MINUTES OF THE 4th EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) MEETING HELD DURING 26-28 FEBRUARY 2019

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

Time: 10:30 AM

4.1 Opening Remarks by the Chairman

4.2 Confirmation of the minutes of the 2nd EAC meeting held during 29-31 January 2019 and 3rd meeting held during 11th February 2019 at Indira Paryavaran Bhawan, New Delhi.

The EAC, having taken note that no comments were offered on the minutes of its 2nd meeting held during 29-31 January, 2019 and 3rd meeting held during 11th February 2019 at New Delhi, confirmed the same.

Day One - 26th February, 2019

4.3 Environmental Clearance

Agenda No.4.3.1

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

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

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

4.3.1.1 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**

Details of products

S.N.	Product	Quantity/Annum
ANTICANCER		
1.	Imatinib base	2 TON
2.	Thalidomide base	1 TON
3.	Vinblastin base	300 KG
4.	Vincristine	150 KG
5.	Mitomycin C	15 KG
6	Melphalan hydrochloride	50 KG
7	Irinotecan hydrochloride	25 KG
8	Paclitaxel	200 KG
9	Docetaxel	100 KG
10	Pemetrexed sodium	50 KG
11	Letrozole	50 KG
12	Gefitinib	500 KG
13	Topotecan hydrochloride	10 KG
14	Temozolomide	200 KG
15	Doxorubicin	400 KG
16	Daunorubicin	400 KG
17	Epirubicin	150 KG
18	Methotrexate	400 KG
19	Aprepitant	100 KG
20	Bicalutamide	100 KG
21	Bortezomib	15 KG
22	Capecitabine	10 TON
23	Carboplatin	500 KG
24	Cisplatin	400 KG
25	Dacarbazine	200 KG
26	Estrarnustine	50 KG
27	Bendamustine	10 KG
28	Fludarabine Phosphate	10 KG
29	Gemcitabine Hydrochloride	500 KG
30	Lapatinib	200 KG
31	Lenalidomide	100 KG
32	Lomustine	100 KG
33	Oxaliplatin	50 KG
34	Procarbazine	2 TON
35	Zoledronic Acid	50 KG
36	Cyclophosphamide	2 TON
37	Ifosfamide	4 TON
38	Chlorombucil	10 KG
39	Busulfan	5 KG
40	6-Mercapeopurine	1 TON
41	Amifostine	200 KG
42	Cytosine Arabinoside	200 KG
43	Pamidronate	50 KG

44	Etoposide	500 KG
45	Idarubicin	10 KG
46	Dactinomycin	5 KG
47	Bleomycin	10 KG
48	L-Asparaginase	20 KG
49	Leucovorin Ca	1000 KG
50	Polanestron	10 KG
51	Tamoxifen citrate	10 TON
52	Megastrol acetate	3 TON
53	Thioguanine	20 KG
54	Abiraterone	20 KG
55	Mitoxantrone	20 KG
56	Anstrazole	20 KG
57	Sunitinib	200 KG
58	Dasatinib	200 KG
59	Vinorlbine	10 KG
60	Sevelamer	500 KG
61	Exemestane	200 KG
62	Polanestron	10 kg
Total		**43.555 TON**
General		
1	Azathioprine	2 TON
2	Cyclosporine	1 TON
3	Mycophenolate	3 TON
4	Tacrolimus	100 KG
5	Sirolimus	10 KG
6	Deferoxamine	100 KG
7	Dimercaprol	2 KG
8	Pralidoxime chloride	50 KG
9	Naloxone	2 KG
10	Deferasirox	100 KG
11	Metadoxine	100 KG
12	Citicoline	2500 KG
13	Propofol	500 KG
14	Midazolam	300 KG
15	Succinyl Choline Chloride	300 KG
16	Isoflurane	300 KG
17	Vecuronium Bromide	250 KG
18	Ketamine	500 KG
19	Thiopintone sodium	2 TON
20	Pancuronium	250 KG
21	Fentanyl	50 KG
22	Terlipressin	50 KG
23	Dopamine	500 KG
24	Eptifibatide	90 KG
25	Tirofiban	50 KG
26	Enoxaparine	400 KG
27	Heparine	2000 KG
28	Protamine	500 KG
29	Protamine	50 KG

30	Alprostadil	5 KG
31	Sodium antimony gluconate	200 KG
32	Dobutamine	500 KG
33	Capreomycin	1000 KG
34	Cycloserine	1 TON
35	Ethionamide	500 KG
36	Amikacin	2 TON
37	Tobramycin	1 TON
38	Netlimicin	1 TON
39	Tigecycline	500 KG
40	Amphotericin B	500 KG
41	Voriconazole	1 TON
42	Caspofungin	100 KG
43	Ganciclovir	500 KG
44	Valganciclovir	500 KG
45	Ribavirin	500 KG
Total		**28.459 Ton**
Penicillin		
1	Piperacillin	60 TON
2	Tazobactum	20 TON
3	Ticarcilline	75 TON
4	Sulbactum	75 TON
5	Clavulanate	20 TON
6	Amoxycilline	50 TON
Total		**300 TON**
Penems		
1	Meropenem	18 TON
2	Feropenem	500 KG
3	Ertapenem	2 TON
4	Doripenem	200 KG
5	Imipenem	3 TON
6	Cilastatin	3 TON
Total		**26.700 TON**
Macrolides		
1	Vancomycin	4 TON
2	Teicoplanin	2 TON
3	Lincomycin	2 TON
4	Clindamycin	10 TON
5	Clarithromycin	10 TON
6	Aztreonam	5 TON
7	Colistimethate	3.3 TON
8	Polymyxin B	150 KG
Total		**36.450 TON**
Cephalosporin		
1	Cefexime Trihydrate	4 TON
2	Ceftazidime	2 TON
3	Cefotaxime	5 TON
4	Cefepime	2 TON
5	Cefoperazone	2 TON
6	Cefpirome	2 TON

7	Cefuroxime	10 TON
8	Ceftriaxone sodium	10 TON
9	Cefazolin	5 TON
10	Ceftizoxime	2 TON
Total		**44 TON**
HARMONES		
1	HCG(Human Chorionic Gonadotropin)	3 KG
2	Desmopressin	4 KG
3	Follicle Stimulating Hormone (**FSH**)	500 G
4	human menopausal gonadotropin (HMG)	500 G
5	Vasopressin	3 KG
6	Octreotide	3 KG
7	Somatostatin	3 KG
8	Methyl prednisolone	1010 KG
9	Milrinone lactate	50 KG
10	Noradrenaline	200 KG
11	Salmon calcitonin	5 KG
12	Hydrocortisone	5.0 ton
13	L-Ornithine L-Aspartate)	12 Ton
14	Calcium Polystyrene Sulfonate	2 Ton
Total		**20.281 TON**

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification under category 'A' and requires appraisal at central level by sectoral Expert Appraisal Committee 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 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 distance 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 530 cum/day, which includes fresh water requirement of 230 cum/day, proposed to be met from Borewell. Application in this regard has been submitted with CGWA.

Industrial effluent of 350 cum/day will be treated through ETP comprising of primary treatment, Multi effect Evaporator, Biological treatment, Tertiary Treatment, Reverse Osmosis and the

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 are reported to be 97.35 µg/m3, 13.68 µg/m3 and 31.52 µg/m3 with respect to PM10, SOx and NOx, which are not within the National Ambient Air Quality Standards.

4.3.1.2 *The EAC, during deliberations, 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 Committee, after detailed deliberations, insisted for clarifications/inputs in respect of the following:

- *Considering critical air quality and ground water quality of the region, comments of SPCB to allow setting up such polluting units in the area.*
- *Details on proposed emissions control measures to achieve 99.99% efficiency.*
- *Health & Risk assessment in in view of the sensitive chemical handling.*
- *Hazardous substance management plan in conformity with the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016.*
- *Revised water balance with the proposed reduction in fresh water requirement.*
- *Detailed Effluent treatment plan and commitment to achieve zero liquid discharge system*
- *Response and commitment on the issues raised during public hearing*
- *Plan for Corporate Environment Responsibility.*

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

Agenda No.4.3.2

Expansion of Resin Manufacturing Unit (Phenol Formaldehyde Resin: 500 MT/month, Melamine Formaldehyde Resin: 500 MT/month, Urea Formaldehyde Resin: 500 MT/month) at Survey No. 132/P1, N.H.-8A, Village Bahadurgadh, Near Sokhda Bus Stop, Taluka & District Morbi (Gujarat) by M/s Rebecca Laminates - For Environmental Clearance

[IA/GJ/IND2/78761/2017, IA-J-11011/108/2017-IA-II(I)]

The project proponent and accredited consultant M/s T R Associates, made a detailed presentation on the salient features of the project.

4.3.2.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of resin manufacturing unit from 125 TPM to 1500 TPM by M/s Rebecca Laminates in a total area of 14569 sqm located at Survey No.132/P1, N.H-8A, Village Bahadurgadh, Near Sokhda Bus Stop, Taluka & District Morbi (Gujarat).

The details of products are as under:

S. No.	Product	Quantity (MT/Month)		
		Existing	Proposed	Total
1	Phenol Formaldehyde Resin	87.5	412.5	500
2	Melamine Formaldehyde Resin	37.5	462.5	500
3	Urea Formaldehyde Resin	00	500	500

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

ToR for the project was granted on 10th July, 2017. Public hearing was conducted by the State Pollution Control Board on 26th July, 2018. The main issues raised during the public hearing are related to air pollution and local employment.

Existing land area is 14,569 sqm, no additional land will be required for the proposed expansion. Industry has developed greenbelt in an area of 4,810 sqm covering 33%of total project area. The estimated project cost is Rs 7.0 crore including existing investment of Rs 6.19 crore. Total capital cost earmarked towards environmental pollution control measures is Rs46 lakh and the recurring cost (operation and maintenance) will be about Rs 7.2 lakh per annum. Employment will be provided to 70 persons directly after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wild life Corridors etc. within 10 km distance from the project site. Machhu river is flowing at a distance of 4.8km in WNW direction.

Total water requirement is estimated to be 53.5cum/day, of which fresh water requirement of 42.3cum/day will be met from Narmada water through Gujarat Water Infrastructure Limited.

Industrial effluent of 6.1 cum/day will be treated through Effluent Treatment Plant (having evaporator followed by condenser) and reused in the process. Domestic effluent of 6 cum/day will be treated in Sewage Treatment Plant and treated sewage will be reused in gardening. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement for the expansion project will be 250 kVA including existing 225 KVA, proposed to be met from Paschim Gujarat Vij Company Limited. Existing unit has one DG set of 250 KVA capacity.

Existing unit has coal/lignite fired 4 TPH Steam Boiler and 10 Lakh Kcal/hr Thermic Fluid Heater. Additionally, briquettes/lignite fired 4 TPH Steam Boiler will be installed. Cyclone separator followed by Bag Filter with a stack height of 40 m will be installed for controlling the particulate emissions within the statutory limit.

Ambient air quality monitoring was carried out at 8 locations during March 2017 to June 2017 and the baseline data indicates the ranges of concentrations as: PM10 (40.12 to 88.47 µg/m3), PM2.5 (20.54 to 59.44 µg/m3), SO2 (20.65 to 64.68 µg/m3) and NO2 (19.60 to 70.93 µg/m3) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 11.3 µg/m3, 6.04 µg/m3 and 9.903 µg/m3with respect to PM10, SO2 and NO2. The resultant concentrations are within the National Ambient Air Quality Standards.

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

Earlier, SEIAA has issued EC vide letter no. SEIAA/GUJ/EC/5(f)/3075/2015 dated 21st August, 2015 for the existing resin manufacturing unit by M/s Rebecca Laminates. The monitoring report on compliance status of EC conditions (site visit conducted on 15th June, 2018) was forwarded by the Ministry's Regional Office at Bhopal.

4.3.2.2 *The EAC, during deliberations, noted about the litigation pending in District Session Court, Morbi (Gujarat), based on the report of Gujarat Pollution Control Board (GPCB) for operation of resin manufacturing plant @ 125 TPM without obtaining the prior environmental clearance and thus violation of the EIA Notification, 2006. Further, GPCB has issued direction under Section 33 (A) of the Water Act, 1974, and also show cause notices under the Air Act, 1981 and the Water Act, 1974 for not complying with the statutory provisions.*

Based on the information made available, the Committee asked the project proponent to submit the proposal for consideration as per the provisions of Ministry's Notification S.O.804 (E) dated 14th March, 2017, as applicable.

Agenda No.4.3.3

Expansion of DAP and Proposal of Coal Handling Plant, Ammonia, Ammonium Nitrate, Urea, GSSP, Ammonium Fluoride, Nitric Acid at/Po PPL Township District Jagatsinghpur (Odisha) by M/s Paradeep Phosphate Limited- For Environmental Clearance

[IA/OR/IND2/77891/2018, J-11011/370/2009-IA-II(I)]

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

4.3.3.1 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion of fertilizer plant by M/s Paradeep Phosphates Limited in an area of 2282.4 acres located at PPL Township, District Jagatsinghpur (Odisha).

The details of products and capacity are as under:

S.No.	Product	Existing	Proposed	Total

1	SAP	0.792MMTPA	-	0.792 MMTPA
2	PAP	0.42 MMTPA	-	0.42 MMTPA
3	DAP	1.5 MMTPA	0.4MMTPA (capacity expansion of DAP 4 trains)	1.9 MMTPA
4	Coal Handling Plant	-	7 MMTPA	7 MMTPA
5	Ammonia	-	2.178 MMTPA	2.178MMTPA
6	Urea		1.3 MMTPA	1.3 MMTPA
7	Ammonium Nitrate	-	0.35 MTPD	0.35 MTPD
8	Nitric Acid	-	0.33 MMTPA (0.05 MMTPA Conc. Nit. Acid)	0.33 MMTPA (0.05 MMTPA Conc. Nit. Acid)
9	GSSP	-	0.5 MTPD	0.5 MTPD
10	Aluminium Fluoride	-	9500 MTPA	9500 MTPA

The project/activity is covered under category A of item 5(a) 'Chemical Fertilizers' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at central level by the sectoral Expert Appraisal Committee in the Ministry.

Standard ToR for the project was granted on 1st June, 2018. Public hearing for the proposed project has been conducted by the State Pollution Control Board on 19th May 2017. The main issues raised during the public hearing are related to pollution from the proposed plant and employment to local people.

The existing land area is 2282.4 acres, no additional land is required for the proposed project. Industry has developed greenbelt in an area of 854 acres covering 37% of total project area. The estimated project cost is Rs 9459 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 473 crores and the recurring cost (operation and maintenance) will be about Rs 100 crores per annum. Total employment opportunity will be for 1017 persons directly and 50 persons indirectly after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Mahanadi river is flowing at a distance of 5.02 km in North East.

Total estimated water requirement is 1800.43 cum/hr, which includes fresh water requirement of 1064 cum/hr, proposed to be met from Taladanda canal.

Ambient air quality monitoring was carried out at 8 locations during March-May, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (55-105 µg/m3), PM2.5 (22-49 µg/m3), SO2 (4.8-20.2 µg/m3) and NO2 (9.5- 38 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 12.18 µg/m3, 10.96 µg/m3 and 8.94 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are found to be exceeding National Ambient Air Quality Standards.

Earlier, the Ministry had issued EC on 5th October, 2010 for 'Expansion of Fertilizer Plant by retrofitting and de-bottlenecking in existing plant for manufacturing of sulphuric acid (2000 TPD to 2400 TPD) and DAP (2400 TPD to 5000 TPD) in favour of M/s Paradeep Phosphate Limited.

Consent to Operate for the present industrial operations issued by Odisha PCB vide letter dated 31st March, 2017 is valid up to 31st March, 2022.

4.3.3.2 *The EAC, during deliberations, expressed serious concerns over the prevailing air quality not meeting the NAAQ standards, which would increase further considerably due to the proposed expansion. Further, fresh water requirement on the higher side, proper effluent management plan and water balance scheme not presented, the Committee desired for an addendum to the EIA/EMP report, with detailed information/inputs on the following:*

- *Considering air quality of the region, comments of SPCB to allow the proposed expansion of fertilizer plant.*
- *Additional one month baseline data for the air quality.*
- *Complete details of different existing and the proposed products.*
- *Compliance status of the conditions in the EC dated 5th October, 2010 forwarded by the concerned Regional Office of the Ministry.*
- *Revised water balance plan with reduction in fresh water requirement by 20%, and the detailed effluent management plan to achieve ZLD.*
- *Emission management plan and details of pollution control measures to achieve 99.9% emissions control.*
- *Safety and risk assessment with advanced models.*
- *Details of Corporate Environment Responsibility during last 5 years and the proposal to cater to the proposed expansion.*

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

Agenda No.4.3.4

Augmentation in LPG Bulk Storage capacity in the LPG Bottling Plant at Village Raipur Sahoran, Mehatpur, District Una (HP) by M/s Indian Oil Corporation Ltd - For Environmental Clearance

[IA/HP/IND2/80411/2017, IA-J11011/ 80/2017-IA-II(I)]

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

4.3.4.1 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for augmentation of LPG storage capacity from 900 MT to 2100 MT at the LPG Bottling Plant by M/s Indian Oil Corporation Ltd in a total area of 131765 sqm located at Village Raipur Sahoran, District Una (Himachal Pradesh).

Details of existing and proposed storage facilities are as under:

S. No.	Product	Existing	Proposed	Total
1	LPG	Mounded Bullets 3 x 300 MT = 900 MT	Mounded Bullets 2x 600MT= 1200 MT	2100 MT

The project/activity is covered under category B of item 6(b) 'Isolated storage & handling of hazardous chemicals (As per threshold planning quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules1989 amended 2000)' of schedule to the Environment Impact Assessment (EIA) Notification, 2006. However, due to applicability of general condition (interstate boundary of Punjab at 0.3 km), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

ToR for the project was granted on 31st May, 2017 by the Ministry. Public hearing for the proposed project has been conducted by the State Pollution Control Board on 30th January, 2018.The main issues raised during the public hearing are related to employment and village development etc.

Existing land area is 131765 sqm, no additional land will be acquired for the proposed expansion. Industry has developed greenbelt in an area of 43500 sqm, covering 33 % of the total project area. The estimated project cost is Rs.21.70 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 300 lakhs and the recurring cost (operation and maintenance) will be about Rs.21 lakhs per annum. Unit is employing 22 persons directly and 62 persons indirectly and no additional manpower will be required 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. Satluj Lake, Nangal Dam is flowing at a distance of 3.5 km and 10 km respectively in East direction.

Total fresh water requirement is 15 cum/day, proposed to be met from existing bore well. Effluent of 3 cum/day generated from washing of cylinder will be treated through ETP, and domestic sewage of 4.5 cum/day will be treated in STP and treated water will be used for plantation. 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 450 kW, which will be met from Himachal Pradesh State Electricity Board. Existing unit has 3 DG sets of: 1x250 kVA, 1x400 kVA and 1x500 kVA capacity and are used as standby during power failure. Stack height has been provided as per CPCB norms.

As the plant is providing only LPG storage, bottling and distribution services, there is no generation of process emissions.

Ambient air quality monitoring was carried out at 10 locations during January 2017 to March 2017 and the baseline data indicates the ranges of concentrations as: PM10 (79 -96 µg/m3), PM2.5 (18-48 µg/m3), SO2 (2-8 µg/m3) and NO2 (3-10 µg/m3). There will not be any addition of stack and addition of pollutants in air and hence air quality modelling was not done. The AAQ parameters are within the National Ambient Air Quality Standards.

Existing LPG storage facilities were established before the inception of the EIA notification, 2006, and thus requiring no prior environmental clearance for the same.

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

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

Consent to Operate for the present capacity has been obtained from the State PCB, which is presently valid up to 31st March, 2020.

PESO has given approval for the site and layout plan of storage facilities (Petroleum storage Class A installation) vide letter dated 29th September, 2003 for the existing unit, which is presently valid till 31st March, 2019 and the mandatory licence in Form XV as per the Petroleum Rules, 2002.

