2	Certified report on compliance status of the ECs dated 30 th August, 2012 & 10 th January, 2018 from the Regional Office of the Ministry, Bhopal.	Certified report on compliance status of the ECs dated 30 th August, 2012 & 10 th January, 2018 from the Regional Office of the Ministry, Bhopal is submitted.
3	Comments of the Regional Office of the Ministry regarding location of the two units and feasibility of merger vis-a-vis environmental angle and monitoring.	Comments of the Regional Office is submitted.
4	Addendum to the EIA report combining the production, raw materials and utilities.	Summary of EIA report combining the production, raw materials and utilities of both units as well as EIA Report are submitted.
5	Technical justification for merger of ECs.	Technical justification for merger of ECs is submitted.

10.6.3.4 The EAC, after deliberations, was agreed in-principle to the proposal for merger of both the ECs dated 30th August, 2012 & 10th January, 2018 in the name of M/s Hemani Industries Ltd for total pesticides production @2112 TPM in a total area of 62137.22 sqm and the project details (products, by-products, utilities, water consumption, waste water

management, storage for products and raw materials) and other environmental parameters, as stated in para 10.6.3.3 above. The Committee desired that the Ministry may ensure other administrative requirements (like Certificate of Incorporation) for merger of the two companies/units.

Agenda No.10.6.4

Onshore Exploratory Well Drilling (6 Wells) in MZ-ONN-2004/1 in Aizawl, Lunglei, Mamit and Serchhip Districts in Mizoram by M/s Oil India Limited - Validity Extension of EC

[IA/MZ/IND2/105403/2019, J-11011/877/2007-IA-II(I)]

10.6.4.1 The Ministry has granted environmental clearance vide letter dated 3rd August, 2012 in favour of M/s Oil India Limited to the project 'Exploratory Drilling (6 wells) in MZ-ONN-2004/1' located in Districts Aizawl, Lunglei, Mamit and Serchhip (Mizoram).

The project proponent has informed that due to various constraints, only three wells could be drilled by now, and requested for extension of the validity of the project for a period of three years, to complete the work as per scope of the project.

10.6.4.2 *The EAC, after deliberations, recommended for extension of validity of the EC dated 3rd August, 2012 for a period of three years, i.e. till 3rd August, 2022, to complete the work as per scope of the project.*

Day Three: 31st July, 2019

10.7 Environmental Clearance

Agenda No.10.7.1

Expansion of agro chemicals, synthetic organic dyes and optical brightening agents manufacturing facility within existing premises at Plot No.Z-6, GIDC, Dahej, Taluka-Vagra, DistrictBharuch, (Gujarat) by M/s Meghmani Industries Limited (SEZ) - Environmental Clearance

[IA/GJ/IND2/102990/2018, F. No.IA-J-11011/403/2018-IA-II(I)]

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

10.7.1.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of agro chemicals (990 TPM to 2240 TPM), synthetic organic dyes (500 TPM to 1100 TPM) and optical brightening agents (500 TPM to 1650 TPM) manufacturing unit by M/s Meghmani Industries Ltd (SEZ) in an area of 75,730 sqm located at Plot No.Z-6, SEZ, GIDC Dahej, Taluka Vagra, District Bharuch (Gujarat).

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

Group	Product	Existing (MT/Month)	Proposed Expansion (MT/Month)	Total after Expansion (MT/Month)	
SYNTHETIC ORGANIC DYES					
Acid Dyes					
A	A1	Acid Yellow 1MA	15	0	15
	A2	Acid Yellow 4MA			
	A3	Acid Yellow 5MA			
	A4	Acid Yellow 6MA			
B	B1	Acid Red 1MA	15	0	15
	B2	Acid Red 4MA			
	B3	Acid Red 7MA			
C	C1	Acid Blue 2MA	20	0	20
	C2	Acid Blue 1MA			
	C3	Acid Blue 3MA			
	C4	Acid Blue 4MA			
D	D1	Acid Black 4MA	10	0	10
	D2	Acid Black 2MA			
E	E1	Acid Violate 1MA	5	0	5
Direct Dyes					
F	F1	Direct Yellow 1SD	20	0	20
	F2	Direct Yellow 2SD			
	F3	Direct Yellow 3SD			
G	G1	Direct Red 3SD	20	0	20
	G2	Direct Red 1SD			
	G3	Direct Red 4SD			
	G4	Direct Red 6SD			
H	H1	Direct Blue 2SD	20	0	20
	H2	Direct Blue 1SD			
	H3	Direct Blue 4SD			
	H4	Direct Blue 5SD			
	H5	Direct Blue 6SD			
I	I1	Direct Black 1SD	20	0	20
	I2	Direct Black 2SD			
Reactive Dyes					
J	J1	Reactive Black WNN	100	0	100
	J2	Reactive Black CLS			
	J3	Reactive Black XLW			
	J4	Reactive Black DN			
	J5	Reactive Black R			
	J6	Reactive BlackG			
	J7	Reactive Black GF			
	J8	Reactive Black GR			
	J9	Reactive Black B			
K	K1	Reactive Yellow WNN	60	0	60
	K2	Reactive Yellow 3RX			
	K3	Reactive Yellow XL			
	K4	Reactive Yellow 4GL			
	K5	Reactive Ultra Yellow RGB			

L	L1	Reactive Orange 2RX	20	0	20
	L2	Reactive Orange H2R			
	L3	Reactive Orange 3R			
	L4	Reactive Orange WNN			
	L5	Reactive Orange CD			
M	M1	Reactive Red 5BX	60	0	60
	M2	Reactive Red BS			
	M3	Reactive Red CD			
	M4	Reactive Red 3GX			
	M5	Reactive Red RGB			
	M6	Reactive Red Crimson HEXL			
	M7	Reactive Rubine XL			
	M8	Reactive Red RB			
	M9	Reactive Red 2GX			
	M10	Reactive Red 3BX			
N	N1	Reactive Navy Blue RGB	40	0	40
	N2	Reactive Navy Blue BFN			
	N3	Reactive Navy Blue GG			
	N4	Reactive Navy Blue 3GX			
	N5	Reactive Blue BB			
	N6	Reactive Blue BRX			
O	O1	Bis Mark Brown 1	0	200	200
P	P1	Bis Mark Brown 44	0	200	200
		AZO DYES			
Q	Q1	Red 19E	20	0	20
	Q2	Red 161			
	Q3	Red 164			
R	R1	Yellow 174	20	0	20
	R2	Yellow 124			
	R3	Yellow 107			
S	S1	Green 33	10	0	10
T	T1	Orange 98	10	0	10
U	U1	Blue 98	15	0	15
	U2	Blue 58			
	U3	Blue 79			
		Petromate Dyes / Solvent Dyes			
V	V1	Petromate Yellow 15	0	200	200
	V2	Petromate Yellow 14	0		
	V3	Petromate Yellow 07	0		
	V4	Petromate Orange 16	0		
	V5	Petromate Red 11	0		
	V6	Petromate Red 07	0		
	V7	Petromate Red 13	0		
	V8	Petromate Blue 16	0		

V9	Petromate Blue 12	0		
V10	Petromate Blue 14	0		
V11	Petromate Blue 18	0		
V12	Petromate Green 12	0		
V13	Solvent Yellow 163*	0		
V14	Solvent Yellow 33*	0		
V15	Solvent Red 111*	0		
V16	Solvent Red 207*	0		
V17	Solvent Red 24*	0		
V18	Solvent Red 23*	0		
V19	Solvent Yellow 2*	0		
V20	Solvent Yellow 131*	0		
V21	Solvent Blue 35*	0		
V22	Solvent Blue 36*	0		
	Total	500	600	1100