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

- *Prior approval shall be obtained from the Petroleum & Explosives Safety Organization (PESO) for the site and layout plan submitted to this Ministry along with the proposal for EC. In case of any change therein post PESO approval, the proposal shall require fresh appraisal by the sectoral EAC.*
- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Total fresh water requirement shall not exceed* 15 *cum/day to be met from ground water through Bore well. Prior permission shall be obtained from the concerned regulatory authority/CGWA.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *During construction phase, air pollution and the solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016.*
- *The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines and in consultation with the State Forest Department.*
- *All the commitments made to the public during public hearing/consultation shall be satisfactorily implemented.*
- *At least 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.*
- *Regular monitoring of VOC and HC in the work zone area in the plant premises should be carried out and data to be submitted to Ministry's Regional Office, CPCB and State Pollution Control Board. Quarterly monitoring for fugitive emissions should be carried out as per the guidelines of CPCB and reports submitted to Ministry's Regional Office.*
- *Necessary approvals from Chief Controller of Explosives, as applicable, shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans shall be prepared and implemented.*
- *OISD standards for Liquefied Petroleum Gas (LPG) Installations (OISD-STD-144) and Design and Safety Requirements For Liquefied Petroleum Gas Mounded Storage Facility (OISD-STD-150) shall be followed.*
- *Emergency Response Plan should be based on the guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once a month.*

- *The Petroleum and Natural Gas Regulatory Board (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG) Regulations, 2018, shall be followed, as applicable.*
- *Additional safety measures should be taken by using remote operated shut off valve, Double Block &Bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.*
- *Occupational health surveillance of worker should be done on a regular basis and records maintained as per the Factory Act.*
- *Road tankers should be equipped to the standard specified in national regulations reputable code. Vehicles should be mobilized during transfer operations and equipped to prevent untimely movement. Loading/unloading bays should be protected against impact. Fire-resistant coatings shall be provided to tanks/vessels.*
- *High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *Water sprinkling shall be undertaken on regular basis to control the polluting particles.*
- *Approach road shall be made pucca to minimize generation of suspended dust.*
- *The energy sources for lighting purposes shall preferably be LED based.*
- *Emergency preparedness plan based on the Hazard identification and Risk Assessment and guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once in a month. onsite and off-site Disaster Management Plan shall be implemented.*
- *Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.*
- *High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.*
- *Unit should carry out safety audit and report submitted to the Regional Office. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.*
- *Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.*

Agenda No.4.3.5

Setting up Pesticides & Pesticide specific Intermediates manufacturing plant @ 4850 TPM at Plot No. C1/101 & 102, Saykha Industrial Estate, Taluka Vagra, District Bharuch (Gujarat) by M/s Nandolia Organic Chemicals Pvt Ltd - For Environmental Clearance

[IA/GJ/IND2/74191/2018, IA-J-11011/136/2018-IA-II(I)]

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

4.3.5.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up pesticides & pesticide specific intermediates manufacturing plant of capacity 4850 TPM by M/s Nandolia Organic

Chemical Pvt Ltd in an area of 19500 sqm located at Plot No. C1/101 & 102, Saykha Industrial Estate, Taluka Vagra, District Bharuch (Gujarat).

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

No	Product	Capacity (TPM)	CAS No.	LD50 (mg/Kg)
	GROUP I	1500		
1	Mancozeb		07-01-18	5000
2	Propineb		12071-83-9	8500
3	Maneb		12427-38-2	3000
4	Zineb		12122-67-7	1850
5	Thiram		137-26-8	1350
6	Ziram		137-30-4	1400
	GROUP II	150		
7	Hexaconazole		79983-71-4	6071
8	Tebuconazole		107534-96-3	1700
9	Difenoconazole		119446-68-3	1453
10	Propiconazole		60207-90-1	1517
11	Tricyclazole		41814-78-2	2000
12	Metalaxyl		57837-19-1	3100
13	Carbendazim		10605-21-7	6400
	GROUP III	200		
14	Metribuzin		21087-64-9	1100
15	Pendimethalin		40487-42-1	1050
16	Atrazine		1912-24-9	2200
17	Clodinafop		105512-06-9	1392
18	Pretilachlor		51218-49-6	2200
	GROUP IV	100		
19	Glufosinate		77182-82-2	1620
	GROUP V	500		
20	Acephate		30560-19-1	700
21	Methamidophos		10265-92-6	7.5
22	Profenofos		41198-08-7	1610
23	Buprofezin		69327-76-0	2198
24	Imidacloprid		138261-41-3	5000
25	Acetamiprid		135410-20-7	2000
26	Thiamethoxam		153719-23-4	1563
	GROUP VI	200		
27	Cypermethrin		52315-07-8	1600
28	Permethrin		52645-53-1	2000
	GROUP VII	200		
29	Cypermethric Acid Chloride		52314-67-7	NA
	GROUP-VIII	1000		

30	P-Cresol		106-44-5	207
	GROUP IX			
	Nitrochlorobenzene	1000		
31	O-Nitrochlorobenzene		88-73-3	251
32	M-Nitrochlorobenzene		121-73-3	400
33	P-Nitrochlorobenzene		100-00-5	812
34	2,4 Dinitrochlorobenzene		97-00-7	1070
	Nitro Anilines			
35	O-Nitro Aniline		88-74-4	1600
36	M-Nitro Aniline		99-09-2	535
37	P-Nitro Aniline		100-01-6	750
38	2,4 Dinitro Aniline		97-02-9	285
	Anisidines			
39	O-Anisidine		90-04-0	2000
40	M-Anisidine		536-90-3	526
41	P-Anisidine		104-94-9	1320
	Total (A)	**4850**		

By-Products

No.	Products	Capacity (TPM)	CAS NO.	LD50 mg/Kg
1	Sodium Sulfate	861	7757-82-6	5989
2	Ammonium Chloride &	3106	12125-02-9	1440
3	Ammonium Sulfate		7783-20-2	2840
4	Potassium Sulfate	2674	7778-80-5	6600
5	Hydrochloric Acid Solution	483	7647-01-0	LC50 3124
6	Hydrobrmic Acid Solution	411	10035-10-6	LC50 2858
7	Potassium Bromide Solution	158	03-02-58	3070
8	Sodium Bromide Solution	814	7647-15-6	3500
9	Spent Acid	1403	7664-93-9	2140
10	Dilute Acetic Acid	966	64-19-7	3310
11	Sodium Sulfite	5867	7757-83-7	2160
	Total (B)	**16743**		

Standard ToR for the project was granted on 18th May, 2018. Public hearing is exempted as the project is located in the notified Industrial area as per Ministry's OM dated 27th April, 2018.

The land area available for the project is 19500 sqm. Industry will develop greenbelt in an area of 6435 sqm covering 33% of the total project area. The estimated project cost is Rs.30 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.5 crore and recurring cost (operation and maintenance) will be around Rs.12 crore per annum. Total employment opportunity will be for 150 people directly and 100 person indirectly.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Bhukhi river is flowing at a distance of 4 Km in South direction.

Total water requirement estimated to be 499 cum/day, proposed to be met from GIDC water supply.

Total wastewater generation will be 576 cum/day. Industrial effluent of 364 cum/day will be sent to ETP consists of primary, secondary and tertiary treatment facility and treated effluent shall be sent to CETP for final disposal into deep sea. The High COD & High TDS effluent stream (200 cum/day) will be evaporated in MEE and MEE condensate (185 cum/day) will be sent to ETP and treated effluent of 549 cum/day (364 + 185) shall be sent to CETP for final disposal into deep sea. Domestic waste water of 12 cum/day will be disposed in septic tank & soak pit.

Total power requirement is estimated to be 750 KVA from Dakshin Gujarat Vij Company Limited. Three DG sets of 250 KVA each will be utilized as standby during power failure. Stack (Height 10 m) will be provided as per CPCB norms to the proposed DG sets.

Unit will have coal/agro-waste based two steam boiler of 6 TPH capacity, Coal/Agrowaste based two Thermic Fluid Heater of capacity 40 Lakh KCal/hr. Multicyclone separator with bag filter will be installed with adequate stack height to control the particulates matter emission.

Ambient air quality monitoring is carried out at 7 locations during October - December, 2017. The baseline data indicates the ranges of concentrations as: PM10 (72.40– 81.06 μg/m3), PM2.5 (42.76-45.78 μg/m3), NOx (13.63-19.48 μg/m3), SO2 (12.57-17.64 μg/m3), O3 (10.19-10.93 μg/m3), CO (1.20-1.27 mg/m3), NH3 (BDL), Ni (10.31 – 10.79 ng/m3) and VOC (0.2 – 0.8 ppm).

4.3.5.2 *The Committee, in the first instance, noted that the proposed products were not categorized vis-a-vis the schedule to the EIA Notification, 2006, mainly to arrive at admissibility of the proposal at the central level and also applicability of the said Notification. Further, there being no prediction for incremental concentration due to the proposed project and the water balance not in order, the Committee was not inclined to accept the proposal.*

The Committee, after detailed deliberations, insisted for clarifications/inputs in respect of the following:

- *Classification/categorization of different products as per the EIA Notification, 2006, along with the chemistry involved in their manufacturing.*
- *Revised water balance plan with the proposed reduction in fresh water requirement.*
- *Detailed effluent treatment plan and commitment to achieve zero liquid discharge.*
- *Commitment for not manufacturing the pesticides banned by the Ministry of Agriculture & Family Welfare from time to time.*
- *Consistency of baseline air quality data with those of CPCB for the said area, and the incremental GLC due to the proposed project without usage of coal as fuel.*
- *Efficacy and adequacy of the proposed pollution control measures to achieve 99.99% efficiency.*
- *Safety and risk assessment using advanced models.*
- *Plan for monitoring chlorinated pesticides and analyzing pesticide residue in the effluent.*
- *Plan for Corporate Environment Responsibility.*

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

Agenda No.4.3.6

Manufacturing of S.O. Dyes (130 MT/M) at Plot No 66 to 70, Rudra Ind Park, Bakrol, Ahmedabad (Gujarat) by M/s Aditya Color Chem - For Environmental Clearance

[IA/GJ/IND2/67946/2017, IA-J-11011/450/2017-IA-II(I)]

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

4.3.6.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up synthetic organic dyes manufacturing unit of capacity 130 TPM (Powder dyes 40 TPM & Liquid dyes 90 TPM) by M/s Aditya Color Chem in an area of 1492.88 sqm located at Plot No.66-70, Rudra Industrial Park Bakrol, Village Bakrol (Bujrang), Taluka Daskroi, District Ahmedabad (Gujarat).

The details of different products are proposed as under:

Sr. No.	Name of dyes	Case No.	Quantity (TPM)
Powder Dyes			
1.	Acid Yellow 151	12715-61-6	40
2.	Acid Yellow 194	61814-52-6	
3.	Acid Red 34	6360-04-9	
4.	Acid Red 183	6408-31-7	
5.	Acid Red 186	52677-44-8	
6.	Acid Brown 75	8011-86-7	
7.	Acid Brown 83	130211-68-2	
8.	Acid Brown 161	61724-73-8	
9.	Acid Brown 165	61724-14-9	
10.	Acid Brown 282	12219-65-7	
11.	Acid Brown 355	60181-77-3	
12.	Acid Brown 365	63641-88-3	
13.	Acid Brown 425	119509-49-8	
14.	Acid Brown 432	119509-50-8	
15.	Acid Brown 434	126851-40-9	
16.	Acid Blue 113	3351-05-1	
17.	Acid Blue 158	6370-08-7	
18.	Acid Blue 193	12392-64-2	
19.	Acid Black 107	12218-96-1	
20	Acid Black 194	61931-02-0	
21	Acid Black 210	85223-29-6	
22	Acid Green104	61814-51-5	
23	Direct Yellow 11 / Direct Yellow 5 RA	1325-37-7	
24	Direct Orange 26	3626-36-6	
25	Direct Orange 34	12222-37-6	
26	Direct Red 80 / Direct Red 5BR	2610-10-8	
27	Direct Red 239 / Direct scarlet 6BS	60202-35-9	
28	Direct Blue 71	4399-55-7	

29	Direct Blue 279	72827-89-5	
30	Direct Blue 290	110444-91-2	
31	Direct Black 19	6228-31-5	
32	Direct Black 168	85631-88-5	
33	Direct Black 179	143549-91-8	
34	Direct Violet 9	6227-14-8	
35	Direct Violet 35	6227-20-9	
36	Direct Violet 51	5489-77-0	

S. No.	Name of dyes	Case No	Qty.in MT
Liquid dyes			
1.	Acid Yellow R Liquid [Acid Yellow 36]	587-98-4	90
2.	Acid Yellow 79 Liquid	12220-70-1	
3.	Acid Orange 7 Liquid	633-96-5	
4.	Acid Orange 34 Liquid	6373-74-6	
5.	Acid Red 249 Liquid	6416-66-6	
6.	Acid Black 194	61931-02-0	
7.	Direct Yellow 11	1325-37-7	
8.	Direct Yellow27	10109-68-8	
9.	Direct Yellow 137	71838-47-6	
10.	Direct Yellow / Direct Yellow 4GL Liquid [147]	71838-49-8	
11.	Direct Yellow 157/ Direct Yellow 5GL Liquid	72705-26-1	
12.	Direct Orange 15	1325-35-5	
13.	Direct Orange 34	12222-37-6	
14.	Direct Orange 102 Liquid	6598-63-6	
15.	Direct Red 80/Direct Red 5BR	2610-10-8	
16.	Direct Red 81 / Direct Red 5B	2610-11-9	
17.	Direct Red 239 / Direct scarlet 6BS	60202-35-9	
18.	Direct Red 253 / Direct Red L3B	12222-51-4	
19.	Direct Red 254 / Direct Pink 3B	101380-00-1	
20.	Direct Blue 71	4399-55-7	
21.	Direct Blue 199 / Turq. Blue FB L	12222-04-7	
22.	Direct Blue 279	73827-89-5	
23.	Direct Blue 290	110444-91-2	
24.	Direct Black 19	6428-31-5	
25.	Direct Black 168	85631-88-5	
26.	Direct Black 179	143549-91-1	
27.	Direct Violet 9	6227-14-1	
28.	Direct Violet 35	6227-20-9	
29.	Direct Violet 51	5489-77-0	

The project/activity 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.

ToR for the project was granted on 16th November, 2017. Public hearing was conducted by the State Pollution Control Board on 26th June, 2018. The main issues raised during the public hearing are related to traffic management, air pollution, water control measures and employments.

The land area available for the project is 1492.88 sqm. Industry will develop greenbelt in an area of 492.7 sqm covering 33% of the total project area. The estimated project cost is Rs 3.75 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 0.10 crores and the recurring cost (operation and maintenance) will be about Rs 0.03 crores per annum. Employment opportunity will be for 10 persons directly and 15 persons indirectly.

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

Total water requirement estimated to be 41 cum/day, which includes fresh water requirement of 28 cum/day, proposed to be met through ground water. Necessary application in this regard has been submitted to CGWA.

Effluent of 18 cum/day will be treated in ETP and passed through the RO system, RO permeate of 13 cum/day shall be reused in process and 5 cum/day of RO reject shall be evaporated by spray dryer. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 180 KW, proposed to be met from UGVCL (State power Distribution Corporation limited). It is proposed to install 1 DG set of 125 KVA, to be used during power failure. Stack (height 11 m) will be provided as per CPCB norms to the proposed DG set.

Ambient air quality monitoring was carried out at 10 locations during 1st December, 2017 to 28th February, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (48-62 µg/m3), PM2.5 (32-46 µg/m3), SO2 (4-10 µg/m3) and NOx (14-26 µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project are reported to be 0.05 µg/m3, 0.005 µg/m3 and 0.008 µg/m3with respect to PM10, SO2 & NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

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

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

4.3.6.2 *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.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of resins.*

- *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.*
- *Coal with Sulphur content less than 0.5% shall be used as fuel in the boiler, along with lignite/bio-fuel/briquettes/bagasse/agro waste.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows:*
  - *(a) Reactor shall be connected to chilled brine condenser system.*
  - *(b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - *(c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
  - *(d) Solvents shall be stored in a separate space specified with all safety measures.*
  - *(e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - *(f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  - *(g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed* 28 cum/day to be met through 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 shall 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 to the public during public hearing/consultation shall be satisfactorily implemented.*

- *At least 2.5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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.4.3.7

Expansion of synthetic organic chemicals at Plot No. D-8, MIDC Piathan, Paithan, District Aurangabad (Maharashtra) by M/s Matrix Fine Sciences Pvt Ltd - For reconsideration of Environmental Clearance

[IA/MH/IND2/79952/2018, IA-J-11011/60/2018-IA-II(I)]

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

4.3.7.1 The proposal was earlier considered by the EAC in its meeting held during 19-20 December, 2018, and was deferred for clarifications/inputs on certain points. The project proponent has provided parawise reply to different observations the Committee with the details as under:-

Clarifications/inputs sought by the EAC	Reply by the PP
Higher incremental GLCs in respect of all the air pollutants namely, PM10, PM2.5, SO2 due to the proposed expansion.	The maximum Ground Level Concentration for SO2 was found to be 0.87µg/m3 and for PM10 & PM2.5 was found to be 0.17 µg/m3 & 0.04 µg/m3 respectively.
Usage of coal having Sulphur content less than 0.5%.	The fuel for boiler & Thermopack is coal, having Sulphur % less than 0.5%.
Health & safety management plan, including that for toluene.	Engineering Measures to keep VOC below PEL. Use of PPE's to eliminate health effects through skin. Medical surveillance. All storage tanks will be equipped with chilled water condenser followed by

<table>
<tr><td></td><td>flame arrestor to minimize loss/presence of VOC’s to the minimum.
All transfer pumps, receiving tanks etc. will be equipped with chilled water condenser followed by flame arrestor.
All transfers, will be by pumps. Reactor/vessel stirrers will be with mechanical seals to have zero leakage.
Periodic Medical tests will be carried out for the workers working in the area/handling the toluene.
If tests indicate any adverse effect on worker, suitable measures like giving medical treatment in consultation with OH qualified Doctor, affected worker shall be shifted immediately to the other division for restoring health.</td></tr>
<tr><td>Different sources of volatile organic matter to be equipped with suitable control devices to limit the concentration within 99.52%.</td><td>
<table>
<tr><td>Process Operation and source of VOC</td><td>Recommended Device /Equipment/utility</td></tr>
<tr><td>Charging of solvent in the Reactor</td><td>The provision of overhead tank or addition tank. No solvents shall be charged directly in the Reactor.</td></tr>
<tr><td>Reactor -Equipment</td><td>Accessories and joints shall be provided with tongue and groove type flanges.
Flange joints shall be provided with guard or calms.
Reactor drive system shall be provided with mechanical seal.</td></tr>
<tr><td>Condenser</td><td>Double condenser with chilled water condenser followed by flame arrestor shall be provided.</td></tr>
<tr><td>Reaction mass Filtration</td><td>Filters of closed type shall be used.
Nitrogen gas purging.
The filtrate collection in the close vessel with chilled water condenser followed by flame arrestor.
Vessels have jacket with cooled water circulation.</td></tr>
<tr><td>Centrifuge</td><td>Centrifuge equipment shall be 4 suspension and top or bottom discharge.
The operation shall be in close loop, no manually charging
The centrifuge vent shall be connected to double condenser with chilled water condenser followed by flame arrestor.
The filtrate shall be collected in a close tank with jacket and cooling arrangement.
The transfer of filtrate to the distillation vessels shall be through appropriate pump with mechanical seal</td></tr>
<tr><td>Charging Tanks</td><td>Charging tanks shall be suitable size be connected to main storage tank.
Supply line shall be of lower size than the return or overflow line to avoid overflow.
Pump shall be equipped with chilled</td></tr>
</table>
</td></tr>
</table>

	water condenser followed by flame arrestor. An alarm system shall be provided .
Dosing and Transfer Pumps	Dosing pumps shall be installed to avoid manual operation. All transfer pumps are equipped with chilled water condenser followed by flame arrestor.
Drying Operation	In case of atmosphere drying operation, the dryers shall be provided with utility cut of device to control overheating. In case of vacuum drying operation non Return valves and utility auto control device shall be provided. The dryer exhaust or vent shall be connected to Scrubber.
Distillation column or recovery system	All the flange joints shall be appropriately covered with flange guards. Condensers shall be of appropriate capacity and utility. Condenser vent shall be of appropriate height and connected to a tank with secondary vent and jacket cooling system. Distilled solvent shall be transferred in a close loop. Solvent distillation Residue shall be discharged with Nitrogen blanketing and in close containers. Solvent containers or drums shall be sealed appropriately.
Training for avoiding wrong operation for escape of VOC and causing health hazard.	All the working staff and employees in the factory shall be trained in line with standard operating Procedure by theoretical and practical training.

Revised water balance and the expected characteristics for the treated effluent.

The total water requirement for new project is about 245 m3/day for domestic, greenery, process, boiler and cooling purposes.
Out of this water requirement 205 m3/day is fresh water and 40 m3/day shall be from recycle of treated effluent.

S. No.	Particulars	Justification	Input	Loss	Reason for Losses	Effluent
			m3/day	m3/day		m3/day
1.	Domestic	300 nos. x 50 lit/head/day	15	3	Consumption, Evaporation	12
2.	Process	--	22	15	Evaporation	7

		3.	Process Washings	--	3	--	--	3
		4.	Cooling tower Makeup	Capacity 1000 TR, 5% losses of recirculation rate 3660 m3/day	183	170.5	Evaporation	12.5
		5.	Boiler Makeup	Actual water requirement 168 m3/day 90% condensate recovery	17	14	Evaporation	3
		6.	DM water / Softener Regeneration	--	5	0	--	5
		Total			245	202.5		42.5
Plan for waste management, including ash	The hazardous waste generated 29.72 MT/Month will be disposed off to the CHWTSDF or sold to authorized recycler/re-processor. Non-hazardous waste generated 38.36 MT/Month will be disposed off as Sale to authorized re-users/recyclers and ash will be sale to brick manufacturer. The agreement is made with brick manufacturer for ash disposal.							

4.3.7.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of synthetic organic chemicals from 10005 TPA (9 products) to 14925 TPA (16 nos of products) by M/s Matrix Fine Sciences Pvt Ltd in an area of 40,000 sqm at Plot No.D-8, MIDC Paithan, Taluka Aurangabad, District Aurangabad (Maharashtra).

The details of existing and proposed products are as under:

S. No.	Product	Existing (TPA)	Proposed (TPA)	Total (TPA)
1	FAME/Biodiesel/ Distillated Fatty Acid	7600	0	7600
2	Phytosterol	450	0	450
3	Tocopherol & Its Derivatives	600	0	600
4	Oil Residue	600	0	600
5	Squalene	50	0	50
6	Tocotrieols	550	0	550
7	Bixin or Nor-Bixin	52	0	52
8	Omega 3 Fatty Acid	53	0	53
9	Beta Carotene	50	0	50
10	D Alpha Tocopherol	0	720	720

11	D Alpha Tocopherol Acetate	0	720	720
12	D Alpha Tocopheryl Succinate	0	720	720
13	Vitamin E TPGS	0	720	720
14	Steryl Ester	0	720	720
15	Squalane	0	720	720
16	Vitamin E Powder	0	600	600
By Products				
17	Acetic Acid	0	3	3
18	Succinic Acid	0	5	5
	Total	**10005**	**4928**	**14933**

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

Standard ToR for the project was granted on 24th May 2018. Public hearing/ consultation is not required as project site is located inside the notified industrial area.

Existing land area is 40000 sqm, and no additional land is required for the proposed expansion. Industry has developed Greenbelt on an area of 9947 sqm and additionally 795 sqm will be developed. The estimated project cost is Rs.28 crore. Total capital cost earmarked towards environmental pollution control measures is Rs1.95 cr and the recurring cost (O&M) will be about Rs 0.9 cr per annum. Total employment opportunity will be for 200 persons directly and 500 persons indirectly after expansion.

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

Total water requirement is estimated to be 245 cum/day, to be met from the MIDC supply.

Industrial effluent of 91.5 cum/day generated will be treated through Effluent Treatment Plant. Domestic effluent will be taken to STP for treatment. High COD effluent will be treated in solvent stripper, MEE and ATFD and treated water will be recycled in the process and for green belt development. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement after proposed project will be 1650 KVA including existing 400 KVA and will be supplied by Maharashtra State power distribution corporation limited (MSEDCL). Existing unit has 2 DG sets of 750 KVA and 320 KVA capacity each. Additionallyone DG Set of 750KVA. DG Sets are used as standby during power failure. Stack (height 6.5 m) is provided as per CPCB norms to proposed DG Sets.

Existing unit has 3 TPH Coal fired boiler. Additionally 7 TPH Coal fired boiler will be installed. Multi cyclone Dust Collector and bag filter with a stack of height of 30 m will be installed for controlling the Particulate emissions within statutory limit of 115 mg/Nm3 for proposed boiler.

Ambient air quality monitoring was carried out at 9 locations during March 2018 to May 2018 and the baseline data indicates that ranges of concentrations as: PM10 30.59 µg/m3 to 64.87

µg/m3, PM2.5 16.03 µg/m3 to 36.63 µg/m3, SO2 9.59 µg/m3 to 32.50 µg/m3and NOx 16.90 µg/m3 to 39.84 µg/m3 respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.17 µg/m3 for PM10, 0.04 µg/m3 for PM2.5 and 0.87 µg/m3 for SO2. The resultant concentrations are within the National Ambient Air Quality Standards.

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

The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The additional information submitted by the project proponent found to be in order, suitably addressing observations of the Committee.

The existing products are based on purification and extraction process and do not fall under the purview of the EIA Notification, 2006, and as such not requiring any prior environmental clearance.

Consent to Operate for the existing capacity has been obtained from the State PCB vide letter dated 28th August, 2018, which is valid up to 31st May, 2019

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

- *Environmental clearance shall be subject to obtaining prior clearance from the wildlife angle including clearance from the Standing Committee of the National Board for Wildlife as applicable. Grant of environmental clearance does not necessarily implies that Wildlife Clearance shall be granted to the project and that their proposals for Wildlife Clearance will be considered by the respective authorities on their merits and decision taken.*
- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for 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.*
- *Coal with Sulphur content less than 0.5 % shall be used as fuel in the boiler.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows:*
  - *(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* 245 *cum/day to be met from MIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
  (a) *Metering and control of quantities of active ingredients to minimize waste.*
  (b) *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  (c) *Use of automated filling to minimize spillage.*
  (d) *Use of Close Feed system into batch reactors.*
  (e) *Venting equipment through vapour recovery system.*
  (f) *Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *At least 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.4.3.8

Expansion of dyes and chemicals manufacturing unit at Block No.484,502, 503 A, 504 & 505. NH-8, Palsana, District Surat (Gujarat) by M/s Spectrum Dyes & Chemicals Pvt Ltd - For reconsideration of Environmental Clearance

[IA/GJ/IND2/79313/2017, J-11011/517/2017-IA II(I)]

The project proponent and accredited consultant M/s En-Vision Environmental Services made a detailed presentation on the salient features of the project.

4.3.8.1 The proposal was earlier considered by the EAC in its meeting held during 19-20 December, 2018. The Committee deferred the proposal, taking note of discrepancies in product list, effluent discharge without any recycle/reuse, issues raised during public hearing, discrepancy in baseline air quality analysis.

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

Clarifications/inputs desired by the EAC	Reply by the PP
Justification for not obtaining prior EC for the presently manufacturing products, viz. Dispersing Agent, Textile Auxiliaries, Hydrous & Specialty Chemicals, Dyes Intermediate.	Our prior Environmental Clearance was obtained vide letter dated 1st April, 2004, EC was awarded with reference to EIA Notification, 1994 for S.O. Dyes – 250 MT/Month. As per EIA Notification 1994, Schedule-I list of Project Requires Environmental Clearance from Central Government, item no. 26 Only “Dyes” was covered. (EIA Notification 1994 and its amendment till 2006. (Dispersing Agent, Textile Auxiliaries, Hydrous & Specialty Chemicals, Dyes Intermediate were not covered under EIA Notification 1994 and its amendment till 2006) Subsequently industry has obtained CTE from GPCB for manufacturing of products under captive use viz. Dyes Intermediate, Dispersing Agent, Textile Auxiliaries, Hydrous & Specialty Chemicals Vide Letter No. PC/NOC-SRT-390(4)/7004 Dated:11th March, 2004 & GPCB/NOC/SRT-1663/27936 Dated:11th September, 2006. Since GPCB has given NOC for Dispersing Agent, Textile Auxiliaries, Hydrous & Specialty Chemicals, Dyes Intermediate it must have considered that they are not covered under EIA Notification, 1994 and its amendment till 2006. Thereafter as per EIA Notification 2006, Schedule-I Project Activity 5(f) - Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic

	rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates) are now covered.
Revised product list as per the schedule to the EIA Notification, 2006.	Revised product list as per schedule to EIA Notification 2006 has been submitted.
Revised water balance with reduction in fresh water requirement up to 50 % of the presently proposed.	Revised water balance with reduction in fresh water requirement has been submitted
Effluent treatment plan.	Detailed Effluent Treatment Plan is submitted.
Action plan for chemical health and safety impact.	Action plan for chemical health & safety impact has been provided
Response and commitment on the issues raised during public hearing.	Detailed Public Hearing action plan along with funds allocated with CER, time line is given.
Plan for capturing of emission of volatile compounds.	Plan for capturing emission of VOC is provided.
Commitment for use of natural gas in place of coal.	Detailed justification is provided.
Reanalysis of the baseline data.	Reanalysis of Baseline Data and its justification has been provided.
Plan for Corporate Environment Responsibility.	Detailed CER Action Plan has been submitted.

4.3.8.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of synthetic organic dyes, dispersing agent and dye intermediates manufacturing unit from the present capacity of 2150 TPM to 3150 TPM by M/s Spectrum Dyes & Chemicals Pvt Ltd in an area of 49824.52 sqm located at Block No.484, 502, 503-A 504 & 505, NH No.8, Palsana, District Surat (Gujarat).

The details of existing and proposed products are as under:

S. No.	Product	Existing (TPM)	Proposed (TPM)	Total (TPM)	Remarks
A.	**EC Products**				
1	Synthetic Organic Dyes	250	650	900	EC was taken in 2004 for 250 MT and additional EC is sought in this application.
2	Dispersing Agent	1500	0	1500	At the time when EC was taken in 2004, this product was not applicable for EC so we have taken CTE from SPCB in 2004.
3	Dyes Intermediates	400	350	750	At the time when EC was taken in 2004, this product

					was not applicable for EC so we taken CTE
Total				**3150**	
B.	**Product not requiring EC**				
1	Formulated SO Dyes	-	2400	2400	-

The project/activity 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.

Standard ToR for the project was granted on 9th December, 2017. Public hearing was conducted by the SPCB on 25th May 2018. The main issues raised during the public hearing are related to release of effluents, employment etc.

Existing land area is 46158.23 sqm, additional 3666.29 sqm area will be used for proposed expansion. Industry has developed green belt in 8185 sqm area, compensatory greenbelt of 5400 sqm area at Udhana-Magdalla Road, Surat and additionally Industry will develop greenbelt in 2000 sqm covering 31.31% of total project area. Estimated cost of the project is Rs 4,757.83 lakhs. Total capital cost for environmental pollution control measures will be Rs 3,155.91 lakhs and recurring cost per annum will be Rs 1,165.38 lakhs. Presently 1080 persons are employed in the unit, additionally employment will be provided to 122 persons directly and indirectly after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Mindhola river is flowing at a distance of 2.6 km in SE direction.

Total water requirement is estimated to be 4000 cum/day, of which fresh water requirement of 2560 cum/day will be met from ground water through bore well. Application for ground water withdrawal has been submitted to CGWA on 29th January, 2018.

Total effluent generated from different industrial operations is estimated to be 2185 cum/day, which will be treated in ETP. Domestic wastewater of 75 cum/day will be treated in secondary ETP. Treated water of 2245 cum/day will be sent to CETP of M/s NPICSL, Palsana for further treatment and disposal.

Power requirement after expansion will be 6000 KVA including existing 4000 KVA and will be met from DGVCL. Existing unit has D.G sets of 2x380KVA, 2x500KVA, 2x1250KVA. DG sets are used as standby during power failure. Stack of height 11 m has been provided as per CPCB norms to the DG sets.
Existing unit has 6 MTPH (Running) & 4 MTPH (Stand by) Coal fired steam boiler. Additionally, 10 MTPH Coal fired steam boiler will be installed. ESP with a stack of height of 36 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boilers.

Ambient air quality monitoring was carried out at 8 locations during 1St October 2017 to 31St December 2017 and the baseline data indicates the ranges of concentrations as: PM10 (56.20-65.20 µg/m3), PM2.5 (29.30-34.70 µg/m3), SO2 (14.30-19.60µg/m3) and NOx (17.10-24.10 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.5797µg/m3, 1.01139 µg/m3 and

0.50569 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

Earlier, the Ministry had issued EC vide letter dated 1st April, 2004 for Dye Manufacturing unit of capacity 250 TPM by M/s Spectrum Dyes and Chemicals Pvt Ltd. The monitoring report on compliance status of EC conditions has been forwarded by the Regional Office vide their letter dated 30TH August, 2018.

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

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

Consent to Operate for the present industrial operations issued by Gujarat PCB vide letter dated 24th April, 2018, is valid up to 21st October, 2019.

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *Treated water of 2245 cum/day shall meet the standards prescribed under the Environment (Protection) Act, 1986, before taking to the CETP operated by of M/s NPICSL, Palsana for further treatment and disposal.*
- *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.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of dyes & dye intermediates.*
- *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.*
- *Coal with Sulphur content less than 0.5 % shall be used as fuel in the boiler.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows:*
  - *(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 2560 cum/day proposed to be met from ground water through bore well. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash shall 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 shall be avoided.*
- *The company shall undertake waste minimization measures as below:-*
  - *(a) Metering and control of quantities of active ingredients to minimize waste.*
  - *(g) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(h) Use of automated filling to minimize spillage.*
  - *(i) Use of Close Feed system into batch reactors.*
  - *(j) Venting equipment through vapour recovery system.*
  - *(k) 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 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.*
- *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*

4.4 Any Other

Agenda No.4.4.1

Proposed project of dyes, pigments, inorganic salt and formulation manufacturing plant located at plot no.3027, Phase-III, GIDC Estate, Panoli District Bharuch (Gujarat) by M/s Aarav Industries - For correction in ToR

[IA/GJ/IND2/63986/2017, IA-J-11011/187/2017-IA-II(I)]

4.4.1.1 The project proponent did not attend the meeting. The proposal was, therefore, not considered by the Committee.

Agenda No.4.4.2

Setting up of 166.1 MT/Month of API Products & its Intermediates Plot No. B-93, 94 MIDC Paithan, Aurangabad (Maharashtra) by M/s Surya Industries - For Amendment in ToR

[IA/MH/IND2/73318/2018, IA-J-11011/83/2018-IA-II(I)]

4.4.2.1 The proposal is for amendment in the Terms of Reference dated 21st May, 2018 granted by the Ministry in favour of M/s Surya Industries to the project for setting up API products and its intermediates manufacturing unit of capacity 166.1 TPM at Plot No. B-93/94, MIDC Paithan, Taluka Aurangabad, District Aurangabad (Maharashtra).

4.4.2.2 The project proponent has requested for amendment in ToR with the details as under:

<table>
<tr><th>S. No</th><th>Para of ToR issued by MoEF&CC</th><th>Details as per the ToR</th><th>To be revised as</th><th>Justification/ reasons</th></tr>
<tr><td>1.</td><td>Standard TOR No. 3 (ii) Products with capacities for the proposed project.</td><td>
<table>
<tr><th>S. No</th><th>Name of Product</th><th>Qty MT/Month</th></tr>
<tr><td>1</td><td>Glimepiride</td><td>4.20</td></tr>
<tr><td>2</td><td>Saccharin Sodium</td><td>30.0</td></tr>
<tr><td>3</td><td>Sitagliptin Phosphate Monohydrate</td><td>3.00</td></tr>
<tr><td>4</td><td>Diosmin</td><td>6.00</td></tr>
<tr><td>5</td><td>Bromhexine Hydrochloride</td><td>6.00</td></tr>
<tr><td>6</td><td>Cis Pyrido Indole</td><td>5.00</td></tr>
<tr><td>7</td><td>Homidium Bromide</td><td>4.00</td></tr>
<tr><td>8</td><td>Lamotrigin</td><td>2.25</td></tr>
</table>
</td><td>
<table>
<tr><th>S. No</th><th>Name of Product</th><th>Qty MT/ Month</th></tr>
<tr><td>1</td><td>Glimepiride</td><td>4.20</td></tr>
<tr><td>2</td><td>Pioglitazone</td><td>8.0</td></tr>
<tr><td>3</td><td>Gliclazide</td><td>8.0</td></tr>
<tr><td>4</td><td>Sitaglipti n Phosphate Monohydrate</td><td>3.0</td></tr>
<tr><td>5</td><td>Citicoline Sodium</td><td>8.0</td></tr>
<tr><td>6</td><td>Benfotiamine</td><td>8.0</td></tr>
<tr><td>7</td><td>Methylcobalamin</td><td>0.4</td></tr>
</table>
</td><td>Online TOR application was made by us on 29th March 2018.

Justification:
• Availability of key raw materials due to uncertainties from suppliers of China.
• High pollution potential of certain products.</td></tr>
</table>

	e		
9	Permenthrin	25.00	
10	Methyl Cyanocobalamin	0.10	
11	Benfotiamine	2.00	
12	Fluconazole	2.00	
13	Letrozole	1.00	
14	Norfloxacin	4.00	
15	p- Cresyl Phenyl Acetate	10.00	
16	Irinotecan Hydrochloride	0.30	
17	Gemcitabine Hydrochloride	0.50	
18	Docusate Sodium	12.50	
19	Citicoline Sodium	2.00	
20	Chlorthalidone	2.40	
21	Chlorambucil	0.50	
22	5-Bromo Indole	4.50	
23	Alendronate	1.00	
24	Allopurinol	5.00	
25	Etamsylate	1.00	
26	Gliclazide	2.00	
27	Ketoconazole	1.00	
28	Lidocaine Base	5.00	
29	Miconazole Nitrate	1.00	
30	Oseltamivir	1.00	
31	Phenylephrine	2.00	
8	Diosmin	12.0	
9	Tadalafil	5.0	
10	Lamotrigine	4.5	
11	Docusate Sodium	25.0	
12	Saccharin Sodium	30.0	
13	Permethrin	50.0	
Total		**166.10**	

		32 Pioglitazone 2.00 33 Sertaconazole 1.00 34 Warfarin Sodium 0.10 35 Lidocaine Hydrochloride 3.00 **Total 152.35**		
2.	**Standard TOR No. 3 (vi)** Details of Emission, effluents, hazardous waste generation	Effluent Generation : 26.3 CMD	Effluent Generation : 26.3 CMD	
3.		Hazardous Waste Generation: 11.7 MT/day	Hazardous Waste Generation: 4.39 MT/day	
4.		Non- Hazardous Waste Generation : 3.9 MT/M	Non- Hazardous Waste Generation : 3.9 MT/M	
5.	**Standard TOR No. 3 (vii)** Water Requirement	Water Consumption: 47 CMD	Water Consumption : 41 CMD	

4.4.2.3 *The EAC, after deliberations and in view of substantive variations from the earlier one, found the proposal not admissible under amendment category. The Committee asked the project proponent to submit a fresh proposal for ToR with the revised Form-1 covering all the relevant details.*

Agenda No.4.4.3

Development drilling of 406 wells in Mehsana Asset, Mehsana (Gujarat) by M/s Oil and natural Gas Corporation - For Amendment in ToR

[IA/GJ/IND2/60533/2016, J- 11011/352/2016-IA.II(I)]

4.4.3.1 The proposal is for amendment in ToR dated 15th March, 2017 granted by the Ministry in favour of M/s Oil and Natural Gas Corporation Ltd to the project for development drilling of 406 wells in Mehsana Asset, Mehsana (Gujarat).