* Solvent Use and Its Recovery

Group		Product	Existing (MT/Month)	Proposed expansion (MT/Month)	Total after expansion (MT/Month)
Agro chemicals					
A	A1	Atrazine*	100	100	200
	A2	Simazine*			
	A3	Tertbutylazine*			
	A4	Propazine*			
B	B1	Ametryne	55	145	200
	B2	Simetryne			
	B3	Terbutryne			
	B4	Prometryne			
C	C1	Propanil	70	0	70
D	D1	Hexaconazole*	80	0	80
	D2	Propiconazole*			
	D3	Tricyclazole			
	D4	Tebuconazole			
	D5	Cyproconazole			
	D6	Difenoconazole*			
	D7	Miclobutanil*			
	D8	Flutriafol			
E	E1	Pendimethalin	200	0	200
F	F1	Metribuzin	25	175	200
	F2	BisPyribac Sodium*			
G	G1	Quizalofop Ethyl	20	0	20
	G2	Fenaxoprop P Methyl			
	G3	Diclofop P Methyl			
	G4	ClodinafopPropargyl			
H	H1	Diuron	50	100	150
I	I1	AzoxyStrobin*	50	150	200
	I2	Benalaxyl*			
	I3	Thiophanate Methyl*			
	I4	Metalaxyl*			

	I5	Kresoxim Methyl*			
J	J1	Bromoketal*	40	0	40
K	K1	PMIDA	300	0	300
L	L1	1,2,4, Triazole*	0	100	100
M	M1	Triazineone	0	200	200
N	N1	DCAP (DichloroAcetoPhenon)	0	100	100
O	O1	2,4 DichloroValerophe	0	30	30
P	P1	Pentane Diol	0	50	50
Q	Q1	HMBT (Hydrazino Methyl Benzothiazole)*	0	50	50
R	R1	Diclosulam*	0	50	50
	R2	Sulfentrazone*			
		Total	990	1250	2240

* Solvent Use and Its Recovery

Sr.No	Product	Existing (MT/Month)	Proposed expansion (MT/Month)	Total after expansion (MT/Month)
Optical (OBA)	Brightening Agents			
1	OBA-2B	10	0	10
2	OBA-BSU	70	30	100
3	OBA-DMX	197	303	500
4	OBA-BBU	35	65	100
5	OBA-BA	35	40	75
6	OBA-DT*	100	100	200
7	OBA-4BB	0	15	15
8	OSB	53	197	250
9	DASDA	0	200	200
10	BCMB*	0	200	200
	Total	500	1150	1650

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 7th January, 2019. Public hearing is exempted as the project is located in the notified Industrial area.

Existing land area is 75,730sqm. The expansion project will be carried out within the existing premises. Industry will develop greenbelt in an area of 26,500sqm covering 35% of total project area. The estimated project cost is Rs.54 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 10 crores and the recurring cost (O&M) will be about Rs.8.4 crores per annum. The project will provide employment to 140.

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 1473 cum/day (existing 843 cum/day + proposed 630 cum/day), proposed to be met through GIDC water supply. It was informed that by installing rain

water harvesting system and improvement in process efficiency, fresh water requirement shall be further reduced to 736.5 cum/day (50% reduction).

Effluent of 672 cum/day will be treated through ETP and disposed off to the GIDC drainage line for final disposal. High COD/TDS effluent of 254 cum/day will be sent to the MEE. Domestic wastewater of 18 cum/day will be discharged through septic tank/soak pit system.

Power requirement after expansion will be 3000 KVA (including existing 1500 KVA + proposed 1500 KVA) and will be met from Dakshin Gujarat Vij Corporation Limited [DGVCL]. Existing unit has two DG sets of 250 KVA capacity which is used as standby during power failure/emergency.

Existing unit has 5 TPH natural gas fired boiler and 5 TPH coal fired boiler. Additionally, two 6 TPH coal fired boilers will be installed. Multi cyclone dust collector/ bag filter with a stack of height of 30 m will be installed to control particulate emissions within the statutory limits. It was informed that natural gas will be used in place of coal in the boilers and furnace oil shall not be used in the unit.

Ambient air quality monitoring was carried out at 8 locations during October to December 2017 and the baseline data indicates the ranges of concentrations as: PM₁₀ (58 - 92 µg/m³), PM_{2.5} (12 - 39 µg/m³), SO₂ (8-39 µg/m³) and NO₂ (8-32 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3 µg/m³, 5 µg/m³ and 1 µg/m³ with respect to PM₁₀, SO₂ and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards.

Ministry has issued environmental clearance vide letter dated 23rd March, 2010 in favour of M/s Meghmani Speciality Chemicals Ltd to the project for 'Dyes, Dyes Intermediates Optical Brightening Agents and agrochemical manufacturing unit at Plot No. Z-6, Dahej SEZ, Taluka Vagra, District Bharuch (Gujarat). Monitoring report on compliance status of the EC conditions have been forwarded by Ministry's RO at Bhopal vide letter dated 5th December, 2018 after conducting site visit on 13th August, 2018.

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.

Consent to Operate for the present industrial operations, issued by Gujarat SPCB vide letter dated 20th July, 2016, which is presently valid upto 22nd May, 2021.

10.7.1.2 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to prior transfer of existing environmental clearance dated 23rd March, 2010 in the name of M/s Meghmani Speciality Chemicals Ltd to the present applicant M/s Meghmani Industries Limited (SEZ), and 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.*

- Treated effluent of 672 cum/day shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, for discharge to the GIDC drainage line.
- Natural gas shall be used as fuel in the boiler. Furnace oil shall not be used in the plant.
- 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 LD₅₀<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.
- 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 736.5 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 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 and urological assessment 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 carried out.

Agenda No.10.7.2

Expansion of Agro Chemicals Manufacturing Unit at Plot No.54 to 56, 58 to 61, Phase II IDA, Pashamylaram, Patancheru Mandal, Sangareddy District, Telangana by M/s Nichino Chemical India Pvt Ltd - Environmental Clearance.

[IA/TG/IND2/99362/2017, J-11011/87/2017-IA II (I)]

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

10.7.2.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of agro chemicals manufacturing unit from 2.33 TPD to 9 TPD by M/s Nichino Chemical India Pvt Ltd in an area of 5.31 acres located at Plot Nos. 54 to 56, 58 to 61, IDA Phase II, Pashamylaram, Patancheru Mandal, District Sangareddy (Telangana).

Details of existing and proposed products are as under:-

S.No	Name of Product	CAS No.	Capacity (TPD)	
			Permitted*	After Expansion
1	Acephate	30560-19-1	0.83	2.53
2	Imidacloprid	138261-41-3	0.5	0.14
3	Thiomethoxam	153719-23-4	0.5	2.0
4	Acetamiprid	160430-64-8	0.33	0.07
5	Buprofezin	69327-76-0	0.15	2.25
6	Pretilachlor	51218-49-6	0.5	1.5
7	Tricyclazole	41814-78-2	0.28	0.14
8	Hexaconazole	79983-71-4	0.17	0.06
9	ClodinafopPropargyl	105512-06-9	0.33	0.72
10	Ethion	563-12-2	0.44	0.07
11	CloquintocetMexyl	99607-70-2	0.15	0.06

12	Sulfosulfuron	141776-32-1	0.1	0.06
13	Fipronil	120068-37-3	0.07	0.01
14	Dimethoate	60-51-5	0.15	0.25
15	Thiodicarb	59669-26-0	0.07	0.03
16	Bispyribac Sodium	125401-92-5	--	0.06
17	Quizalofop Ethyl	76578-14-8	--	0.04
18	Pymetrozine	123312-89-0	--	0.04
19	Azoxystrobin	131860-33-8	--	0.04
20	Bifenthrin	82657-04-3	--	0.04
Total Worst Case: 5 Products on campaign basis after expansion at any point of time			2.33	9
	R&D and Pilot Plant Products		--	0.1
	Formulations		6.67 KLM	80 KLM

*** At any point of time only 5 products are manufactured**

By-Products

S.No	Name of Product	Name of By-Product	Quantity (Kg/day)
1	Acephate	Ammonium Acetate	1065.6
2	Thiomethoxam	Potassium chloride	1021
3	Buprofezin	Calcium Chloride (30%)	4267.5
4	Ethion	Sodium Bromide	37.6
5	Pretilachlor	Lean HCl(20-25%)	600

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.