4.4.3.2 The project proponent has requested for amendment in ToR with the details as under:

Sl. No.	Para of EC issued by MoEF&CC	Details as per the TOR	To be revised/ read as	Justification / reasons
1.	4	You are	Public	ONGC had recently conducted Public

<table>
<tr>
<td></td>
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<td>requested to kindly submit the final EIA/EMP prepared as per TORs and incorporating all the issued raised during Public Hearing/Public Consultation to the Ministry for considering the proposal for environmental clearance within 3 years as per the MoEFC OM dated 8th October, 2014</td>
<td>Hearing exempted in four districts viz. Gandhinagar, Ahmedabad, Mehsana and Patan in view of the earlier public hearings conducted by the proponent in these districts.</td>
<td>Hearings in all four districts for other projects of ONGC as detailed below:
<table>
<tr><th>S. no.</th><th>District</th><th>Public Hearing Date</th><th>ONGC project for which Public Hearing conducted</th></tr>
<tr><td>1</td><td>Gandhinagar</td><td>26.10.2017</td><td rowspan="2">Exploratory drilling of 11 wells for shale oil/shale gas in Cambay basin, Gujarat</td></tr>
<tr><td>2</td><td>Ahmedabad</td><td>25.10.2017</td></tr>
<tr><td>3</td><td>Mehsana</td><td>06.05.2017</td><td rowspan="2">Drilling of 29 exploratory wells in 10 ML blocks in District Patan and Mehsana</td></tr>
<tr><td>4</td><td>Patan</td><td>21.04.2017</td></tr>
</table>
In view of these recent public hearings, it is requested to consider the case for ToR amendment of the project ‘Development Drilling of 406 wells in Mehsana Asset, Mehsana, Gujarat’ by exempting the Public Hearings in four districts viz. Gandhinagar, Ahmedabad, Mehsana and Patan.</td>
</tr>
</table>

4.4.3.3 *The EAC, after detailed deliberations, noted that the earlier public hearings in the Districts namely, Gandhinagar, Ahmedabad, Mehsana and Patan, were conducted by the SPCB for different projects with different scope of works and the coverage area which would not be applicable for the instant project. In this regard, the Committee was informed about earlier decisions of the regulatory authority, wherein, public hearings have been termed as project specific and thus not allowing exemption on that account.*

The Committee, after deliberations, desired that public hearing should be conducted in all the four Districts covering the study area.

Agenda No.4.4.4

Expansion of Camphor production and its derivatives at SF.No.669, 672, 670/2, 676/1 674/1, Kanchipuram (Tamil Nadu) by M/s Kanchi Karpooram Ltd - For amendment in ToR

[IA/TN/IND2/74991/2018, IA-J-11011/172/2018-IA-II(I)]

4.4.4.1 The proposal is for amendment in the terms of reference dated 21st June, 2018 granted by the Ministry in favour of M/s Kanchi Karpooram Limited (KKL) to the project for increase in camphor production & its derivatives at S.F. No.669, 670/2, 672, 674/1 & 676/1, Enadur Village, District Kancheepuram (Tamil Nadu).

4.4.4.2 The project proponent has requested for the amendment in the ToR with the details as under:

<table>
<tr><th>S. No</th><th>Para of ToR issued by MoEF & CC</th><th>Details as per the ToR</th><th>To be revised as</th><th>Justification/ reasons</th></tr>
<tr><td>1.</td><td>Standard ToR</td><td>Power Requirement:<table><tr><td>Details</td><td>Existing</td><td>Proposed for Expansion</td><td>After Expansion</td></tr><tr><td>Power Requirement (kVA)</td><td>200</td><td>60</td><td>260</td></tr></table></td><td>Power Requirement:<table><tr><td>Details</td><td>Existing</td><td>Proposed for Expansion</td><td>After Expansion</td></tr><tr><td>Power Requirement (kVA)</td><td>260</td><td>100</td><td>360</td></tr></table></td><td>Power requirement will be increased due to additional one higher capacity heater. (1 x 4.65 MW/hr)</td></tr>
<tr><td>2.</td><td>Standard ToR</td><td>Energy Requirement from Fire wood heaters:<table><tr><td rowspan="2">Details</td><td colspan="3">Capacity</td></tr><tr><td>Existing</td><td>Proposed</td><td>After Expansion</td></tr><tr><td>TFH (Wood Fired Heater) MW/hr)</td><td>1 x 1.74</td><td>-</td><td>1 x 1.74</td></tr></table></td><td>Energy Requirement from Fire wood heaters:<table><tr><td rowspan="2">Details</td><td colspan="3">Capacity</td></tr><tr><td>Existing</td><td>Proposed</td><td>After Expansion</td></tr><tr><td>TFH (Wood Fired Heater) MW/hr)</td><td>1 x 1.74</td><td>1x 4.65</td><td>1 x 1.74 1x 4.65</td></tr></table></td><td>Proposed additional higher capacity heater and considering more productivity and less maintenance since, existing heater working day is about 7 days only, 16 hrs is required for heater cleaning. so due to</td></tr>
</table>

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<tr>
<td></td>
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<td>increase in productivity, client proposed one higher capacity heater (1x4.65 MW/hr).
A Variable Frequency Drive (VFD) will be installed for all motors to control of energy consumption.</td>
</tr>
<tr>
<td>3.</td>
<td>Standard ToR</td>
<td>Fuel (Fire wood) Requirement
<table><tr><th rowspan="2">S. No</th><th rowspan="2">Details</th><th colspan="3">Capacity</th></tr><tr><th>Existing</th><th>Proposed expansion</th><th>After Expansion</th></tr><tr><td>1</td><td>Fire wood (MT/ Month)</td><td>300</td><td>100</td><td>400</td></tr></table></td>
<td>Fuel (Fire wood) requirement
<table><tr><th rowspan="2">S. No</th><th rowspan="2">Details</th><th colspan="3">Capacity</th></tr><tr><th>Existing</th><th>Proposed expansion</th><th>After Expansion</th></tr><tr><td>1</td><td>Fire wood (MT/ Month)</td><td>300</td><td>500</td><td>800</td></tr></table></td>
<td>Fire wood usage will be increased due to proposed higher capacity heater (1x4.65 MW/hr)
Automatic fuel feeding system will be installed to control the fuel consumption.</td>
</tr>
<tr>
<td>4</td>
<td>Standard ToR</td>
<td>Fire wood Ash Generation and Management
<table><tr><th rowspan="2">S. No</th><th rowspan="2">Waste</th><th colspan="3">Quantity (kg/day)</th><th rowspan="2">Collection Met</th><th rowspan="2">Treatment / disposal method</th></tr><tr><th>Existing</th><th>Proposed Ex</th><th>After Expansi</th></tr></table></td>
<td>Fire wood Ash Generation and Management
<table><tr><th rowspan="2">S. No</th><th rowspan="2">Waste</th><th colspan="3">Quantity (kg/day)</th><th rowspan="2">Collection method</th><th rowspan="2">Treatment / disposal method</th></tr><tr><th>Existing</th><th>Proposed Ex</th><th>After Expansi</th></tr></table></td>
<td>Fire wood usage will be increased due to proposed higher capacity heater (1x4.65 MW/hr)</td>
</tr>
</table>

					Expansion	**on**	**hod**					**Expansion**	**on**			
		1	Ash from Firewood	8.0	6.0	140	Bags	Given to local former for agriculture purpose	1	Ash from Firewood	8.0	8.0	16.0	Bags	Given to local former for agriculture purpose	
5	Standard ToR	**Project Cost** 1.0 Crore							**Project Cost** 2.5 Crore							Project cost will be increased from 1 Crores to 2.5 crores due to additional heater, fuel, power & STP implementation etc. as per issued ToR.

4.4.4.3. *The EAC, after deliberations and in view of substantive deviations in respect of fuel and the utilities, found the proposal not admissible under amendment category. The Committee asked the project proponent to submit a fresh proposal for ToR with the revised Form-1 covering all the relevant details.*

Day Two - 27th February, 2019

4.5 Environmental Clearance

Agenda No.4.5.1

Expansion & Modernization of existing project for manufacturing of explosives and defence Products at Village Chakdoh Near Bazargaon, Tehsil Katol, District Nagpur (Maharashtra) by M/s Solar Industries India Limited - For Environmental Clearance

[IA/MH/IND2/61877/2017, IA-J-11011/28/2017-IA-II(I)]

The project proponent and their Consultant M/s Anacon Laboratories Pvt Ltd made a detailed presentation on the salient features of the project.

4.5.1.1 The proposal was last considered by the EAC in its meeting held on 19-20 December, 2018, wherein the EAC taking note of public hearing proceedings, insisted for scientific and technical analysis of the prevailing concerns, response and commitment made on the issues raised during public hearing. The Committee also desired for the proposal to be restructured in consistent with the schedule to the EIA Notification, 2006.

In response to the above observations, para wise replies submitted by the project proponent are as under: -

S. No.	Clarifications/inputs sought by the EAC	Reply submitted by the project proponent
1	Scientific and technical analysis of the prevailing concerns, response and commitment made on the issues raised during public hearing	The project proponent has submitted the concerns, response and commitment made on the issue raised during public hearing.
2	The Committee also desired for the proposal to be restructured in consistent with the schedule to the EIA Notification, 2006.	The project proponent has submitted the restructured the product list consistent with the schedule to the EIA Notification, 2006.

4.5.1.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project for expansion & modernization of explosives and defence products manufacturing plant by M/s Solar Industries India Limited in an area of 1108474.47 sqm located at Village Chakdoh, Tehsil Katol, District Nagpur (Maharashtra).

The details of existing and proposed products are as under:

S. No.	Product	Existing Production Capacity (MTPA)	Proposed Capacity (MTPA)	Total Capacity after Expansion (MTPA)	EIA Cat./ Sch.No MSIHC Rules	Remarks
1.	Surry /Emulsion Explosives (Nitrate Mixture)	100000	56250	156250	5(f) & 6(b)	The Products 'Slurry /Emulsion Explosives' and 'Bulk Emulsion' (SME) as such are not covered in the MSIHC Rules,1989/amendment 2000. The products also called as "Nitrate Mixture". Since, Ammonium nitrate used as raw
2.	Bulk Emulsion (SME) (Nitrate Mixture)	NIL	125000	125000	5(f) & 6(b)	

						materials (also stored at site) is listed under Column 3 of Schedule 2 and Group 3 High Reactive chemicals of Schedule 3 of MSIHC Rules, 1989 amended 2000, Hence, Environmental clearance required under project/activity 6(b). Raw materials are processed to make product, hence 5(f).
3.	Sorbitan Monooleate (SMO) C&F	9162	NIL	9162	5(f)	--
4.	Polyisobutylene succinic anhydride, (PIBSA) C & F	6000	NIL	6000	5(f)	--
5.	Lead Azide (Captive)	9	Nil	9	5(f)	ASA is Mixture of Lead Azide, Lead Styphanate and aluminium powder. ASA used to manufacture Detonators. Products Sl. no. 5 to 11 are covered under Group-4 Explosives chemicals of Schedule 3 of MSIHC Rules,1989 amended 2000. These chemicals are stored as raw materials for captive use and as finished products stored at site
6.	Lead Styphanate (Captive)	3	Nil	3	5(f)	
7.	ASA (Mixing and Drying) Captive	12	Nil	12	5(f)	
8.	Penta Erythritol Tetra Nitrate (PETN) C & F	2062.5	937.5	3000	5(f) & 6(b)	
9.	Cyclotetramethylene tetranitamine, (HMX) & HMX Compounded Products , C & F	62.5	237.5	300	5(f) & 6(b)	
10.	RDX & RDX Compounded Products	125	2875	3000	5(f) & 6(b)	
11.	Trinitrotoluene (TNT)	625	2375	3000	5(f) & 6(b)	
12.	Pentolite Cast Booster	1875	1125	3000	5(f) & 6(b)	Cast booster consists of PETN & TNT and casted in Plastic & Paper shells as per defence requirements. The

						products are also stored.
13.	Detonating Fuse	75 Million Meters	75 Million Meters	150 Million Meters	5(f) & 6(b)	Detonating Fuse is the form of cord mainly constitutes of PETN and used as an initiating device. The products are also stored.

The project/activities are covered under category A of item 5(f) 'Synthetic organic chemicals industry' & 6(b) 'Isolated storage & handling of hazardous chemicals' 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 7th July, 2017. Public hearing was conducted by the Maharashtra SPCB on 28th December 2017. The main issues raised during the public hearing are related to employment to the local villagers, ground vibration during testing of explosives, cracks observed in nearby homes, etc.

Existing land area is 1108474.47 sqm. No additional land shall be required for proposed expansion. Industry has already developed greenbelt in an area of 33% i.e. 365795.35 sqm out of total area of the project. The estimated project cost is Rs.184.01 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 7.0114915 Crores and the Recurring cost (O&M) will be about Rs. 3.6168353 crores per annum. Total employment will be 1710 persons as direct & 100 persons indirect after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Rivers etc within 10 km area. Jam River flows at a distance of 18.0 km in West-North West.

Total water requirement is estimated to be 922 cum/day, of which fresh water requirement will be 471 cum/day. Presently the fresh water requirement is met through ground water and after expansion proposed fresh water requirement will be sourced from surface water. Permission for withdrawal for 430 KLD has been obtained from the CGWA vide letter dated 15th May, 2018. To meet the additional requirement of water, proposal has been submitted to the concerned regulatory authority.

Total effluent generated from different industrial operations is estimated to be 259 cum/day, which will be treated in ETP, and 227 cum/day of treated water will be reused in the process/gardening. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Existing unit has 11 TPH (2 TPH, 3 TPH & 6 TPH) coal / agro waste briquette fired boiler and Thermopac Boiler of 600000 k Cal/hr capacity. Additionally, 12 TPH coal fired boiler will be installed. Multi cyclone separator/ bag filter with a stack of height of 30 m (existing boilers) and 33.5 m (proposed boilers) will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

Ambient air quality monitoring was carried out at 8 locations during 01 Dec. 2016 to 28 Feb. 2017 and the baseline data indicates the ranges of concentrations as: PM10 (33.7-79.2µg/m3), PM2.5 (13.1-31.7 µg/m3), SO2 (3-16.6 µg/m3) and NO2 (3.4-28.2 µg/m3). AAQ modeling study

for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.05 µg/m3, 0.32 µg/m3 and 3.2 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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

The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during the public hearing have been duly addressed by the project proponent. The Committee also found additional information submitted by the project proponent to be satisfactory.

No prior environmental clearance was required for the existing operations hence there is no requirement of certified compliance report. However, in view of complexity of different products and the processes involved therein, applicability of the EIA Notification, 1994/2006 needs to be further confirmed by the Ministry.

PESO has given licence vide letter dated 16th December, 2014 for the site and layout plan of storage (Petroleum storage Class A installation) as per the Explosives Act, 1884, which is presently valid up to 31st March, 2019. Also, licence for manufacturing explosives has been obtained vide letter dated 7th June, 2018, which is valid up to 31st March, 2020, mandated under the Explosives Rules, 2008.

Consent to Operate for the present industrial operations issued by Maharashtra PCB vide letter dated 30th December, 2016 is valid up to 30th June, 2021.

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *Necessary permission from the Ministry of Defence and/or other statutory authorities shall also be obtained for manufacturing products of their use.*
- *Storage of different raw materials and/or the finished products shall be as decided by the PESO and the permission granted in this regard.*
- *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.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.*
- *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.*
- *Coal with Sulphur content less than 0.5% shall be used as fuel in the boiler, along with bio-fuel/briquettes/bagasse/agro waste.*
- *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 471 cum/day, out of which 430 cum/day shall be met from ground water, and the remaining from surface water resource. 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 should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.*
- *The 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 hearing/consultation shall be satisfactorily implemented.*
- *As committed by the project proponent monitoring stations shall be installed in nearby villages to monitor the vibrations due to blasting.*
- *As committed by the project proponent ground vibrations shall be reduced to NIL.*
- *At least 1.5% 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.*
- *Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.*

Agenda No.4.5.2

Proposed 45 KLPD Molasses based Distillery Unit at Gat No. 141, 142, 143, Dharikheda village, PO Timbi, Tal-Rajpipla Nandod, District Narmada (Gujarat) by M/s Shree Narmada Khand Udyog Sahakari Mandli Ltd - For reconsideration of Environmental Clearance

[IA/GJ/IND2/66997/2017, IA-J-11011/384/2017-IA-II(I)]

The project proponent and the accredited consultant M/s SGM Corporate Consultants Private Ltd made a detailed presentation on salient features of the project.

4.5.2.1 The proposal was last considered by the EAC in its meeting held on 29-31 October, 2018, wherein the EAC desired for clarifications/inputs in respect of the following:-

- Approval by PESO for the site and layout plan for Ethanol storage facilities from safety considerations.
- Revised water balance and permission for withdrawal of ground water.

In response to the above observations, parawise replies submitted by the project proponent are as under: -

S. No.	Clarifications/inputs sought by the EAC	Reply submitted by the project proponent
1	Approval by PESO for the site and layout plan for Ethanol storage facilities from safety considerations	The project proponent has submitted the copy of approval given by Petroleum & Explosives Safety Organisation (PESO).
2	Revised water balance and permission for withdrawal of ground water.	The project proponent has submitted the revised water balance and copy of NOC issued by CGWB.

4.5.2.2 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for setting up 45 KLD molasses based distillery in an area of 437060 m2 by M/s Shree Narmada Khand Udyog Sahakari Mandli Ltd located at Village Dharikheda, PO Timbi, Taluka Rajpipla (Nanded), District Narmada

(Gujarat).

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

S. No.	Product Details	Proposed Quantity
1.	Rectified Spirit / Fuel alcohol production (Lac lit/annum)	115.43 / 109.93
2.	Impure spirit (Lac lit/annum)	6.08
3.	Fusel Oil (lit/annum)	24300
4.	Bio-gas (m3/day)	20365
5.	Bio-compost (TPA)	19141

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 26th October, 2017. Public Hearing for the proposed distillery project has been conducted by the State Pollution Control Board on 20th July 2018. The main issues raised during the public hearing are related to employment and benefit to farmers.

Existing land area available with sugar complex is 437060 m2, out of which only 59520.3 m2 of land is required for proposed distillery unit. Green belt will be developed in 33.62% of total plot area i.e. 146954 m2. The estimated project cost of proposed distillery project is Rs.50.0484 crore. Total capital cost earmarked towards environmental pollution control measures for distillery project is Rs.14.1025 crore and the recurring cost (operation and maintenance) will be about Rs 1.106 crore per annum.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km distance from the project site. River Narmada flows at a distance of 7.50 Km in north direction and Karjan River flows at a distance of about 10 Km in east direction.

Total water requirement for proposed distillery project is 1486 cum/day of which fresh water requirement of 293 cum/day and will be met from the existing bore well. Approval from the Central Ground Water Authority has been obtained vide their letter dated 24th December, 2018 for ground water withdrawal of 2350 cum/day.

Effluents of 515 cum/day generated from the proposed distillery project will be treated through Condensate Polishing Unit (CPU) and spent wash of 482 TPD will be sent for bio-methanation followed by concentration of bio-methanated spent wash with integrated evaporation and standalone evaporation system to further concentrate the spent wash (6% to 30%, i.e. from 482 TPD to 96 TPD) followed by composting system. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Existing unit has 35 TPH incinerator fired boiler. Additionally, 50 TPH incineration boiler will be installed. Bag filter with a stack of height of 60 m will be installed for control the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boilers.

The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during the public hearing have been duly addressed by the project proponent. The Committee also found additional information submitted by the project proponent to be satisfactory.

PESO has given approval for the site and layout plan of storage facilities (Petroleum storage Class A installation) vide letter dated 16th November, 2018 to enable the mandatory licence in Form XV as per the Petroleum Rules, 2002.

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board as required.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Total fresh water requirement shall not exceed 293 cum/day proposed to be met from* ground water*. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  (i) Metering and control of quantities of active ingredients to minimize waste.
  (ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  (iii) Use of automated filling to minimize spillage.
  (iv) Use of Close Feed system into batch reactors.
  (v) Venting equipment through vapour recovery system.
  (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- *The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.*
- *At least 2% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*

- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.*
- *Storage of raw materials shall be either 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.*
- *There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.*

Agenda No.4.5.3

Manufacturing of Bulk Continuous Filament (BCF) Yarn and Partially Oriented Yarn by M/s Welspun Flooring Limited at Survey No. 190, Village-Chandanvalli, Shabad (Mandal), District Ranga Reddy (Telangana) - For Environmental Clearance

[IA/TG/IND2/86277/2018]

The project proponent and their Consultant M/s Unistar Environment and Research Labs Private Limited made a detailed presentation on the salient features of the project.

4.5.3.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up of Bulk Continuous Filament Yarn @ 17,500 TPA and Partially Oriented Yarn @ 7500 TPA manufacturing unit by M/s Welspun Flooring Limited in an area of 85 acres at Sy. No.190, Village Chandanavalle, Tehsil Shabad, District Rangareddy (Telangana).

The project/activity is covered under category B of item 5(d) 'Manmade fiber (other than rayon)' of the schedule to the Environmental Impact Assessment Notification, 2006. However, due to absence of SEAC/SEIAA in the State, the proposal was considered by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The proposal has been submitted for consideration under category B2 without any ToR, public hearing and the EIA/EMP report, as per the Ministry's OM dated 24th December, 2013 in case of all manmade fibre manufacturing units producing fibres from granules or chips.

Total land area is 200 acres sqm. Greenbelt will be developed in an area of 33.5% i.e.85 acres out of total area of the project. The estimated project cost is Rs.344.75 crores. Total capital

cost earmarked towards environmental pollution control measures is Rs.4.65 crores and the recurring cost (operation & maintenance) will be about Rs.111 lakhs per annum.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Rivers etc. within 10 km from the project site. River Polaram Cheruvu flows at distance of 0.64 km in SW, Machanapalli cheruvu flows at a distance of 1.08 km in SW and Musa River flows at distance of 3 km in North.

Total water requirement is estimated to be 768.5 cum/day, which includes fresh water of 688 cum/day to be met from the Telangana State Industrial Infrastructure corporation.

Industrial effluent of 80.5 cum/day generated will be treated through MEE and Effluent Treatment Plant followed by RO. Domestic effluent will be treated in STP. 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 8.7 MW, which is met from Telangana State power distribution corporation limited (TSPDCL). Three DG sets of 1500 kVA capacity each will be used as standby during power failure. Stack of height 7.7 m will be provided as per CPCB norms.

Two coal/Rice Husk fired boiler of 10 TPH capacity each will be installed. Bag filter with a stack of height of 30 m will be provided to control the particulate emissions within the statutory limits of 115 mg/NM3 for the proposed boiler.

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

4.5.3.2 *The EAC, after deliberations, desired that the Ministry may confirm categorization of the unit under category B2, as claimed by the project proponent, vis-a-vis the provisions of the EIA Notification, 2006 and the subsequent amendments therein, and also the OM dated 24th December, 2013 in this regard.*

The Committee, considering the proposal under B2 category, exempted the project from EIA studies and public hearing, and 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.*
- *Solvent management, if any, shall be carried out as follows:*
  - *(i) Reactor shall be connected to chilled brine condenser system.*
  - *(ii) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - *(iii) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 98% recovery.*

(iv) *Solvents shall be stored in a separate space specified with all safety measures.*
(v) *Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
(vi) *Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*

- *Total fresh water requirement shall not exceed* 688 cum/day *proposed to be met from TSIIC. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Rain water harvesting structures shall be provided to reduce dependency of fresh surface water for industrial purposes. In any case, no ground water shall be used for the plant.*
- *The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed 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 at least 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *At least 1.5% 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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*
- *The energy sources for lighting purposes shall preferably be LED based.*
- *Transportation of raw materials/products should be carefully performed using GPS enabled vehicles.*

Agenda No.4.5.4

Proposed manufacturing unit for production food preservatives at Plot No.E-73, Additional Patalganga, District Raigad (Maharashtra) by M/s Fine Organic Industries Pvt Ltd - For Environmental Clearance

[IA/MH/IND2/83527/2018, IA-J-11011/47/2018-IA-II(I)]

4.5.4.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up food preservatives manufacturing unit of capacity 25000 TPA by M/s Fine Organic Industries Pvt Ltd in an area of 12000 m2 at Plot No.E-73, Additional Patalganga, District Raigad (Maharashtra), with the products details as under:-

Product	Proposed	Total
Spray Drying method		
Calcium Propionate and/or	10000 MTPA	10000 MTPA
Sodium Propionate and /or		
Calcium acetate		
Potassium propionate		
Mixing method		
Calcium Propionate	15000 MTPA	15000 MTPA

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. However, due to applicability of general condition (Karnala Bird Sanctuary is within 5 km), the project requires appraisal/approval at Central level in the Ministry.

Standard ToR for the project was granted on 22nd March, 2018. Public hearing is exempted as per the para 7.III Stage (3)(i)(b) of the EIA Notification, 2006 in view of the project site located within the notified industrial area.

Total land area required for the project is 12000 m2. Greenbelt will be developed in an area of 33% i.e. 2787 sqm out of total area of the project. The estimated project cost is Rs.52.96 crore. Total capital cost earmarked towards environmental pollution control measures is Rs.97.0 lakhs and the recurring cost (operation and maintenance) will be about Rs. 55.5 lakhs per annum.

Karnala Bird sanctuary is situated within 5 km from the project site. Patalganga River flows at distance of 0.6 km in North West.

Total water requirement is estimated to be 290 m3/day including fresh water demand of 220 cum/day proposed to be met from MIDC.

Effluent of 4.5 cum/day will be treated in the STP cum ETP followed evaporation. Treated water of 70 cum/day will be reused. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

One furnace oil fired thermopack of capacity 15 lac kcal/hr with a stack of height of 39.5 m will be installed.

Ambient air quality monitoring was carried out at nine locations during March-May, 2018 and the baseline data indicates the ranges of concentrations as PM10 (32.8-50.3 µg/m3), PM2.5 (20.5-45.1 µg/m3), SO2 (8.3-18.7µg/m3) and NOx (12.2-22.9µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 11 µg/m3 and 11.12 µg/m3 with respect to SO2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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

The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

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

- *Environmental clearance shall be subject to obtaining prior clearance from the wildlife angle including clearance from the Standing Committee of the National Board for Wildlife as applicable. Grant of environmental clearance does not necessarily implies that Wildlife Clearance shall be granted to the project and that their proposals for Wildlife Clearance will be considered by the respective authorities on their merits and decision taken.*
- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for 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 99.5% 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 220 cum/day to be met from MIDC. 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.*
- *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 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.*
- *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.4.5.5

Manufacturing of Formaldehyde 100 TPD at Village Toffanpur, Tehsil Derabassi, District SAS Nagar (Punjab) by M/s Trigun Organics - For Environmental Clearance

[IA/PB/IND2/72942/2018, IA-J-11011/54/2018-IA-II(I)]

4.5.5.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up of Formaldehyde manufacturing unit of total capacity 100 TPD by M/s Trigun Organics in an area of 0.255 ha at Village Toffanpur, Tehsil Derabassi, District S.A.S. Nagar (Punjab).

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

Total land area required for the project is 0.255 ha. Greenbelt will be developed in an area of 33 % i.e. 0.0836 Ha out of total area of the project. The estimated project cost is Rs. 430 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs.11.5 Lakhs and the recurring cost (O&M) will be about Rs.8 Lakhs per annum.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Rivers etc within 10 km from the project site. Tangri River and Ghagghar River flows at a distance of 7.8 km in East and 8 km in West South West.

Standard ToR for the project was granted on 22nd March, 2018. Public hearing for the project has been conducted by the SPCB on 18th September, 2018.

Total water requirement is 55 m3/day of which fresh water requirement of 50 m3/day will be met from borewell for which the water withdrawal application is already submitted to CGWA.

The total power requirement will be 0.25 MW proposed to be met from PSTCL (Punjab State Transmission Corporation Ltd). Two DG sets of 125 kVA capacity each will be installed as power backup. Stack of 4m height will be provided as per CPCB norms to the proposed DG sets.

One boiler of 0.6 TPH capacity will be installed. Multi cyclone separator/bag filter with a stack of height of 20 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

Ambient air quality monitoring was carried out at 8 locations during March, 2018 to May, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (60.9–92.4µg/m3), PM2.5 (25.4–50.4µg/m3), SO2 (4.2–11.2µg/m3) and NO2 (16.1–31.4µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be92.417 µg/m3, 11.204 µg/m3 and 31.405 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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

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

4.5.5.2 *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/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines. Fugitive emissions shall be controlled at 99.5% with effective chillers.*
- *Solvent management shall be carried out as follows:*
  - *(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 50 cum/day 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.*
- *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 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.*
- *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.4.5.6

Work Over of temporarily abandoned well and drilling 5 nos. of additional exploratory/development well in an area of 9.63 sq km of Achanta field in West Godavari Dist. in Andhra Pradesh for hydrocarbon prospecting and gas pipeline along with the associated facilities) by M/s PFH Oil & Gas PL - For Environmental Clearance

[IA/AP/IND2/69756/2017, IA-J-11011/482/2017-IA-II(I)]

The Project Proponent and the accredited consultant M/s Bhagavathi Ana Labs Pvt Ltd made a detailed presentation on the salient features of the project.

4.5.6.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for onshore exploration/development of oil & gas from 5 wells along with the associated facilities and work over of the temporarily abandoned well in an area of 9.63 sq km of Achanta field in West Godavari District (Andhra Pradesh).

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).

Total area of the block is 9.63 sq. km. Total land requirement will be 5 ha (1 ha for each well) Total about 5 Ha of land will be leased from the land owners. The estimated project cost is Rs 50 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.20 Lakhs and the recurring cost (O&M) will be about Rs.5 lakhs.

The ToR for the project was granted on 6th November 2017 and public hearing was conducted by State Pollution Control Board on 28th September 2018. The main issues raised during the public hearing are related to the safety measurements, funds for the development of the villages, management wastewater discharge, and the employment opportunities.

Total water requirement is 25 m3/day of which fresh water requirement of 21 m3/day proposed to be met from tankers.

Effluent of 4 m3/day will be treated through catridge filters. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

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 the public hearing have been duly addressed by the project proponent.

4.5.6.2 *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 proposed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16thNovember, 2009 for PM10, PM2.5, SO2, NOX, 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 the proposed quantum of* 21 *cum/day proposed to be met from water tankers, 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.*
- *The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.*
- *All the commitments made to the public during public hearing/consultation shall be satisfactorily implemented.*
- *At least 2% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.*
- *Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office.*
- *Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.*
- *An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to the Ministry's Regional Office.*
- *Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.*
- *On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.*

Agenda No.4.5.7

Proposed Pesticide specific intermediates and synthetic organic chemical manufacturing unit by M/s Reshmika Minerals and Chemicals Private Limited at Plot No. 23, GIDC Industrial Estate Panoli, Talulka Ankleshwar, District Bharuch (Gujarat) - For Environmental Clearance

[IA/GJ/IND2/79285/2017, IA-J-11011/535/2017-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.

4.5.7.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up of pesticide specific intermediates and synthetic organic chemicals manufacturing unit of capacity 3,060 TPM (18 nos of products) by M/s Reshmika Minerals and Chemicals Private Limited in an area of 89632.72 sqm at Plot No.23, GIDC Industrial Estate, Panoli (Gujarat)

The details of existing and proposed products are as under:

S. No	Product	Existing (TPM)	Proposed (TPM)	Total (TPM)
	Inorganic Chemicals			
1	Manganese Dioxide (MnO2) 5-10 mm size	2,000	0	2,000
2	Manganous oxide (MnO)	700	0	700
3	Manganese sulphate solution (25%- 35% w/w)	12,000	0	12,000
4	Bricks (Using Non- Hazardous waste generated from manufacturing process)	36,00,000 Nos./ Month	0	36,00,000 Nos./ Month
	Pesticide Intermediates & Organic chemicals			
5	Di-Ethyl Ketone (DEK)	0	250	250
6	4-Nitro-o-Xylene	0	500	500
7	2,4-Dimethyl-1-Nitrobenzene	0	80	80
8	N-(1-Ethylpropyl)-3,4-Xylidine	0	500	500
9	2-Cynophenol	0	100	100
10	Propiophenone	0	50	50
11	3-Nitro-o-Xylene	0	600	600
12	1,3-Dimethyl-2-Nitrobenzene	0	20	20
13	3,4-Xylidine (3,4 –Dimethyl Aniline)	0	100	100
14	2,6-Xylidine (2,6 –Dimethyl Aniline)	0	10	10
15	2,4-Xylidine (2,4 – Dimethyl Aniline)	0	40	40
16	1-Octanoic acid	0	300	300
17	Styrene oxide	0	200	200
18	Phenyl ethyl alcohol	0	200	200

19	Phenyl ethyl alcohol methyl ether	0	50	50
20	Phenyl acetaldehyde	0	20	20
21	Phenyl acetaldehyde di-methylacetal	0	20	20
22	Phenyl ethyl acetate	0	20	20
	Total	**14700 TPM**	**3060 TPM**	

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

The standard ToR for the project was granted on 22nd March, 2018. Public hearing is exempted as per the para 7.III.Stage (3)(i)(b) of the EIA Notification, 2006 in view of the project site located within the notified industrial area.

Total land area is 89632.72 sqm. Greenbelt will be developed in an area of 33% of total plot area i.e. 29420.43 sqm, out of which 14447.06 sqm will be developed within the premises and 14973.37 sqm greenbelt on adjacent land. The estimated project cost is Rs.130 Crores excluding existing investment of Rs.32.44crores. Total capital cost earmarked towards environmental pollution measures is Rs.775 Lakhs & the recurring cost (O&M) will be about Rs.135 Lakhs per annum.

Present industrial operations and/or the project/activities for manufacturing inorganic chemicals and bricks, are not covered under the schedule to the EIA Notification, 2006 and thus not requiring any prior environmental clearance.

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 913.5 cum/day, of which fresh water requirement will be 748.5 cum/day proposed to be met from GIDC supply.

Total effluent generated from different industrial operations is estimated to be 165 cum/day, which will be treated in ETP, and treated water will be reused. 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 1275 KVA proposed to be met from Dakshin Gujarat Vij Company Ltd (DGVCL). Existing unit has 1 DG set of 315 kVA. Three more DG sets of 500 kVA capacity each will be used as standby during power failure. Adequate stack height will be provided as per CPCB norms.

Ambient air quality monitoring was carried out at 8 locations during March 2018 to May 2018 and baseline data indicates that ranges of average concentrations of PM10 (65.7-87.1 µg/m3), PM2.5 (23.8-39.1 µg/m3), SO2 (7.2-19.7 µg/m3), NOx (10.1-25.7 µg/m3), CO (0.26-1.14 mg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.3 µg/m3, Nil & 0.2 µg/m3

with respect to PM10, SO2 & NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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

The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

4.5.7.2 *The EAC, after deliberations and as resolved earlier in similar other cases, desired that the Ministry may take a comprehensive view on categorization of such projects, taking into consideration its observations in para 4.5.7.1 above.*

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th June, 2011, as amended from time to time, shall be followed.*
- *No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having 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:*
  - *(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 748.5 cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP/RO to meet the prescribed standards.*

- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.*
- *The company shall undertake waste minimization measures as below:-*
  - *(i) Metering and control of quantities of active ingredients to minimize waste.*
  - *(ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(iii) Use of automated filling to minimize spillage.*
  - *(iv) Use of Close Feed system into batch reactors.*
  - *(v) Venting equipment through vapour recovery system.*
  - *(vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 2% of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *Safety and visual reality training shall be provided to employees.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*
- *Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.*

Agenda No.4.5.8

Expansion of Pesticides and Pesticide specific intermediate manufacturing unit at Plot No.117/118, Notified Industrial Estate, GIDC, Ankleshwar, District Bharuch (Gujarat) by M/s. UPL Limited (Unit 1) - For Environmental Clearance

[IA/GJ/IND2/80387/2017, J-11011/582/2017-IA-II(I)]

The project proponent and the accredited Consultant M/s Shivalik Solid Waste Management Limited, made a detailed presentation on the salient features of the project.

4.5.8.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of pesticides (1520 to 4720 TPM) and Pesticide specific intermediate (1120 to 2100 TPM) by M/s UPL Limited (Unit 1) in an area of 136677 sqm at Plot No.117/118, GIDC Industrial Estate, Ankleshwar, District Bharuch (Gujarat).

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

(a) Technical grade Pesticide

S. No	Product Name	Existing Capacity (TPM)	Proposed Additional Capacity (TPM)	Total Capacity After Expansion (TPM)	CAS Number
1	Mancozeb Or Maneb Or Zineb Or Ziram Or Antracol	650	650	1300	8018-01-7 12427-38-2 12122-67-7 137-30-4 12071-83-9
2	Antracol OR Zineb	0	500	500	12071-83-9 12122-67-7
3	Monocrotophos	760	740	1500	6923-22-4
4	Sulfosulfuron (SF-10) OR Tebuconazole OR Acifluorfen	60	60	120	141776-32-1 107534-96-3 62476-59-9
5	Flonicamide (IKI 1145)	50	100	150	158062-67-0
6	Metalaxyl	0	500	500	57837-19-1
7	Karphos	0	150	150	18854-01-8
8	Imazapic	0	500	500	115136-53-3
Total A		**1520**	**3200***	**4720***	

(b) Pesticide Intermediates

S. No	Product Name	Existing Capacity (TPM)	Proposed Additional Capacity (TPM)	Total Capacity After Expansion (TPM)	CAS Number
9	Amino AcetoNitirile Sulphate (AANS)	0	100	100	5466-22-8

10	Trimethyl Phosphite OR Tri Ethyl Phosphite	1120 OR 1000	880 OR 880	2000 (Combined Capacity)	121-45-9
11					122-52-1
Total B		**1120**	**980**	**2100**	

***** In ToR, the product Dichlorovos (DDVP) was included but now deleted since it is now banned from 1 January, 2019.

The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates'; 5(f) 'Synthetic organic chemicals industry' & 1(d) 'Thermal Power Plants' 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 10th February, 2018. Public Hearing is exempted as per the para 7.III.Stage (3)(i)(b)the project site is located inside the notified industrial area.

Existing land area is 136677 sqm. No additional land area will be required. Industry has already developed greenbelt in an area of 33% i.e.,33402 sqm out of total area of the project. The estimated project cost is Rs 353.43 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 20.62 Crores, and the recurring cost (O&M) will be about Rs 3.53 Crores per annum. Total Employment will be 595. persons as direct &510 persons indirect after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Rivers etc. within 10 km from the project site. Narmada River flows at a distance of 7.5 km in North.

Total fresh water requirement is estimated to be 4757 cum/day proposed to be met from GIDC supply.

Effluent of 1273 cum/day will be treated through Effluent Treatment Plant (ETP) having Primary, Secondary & Tertiary Treatments & Discharged to Final Effluent Treatment Plant (FETP) Operated by Narmada Clean Tech (NCT) for Further treatment and disposal.

Power requirement after expansion will be 32653 kW proposed to be met from Dakshin Gujarat Vij Company Limited (DGVCL). Existing unit has two DG sets of 1250 kVA 500 kVA capacity. One more DG set of 1250 kVA will be required under proposed expansion.