Terms of Reference for the project was granted on 31st May, 2017. Public hearing is exempted as the project is located in the notified Industrial area.

Existing land area is 5.31 acres. No additional land will be required for proposed expansion. Industry has developed greenbelt in an area of 1.76 acres covering 33% of total project area. The estimated project cost is Rs.50 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.7.3 crores and the recurring cost (operation and maintenance) will be about Rs. 4.54 crores per annum. The project will provide employment to 120 persons directly and 40 persons indirectly.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, rivers etc. within 10 km distance from the project site. Nakkavagu stream is at 6.5 km (NE), Isnapurcheruvu is at 0.2 km (N), Kottacheruvu is at 1.5 km (NW), Lakdaramcheruvu is at 5 km (N) and Peddacheruvu is at 3.7 km (NE) from the project site.

Total water requirement is estimated to be 238.19 cum/day, which includes fresh water requirement of 183.19 cum/day, proposed to meet through TSIC Industrial water supply. The fresh water requirement will be further reduced to 164 cum/day with improvement in cooling tower efficiency.

Total effluent of 58.28 cum/day will be treated in effluent treatment system. High COD/TDS stream of 39.28 m³/day is segregated and sent to stripper followed by multiple effect evaporators (MEE) and agitated thin film dryer (ATFD). Condensate from stripper will be sent to cement plants for co-incineration, while condensate from MEE and ATFD is mixed with low TDS/COD from utility blow downs and domestic wastewater of 19 cum/day in biological treatment plant followed by Reverse Osmosis. Treated wastewater shall be reused for cooling towers make-up. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be met through TS Transco. Existing DG sets of capacity 1 x 600 kVA, 2 x 225 kVA and 1 x 125 kVA caters the energy requirement during load shut down by Transco. Stack (height 5 m for 1x 600 kVA; 4 m for 2 x 225 kVA and 2.5 m for 1 x 125 kVA) is provided as per CPCB norms to the existing DG sets.

Existing unit has 1 x 5 TPH, 1 x 3 TPH and 1 x 1.5 TPH coal fired boilers (1 x 3 TPH coal fired boiler will be kept as standby after expansion). No additional boilers are proposed for expansion. It is proposed to establish 1 x 6 Lac K.cal/hr coal fired thermic fluid heater and 1 x 2 Lac K.cal/hr HSD fired thermic fluid heater for process requirement. Bag filters with a stack of height of 20 m for 1 x 6 Lac K.cal/hr coal fired thermic fluid heater will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm³). Bag filter is provided for existing 1 x 5 TPH and 1 x 3 TPH (standby) coal fired boilers with a stack height of 30m.

Ambient air quality monitoring was carried out at nine locations during October to December 2017 and the baseline data indicates that ranges of concentrations as: PM₁₀ (40-56 µg/m³), PM_{2.5} (15-36 µg/m³), SO₂ (9-19 µg/m³) and NO₂ (9-22 µg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLC_s after the proposed expansion would be 1.2 µg/m³, 6.9 µg/m³, and 8.13 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards.

Ministry has issued environmental clearance earlier vide letter No. J-1011/183/2003-IA II (I) dated 21st March, 2006 to the project for manufacturing pesticides and formulations in favour of M/s Hyderabad Chemical Products Ltd, which was transferred in favour of M/s Nichino Chemical India Pvt Ltd 20th November, 2018. Compliance status of EC conditions forwarded by the Ministry's RO at Chennai vide letter dated 6th October, 2017 (site visit on 21st August, 2017) found to be satisfactory.

ToR for the project was granted in favour of M/s Nectar Crop Sciences Private Limited. It was informed that M/s Hyderabad Chemical Products Ltd was first converted into a private limited company in the name of M/s Nectar Crop Sciences Private Limited, and later changed to M/s Nichino Chemical India Pvt Ltd.

The expenditure towards CER for the project would be 2.5% of the project cost as committed by the project proponent.

Consent to Operate for the present industrial operations, issued by Telangana SPCB vide letter dated 24th February, 2016, which is presently valid upto 31st August, 2020.

10.7.2.2 *The EAC, after deliberations, desired for clarifications/inputs in respect of the following:*

- *Impact of the agrochemical products on human being.*
- *In view of CEPI score for Pattancheru Bollaram area identified as critically/severely polluted area, confirmation from the SPCB/CPCB regarding applicability of any of the*

restrictions and/or moratorium, if any, for setting up any industrial unit or expansion thereof.

- No consistency between the baseline air quality values and the incremental concentrations for the core air pollutants. Revised AAQ modeling and prediction of GLC.
- Action plan for transport of chemicals.
- Ash management plan.

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

Agenda No.10.7.3

Agro technical and intermediates with inorganic chemical(4600 MT/Month and 3092 MT/Month) by M/s Meghmani Organics Ltd Unit- V at Plot No.- D-2/CH/10, GIDC Industrial Estate, Dahej-2, TalukaVagra, District Bharuch (Gujarat) -Environmental Clearance.

[IA/GJ/IND2/105464/2017, IA-J-11011/506/2017-IA-II(I)]

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

10.7.3.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up agrochemicals and intermediates manufacturing unit of capacity 4600 TPM (50 nos of products)by M/s Meghmani Organics Limited (Unit-V) in an area of 1,00,000 sqm located at Plot No.D-2/CH/10, GIDC Dahej-2, Taluka Vagra, District Bharuch (Gujarat). The project also involves manufacturing Poly Aluminum Chloride (inorganic chemical) @ 3092 TPM.

Details of products are as under:-

Group	S. No.	Product	Capacity (TPM)
A	1.	2,4 DichloroPhenoxy Acetic Acid	1000
	2.	2,4,D Amine	
	3.	2,4,D Ester	
	4.	2,4,D Sodium	
	5.	Triclopy-Acid	
	6.	Triclopy-Ester	
B	7.	Lufenuron	600
	8.	Novaluron	
I	9.	Bifenthrin Alcohol	600
	10.	LamdaCyhalothric Acid (L.C.Acid)	
	11.	Sodium Salt of HTCP	
	12.	Mono Chloro Acetic Acid (MCA)	
	13.	Cypermethric Acid Chloride (CMAC)	
	14.	Meta PhenoxyBenzaldehyde (MPB)	
NN	15.	Acetamapride	600
	16.	Imidaclopride	
	17.	Thiamethoxam	
O	18.	Acephate	600
	19.	Profenophos	

OTHER	20.	Buprofezin	600
	21.	Chlorantraniliprole	
	22.	Chloropyrifos	
	23.	Cyproconazole	
	24.	Difenthiuron	
	25.	Dinotefuran	
	26.	Emamectin Benzoate	
	27.	Ethaphon	
	28.	Fipronil	
	29.	Fonicamide	
	30.	MPB Alcohol	
	31.	Prometrin	
	32.	Propargite	
	33.	Spiromesifen	
	34.	Spirodiclofen	
	35.	Thiocyclam Oxalate	
	36.	Indoxocarb	
	37.	Thiophanate Methyl	
	38.	Flubendiamide	
39.	Tolefennyprod		
P	40.	Zeta Cypermethrin	600
	41.	Alpha- Cypermethrin	
	42.	Beta- Cypermethrin	
	43.	Beta Cyfluthrin	
	44.	Bifenthrin	
	45.	Cypermethrine	
	46.	Deltamethrin	
	47.	Lambda Cyhalothrin	
	48.	Permethrine	
	49.	Transfluthrin	
	50.	Cyfluthrine	
		Total	4600
Inorganic	51.	Poly Aluminum Chloride	3092

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 by the sectoral EAC in the Ministry.

Standard ToR for the project was granted on 9th December, 2017. Public hearing is exempted as the project is located in the notified Industrial area.

The land area available for the project is 1,00,000sqm. Industry will develop greenbelt in an area of 33,000sqm, covering 33% of total project area. The estimated project cost is Rs. 70 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 16.39 crores and the recurring cost (operation and maintenance) will be about Rs.4.28 crores per annum. The project will provide employment for 200 persons directly and indirectly.

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 3051 cum/day, which includes fresh water requirement of 2177 cum/day, proposed to be met through GIDC water supply. Fresh water requirement will be reduced by utilizing water from the rain water harvesting system (storage tank -2 lakh cum).

Effluent of 1578 cum/day will be treated in the ETP and disposed off to the GIDC drainage line for final disposal.

Power requirement will be 4000 KVA, which will be met from DGVCL. DG set of 500 KVA capacity will be installed and use as standby during power failure/ emergency. Stack (height 11m) will be provided as per CPCB norms to the proposed DG set.

Unit will have three 7.5 TPH boilers (One out of which will be stand-by boiler). Multi cyclone dust collector/ bag filter with a stack of height of 30 m will be installed to control particulate emissions within the statutory limits.

Ambient air quality monitoring was carried out at 8 locations from October to December, 2017 and the baseline data indicates the ranges of concentrations as: PM₁₀ (58 - 92µg/m³), PM_{2.5} (12 - 39µg/m³), SO₂ (8 - 39 µg/m³) and NO_x (8 - 32µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 4 µg/m³, 5 µg/m³ and 6 µg/m³ with respect to PM₁₀, SO₂ and NO_x. 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.

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.

10.7.3.2 *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.*
- *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.*
- *Treated effluent of 1578 cum/day shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, for discharge to the GIDC drainage line.*
- *Natural gas shall be used as fuel in the boiler.*
- *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 LD₅₀<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.*
- *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:*
 - (h) Reactor shall be connected to chilled brine condenser system.*
 - (i) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*

- (j) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
- (k) Solvents shall be stored in a separate space specified with all safety measures.
- (l) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
- (m) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
- (n) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- Total fresh water requirement shall not exceed 2177 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 carried out.*

Agenda No.10.7.4

Expansion of Existing Grain Based Distillery (110 to 170 KLPD) within Existing Plant Premises at Village Durgapur, Block - Diamond Harbour-II, District South 24 Parganas, West Bengal by M/s IFB Agro Industries Limited - Environmental Clearance.

[IA/WB/IND2/86195/2006, J-11011/333/2006-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.

10.7.4.1 The proposal was earlier considered by the EAC in its meeting held on 8-9 April, 2019, wherein the Committee desired for clarification/inputs. In response, details submitted by the project proponent are as under:-

Point No.	Additional Details Sought by EAC	Reply Submitted by PP
1.	Details of proposed feedstock/non edible grains namely, broken rice, sorghum, bajra, maize, etc, their source and firmed up plan for procurement.	The company uses/ will use non- edible/ waste grain - broken rice, sorghum, bajra, maize etc. as raw material which will be sourced through grain suppliers from West Bengal & neighboring states (Orissa, Chhattisgarh, Jharkhand & Bihar) via road/rail/water ways. To ensure continuous supply of raw material the company has also signed MoU with various grain suppliers.
2.	Test report from a Govt. recognized laboratory to ensure non edibility of the grains.	Test report of the grain which will be used as raw material from a Govt. recognized laboratory (NABL & FSSAI approved) was submitted. Deputy Excise Collector, Govt. of West Bengal has certified that the overall qualities of grains used in the distillery are non-edible and used for industrial purpose.
3.	Permission required from the concerned regulatory authority to meet the increased water requirement of 1380 cum/day. Even the present certificate of registration of existing well dated 17 th April, 2012 issued by the State Water Investigation Department, Government of West Bengal, and needs revalidation.	The total fresh water requirement after expansion will be 1380 KLPD which will be sourced from groundwater. Permission for withdrawal of 1522 KLPD groundwater has already been obtained State Water Investigation Department (SWID), Government of West Bengal and has now been revalidated as well.
4.	Approval from PESO for the site and layout plan for storage facilities.	The company has already obtained the permission from PESO for CO ₂ storage vide letter no S/HO/WB/03/394(S2246) dated 5/04/2018. For storage of ethanol the company has

		submitted the application to PESO vide application no. OIN243058 dated 30/11/2018. The layout plan showing the storage facilities was also submitted.
5.	Plan for Corporate Environment Responsibility.	As per O.M. dated 1 st May, 2018 on CER, for this project, 1.0% (i.e. 40 Lakhs) of the total project cost has to spend on CER activities but the company has earmarked 2.5% of the total project cost i.e. Rs. 1 Crore to be spend in next 3 years.
6.	Measures taken to reduce carbon footprint.	<p>IFB Agro Industries limited is very much concerned towards reducing the carbon footprint. For this, the company will take following measures:-</p> <ul style="list-style-type: none"> • CO2 generated during the fermentation process is being/ will be collected by utilizing CO2 Scrubbers and sold to vendor, thus GHG emissions are/will be reduced. • Solar lights have been installed along the plant boundary and road. • Adequate development of greenbelt in and around plant premises to enhance carbon sequestration. • Biomass/ Biogas is being/ will be used as fuel in boiler. • Optimal use of energy in form of electricity and other appliances. <p>The company will take all possible efforts to reduce the carbon footprint in future as well. In addition to this company has also mandated “Green growth Sustainability Services” to evaluate the GHG inventory for the base year.</p>

10.7.4.2 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion of grain based distillery from 110 KLPD to 170 KLPD by M/s IFB Agro Industries Limited in an area of 135100 sqm located at Village Durgapur, Block Diamond Harbour-II, District South 24 Parganas (West Bengal).

The details of products and capacity as under:

S.No.	Unit	Existing	Proposed	Total
1	Grain based distillery (Extra Neutral Alcohol/Rectified Spirit/Ethanol)	110 KLPD	60 KLPD	170 KLPD
2	Co-generation power plant	4.9 MW	---	4.9 MW

As per the Ministry’s Notification dated 13th June, 2019, the project/activity is covered under category B of item 5 (g) ‘Distilleries’ of the Schedule to the EIA Notification, 2006. However, in view of the proposal earlier considered by the EAC, it was appraised at Central level by the sectoral EAC in the Ministry.

Standard Terms of Reference (ToR) for the project was granted on 6th November, 2017. Public hearing was conducted by the West Bengal Pollution Control Board on 29th June, 2018. The main issues raised during the public hearing are related to employment, ESR activities, effect on environment, etc.

Existing land area is 135100sqm(13.51 ha). No additional land is required for the proposed expansion. Industry has developed greenbelt in an area of 47300 sqm(4.73 ha), covering 35 % of total project area. The estimated project cost for expansion is Rs.40 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.7.35 crores (for revamping of existing ETP) and the recurring cost (O&M) will be about Rs.0.5 crores per annum. Employment opportunity will be for 300 persons directly & indirectly after expansion.

There are no National Parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Hugli river is flowing adjacent to the plant site (S), Hilji tidal canal is at a distance of 4.5 km (WSW), Rupnarayan river at a distance of 4.5 km (W) and Damodar river at a distance of 7.2 km (NNW).

Total water requirement is estimated to be 2313 cum/day, out of which fresh water requirement of 1380 cum/day will be met from ground water. Permission for withdrawal of 1522 KLPD groundwater has already been obtained State Water Investigation Department (SWID), Government of West Bengal vide letter dated 17th April, 2012, which was revalidated vide letter dated 10th May, 2019.

Effluent of 933 cum/day will be treated through Effluent Treatment Plant (anaerobic digestion, aerobic treatment and RO plant) of capacity 1300 cum/day and 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 4.5 MW and will be met from Co-Generation Power Plant via straight back pressure turbine. During emergency, existing D.G Sets (2 x 725 KVA, 1 x 500 KVA) and SEB power (501 KVA) supply would be used.

Existing unit has two rice husk/biogas/coal fired boilers of 22 TPH capacity each. Electrostatic Precipitator with a stack of height 40 m is installed for controlling the particulate emissions.