Existing unit has 3 Natural Gas/FO fired boilers of 10 TPH capacity each the same will be will be replaced with two Natural Gas/FO boilers of 30 TPH capacity each and one boiler of 35 TPH capacity. Multi cyclone separator/ bag filter with a stack of height of 30 m will be installed to control the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

Ambient air quality monitoring was carried out at 8 (Eight) locations during March to May 2018. and the baseline data indicates the ranges of concentrations as: PM10 (54.5-88.3µg/m3), PM2.5 (31.4-53.4µg/m3), SO2 (7.7-28.5µg/m3) and NOx (12.1- 34.8µg/m3). AAQ modelling study for point source emissions indicates that the maximum GLCs after the proposed project would be 88.66 µg/m3, 28.92 µg/m3 and 35.58 µg/m3 with respect to PM10, SO2 & NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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

The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

Earlier, the Ministry has granted EC vide letter dated 17th July, 2003 for expansion of Pesticide manufacturing unit and 4th April, 2007 for Product Mix change of Pesticides in favor of M/s United Phosphorous Ltd. The monitoring report on compliance status of above EC conditions issued by the Regional office at Bhopal vide letter dated 18th October 2018 and was found to be satisfactory.

4.5.8.2 *The EAC, in the first instance observed inconsistency in respect of products details mentioned in earlier ECs, standard ToR dated 10th February, 2018 and the present proposal, and insisted for the rectification. The Committee also asked the project proponent to clarify about none of the pesticides/chemicals banned by the Ministry of Agriculture and Family Welfare and/or other regulatory authorities to the satisfaction of the Ministry.*

However, considering the proposal based on the information available, the Committee recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under: -

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th June, 2011, as amended from time to time, shall be followed.*
- *No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having LD_{50}<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows:*
  - *(i) Reactor shall be connected to chilled brine condenser system.*
  - *(ii) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - *(iii) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
  - *(iv) Solvents shall be stored in a separate space specified with all safety measures.*
  - *(v) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - *(vi) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  - *(vii) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed 4757 cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*

- *Effluent of 1273 cum/day shall be treated through Effluent Treatment Plant (ETP) having primary, secondary & tertiary treatment units and then taken Final Effluent Treatment Plant (FETP) operated by M/s Narmada Clean Tech (NCT) for further treatment and disposal.*
- *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.*
- *All the commitments made to the public during public hearing/consultation shall be satisfactorily implemented.*
- *As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 0.75% of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *Safety and visual reality training shall be provided to employees.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*
- *Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.*

4.6 Any Other

Agenda No.4.6.1

Expansion Project of Active Pharmaceuticals Ingredients (APIs) and API Intermediates Manufacturing unit (4680 TPA) at Sy. No.339, Village Nallabandagudem, Mandal Kodad, District Nalgonda, Telangana by M/s Porus Laboratories Pvt Ltd (Unit-I) - For Validity extension of ToR

[IA/TG/IND2/85784/2015, F. No. J-11011/86/2015-IA-II(I)]

4.6.1.1 The proposal is for extension of validity of Terms of Reference granted by the Ministry vide letter dated 28th December, 2015 for the expansion of Pharmaceuticals Ingredients (APIs) and API Intermediates Manufacturing unit from 2280 TPA to 4680 TPA in favour of M/s Porus Laboratories Pvt Ltd (Unit-I) located at Sy.No.339, Unit-I, Nallabandagudem Village, Kodad Mandal, Suryapet District (Telangana).

4.6.1.2 The project proponent has informed that due to delay in conducting the public hearing by the State Pollution Control Board, extension of ToR validity has been sought.

4.6.1.3 *The Committee, after deliberations, recommended for extension of validity of the ToR dated 28th December, 2015 for a period of one year i.e. till 28th December, 2019.*

Agenda No.4.6.2

Development Drilling in PY-1 Offshore Oil & Gas Block (Drilling of 8 additional development wells) of Cauvery Basin in Tamil Nadu by M/s Hindustan Oil Exploration Company Ltd - For amendment in ToR

[IA/TN/IND2/70842/2017, IA-J-11011/541/2017-IA-II(I)]

4.6.2.1 The proposal is for amendment in the Standard ToR dated 25th January, 2018 granted by the Ministry in favour of M/s Hindustan Oil Exploration Company Ltd to the project for Development Drilling (drilling of 8 additional wells) in offshore Block PY-1 field of Cauvery Basin in Tamil Nadu.

4.6.2.2 The project proponent has requested for exemption from public hearing and inclusion of CRZ condition as the project falling in CRZ-IV area and thus attracting provisions of the CRZ Notification, 2011/2019.

4.6.2.3 *The Committee, after deliberations, noted that the project involves offshore activities covering area between 7-9 Nautical miles from the sea shore. Accordingly, there could be no relevance of public consultation/hearing and thus no requirement for amendment in the said ToR. The Committee asked the project proponent to submit the proposal for EC along with the recommendations of SCZMA, as applicable.*

Agenda No.4.6.3

Revamp of VDU-II project at IOCL, Haldia Refinery, East Medinipur (West Bengal) by M/s Haldia Refinery Indian Oil Corporation Limited - For amendment in ToR

4.6.3.1 The proposal is for amendment in the Terms of Reference dated 28th October, 2018 granted by the Ministry in favour of M/s Indian Oil Corporation Ltd for the project VDU-II Revamp at Haldia Refinery.

4.6.3.2 The project proponent has requested for amendment in ToR with the details as under;

S. No.	Para of ToR	Details as per the ToR	To be revised	Justification/ reasons
1.	ToR reference no. J-11011/175/2016-IA II(I)	The ToR has been granted with reference no. J-11011/175 /2016-IA II(I) based on latest environmental clearance of BS-VI (Phase-I) project at IOCL Haldia Refinery on dated 28.11.2017 which was mentioned by us while applying for TOR of VDU-II revamp.	The ToR reference number required to be revised based on earlier Environmental clearance for VDU-II (2nd Vacuum Distillation Unit) of IOCL Haldia Refinery.	Requested to revise TOR reference file number for VDU-II revamp project in line with previous environmental clearance awarded for VDU-II having file No.: J/11011/28/2000/IA II. Copy of Environmental clearance for VDU-II is enclosed
2.	ToR reference No.J-11011/175/2016-IA II (I) dated 28.10.2018 ; General points no. ix (page no. 8)	**Quote:** "EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCB shall conduct the Public Hearing/ public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing	Exemption from Public Hearing is requested for the proposed project of VDU-II Revamp and amendment is requested in the ToR accordingly.	Public Hearing was done for previous major projects with EC file no F. No. J-11011/299/2013-IA-II (I) dated 4th March 2016. Copy of the compliance report for points raised during Public Hearing is enclosed as *Annexure-C*. Present project is only capacity revamp of existing unit VDU-II up to 2.6 MMTPA. No additional land will be required. Only modification will be done such as: • Distillation column internals modification. • Replacement of heat exchangers with higher load. • Replacement of pumps with higher capacity. • Modification in Heater.

		and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP report in a separator chapter and summarized in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance"		Post VDU-II revamp, incremental fresh water requirement will be 4.5 M3/Hour, SO2 emission will rise by 1.5 Kg/Hour and effluent generation will rise by 1.0 M3/Hour. *Annexure-D* is enclosed showing details of additional fresh water consumption, SO2 emission and effluent water generation due to propose VDU-II revamp project. Capital investment cost for this revamp is only Rs. 42.0 Crore. Public Hearing was exempted during last EC granted for BS-VI Fuel quality up-gradation project.

4.6.3.3 *The Committee, after detailed deliberations, found the proposal not admissible as per the extant provisions of the EIA Notification, 2006.*

Agenda No.4.6.4

Modification in existing 120 KLPD Distillery (Grain to Dual mode of operation - Grain/ Molasses based) at Village Dhudhua, Tehsil Jandaha, District Vaishali, Bihar by M/s. Globus Spirits Limited - For amendment in ToR

[IA/BR/IND2/82103/2018, J-11011/279/2013-IA II (I)]

4.6.4.1 The proposal is for amendment in Terms of Reference dated 17th November, 2018 granted by the Ministry in favour of M/s Globus Spirits Limited for modification project of existing 120 KLPD Distillery (Grain to Dual mode of operation i.e.Grain/Molasses based) at Village Dhudhua, Tehsil Jandaha, District Vaishali (Bihar).

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

S. No.	Para of ToR	Details as per the ToR	To be revised/ read as	Justification/reasons

1.	Standard ToR Letter; Page no 2; Para First	Preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed **with public consultation.**	Preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed **without public consultation.**	Public Hearing to be exempted for this modification project – The company has existing 120 KLPD Grain based Distillery along with 3.5 MW Co-generation Power Plant at Village Dhudhua, Tehsil Jandaha, District Vaishali, Bihar. **Public Hearing for the project was conducted on 19th November, 2014** and thereafter Environmental Clearance was obtained from MoEFCC, New Delhi vide Letter No. J-11011/279/2013- 1A II (I) dated 9th November, 2015. Now the company proposing modification in existing 120 KLPD Distillery (Grain to Dual mode of operation - Grain / Molasses based) within their existing plant premises. After the modification of the distillery, the company will produce Ethanol & on demand ENA/RS. With this proposed modification there will be **no change in the production capacity**. During molasses operation the concentrated spent wash will be completely burnt in the incineration boiler. No additional water, power or manpower is required for the proposed modification. The project is/ will be completely based on Zero Liquid Discharge.

4.6.4.3 *The EAC, after deliberations, noted that due to the proposed dual mode of operation of the distillery, there would be significant change in present scope of the project which shall also involve more pollution load. Moreover, the public hearing dated 19th November, 2014 being more than three years old, the present proposal for exemption from public hearing is not admissible in terms of the extant norms/guidelines in this regard.*

Day Three - 28th February, 2019

4.7 Environmental Clearance

Agenda No.4.7.1

Expansion of Pharma and Agro Chemical Products Manufacturing Unit at Plot No.629, 630-B, GIDC Panoli, Taluka Ankleshwar, District Bharuch (Gujrat) by M/s Hikal Limited - For Environmental Clearance

[IA/GJ/IND2/77372/2008, J-11011/98/2008-IA II (I)]

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

4.7.1.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of pharma products from 2,910 TPA (10 no of products) to 12,355 TPA (21 no of products) and agro-chemicals from

800 TPA (8 no of products) to 14,550 TPA (13 no of products) by M/s Hikal Limited in an area of 1,21,355.30 sqm located Plot Nos. 629,630-B GIDC Estate Panoli, Taluk Ankleshwar, District Bharuch (Gujarat).

The details of existing and proposed products are as under:

S. No	Product	Chemical Name	Existing	Proposed	Total
			Capacity (TPA)		
	Pharma Products				
1	Gemester	Isoobutyl 5(2.5dimethylphenoxy) 2-2 diemthylpentanoate	100	300	400
2	Bupropion-HCl	((1-Propanone, 1-(3-chlorophenyl)-2-((1,1-dimethylethyl)amino) hydrochloride)	100	300	400
3	Lactum	2-Azaspiro (4,5) decan-3 one	1800	2200	4000
4	HPP-529	(Ethyl 2 oxo pyro butanoate)	150	450	600
5	HPP-453 (Decoquinate)	Ethyl 6-decyloxy 7 ethoxy 4 hydroxy 3 quinolinecarboxylate	150	450	600
6	HPP-799	Ethyly 2 oxo pyro acetate	60	540	600
7	HPP-913 (CBZ Amide)		100	-100	0
8	Leavi (Leavetiractam)		100	-100	0
9	PBA HCl		50	-50	0
10	Gabapentin	(Neurontin 1-(Aminomethyl)_cyclohexaneacetic acid	300	700	1000
11	HBS - Hydrozobenzene sulfonamide	4- Sulphonamido phenyl hydrazine hydrochloride	0	300	300
12	Diketon	1-(4-Methylphenyl)-4, 4, 4-trifluorobutane-1, 3-dione	0	200	200
13	S Ester	S –(3-Cyano 5-methyl hexonoic acid methyl ester	0	855	855
14	Pregablin	(Lyrica S-3-(Aminomethyl)-5-methylhexanoic acid	0	500	500
15	Gemfibrozil	(2,2-Dimethyl-5-(2,5-dimethylphenoxy) pentanoic acid	0	400	400
16	Bupropion	3-Chloro-N-tert-butyl-β-keto-α-methylphenethylamine	0	300	300
17	Celecoxib	4-[5-(4-Methylphenyl)-3-	0	300	300

		(trifluoromethyl)pyrazol-1-yl]benzenesulfonamide			
18	Quetiapine	2-(2-(4-Dibenzo[b,f][1,4]thiazepine-11-yl-1-piperazinyl)ethoxy)ethane	0	300	300
19	Sitagliptin	7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8- tetrahydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazine phosphate	0	300	300
20	Dabigatran	N-[(2-{[(4-{N'-[(hexyloxy)carbonyl]carbamimidoyl}phenyl)amino]methyl}-1-methyl-1H-benzimidazol-5-yl)carbonyl]-N-2-pyridinyl-β-alaninate	0	300	300
21	Canagliflozin	2-{3-[5-[4-Fluoro-phenyl)-thiophen-2-ylmethyl]-4-methyl-phenyl}-6-hydroxymethyl-tetrahydro-pyran-3,4,5-triol	0	200	200
22	Dabagliflozin	-2-[4-Chloro-3-(4-ethoxybenzyl)phenyl]-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol	0	200	200
23	Vildagliptin	S -1[N-(3-Hydroxy-1adamantyl)glycyl] pyrrolidine-2-carbonitrile	0	300	300
24	Quetiapine 2/4	2-[2-(4-Dibenzo[b,f] [1,4] thiazepine-11yl-1piperazinyl)ethoxyl] ethanol hemifumarate	0	300	300
	Sub Total (A)		**2,910**	**9,445**	**12,355**
	Agrochemical Products				
1	Quinlphos (TECH)		100	-100	0
2	Ethion (TECH)		50	-50	0
3	Trizophos		50	-50	0
4	Karphos		100	-100	0
5	Temphos	[4-(4-dimethoxyphosphinothioyloxyphenyl)sulfanylphenoxy]-dimethoxy-sulfanylidene-$l^{5}-	200	300	500

		phosphane			
6	3-5 DFA		100	-100	0
7	AF -02 with intermediate	(4 acetoxy 6 tert butyl 8 fluro 2, 3 dimethylequinoline) with intermediate	100	50	150
8	Isoxazole (RTY)		100	-100	0
9	Karphos with Isoxazole (RTY)	diethoxy-[(5-phenyl-1,2-oxazol-3-yl)oxy]-sulfanylidene-$l^{5}-phosphane	0	300	300
10	Thiacloprid	[3-[(6-chloropyridin-3-yl)methyl]-1,3-thiazolidin-2-ylidene]cyanamide	0	1000	1000
11	Clothianidin	(E) -1-(2-Chloro-1, 3 -Thiazol-5-ylmethyl)-3-methyl-2 nitroguanidine	0	1000	1000
12	Trifloxystrobin (HPP 261)	methyl (2E)-2-methoxyimino-2-[2-[[(E)-1-[3-(trifluoromethyl)phenyl]ethylideneamino]oxymethyl]phenyl]acetate	0	2000	2000
13	Prothioconazole	2-[2-(1-chlorocyclopropyl)-3-(2-chlorophenyl)-2-hydroxypropyl]-1H-1,2,4-triazole-3-thione	0	1500	1500
14	Cyclniliprole	5-bromo-N-[2-bromo-4-chloro-6-(1-cyclopropylethylcarbamoyl)phenyl]-2-(3-chloropyridin-2-yl)pyrazole-3-carboxamide	0	500	500
15	IKF with HPP	(5-chloro-2-methoxy-4-methylpyridin-3-yl)-(2,3,4-trimethoxy-6-methylphenyl)methanone	0	300	300
16	BIT - Benzoisothiazol	1,2-benzothiazol-3-one	0	3500	3500
17	MPDC DME	5-MPDC DME ; 2,3-Pyridinedicarboxylic acid, 5-methyl-, 2,3-dimethyl ester	0	2000	2000
18	5- MPDC (MPDC -CA)	5-Methoxyl methyl Pyridine 2,3 dicarboxylic acid	0	1500	1500
19	Benzophenaf (HPP-255)	2-[4-(2,4 dichloro-m-toluoys)_1,3diemthyl-	0	300	300

		pyrazol-5yloxy]4-methylacetophenone			
	Sub Total (B)		**800**	**13,750**	**14,550**
	Grand Total		**3,710**	**23,195**	**26,905**

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

Standard ToR for the project was granted on 10th May, 2018. Public hearing for the project is exempted as the project site is located in the notified Industrial area/estate.

Existing land area is 1,21,355.30 sqm, additional land is not required for the proposed expansion. Industry has developed greenbelt in an area of 40,047.25 sqm, covering 33 % of total project area. The estimated project cost is Rs 600 crores including existing investment of Rs 50 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 45 crores and the recurring cost (operation and maintenance) will be about Rs 1.11 crores per annum. Employment opportunity will be for 701 persons directly and 500 persons indirectly after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Narmada is flowing at a distance of 10.8 Km in North direction.

Ambient air quality monitoring was carried out at 8 locations during March to May, 2018 and the baseline data indicates the ranges of concentrations as: PM_{10} (58.51-84.22 µg/m3), $PM_{2.5}$ (19.09-40.24 µg/m3), SO_2 (4.94-12.30µg/m3) and NO_x (9.33-22.22µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.08 µg/m3, 0.72 µg/m3 and 2.29 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

Total water requirement is 8936 cum/day, which includes fresh water requirement of 5524 cum/day, which will be met from Panoli GIDC Water Supply System.

Industrial effluent of 3857 cum/day will be treated through stripper column, MEE & ATFD (for High COD) and ETP & RO (for low COD). Treated effluent of 3085 will be reused in the process/cooling tower/boiler. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement after expansion will be 22 MW which will be met from Dakshin Gujarat Vij Company Limited State power distribution corporation limited (DGVCL-SPDCL). Existing unit has 11.5 (5 + 6.5) TPH NG/FO fired boiler. Additionally, 110 (10 + 15 +15 + 15 + 15 + 40) TPH FO/NG/Coal/ Briquette fired boiler will be installed. Multi cyclone separator/ bag filter with a stack of height of 30 m each will be installed for controlling the particulate emissions within the statutory limit for the proposed boilers.

Tri fluoro acetic acid is being consumed for the manufacturing of pharma product namely Vildagliptin, which will be sourced from indigenous manufacturer. During, stage 2 of

manufacturing, waste TFA will be generated and will be segregated at site and shall be sent for reprocessing. 2-IPA used in various products will be recovered at 85-88% and reused in process and remaining will be sent for incineration at common incinerator.

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

Earlier, the Ministry has issued EC vide letter dated 24th September, 2008 for the expansion of chemical manufacturing unit by M/s Hikal Limited. The monitoring report on compliance status of EC conditions (site visit conducted on 29th April, 2018) was forwarded by the Ministry's Regional Office at Bhopal vide letter dated 1st November, 2018.

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 the Gujarat PCB vide letter dated 4th March, 2016, is presently valid up to 24th April, 2018, and application for renewal has been submitted.

4.7.1.2 *The EAC, in the first instance and especially in view of pharma products and agro-chemicals manufacturing proposed within the same premises, as envisaged under the project, was not comfortable to accept the proposal and insisted for categorical demarcation between two activities. Further, as resolved earlier also in similar cases, the Committee desired that the Ministry may take a comprehensive view on categorization of such projects, taking into consideration its observations in para 4.7.1.1 above.*

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th June, 2011, amended from time to time, shall be followed.*
- *No pesticides banned by the Ministry of Agriculture & Farmers Welfare, or having LD_{50}<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *At least 50% of the fuel requirement for boiler shall be met from natural gas. Coal shall not be used as fuel in the boiler.*
- *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 5524 cum/day is to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP/RO to meet the prescribed standards.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash & dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
  (a) *Metering and control of quantities of active ingredients to minimize waste.*
  (b) *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  (c) *Use of automated filling to minimize spillage.*
  (d) *Use of Close Feed system into batch reactors.*
  (e) *Venting equipment through vapour recovery system.*
  (f) *Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 2.5% of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *Safety and visual reality training shall be provided to employees.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be*

transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

- *Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.*

Agenda No.4.7.2

Expansion of bulk drugs and drug intermediates manufacturing unit at survey No.35 & 36, behind HGI Foundary, Vill Baska, Taluka Halol, District Panchmahal (Gujarat) by M/s Anmol Antioxidants Pvt Ltd - For Environmental Clearance

[IA/GJ/IND2/81554/2017, IA-J-11011/432/2017-IA-II(I)]

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

4.7.2.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of bulk drugs & bulk drug intermediates manufacturing unit from 21.88 TPM to 141.88 TPM by M/s Anmol Antioxidants Pvt Ltd in an area of 33,081 sqm located at Plot No. 35 & 36, Village Baska, Taluka Halol, District Panchmahal (Gujarat).