Solid waste from the unit in the form of DDGS will be used/sold as animal feed. Yeast sludge will be added to the wet cake for the production of DDGS. Ash from the boiler will be supplied to brick/ cement manufacturers. Used oil & grease generated from plant machinery/gear boxes as hazardous waste are being / will be sold out to the authorized WBPCB recycler.

Ambient air quality monitoring was carried out at 8 locations during October to 31st December, 2017 and the baseline data indicates the ranges of concentrations as: PM₁₀ (62.6- 92.8 µg/m³), PM_{2.5} (28.6-49.8 µg/m³), SO₂ (6.3- 16.8 µg/m³) and NO₂ (12.4-28.5 µg/m³). AAQ modelling study for point source emissions indicates that maximum incremental GLCs after the proposed expansion project would be 0.36 µg/m³, 0.12 µg/m³, 0.90 µg/m³, 1.55 µg/m³ with respect to PM₁₀, PM_{2.5}, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards.

The plant is presently having two distillery units of capacity 50 KLPD and 60 KLPD. The distillery unit of 50 KLPD is in operation since 1987 with the permission from West Bengal Excise Department and West Bengal PCB. For the 60 KLPD grain based distillery, Ministry has issued EC vide letter dated 14th March, 2007 in favour of M/s IFB Agro Industries Limited. The monitoring report on compliance status of EC conditions by the Regional Office vide their

letter dated 19th February, 2018 and action taken report forwarded vide letter dated 29th November, 2018, was found to be satisfactory.

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

The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during the public hearing has been properly addressed in the EIA/EMP report. Additional information submitted by the project has been found to be in order.

Consent to Operate for the existing capacity has been obtained from the West Bengal PCB vide letter dated 24th January, 2019, which is valid up to 31st January, 2024.

10.7.4.3 *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.*
- *Grain unfit for human consumption shall only be used for distillery operations.*
- *Total fresh water requirement shall not exceed 1380 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:-*
 - (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 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 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 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.*
- *CO₂ generated from the process shall be bottled/made solid ice and sold to authorized vendors.*
- *Grain shall be tested for microtoxins in Government laboratory and awareness provided to workers related to grain dust. Regular medical checkup campaign shall be carried out for the same. Mask and gloves shall be provided to the workers.*

Agenda No.10.7.5

Setting up API manufacturing unit of 500 TPA at Village- Bhagwanpur, Tehsil-Derabassi, District SAS Nagar (Punjab) by M/s United Biotech Pvt Ltd- Environmental Clearance

[IA/PB/IND2/83229/2018, IA-J-11011/159/2018-IA-II(I)]

The project proponent and their accredited consultant M/s Vardan Environet, made a detailed presentation on the salient features of the project.

10.7.5.1 The proposal was earlier considered by the EAC in its meeting held during 26-28 February, 2019 and 30-31 May, 2019. The Committee in its meeting held during 26-28 February, 2019, expressed serious concerns over the prevailing air quality, which would increase further considerably due to the proposed project. Further, the Committee in view of the public hearing report mentioning contamination of ground water due to various industrial activities in the area, desired for a detailed effluent treatment plan to achieve ZLD. The Committee also noted that many hazardous chemicals are proposed in the unit without any safety and risk assessment.

The EAC, in its meeting held during 30-31 May, 2019, observed that M/s Vardan Environet, one of the NABET accredited consultant, was engaged for preparation of the EIA/EMP report for the project. The EIA Coordinator was, however, not present during the meeting. The Consultant, presenting the proposal, was not having accreditation for the projects covered under item 5(f). The Committee also desired that the product list and capacity shall be uniform and consistent.

10.7.5.2 Additional information sought by the Committee and response by the project proponent is as under:

S.No.	Clarifications/inputs sought by the EAC	Reply by the PP
1	Considering critical air quality and ground water quality of the region, comments of SPCB to allow setting up such polluting units in the area.	As per letter dated 11.04.2019 from Chief Environmental Engineer, Punjab Pollution Control Board (PPCB) a)- The project site confirms to the citing guidelines as per the policy of Punjab Pollution Control Board (PPCB). b)- Punjab Pollution Control Board (PPCB) recommended for the grant of Environmental Clearance.
2	Details on proposed emissions control measures to achieve 99.99% efficiency.	No emissions from the proposed project shall be discharged in to atmosphere without its proper treatment. The company has also allotted a budget of approx. Rs. 216 lakhs for EMP & annually Rs. 60 lakhs will be spent as the maintenance cost.
3	Health & Risk assessment in in view of the sensitive chemical handling.	The risk has been evaluated for Setting up of API Manufacturing Unit by M/s. United Biotech Pvt. Ltd in PHAST & PHAST Risk. The Overall Maximum Risk contours generated for combined worst case (Catastrophic Rupture) scenario are in the range of 1×10^{-4} to 1×10^{-8} . The maximum risk to persons working in is 8.43 E-004 per year which is in the upper part of ALARP triangle.
4	Hazardous substance management plan in conformity with the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016.	All Hazardous waste shall be disposed to the vendor's authorized by SPCB/PPCB. Company identified the following spent solvent purchasers for disposal of spent solvent 1. C.R. Chemicals Rohani Delhi. 2. Salasar Chemicals Sultaripur road Delhi. 3. Star paints and industries Meerut (UP) 4. Avad Refinery Pvt Ltd kavinagar Ghaziabad
5	Revised water balance with the proposed reduction in fresh water requirement.	Revised water balance with has been worked out with the reduction of 30KLD of fresh water.
6	Detailed Effluent treatment plan and commitment to achieve zero liquid discharge system.	Company is committed to achieve the ZLD and plan is submitted.

7	Response and commitment on the issues raised during public hearing	Three points were raised during the public hearing there are- Pollution Employment Marriage of poor girls of local community. Details are submitted.
8	Plan for Corporate Environment Responsibility.	Company shall spend total of Rs. 2 crore under the CER as per CER notification 2018 The CER budget shall be utilized for providing the following facilities in the area- 1. Drinking water facility 2. Health Care Facility 3. Education development 4. Infrastructure development 5. Employment Opportunity 6. Sanitation & Hygiene Facility 7. Community development 8. Marriage of poor girls of the community

10.7.5.3 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up APIs manufacturing unit of capacity 500 TPA by M/s United Biotech Pvt Ltd in a total area of 44000 sqm located at Village Bhagwanpur, Tehsil Derabassi, District SAS Nagar (Punjab).

The details of products and capacity as under:

S.No	Product Category	Quantity (TPA)
1	Oncology API	43.555
2	Generals	28.459
3	Penicillin API	300
4	Penems API	26.700
5	Macrolide	36.450
6	Cephalosporin API	44
7	Hormones	20.281
	Total	499.445
Total Capacity (Approx.) – 500 TPA		

Product categories quantity will be customized as per market demand but total capacity of the plant will be not more than 500 TPA. Break up of product categories is given below:

Break up of product categories		
S.No	Name of the product	Quantity (Tonne/Annum)
ANTICANCER		
1.	Imatinib base	2
2.	Thalidomide base	1
3.	Vinblastin base	0.3

4.	Vincristine	0.15
5.	Mitomycin C	0.015
6	Melphalan hydrochloride	0.05
7	Irinotecan hydrochloride	0.025
8	Paclitaxel	0.15
9	Docetaxel	0.1
10	Pemetrexed sodium	0.05
11	Letrozole	0.05
12	Gefitinib	0.5
13	Topotecan hydrochloride	0.01
14	Temozolomide	0.2
15	Doxorubicin	0.4
16	Daunorubicin	0.4
17	Epirubicin	0.25
18	Methotrexate	0.4
19	Aprepitant	0.1
20	Bicalutamide	0.1
21	Bortezomib	0.015
22	Capecitabine	10
23	Carboplatin	0.5
24	Cisplatin	0.4
25	Dacarbazine	0.2
26	Estrarnustine	0.05
27	Bendamustine	0.01
28	Fludarabine Phosphate	0.01
29	Gemcitabine Hydrochloride	0.5
30	Lapatinib	0.2
31	Lenalidomide	0.1
32	Lomustine	0.1
33	Oxaliplatin	0.05
34	Procarbazine	2
35	Zoledronic Acid	0.05
36	Cyclophosphamide	2
37	Ifosfamide	4
38	Chlorombucil	0.01
39	Busulfan	0.005
40	6-Mercapeopurine	1
41	Amifostine	0.2
42	Cytosine Arabinoside	0.2
43	Pamidronate	0.05
44	Etoposide	0.5
45	Idarubicin	0.01
46	Dactinomycin	0.005
47	Bleomycin	0.01
48	L-Asparaginase	0.02
49	Leucovorin Ca	1
50	Polanestron	0.01
51	Tamoxifen citrate	9.9
52	Megastrol acetate	3
53	Thioguanine	0.02
54	Abiratenone	0.02

55	Mitoxantrone	0.02
56	Anstrazole	0.02
57	Sunitinib	0.2
58	Dasatinib	0.2
59	Vinorelbine	0.01
60	Sevelamer	0.5
61	Exemestane	0.2
62	Polanestron	0.01
Total (Oncology API)		43.555 TONNE
General		
1	Azathioprine	2
2	Cyclosporine	1
3	Mycophenolate	3
4	Tacrolimus	0.2
5	Sirolimus	0.01
6	Desferriotamine	0.1
7	Dimercaprol	0.002
8	Pralidoxime chloride	0.1
9	Naloxone	0.002
10	Deferasirox	0.2
11	Metadoxime	0.2
12	Citicoline	2.5
13	Propofol	0.5
14	Midazolam	0.3
15	SuccinylCholine Chloride	0.3
16	Isoflurane	0.3
17	Vecuronium Bromide	0.3
18	Ketamine	0.5
19	Thiopintone sodium	2
20	Pancuronium	0.24
21	Fentanyl	0.05
22	Terlipressin	0.05
23	Dopamine	0.5
24	Eptifibatide	0.1
25	Tirofiban	0.05
26	Enoxaparine	0.4
27	Heparine	2
28	Protamine	0.6
29	Aprotamine	0.05
30	Alprostadil	0.005
31	Sodium antimony gluconate	0.2
32	Dobutamine	0.5
33	Capreomycin	1
34	Cycloserine	1
35	Ethionamide	0.5
36	Amikacin	2
37	Tobramycin	1
38	Netlimicin	1
39	Tigecycline	0.5
40	Amphotericin B	0.5
41	Voriconazole	1

42	Caspofungin	0.1
43	Ganciclovir	0.6
44	Valganciclovir	0.5
45	Ribavoroin	0.5
Total (Generals)		28.459 TONNE
PENICILLIN		
1	Piperacillin	60
2	Tazobactum	20
3	Ticarcilline	75
4	Sulbactum	75
5	Clavulanate	20
6	Amoxicilline	50
Total (Penicillin API)		300 TONNE
Penems		
1	Meropenemtrihydrate	18
2	Feropenem	0.5
3	Ertapenem	2
4	Doripenem	0.2
5	Imipenem	3
6	Cilastatin	3
Total (Penems API)		26.700 TONNE
Macrolides		
1	Vancomycin	4
2	Teicoplanin	2
3	Lincomycin	2
4	Clindamycin	10
5	Clarithromycin	10
6	Aztreonam	5
7	Colistimethate	3.3
8	Polymin B	0.15
Total (Macrolides)		36.450 TONNE
Cephalosporin		
1	CefeximeTrihydrate	4
2	Ceftazidime	2
3	Cefotaxime	5
4	Cefepime	2
5	Cefoperazone	2
6	Cefpirome	2
7	Cefuroxime	10
8	Ceftriaxone sodium	10
9	Cefazolin	5
10	Ceftizoxime	2
Total (Cephalosporin API)		44 TONNE
HARMONES		
1	HCG	0.003
2	Desmopressin	0.003

3	FSH	0.0005
4	HMG	0.0005
5	Vasopressin	0.003
6	Octreotide	0.003
7	Somatostatin	0.003
8	Methyl prednisolone	1.01
9	Milrinone lactate	0.05
10	Noradrenaline	0.2
11	Salmon calcitonin	0.005
12	Hydrocortisone	5
13	L-Ornithine L-Asparate	12
14	Ca- polysterinesulphonate	2
Total (Harmones)		20.281 TONNE

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

Standard ToR for the project was granted on 1st June 2018. Public hearing was conducted by the State Pollution Control Board on 17th September, 2018. The main issues raised during public hearing are related to water pollution and employment.

Total land area available for the project is 44000 sqm (4.4 ha). Industry will develop greenbelt in an area of 14520 sqm (1.452 ha) covering 33 % of total project area. The estimated project cost is Rs.100 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.2.15 crores and the recurring cost (operation and maintenance) will be about Rs 60 Lakhs per annum. Total employment opportunity will be for 150 persons directly and 350 persons indirectly.

There are no National parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km from the project site. Ghaggar river is flowing at a distance of 6 km in North-West direction.

Total water requirement is estimated to be 500 cum/day, which includes fresh water requirement of 200 cum/day, proposed to be met from Borewell. Application in this regard has been submitted with CGWA.

Industrial effluent of 300 cum/day will be treated through ETP comprising of primary treatment, Multi effect Evaporator, Biological treatment, Tertiary Treatment, Reverse Osmosis and permeate will be reused in cooling tower. Unit will install STP of 30 cum/day capacity for treatment of domestic sewage. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Total power requirement will be 2000 KVA which will be sourced from the Punjab State Power Corporation Limited. Four DG sets of 500 KVA each will be setup for power back up. Stack (height 5m above the roof level of D.G. Set) will be provided as per CPCB norms to the proposed DG sets.

Three briquette fired boilers of 5 TPH capacity each will be installed in the proposed unit. Multi cyclone separator/ bag filter with a stack height of 30 m will be installed for controlling the particulate emissions within the statutory limit.

Ambient air quality monitoring was carried out at 8 locations during 1st March, 2018 to 31st May, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (78.1 - 97.2 µg/m³), PM2.5 (37.5 - 57.1 µg/m³), SO₂ (5.2 - 13.4 µg/m³) and NO₂ (16.1 - 31.5 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project with respect to PM10, SO_x and NO_x, 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. Issues raised during the public hearing has been properly addressed in the EIA/EMP report. Additional information submitted by the project has been found to be in order.

10.7.5.4 *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 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 Pharmaceuticals Industry (Bulk Drugs) 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 200 cum/day, proposed 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 (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
 - (a) *Metering and control of quantities of active ingredients to minimize waste.*
 - (b) *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
 - (c) *Use of automated filling to minimize spillage.*
 - (d) *Use of Close Feed system into batch reactors.*
 - (e) *Venting equipment through vapour recovery system.*
 - (f) *Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *At least 2.5% 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.10.7.6

Expansion in pesticide manufacturing plant At SP-9B, 9C, 9D, 9D1 and H1-39(O), RIICO Industrial Area, Khushkhera, Taluka-Tijara, Pin –301707, District –Alwar (Rajasthan) by M/s HPM Chemicals and Fertilizers Limited - For reconsideration of Environmental Clearance

[IA/RJ/IND2/89499/2009, J-11011/459/2009-IA-II (I)]

The project proponent has informed their inability to attend the meeting and requested for consideration in the next EAC meeting. Accordingly, the proposal was not considered.