The details of products and capacity as under:

S. No.	Products	CAS No.	LD50	LC50	Existing (TPM)	Proposed (TPM)	Total (TPM)
Existing Products							
1	Ethisterone	434-03-7	300 mg/Kg	--	0.2	--	0.2
2	Nandrolone	434-22-0	300 mg/kg	--	0.1	--	0.1
3	Betamethasone valerate	2152-44-5	Oral (LD50): Acute: 4067 mg/kg [Rat].	--	0.05	--	0.05
4	Budesonide	51333-22-3	Oral (LD50): Acute: 3200 mg/kg [Rat]. 4750 mg/kg [Mouse]	--	0.03	--	0.03
5	Mometasone Furoate	83919-23-7	2000 mg/kg	--	0.03	--	0.03

6	Triamcinolone	124-94-7	--	--	0.03	--	0.03
7	Betamethasone Dipropionate	5593-20-4	--	--	0.05	--	0.05
8	Clobetasol propionate	25122-46-7	Oral (LD50): Acute: >3000 mg/kg [Rat]. >3000 mg/kg [Mouse]	--	0.07	--	0.07
9	Triamainolone Acetonide	76-25-5	3000 mg/kg	NA	0.07	--	0.07
10	Sulphonated Melamine Formaldehyde condensate Solution	9003-08-1	270 mg/kg	203 mg/m3	16	--	16
11	Halobetasole propionate	66852-54-8	-	--	0.03	--	0.03
12	Dexamethasone Sodium Phosphate	2392-39-4	Oral (LD50): Acute: 1800 mg/kg [Mouse]	--	0.05	--	0.05
13	Clobetasol Butyrate	25122-57-0	6000 mg/kg	--	0.03	--	0.03
14	Beclomethasone Dipropionate	5534-09-8	Oral (LD50): Acute: 3750 mg/kg [Rat]. 5000 mg/kg [Mouse]	--	0.03	--	0.03
15	Prednisolone sodium phosphate	125-02-0	360 mg/kg	NA	0.03	--	0.03
16	Betamethasone Sodium phosphate	151-73-5	Oral (LD50): Acute: 1607 mg/kg [Mouse]	--	0.05	--	0.05
17	N (3-bromo	87-41-2	--	--	5	--	5

	propyl pthalide)						
18	Prednisolone Acetate	52-21-1	Oral (LD50): Acute: 1680 mg/kg [Mouse]	--	0.03	--	0.03
Additional Products							
GROUP- A							
19	Acebrofylline	96989-76-3	--	--	--	30	30
20	Ambroxol Hydrchloride	15942-05-9	2720 mg/kg	--			
21	Amlodipine Besylate	111470-99-6	Oral (LD50): Acute: 393 mg/kg [Rat]. 37 mg/kg [Mouse]	--			
22	Bupropion Hydrochloride	31677-93-7	Oral (LD50): 482 mg/kg [Rat]. 544 mg/kg [Mouse]	--			
23	Celecoxib	169590-42-5	5 mg/kg	--			
24	Doxofylline	69975-86-6	300 mg/kg	--			
25	Drotaverine Hydrochloride	985-12-6	Oral (LD50): (rat): 540 mg/kg; Oral LD50 (mouse): 350 mg/kg	--			
GROUP- B							
26	Etoricoxib	202409-33-4	0.7 mg/kg	--			
27	Flurbiprofen	5104-49-4	Oral (LD50)	--			

			: Acute: 117 mg/kg [Rat]. 640 mg/kg [Mouse]: 290 mg/kg [Rabbit].		--	30	30
28	Glibenclamide	10238-21-8	Oral (LD50) : rat> 20,000 mg/kg	--			
29	Phenazopyridine Hydrochloride	136-40-3	Oral (LD50) : Acute: 472 mg/kg [Rat].	--			
30	Phenyl Ephrine	61-76-7	120 mg/kg	--			
31	Quetiapine fumarate	111974-72-2	3.53 µg/kg	--			
32	Telmisartan	144701-48-4	3 mg/kg	--			
33	Valsartan	137862-53-4	300 mg/kg	--			
GROUP- C							
34	Bisoprolol Fumarate	66722-44-9	300 mg/kg	--	--	10	10
35	Brimonidine Tartrate	70359-46-5	50 mg/kg	--			
36	Capacitabine	154361-50-9	2000 mg/kg	--			
37	Cinacalcet Hydrochloride	364782-34-3	300 mg/kg	--			
38	Donepezil Hydrochloride	120011-70-3	32.6 mg/kg	2000 mg/m3			
39	Gemcitabine Hydrochloride	122111-03-9	333 mg/kg	--			
40	Glimepiride	93479-97-1	10000 mg/kg	--			
41	Ivabridine	148849-67-6	--	--			
42	Nevivolol	152520-	300	--			

	Hydrochloride	56-4	mg/kg				
43	Pirfenidone	53179-13-8	Oral LD50 (rat): 1295 mg/kg; Oral LD50 (mouse): 580 mg/kg	--			
44	Sofosbuvir	1190307-88-0	300 mg/kg	--			
45	Terbinafine Hydrochloride	78628-80-5	Dermal(LD50): Acute: >20000 mg/kg [Rat].	--			
46	Ursodeoxycholic acid	128-13-2	Acute oral toxicity (LD50): 4600 mg/kg [Rat].	--			
GROUP- D							
47	2 Amino Phenyl phenyl Sulfide	1134-94-7	--	--	--	40	40
48	2 Amino 3,5 Di bromo benzaldehyde	50910-55-9	--	--			
49	Dibenzo[b,f][1,4]Thiazepin-11(10H)-One	3159-07-7	--	--			
50	4 Methyl Acetophenone	122-00-9	Oral (LD50): rat 1,400 mg/kg	--			
51	2-Chloro-1,3 bis (dimentylamino) trimethinium hexafluoro phosphate	291756-76-8	--	--			
52	2,3-Dibenzoyl-D-Tartaric acid	17026-42-5	--	--			
53	Ethyl Trifluoro Acetate	383-63-1	--	7790 - 128			

				00 mg/ L			
54	m Phenoxy benzyl alcohol	13826-35-2	2040 mg/kg	--			
55	p Methoxy Phenyl Acetonirile	104-47-2	100-125 mg/kg	--			
56	Phthaloyl Amlodipine	88150-62-3	300 mg/kg	--			
57	Sulfanilamide	63-74-1	Oral (LD50): Acute: 3900 mg/kg [Rat]. 3000 mg/kg [Mouse].	Vapor (LC 50): Acute: 255 ppm 4 hour (s) [Rat]			
58	3-Trifluoromethyl Cinnamic Acid	779-89-5	--	--			
GROUP- E							
59	Glipizide	29094-61-9	5000 mg/kg	--			
60	Modafinil	68693-11-8	64 mg/kg	--			
61	Mycophenolate Mofetil	128794-94-5	200 mg/kg	--			
62	Tadalafil	171596-29-5	0.29 mg/kg	--			
63	Tranexamic Acid	1197-18-8	Oral (LD50): Acute: >10000 mg/kg [Mouse]	--			
64	5-(1-Carboxyethyl)-2-Phenylthio-Phenylacetic Acid	83237-49-4	--	--	--	10	10
65	Zaltoprofen	74711-43-6	300 mg/kg	--			
Total					**21.88**	**120**	**141.88**

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

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

Standard ToR for the project was granted on 16th October, 2017. Public hearing for the project has been conducted by the State Pollution Control Board on 11thJune, 2018. The main issues raised during the public hearing are related to air and water pollution, CSR, earlier commitment to the people, etc.

Existing land area is 33,081 sqm, additional land is not required for the proposed expansion. Industry has developed greenbelt in an area of 10,916 sqm, covering 33% of total project area. The estimated project cost is Rs. 11.3 crores including existing investment of Rs. 1.3 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.1.5 crores and the recurring cost (operation and maintenance) will be about Rs.1.5 crores per annum. Employment opportunity will be for 55 persons.

There are National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, rivers etc. within 10 km distance from the project site.

Ambient air quality monitoring was carried out at 12 locations during March to May, 2017 and the baseline data indicates the ranges of concentrations as: PM_{10} (80.85-70.65 µg/m^3), $PM_{2.5}$ (52.15-41.96 µg/m^3), SO_2 (21.73-12.16 µg/m^3) and NO_x (18.23-10.23 µg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.104 µg/m3, 0.073 µg/m3, and 0.042 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

Total water requirement is 163.65 cum/day, which includes fresh water requirement of 101.96 cum/day, proposed to be met through bore well. Application in this regard has been submitted to CGWA.

Effluent generation from the project will be 91.7 cum/day. Low COD Stream of 59.1 KLD will be treated in ETP and then 16.41 KL/Day will be sent to CETP of M/s Nandesari Industries Association for further treatment and disposal. It is now informed that the industry will ensure zero liquid discharge and the treated water will be reused. Treated effluent of 42.69 KLD will be subjected to RO and 37.69 KLD of RO permeate will be reused within premises and 5 KLD of RO reject will be sent to MEE. High COD stream of 20 KLD and 5 KLD of RO reject will be subjected to MEE and MEE condensate will be reused within premises.

Power requirement for proposed project will be 1500 KW including existing 250 KW and will be met from MGVCL. One DG set of 250 KVA capacity shall be used as standby during power failure. Stack (height 11 m) will be provided as per CPCB norms to the proposed DG set.

Unit will have one 3 TPH Agro waste fired boiler, one LDO fired boiler (existing) &one 6 Lakh Kcal/Hr Thermopack. Multi cyclone separator/ bag filter with a stack of height of 15 m, 30 m & 30 m respectively will be installed for controlling the particulate emissions within statutory limit.

The expenditure towards CER for the project would be 2.5 % of the project cost as committed by the project proponent.
The existing unit is in operation since the year 2000 and hence not having EC for the present Industrial operations.

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 by the project proponent.

Consent to operate for the present industrial operations issued by the Gujarat PCB vide letter dated 23rd April, 2014, is valid up to 13th March, 2019.

4.7.2.2 *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/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines. Fugitive emissions shall be controlled at 99.5% with effective chillers.*
- *Solvent management shall be carried out as follows:*
  - *(a) Reactor shall be connected to chilled brine condenser system.*
  - *(b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - *(c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
  - *(d) Solvents shall be stored in a separate space specified with all safety measures.*
  - *(e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - *(f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  - *(g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed 101.96 cum/day to be met through bore well. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- *Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE. Low TDS effluent stream shall be treated in ETP/RO to meet the prescribed standards.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*

- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash & dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
  - *(a) Metering and control of quantities of active ingredients to minimize waste.*
  - *(b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(c) Use of automated filling to minimize spillage.*
  - *(d) Use of Close Feed system into batch reactors.*
  - *(e) Venting equipment through vapour recovery system.*
  - *(f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *Issues raised during the public hearing shall be properly addressed by the project proponent.*
- *As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 2.5% of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *Safety and visual reality training shall be provided to employees.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*

Agenda No.4.7.3

Setting up Bulk Drugs & Intermediates Manufacturing Unit at Sy No: 108 & 109, Jayanthipuram (V) Jaggayyapet (M), Krishna District, Andhra Pradesh by M/s Archimedis Laboratories Private Limited - For Environmental Clearance

[IA/AP/IND2/84787/2018, IA-J-11011/9/2018-IA-II(I)]

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

4.7.3.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up Bulk Drugs & Intermediates Manufacturing Unit of capacity 115 TPM (27 nos of products) by M/s Archimedis Laboratories Private Limited in an area of 11.62 acres located at Sy. Nos.108 & 109, Village Jayanthipuram, Mandal Jaggayyapet, District Krishna (Andhra Pradesh).

The details of products and capacity as under:

S No	Product	Quantity (TPM)	CAS NO	Therapeutic category
1	Itraconazole	4	84625-61-6	Anti fungal
2	Lansprazole	1	103577-45-3	Anti ulcerative
3	Pentaprazole Sodium	9	138786-67-1	Antiulcerative
4	Duloxetine Hydrochloride	2	136434-34-9	Antidepressant
5	Sumatriptan Succinate	1	103628-48-4	Anti migraine
6	Almotriptan Malate	1	181183-52-8	Anti migraine
7	Zolmitriptan	1	139264-17-8	Anti migraine
8	Ketorolac tromethamine	5	74103-07-4	Analgesic
9	Rosuvastatin	4	147098-20-2	Antilipemic
10	Mesalamine (or) Mesalazine	4	89-57-6	Anti-inflammatory
11	Imatinib Mesylate	2	220127-57-1	Anti neoplastic
12	Celecoxib	4	169590-42-5	Arthritis
13	Sitagliptin Phosphate Monohydrate	2	654671-77-9	Hypoglycemic
14	Dabigatran	2	211915-06-9	Anticoagulant
15	Velpatasvir	2	1377049-84-7	Antiviral
16	Emtricitabine	4	143491-57-0	Antiretroviral
17	Olmesartan medoxomil	4	144689-63-4	Anti hypertensive
18	Pregabalin	4	148553-50-8	Anticonvulsant
19	2,4- Dihydro-4-(4-4 hydroxy phenyl)-1-piperazinyl) -2-(1-methyl propyl)-3H-1,2,4-Triazole-3-one(Itraconazole intermediate)	10	-	Drug intermediate
20	Cis -2-[2,4-Di Chloro Phenyl] -2-[1H-1,2,4-Triazole -1-yl Methyl]-1,3 Dioxalane -4 yl Methanol(Itraconazole intermediate)	4	-	Drug intermediate
21	Cis -2-[2,4-Di chloro Phenyl]-2-[1H-1,2,4-Triazole -1-yl methyl]-1,3 Dioxalane-4yl Methyl] Methane Sulfonate (Itraconazole intermediate)	5	-	Drug intermediate
22	2-[3-methyl -4-(2,2,2-trifluoroethoxy)-2-pyridinyl] 5methylthio -1H-benzimidazole(Lansoprazole Sulfide Intermediate)	5	-	Drug intermediate
23	Pentaprazole chloro compound (2-Chloromethyl-3,4-Dimethoxy-Pyridine)	10	72830-09-02	Drug intermediate
24	(S)-(-)-3-(Dimethyl amino)-1-(2-	10	13233-44-5	Drug

	Thienyl)-1-praponal			intermediate
25	4-Chloro-1 hydroxy butane sulphonic acid sodium salt	5	54322-20-2	Drug intermediate
26	4-Chloro Butyralde Diethyl acetal	5	6139-83-9	Drug intermediate
27	4-Dimethyl amino butytalde diethyl acetal	5	1116-77-4	Drug intermediate
	Total	**115**		

By-Products

S. No	Product	By-Product	Quantity (Kg/Day)
1	Lansprazole 2[4-(2,2,2-Tri Fluoro Ethoxy)-3-Methyl Pyridinyl]Methyl Thio]-1h-Benzimidazole Zolmitriptan Imitinib mesylate	Ammonium sulphate	698
2	Lansprazole 2[4-(2,2,2-Tri Fluoro Ethoxy)-3-Methyl Pyridinyl]Methyl Thio]-1h-Benzimidazole	Acetic acid (70%)	414
3	Dabigartan Velpatasvir 2, 4-Di Hydro-4-[4-[4-(4hydroxy Phenyl)-1-Piperazinyl]-2-(1-Methylpropyl)-3h-1, 2, 4-Triazole-3-One (Itraconazole Intermediate) Olmesartan Medoxomil	Hydrobromic acid (20%)	4552
4	Pentaprazole chlorocompound (2-Chloromethyl-3,4-Dimethoxy-Pyridine)	Potassium carbonate	167
		Phosphoric acid	472
5	Emtricitabine	L-Menthol	105

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

Standard ToR for the project was granted on 5th February, 2018. Public hearing was conducted by the State Pollution Control Board on 27th October, 2018. The main issues raised during public hearing are related to drinking water and employment.

Land area available for the project is 11.62 acres (47024.47 sqm). Industry will develop greenbelt in an area of 4.27 acres covering 36.8% of the total project area. The estimated project cost is Rs.30 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.110 lakhs and the recurring cost (operation and maintenance) will be about Rs.20 lakhs per annum. Employment opportunity will be for 80 persons directly and 20 persons indirectly.

There are no National Parks, Wildlife Sanctuaries Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10km from the project site. Palleru river is flowing at a distance of 3.30 km in W direction.

Total water requirement is estimated to be 259 cum/day, which includes fresh water requirement of 175 cum/day, proposed to be met from ground water. The permission to draw ground water for industrial and drinking water purpose was obtained for 269 cum/day from AP Ground Water & Water Audit Department, vide letter dated 20th August, 2018.

Effluent of 105.8 cum/day will be treated through stripper followed by MEE/ATFD, Biological Treatment Plant followed by RO plant. Treated effluent of 84 cum/day will be reused in the process/cooling tower. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 2000 KVA, which will be met from APSPDCL. DG sets of 500 KVA & 1000 KVA capacities will be installed for utilization during power failure. Stack (height 10 mts) will be provided as per CPCB norms to the proposed DG sets. Two coal boilers of 8 TPH & 4 TPH are proposed with stacks of height 34 mtrs & 30 mtrs, Multi cyclone separator/ bag filter, for controlling the particulate emissions within statutory limit.

Ambient air quality monitoring was carried out at 8 locations during March to May 2018 and the baseline data indicates the ranges of concentrations as: PM10 (55.46-68.88 µg/ m3), PM2.5 (18.02-28.92 µg/ m3), SO2 (11.44-15.15 µg/ m3), NOx (17.10-22.33 µg/ m3), CO (0.34-0.74 mg/ m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be PM10, SO2, NOx would be 0.75 µg/ m3, 4.694 µg/ m3, 9.47 µg/ m3**.** The resultant concentrations are within the National Ambient Air Quality Standards.

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

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

4.7.3.2 *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.*
- *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 99.5% with effective chillers.*
- *Odour coming out from the factory shall be prevented and arrested at source.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*

- *Coal (with sulphur content less than 0.5 %) shall be used as fuel in the boiler, and/or bio-fuel/briquettes/bagasse/natural gas.*
- *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* 175 *cum/day 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 should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash and dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
  - *(g) Metering and control of quantities of active ingredients to minimize waste.*
  - *(h) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(i) Use of automated filling to minimize spillage.*
  - *(j) Use of Close Feed system into batch reactors.*
  - *(k) Venting equipment through vapour recovery system.*
  - *(l) 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 hearing/consultation shall be satisfactorily implemented.*
- *At least 2.5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*

- *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 4.7.4

Setting up Chlorinated Paraffin Plasticizer Unit at Village Azimabad Pardi Nagda, District Ujjain (Madhya Pradesh) by M/s Swastik Chloroffin LLP- For Environmental Clearance

[IA/MP/IND2/87993/2018, IA-J-11011/209/2018-IA-II(I)]

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

4.7.4.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up Chlorinated paraffin plasticizer manufacturing Unit of 18000 MTPA by M/s Swastik Chloroffin LLP in an area of 0.73 ha located at Village Azimabad Pardi Nagda, District Ujjain (Madhya Pradesh).

The details of products and capacity as under:

S. No	Product	Capacity (MTPA)
1	Chlorinated Paraffin Plasticizer	18000
By-Product		
1	Hydrochloric Acid	36000

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

Standard ToR for the project was granted on 27th July, 2018. Public hearing was conducted by the State Pollution Control Board on 12th November, 2018. The main issues raised during the public hearing are related to pollution and employment.