10.8 Amendment in Environmental Clearance

Agenda No.10.8.1

Pesticide and Intermediates& Synthetic Organic Dyes Manufacturing Unit at Z-31 &32,SEZ-Dahej, Village Dahej, Tehsil Vagara, District Bharuch (Gujarat) by M/s MeghmaniChemtech Ltd- For extension of validity of EC

[IA/GJ/IND2/108795/2019, J-11011/433/2010 - IA II (I)]

10.8.1.1 The Ministry has granted environmental clearance vide letter dated 12th September, 2012 in favour of M/s MeghmaniChemtech Ltd to the project for Pesticide and Intermediates (excluding formulation) & Synthetic Organic Dyes Manufacturing Unit at Z-31 &32,SEZ-Dahej, Village Dahej, Tehsil Vagara, District Bharuch (Gujarat).The project proponent has requested for extension of the said EC for a period of three years and transfer of the EC in favour of M/s Meghmani Organics Limited (Unit 8).

10.8.1.2*The EAC, after deliberations recommended for extension of validity of the EC dated 12th September, 2012 for a period of three years i.e. till 12th September, 2022. The Committee, however, suggested for first transfer of the EC in favour of M/s Meghmani Organics Limited.*

Agenda No.10.8.2

Expansion of Pesticide Manufacturing Plant by M/s Intech Organics Limited at Khasra No.143, Village Biratiya Kalan, Tehsil Raipur, District Pali (Rajasthan)- Amendment in EC

[IA/RJ/IND2/108423/2019, J-11011/327/2016-IA II (I)]

The project proponent has informed their inability to attend the meeting and requested for consideration in the next EAC meeting. Accordingly, the proposal was not considered.

Agenda No.10.8.3

Expansion of Active Pharmaceuticals Ingredients and Intermediates manufacturing unit by M/s Intas Pharmaceuticals Ltd- Amendment in EC

[IA/GJ/IND2/109732/2019, J-11011/583/2017-IA II (I)]

10.8.3.1 The proposal is for amendment in the environmental clearance granted by the Ministry vide dated 26th February 2019 in favour of M/s Intas Pharmaceuticals Limited to the project for Expansion of Active Pharmaceutical Ingredients (APIs) and Intermediates manufacturing unit from from 241 TPM to 287.77 TPM located at Survey No. 44/B, Village Naldhari & Survey No. 130, Village Valia and Plot No.7/2 Valia Industrial Estate of GIDC, Taluka Valia, District Bharuch (Gujarat).

10.8.3.2 The project proponent has requested for amendment in EC with the details as under:

S. No.	Para of EC issued by MoEF&CC	Details as per The EC	To be revised/ read as	Justification/ reasons
1.	Condition No. 2 of Page No. 1 of EC issued by	The Ministry of Environment, Forest and	The Ministry of Environment, Forest and Climate Change	Incorporation of new purchased additional adjoining survey

S. No.	Para of EC issued by MoEF&CC	Details as per The EC	To be revised/ read as	Justification/ reasons
	MoEF&CC	Climate Change has examined the proposal for environmental clearance to the project for expansion active Pharmaceuticals Ingredients (APIs) and intermediate manufacturing unit from 241 TPM to 287.77 TPM by Intas Pharmaceuticals Ltd in an area of 61,666 sqm. at Survey No. 44/B, Village: Naldhari & Survey No. 130, Village: Valia and Plot No. 7/2 Valia Industrial estate of GIDC, Taluka: Valia, District: Bharuch (Gujarat)	has examined the proposal for environmental clearance to the project for expansion active Pharmaceuticals Ingredients (APIs) and intermediate manufacturing unit from 241 TPM to 287.77 TPM by Intas Pharmaceuticals Ltd in an area of 123566 Sqm (i.e. Existing land 61666 Sqm. + New purchased additional adjoining land 61900 Sqm. = 123566 Sqm.) at Plot No. 7/2 Valia Industrial estate of GIDC, Survey No. 44/B, Village: Naldhari & Survey No. 126, 127 & 130, Village: Valia, Taluka: Valia, District: Bharuch (Gujarat).	numbers i.e. Survey No. 126, & 127, Village: Valia, Taluka: Valia, District: Bharuch (Gujarat) of 61900 sqm. area. Total area after proposed change will be 123566 Sqm (i.e. Existing land 61666 Sqm. + New purchased additional adjoining land 61900 Sqm. = 123566 Sqm.)
2.	Condition No. 4 of Page No. 2 of approved EC	The existing land area is 28567 sqm. Additional land of 33099 sqm area shall be required for the proposed expansion. Greenbelt will be developed in an area of 20350 sqm, covering 33% of total project area. Total project cost is estimated to be Rs. 98.66 crores including existing investment of Rs.	The existing land area is 28567 sqm. Additional land of 94999 sqm area shall be required for the proposed expansion. Greenbelt will be developed in an area of 40777sqm, covering 33% of total project area. Total project cost is estimated to be Rs. 103.16 crores including existing investment of Rs. 28.66 crores. The capital cost	Change in Additional land to 94999 sqm due to addition of new survey numbers i.e. Survey No. 126, & 127, Village: Valia, Taluka: Valia, District: Bharuch (Gujarat) of 61900 sqm. area. Hence, greenbelt area will be increased from 20350 sqm to 40777 sqm. The additional capital cost for proposed land is 4.5 crores, thus, capital cost will be 98.66 crores + 4.5 crores = 103.16 crores.

S. No.	Para of EC issued by MoEF&CC	Details as per The EC	To be revised/ read as	Justification/ reasons
		28.66 crores. The capital cost earmarked for pollution control measures will be Rs. 5.85 crores and the recurring cost (O&M) shall be about Rs. 128 lakhs per annum.	earmarked for pollution control measures will be Rs. 5.85 crores and the recurring cost (O&M) shall be about Rs. 128 lakhs per annum.	
3.	Condition No. 10 of Page No. 3 of approved EC	Based on the proposal submitted by the project proponent and recommendations of EAC (Industry-2), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for Expansion of Active Pharmaceuticals Ingredients and Intermediates manufacturing unit from 241 TPM to 287.77 TPM by M/s. Intas Pharmaceuticals Ltd. at Survey No. 44/B, Village: Naldhari & Survey No. 130, Village: Valia and Plot No. 7/2 Valia Industrial estate of GIDC, Taluka: Valia, District: Bharuch (Gujarat), under the provision of EIA notification, 2006, subject to the compliance of	Based on the proposal submitted by the project proponent and recommendations of EAC (Industry-2), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for Expansion of Active Pharmaceuticals Ingredients and Intermediates manufacturing unit from 241 TPM to 287.77 TPM by M/s. Intas Pharmaceuticals Ltd. At Plot No. 7/2 Valia Industrial estate of GIDC, Survey No. 44/B, Village: Naldhari & Survey No. 126, 127 & 130, Village: Valia, Taluka: Valia, District: Bharuch (Gujarat), under the provision of EIA notification, 2006, subject to the compliance of terms & conditions as below -	Incorporation of new purchased additional adjoining survey numbers i.e. Survey No. 126, & 127, Village: Valia, Taluka: Valia, District: Bharuch (Gujarat) in addition to existing Plot No. 7/2 Valia Industrial estate of GIDC, Survey No. 44/B, Village: Naldhari & Survey No. 130, Village: Valia, Taluka: Valia, District: Bharuch (Gujarat)

S. No.	Para of EC issued by MoEF&CC	Details as per The EC	To be revised/ read as	Justification/ reasons
		terms & conditions as below -		

10.8.3.3 The EAC, after deliberations and in view of no polluting sources proposed in the additional area, recommended for amendment in EC dated 26th February 2019, as under:

- Addition of Survey Nos.126&127 in Village & Taluka Valia, District Bharuch (Gujarat).
- Total land area shall be 123566 sqm(Existing 61666 sqm + additional 61900 sqm). Greenbelt will be developed in an area of 40777sqm, covering 33% of total project area.
- Total project cost shall be Rs.103.16 crores.

Agenda No.10.8.4

Expansion of agrochemical & agrochemical intermediate by M/s Tagros Chemical India Ltd at Plot No.43/1, GIDC Dahej, Taluka Vagra, District Bharuch (Gujarat) - For amendment in EC

[IA/GJ/IND2/52237/2016, J-11011/122/2016- IA II(I)]

The project proponent has informed their inability to attend the meeting and requested for consideration in the next EAC meeting. Accordingly, the proposal was not considered.

10.9 Any other item with the permission of the Chairman

Agenda No.10.9.1

Development Drilling (4 Wells) under NELP-V Offshore BlockCB-OSN-2003/1, Ankleshwar Asset (Gujarat) - Environmental Clearance

[Proposal No. IA/GJ/IND2/60507/2016, F.No. J-11011/339/2016-IA.II (I)]

The project proponent and the accredited consultant M/s Global Management and Engineering Consultant International made a detailed presentation on the salient features of the project.

10.9.1.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for offshore oil/gas development by drilling of four wells under the NELP V Offshore BlockCB-OSN-2003/1 in an area of 6.4 ha located at Aliabet Field, Ankleshwar Asset (Gujarat) by M/sOil and Natural Gas Corporation Limited.

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 29th April, 2017. Public hearing for the proposed project has been exempted.

Land area available for the project is 6.4 ha. The estimated project cost is Rs. 156.40 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 1.17 crores and the Recurring cost (operation and maintenance) will be about Rs. 0.1 Crore per annum. The project will provide employment for 20 persons directly and 30 persons indirectly.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Narmada estuary is at a distance of 3.5 km in NW direction.

Total water requirement of 25 cum/day will be met from tankers supply. DG sets of 1250 kVA capacity will be used as standby during power failure. Air emissions from point sources will be mainly from diesel engines and power generators. To control SO₂ emissions HSD with low sulphur content will be used.

Ambient air quality monitoring was carried out at 8 locations during 1 April to 30 June and the baseline data indicates the ranges of concentrations as: PM₁₀ (98.8 µg/m³), PM_{2.5} (49.8 µg/m³), SO₂ (21.3 µg/m³) and NO₂ (29.0 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 98.9 µg/m³, 22.1 µg/m³ and 32.4 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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.

10.9.1.2 *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 Protected 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. Mobile ETP along with RO plant shall be installed to treat the waste water.*
- *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 16th November, 2009 for PM₁₀, PM_{2.5}, SO₂, NO_x, CO, CH₄, 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 CO₂ 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 25 cum/day proposed to be met tanker supply, and prior permission shall be obtained from the concerned regulatory authority.
- 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 H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S 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.
- On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.
- 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.
- Oil content in drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.
- Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness

shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

Agenda No.10.9.2

Onshore Oil and Gas Exploration in 12 ML Blocks of Western Onshore Basin, in District Mehsana (Gujarat) - Environmental Clearance

[Proposal No.IA/GJ/IND2/74678/2018, J-11011/158/2018- IA II (I)]

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

10.9.2.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for onshore oil & gas exploration by drilling 46 wells in 12 ML Blocks of Western Onshore Basin, District Mehsana (Gujarat) by M/s Oil and Natural Gas Corporation Limited.

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 1st June, 2018. Public Hearing for the project was conducted by the State Pollution Control Board on 6th June, 2019. The main issues raised during the public hearing are related to preventive measures to control pollution and employment generation.

The estimated land requirement is 110m x 110m for each exploratory well. The estimated project cost is Rs 460 crore. Total capital cost earmarked towards environmental pollution control measures is Rs 32.64 crores and the recurring cost (operation and maintenance) will be about Rs 5.86 crores per annum. About 30-40 persons will be working in shifts at site.

There are no national parks, wildlife sanctuaries, biosphere reserves, Tiger/Elephant reserves, wildlife's corridors etc. within 10 km.

Total water requirement is 25 cum/day which will be met from nearby ONGC source. Wastewater (drill cutting washing + rig washing+ cooling etc) shall be generated at an average rate of around 5 cum/day during the drilling operations from a single well. Waste water will be discharged in HDPE lined evaporation pit, available at site and will be solar dried. Drilling is a temporary activity lasting for 40-60 days.

Power requirement will be met through three DG sets of 1250 kVA capacity, Stack height will be provided as per CPCB norms to the proposed DG sets.

Ambient air quality monitoring was carried out at 11 locations during summer season (April to July) 2018 the baseline data indicates the average ranges of concentration of PM₁₀: (80.4 µg/m³ to 41.2 µg/m³), PM_{2.5}: (45.1 µg/m³ to 18.6 µg/m³), SO₂: (14.1 µg/m³ to 5.1 µg/m³) and NO_x: (24.6 µg/m³ to 5.7 µg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.33µg/m³, 1.87 µg/ m³, 5.55

$\mu\text{g}/\text{m}^3$ and $31.94 \mu\text{g}/\text{m}^3$ with respect to PM_{10} , $\text{P}_{2.5}$, SO_2 and NO_x . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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.

10.9.2.2 *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 Protected 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. Mobile ETP along with RO plant shall be installed to treat the waste water.*
- *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 16th November, 2009 for PM_{10} , $\text{PM}_{2.5}$, 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 25 cum/day. Prior permission shall be obtained from the concerned regulatory authority.*
- *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 H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S 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.*
- *On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.*
- *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.*
- *Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.*
- *Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.*

Agenda No.10.9.3

Exploratory Drilling of additional 10 wells in Onshore NELP-IV Block CYONN-2002/2, Cauvery Basin, Tamil Nadu located at Tamil Nadu in favour of M/s Oil and Natural Gas Corporation Limited (ONGCL) - Amendment in Environmental Clearance

[Proposal No. IA/TN/IND2/111762/2019, J-11011/28/2013-IA-II(I)]

10.9.3.1 The proposal is for amendment in environmental clearance granted by the Ministry vide letter dated 23rd July, 2014 to the project 'Exploratory Drilling of additional 10 wells in Onshore NELP-IV Block CYONN-2002/2' in Cauvery Basin (Tamil Nadu) in favour of M/s Oil and Natural Gas Corporation Limited (ONGCL).

10.9.3.2 The project proponent has requested for amendment in EC with the details as under:

Sl. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised / read as	Justification/ reasons
1.	Para 3	It is noted that proposal is for exploratory drilling of additional 10 wells of M/s ONGC, in Onshore NELP-IV Block CYONN-2002/2, Cauvery Basin, Tamil Nadu. The block was awarded to ONGC (60%) & BPCL (40%) with ONGC as operator under NELP-IV round in the year 2004. The total block area is 140 sq. km.	It is noted that proposal is for additionally setting up of Central Processing Facility (Isolated Storage) along with associated handling facilities(storage tanks for crude and effluent,gas compressors,separators &heater treaters,gas surgetank dehydration facility,utilities etc)of Oil & Gas at Madanam, District Nagapattinam (Tamil Nadu) and exploratory drilling of additional 10 wells of M/s ONGC, in Onshore NELP-IV Block CYONN- 2002/2, Cauvery Basin, Tamil Nadu. The block was awarded to ONGC (60%) & BPCL (40%) with ONGC as operator under NELP-IV round in the year 2004.	For Setting up of Central Processing Facility (Isolated Storage) along with associated handling facilities of Oil & Gas at Madanam, Nagapattinam District, Tamil Nadu by Oil And Natural Gas Corporation, Cauvery Asset for taking production of oil and gas from the wells for which Environmental Clearance is already available.

10.9.3.3 *The EAC, after deliberations, noted that the Ministry vide Notification S.O.1960(E) dated 13th June, 2019 has omitted entries relating to item 6(b) of the EIA Notification, 2006. Accordingly, the proposed central processing facility may not be covered under the ambit of the said Notification, and thus not requiring environmental clearance.*

Further, in case of proposed handling facilities associated with the said exploration project already having environmental clearance dated 23rd July, 2014, the same may be construed as part and parcel of the project and thus admissible without requiring any amendment therein.

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 Tudi Indrasen Reddy	Member
4.	Dr J S Sharma	Member
5.	Dr T K Joshi	Member
6.	Smt. Saloni Goel	
7.	Shri Ashok Agarwal	Member
8.	Shri Sanjay Bist	Member
9.	Shri S.K. Srivastava	Member Secretary