The land area available for the project is 0.73 ha. Industry will develop greenbelt in an area of 0.24 ha covering 33 % of total project area. The estimated project cost is Rs. 950 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 37 lakhs and the recurring cost (operation and maintenance) will be about Rs. 12.5 lakhs per annum. Employment opportunity will be for 18 persons directly in the proposed unit.

There are no National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. Chambal river is flowing at a distance of 1.5 km in West direction.

Ambient air quality monitoring was carried out at 8 locations during 1st March- 31st May, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (66.4 – 95.1 µg/m3), PM2.5 (32.2 – 80.3 µg/m3), SO2 (5.3 – 18.5 µg/m3) and NO2 (14.2 – 56.6 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.02 µg/m3, 0.59 µg/m3 and 0.19 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

Total fresh water requirement is 93 cum/day, proposed to be met from Borewell. Application has been submitted to CGWA in this regard.

There shall be no effluent generation from the Industrial operations. Hydrochloric Acid shall be recovered from the effluents as by-product. Waste water generated through scrubbing purpose will be stored in proper storage tanks & Domestic effluent will be disposed off into soak pit through septic tank. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Block condenser of graphite block of 25 feet and coolers of graphite block shall be installed for control of HCL fumes. HCL vapor gas from reactor will be passed on to separator leading to graphite bloc absorber. Conversion of HCL gas into HCL involves generation of heat. Water is circulated for control of this heat from cooling tower. It is observed that absorption of gas in to liquid HCL is maximum below 55° C of temperature at absorbers is kept below 55°C.

Two absorbers are employed in series so that entire HCL gases are converted into HCL liquid. The outlet of absorber No. 2 is sent to bubbling tank where in cold water is kept ready and by bubbling and by bubbling further HCL gas is converted in dilute HCL Acid. The gases from reactor consist of HCL gases and approx 3% untreated chlorine. HCL gases are almost absorbed in graphite absorbers blocks 1 & 2 and balance if any, in bubbling tank.

Chlorine is only slightly soluble in water when it reacts with pure water, a weak solution of hydrochloric and hydrochlorous acid is formed. Hydrochlorous acid further dissociates to HCL and nascent oxygen. Non reacted chlorine from each bubbling tank is sent in inverted dome covered floating vessel in pit where in chlorine is stored and sent for sodium hypo formation or neutralization.

Excess waste gas is treated by two power full water scrubber free HCL fumes and free oil Particles are stored in FRP tank later on oil particles and HCL is separated and oil particles is sent to HNP storage tank and HCL is transferred to HCL storage tank.

To ensure zero pollution, any residual gas if any from above two processes will be sent to Grassim Industries through suction mechanism, where this will be treated with sodium hypo for commercial use.

Power requirement is estimated to be 190 KW which will be sourced from Madhya Pradesh Electricity board. One DG set of 280 KVA capacity will be setup for the power back up. Stack (height 6 m above the roof level) will be provided as per CPCB norms to the proposed DG set. No boiler has been proposed in the project.

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

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

4.7.4.2 *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. Fugitive emissions shall be controlled at 99.5% with effective chillers.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *Fugitive emissions of HCl and chlorine gas shall be completely arrested and continuos monitoring sensor shall be installed.*
- *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:*
  - *(o) Reactor shall be connected to chilled brine condenser system.*
  - *(p) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - *(q) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
  - *(r) Solvents shall be stored in a separate space specified with all safety measures.*
  - *(s) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - *(t) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  - *(u) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed* 93 *cum/day 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 should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash and dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
  (m) Metering and control of quantities of active ingredients to minimize waste.
  (n) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  (o) Use of automated filling to minimize spillage.
  (p) Use of Close Feed system into batch reactors.
  (q) Venting equipment through vapour recovery system.
  (r) 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 hearing/consultation shall be satisfactorily implemented.*
- *At least 2.5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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.4.7.5

Expansion of active pharmaceutical ingredients and intermediate chemicals manufacturing plant at Gut No.350/1, 350/2 & 350/3, Nashik-Mumbai Highway Village Wadivarhe Taluka Igatpuri, District Nashik (Maharashtra) by M/s Delta Finochem Pvt Ltd - For Environmental Clearance

[IA/MH/IND2/78862/2010, J-11011/152/2011-IA II (I)]

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

4.7.5.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of active pharmaceutical ingredients (APIs) & intermediates and other chemicals manufacturing unit from 2222 TPM to 13619.3 TPM (126 nos of products) by M/s Delta Finochem Pvt Ltd in an area of

80600 sqm located at Plot Nos.350/1, 350/2, 350/3, Village Wadivare, Taluka Igatpuri, District Nashik (Maharashtra).

The details of products and capacity as under:

S. No.	Product	Existing	Proposed	Total
		MT/M	**MT/M**	**MT/M**
1	Tetra butyl ammonium bromide	36	100	136
2	Tetra butyl ammonium hydrogen sulphate	10	0	10
3	Tetra propyl ammonium bromide	2	0	2
4	Tetra ethyl ammonium bromide	2	0	2
5	Benzyl tributyl ammonium chloride	1	0	1
		MT/A	**MT/A**	**MT/A**
6	Tramadol HCl BP	120	-110	10
7	Fenofibrate BP	120	0	120
8	Methyl alpha bromo 2-chlorophenyl acetate	300	-150	150
9	ALPHA BROMO 2-CHLOROPHENYL acetic acid	300	-150	150
10	DIBENZO (b,f)[1,4]thiazepine-11 (10H)one	40	80	120
11	Ethyl triphenylphosphonium bromide	300	100	400
12	N-hexyl bromide	400	2000	2400
13	1 (2H) pthalazinone	30	0	30
A	**TOTAL**	**2222**	**2970**	**5192**
API				
14	Acebrofylline	0	30	30
15	Ambroxol Hydrochloride	0	36	36
16	Amisulpride	0	24	24
17	Apremilast	0	1	1
18	Atazanavir	0	2.4	2.4
19	Avanafile	0	1.2	1.2
20	Azelaic Acid	0	36	36
21	Bamifyline	0	12	12
22	Benfothiamine or Oseltamivir	0	120	120
23	Bezafibrate	0	12	12
24	Brivaracetam	0	3.6	3.6
25	Carbimazole	0	4.8	4.8
26	Choline Fenofibrate or Oxaceprol	0	24	24
27	Cycloserine	0	6	6
28	Dapoxetine	0	6	6
29	Deferamine	0	6	6
30	Deferesirox	0	12	12
31	Deferiprone	0	12	12
32	Diphenhydramine Hydrochloride	0	120	120
33	Doxofylline	0	120	120
34	Ecabet Sodium or Azelnidipine	0	48	48
35	Erdosteine	0	30	30
36	Ethionamide	0	120	120
37	Fenofibric Acid	0	36	36
38	Flavoxate Hydrochloride	0	30	30
39	Folic Acid	0	240	240

40	Hydralazine Hydrochloride	0	36	36
41	Levocloperastine	0	6	6
42	Levosulpride	0	48	48
43	Lomitapide Mesylate	0	3	3
44	Methimazole	0	6	6
45	Nitazoxanide	0	24	24
46	Oxomemazine Base	0	2.4	2.4
47	Oxomemazine Hydrochloride	0	2.4	2.4
48	Pentoxyverine Citrate	0	36	36
49	Piperaquiline TP	0	36	36
50	Piperaquine Tetraphosphate	0	48	48
51	Praziquantel	0	180	180
52	Proglumetacin maleate	0	36	36
53	Propyl thiouracil	0	24	24
54	Prothionamide	0	24	24
55	Pyrihiazine Theocloate	0	6	6
56	Pyronaridine Tetraphosphate	0	36	36
57	Ritonavir	0	3	3
58	Tapentadol	0	6	6
59	Taurolidine	0	6	6
60	Terizidone	0	6	6
61	Thiamine Hydrochloride	0	120	120
62	Thiooctic Acid	0	60	60
63	Tolmetin	0	24	24
64	Tolperisone	0	6	6
65	Tranexamic acid	0	60	60
66	Vigabatrin	0	12	12
B	**TOTAL**	**0**	**1949.8**	**1949.8**
Intermediate Compounds				
67	1,4-Dibromobutane	0	480	480
68	2-cyanobenzyl bromide	0	20	20
69	4-cyanobenzyl bromide	0	20	20
70	Allyl bromide	0	300	300
71	Cetyl bromide	0	60	60
72	Cyclobutyl Methyl Bromide	0	1.92	1.92
73	Cyclopropyl Bromide	0	1.92	1.92
74	Cyclopropylmethyl Bromide	0	3	3
75	Decyl bromide	0	600	600
76	Dibromobutenediol	0	9.96	9.96
77	Dimethyl acetylenedicarboxylate	0	10	10
78	Ethyl bromide	0	480	480
79	Isoamyl Bromide	0	60	60
80	Lauryl bromide	0	20	20
81	N Butyl bromide	0	2000	2000
82	N Octyl bromide	0	20	20
83	N Propyl bromide	0	200	200
84	Pentyl bromide	0	6	6
85	Tetrahydrofuryl bromide	0	4.92	4.92
86	Triethylphosphonoacetate	0	240	240
87	Trimethylphosphonoacetate	0	19.2	19.2
88	2-hydroxyethyl piperazinyl Dibenzothiazepine	0	24	24

89	2-aminothiophenol	0	30	30
90	8-chloro dihydrobenzodiazepine	0	19.2	19.2
91	Phenetole	0	199.2	199.2
92	Thioanisole	0	199.2	199.2
93	Benzoyl Praziquantel	0	69.6	69.6
94	Praziquinamine	0	39.6	39.6
95	Benzhydryl Sulfinyl Acetic Acid	0	30	30
96	2-aminodiphenyl sulphide	0	39.6	39.6
97	4-fluorophenyl-2-methylpropionyl chloride	0	49.2	49.2
98	2-chloroethyl trityl ether	0	10	10
99	Bromohexyl 4-phenylbutyl ether	0	1	1
100	aminoacetaldehydedimethylacetal	0	9.96	9.96
Quaternary Compounds				
	Quaternary Ammonium salts – 29239000 or Brominated Derivatives – 29033920 (HSN code)	0	1200	1200
101	Tetrabutylammonium Iodide			
102	Benzyltrimethylammonium Chloride			
103	Tetraethylammonium Bromide			
104	Tetrabutylammonium Hexafluorophosphate			
105	Methyltributylammonium Chloride			
106	Methyltrooctylammonium chloride			
107	Tetraoctylammonium Bromide			
108	Tetrabutylammnoium Fluoride			
109	Tetrabutylammonium Acetate			
110	Tetramethylammonium Hydroxide			
111	Benzyltrimethyl Ammonium Hydroxide			
112	Tetraethylammonium Hydroxide			
113	Tetrabutylammonium Hydroxide			
114	Benzalkonium Chloride			
	Quaternary Phosphonium salts – 29319090 or Brominated Derivatives – 29033920 (HSN Code)			
115	Ethyltriphenylphosphonium Iodide			
116	Ethyltriphenylphosphonium Acetate			
117	Methyltriphenylphosphonium Bromide			
118	Methyltriphenylphosphonium Iodide			
119	Methoxymethyl Triphenyl Phosphonium Chloride			
120	Tertabutylphosphonium bromide			
121	Tetraphenylphosphonium Bromide			
122	Tetrabutylphosphoniumhydrogendifluoride			
123	Benzyltriphenylphosphonium Chloride			
124	BenzyltriphenylPhosphonium Bromide			
125	ButyltriphenylPhosphonium Chloride			
126	Butyltriphenylphosphonium Bromide			
C	**TOTAL**	**0**	**6477.5**	**6477.5**
	Total Product Capacity (A+B+C)	**2222**	**11397.3**	**13619.3**
	By-products			
	Aqueous ammonia spent	0	180	180

	Potassium Carbonate solution	0	240	240
	Spent soda ash	0	120	120
	Ammonium sulphate solution	0	240	240
	Aqueous sulphuric acid	0	600	600
	Spent phosphoric acid	0	480	480
	Total	**0**	**1860**	**1860**

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

Standard ToR for the project was granted on 17th August, 2017. Public hearing was conducted by the State Pollution Control Board on 17th May, 2018. The main issues raised during the public hearing are related to employment to local people, effluent emission etc.

Existing land area is 20200 sqm, additionally 60400 sqm land will be required for the proposed expansion. Industry will develop greenbelt in an area of 27,580 sqm, covering 33% of total project area. The estimated project cost is Rs. 20.05 crores including existing investment of Rs. 3.5 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 5.4 crore and the recurring cost (operation and maintenance) will be about Rs 65.55 lakhs per annum. Employment opportunity will be for 280 persons directly and 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. Darna river is flowing at a distance of 9.7 km in South direction.

Ambient air quality monitoring was carried out at 8 locations during October - December 2017 and the baseline data indicates the ranges of concentrations as: PM10 (67.3 - 86.1 µg/m3), PM2.5 (24.2 - 48.2 µg/m3), SO2 (6 – 18.2 µg/m3) and NO2 (13.2 – 32.1 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.08 µg/m3, 1 µg/m3 and 0.1 µg/m3 with respect to PM10, SO2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

Total fresh water requirement is estimated to be 539 cum/day, proposed to be met from Tanker water supply.

Effluent of 73.6 cum/day will be treated after segregation as low and high stream effluents. Low stream effluent will be treated by Primary, Secondary and tertiary treatment system. High stream effluent will be treated by Striper column, MEE, ATFD and RO. Treated effluent of 62.6 cum/day will be recycled/reused in the process/cooling tower. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement after expansion will be 1000 kW including existing 650 kW and will be met from State power distribution corporation limited (MSEDCL). Existing unit has one DG set of 550 kVA capacity, additionally one more DG set will be 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 1.1 TPH F.O. fired boiler. Additionally, 3.5 TPH FO fired boiler will be installed. Multi cyclone separator/ bag filter with a stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boilers.

Earlier, the Ministry has issued EC vide letter dated 31st March, 2015 for expansion of bulk drugs manufacturing unit by M/s Delta Finochem Pvt Ltd. The monitoring report on compliance status of EC conditions (site visit conducted on 15th September, 2017) has been forwarded by the Ministry's Regional Office at Nagpur vide letter dated 16th January, 2018.

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

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

Consent to Operate for the existing industrial operations have been obtained from Maharashtra PCB vide letter dated 22nd July, 2016 which is presently valid up to 31st October, 2020.

4.7.5.2 *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, as amended from time to time, shall be followed.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *Furnace oil shall not be used as fuel in the boiler. LSHS/LDO/HSD/briquette/natural gas shall be used as fuel.*
- *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 539 cum/day to be met through tanker supply. Prior permission in this regard shall be obtained from the concerned regulatory authority. No ground water shall be used for the proposed project.*

- *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 should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash 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 to the public during public hearing/consultation shall be satisfactorily implemented.*
- *At least 2.5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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.4.7.6

Development Drilling of 4 wells in Borholla ML block, Jorhat District and development drilling of 8 wells in Nambar ML area, East Lakhibari ML area, Khoraghat ML and Khorghat extension ML area in Golaghat by M/s Oil And natural Gas Corporation- For Environmental Clearance

[IA/AS/IND2/83554/2014, J-11011/49/2014- IA II]

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

4.7.6.1 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for development drilling of 6 wells in Onshore ML areas of Jorhat and Golaghat Districts (Assam) by M/s Oil and Natural Gas Corporation of India. Initially it was proposed to drill 12 wells (4 wells in Jorhat and 8 wells in Golaghat districts). Out of 12 wells, 4 wells are in non-forest area and 8 were in forest area. Now, stage-1 forest clearance has been obtained for only 2 wells in Golaghat district. The project proponent has informed that drilling in the remaining 6 wells (in the forest area) has been dropped from the present project.

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).

ToR for the project was issued on 18th December, 2014 with its validity of 3 years. Extension of validity of ToR has been granted on 2nd February, 2018, for a period of one year till 18th December 2018. Public hearing for the proposed project has been conducted by the State Pollution Control Board on 6th May 2017 and 9th May 2017 for Golaghat and Jorhat respectively. The main issues raised during the public hearing are related to Employment, CSR and Water Supply.

Existing land area in Jorhat District is 32.116 sqkm and in Golaghat is 120.5 sqkm. The estimated project cost is Rs 240 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 17,62,000 and the recurring cost (operation and maintenance) will be about Rs 28,31,000 per annum. Employment opportunity will be for 62 persons directly and 60 persons during installation of surface facilities.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Dhansiri river is passing through Nambar ML area.

Ambient air quality monitoring was carried out at eight locations during October –December, 2015 and the baseline data indicates the ranges of concentrations as: PM10 (39.7µg/m3 -64.4 µg/m3), SO2 (5.23 µg/m3 -8.26µg/m3) and NO2 (9.24µg/m3 - 16.53µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.39 µg/m3, 0.74 µg/m3 and 0.3 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

Total water requirement is estimated to be 25 cum/day, which is proposed be met from ground water from bore wells/tankers. Waste water of 17 cum/day quantity will be treated through Mobile Effluent Treatment Plant (ETP). The plant will be based on Zero Liquid discharge system.

Power requirement will be met through four DG sets of 1430 KVA or from Assam State power distribution corporation limited (ASPDCL). Stack will be provided as per CPCB norms to the proposed DG sets.

Stage -1 forest clearance has been obtained for conversion of 3.48 ha of forest land at KHDF location under Golaghat Division, Assam, vide Ministry's Regional Office (Shillong) letter dated 29th October, 2018, and for conversion of 2.24 ha of forest land for drilling location KHDD under Golaghat Division, vide letter dated 3rd January, 2019.

The project proponent has confirmed the expenditure towards CER @ 1.5% 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 the public hearing has been properly addressed by the project proponent.

4.7.6.2 *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 conducted in forest areas without obtaining prior approval under the Forest (Conservation) Act, 1980.*
- *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, and/or on land.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16thNovember, 2009 for PM10, PM2.5, SO2, NOX, 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 from water tankers/bore wells. Prior permission in this regard 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.*
- *Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.*
- *Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.*
- *The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.*
- *All the commitments made to the public during public hearing/consultation shall be satisfactorily implemented.*
- *At least 1.5 % 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.*
- *Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.*
- *Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office.*
- *An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to the Ministry's Regional Office.*
- *Company shall have own Environment Management Cell having qualified persons with proper background.*
- *Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.*
- *On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.*

Agenda No.4.7.7

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

The project proponent and accredited consultant M/s TR Associates made a detailed presentation on the salient features of the project.

4.7.7.1 The proposal was earlier considered by the EAC in its meeting held on 29-31 October, 2018. The Committee deferred the proposal for want of additional information/inputs. The information desired by the Committee and the reply submitted by the project proponent are as under:

Additional details sought by the EAC	Reply by the PP
Approval by PESO for the site and layout plan for Ethylene Oxide storage facilities from safety considerations.	Approval from PESO has been obtained vide letter dated 12th February, 2019
Requirement of clearance, if any, from the perspective of MSIHC Rules, 1989 and its subsequent amendments, for handling and storage of Ethylene Oxide more than the threshold storage of 5 MT	EC and other approvals are required for setting up the unit.

4.7.7.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up Liquid Choline Chloride (75%) manufacturing unit (feed grade) of capacity 300 TPM by M/s Happiness Pharmaceuticals Limited in a total area of 13,028 sqm located at Survey No. 1288, Village Lavad, Taluka Dehgam, District Gandhinagar (Gujarat).

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

The ToR for the project was granted on 16th November, 2017. Public hearing was conducted by the State Pollution Control Board on 30th June, 2018.

Land area available for the project is 13,028 sqm. Industry will develop greenbelt in an area of 4,457 sqm covering 34.2% of total project area. The estimated project cost is Rs. 3 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 20 lakhs and the recurring cost (operation and maintenance) will be about Rs. 7 lakhs per annum. Employment opportunity will be for 10 persons.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Meshwo river is flowing at a distance of 1.7 km in ESE direction and Khari river is flowing at a distance of 7.4 km in NNW direction from project site.

Ambient air quality monitoring was carried out at 8 locations during October - December, 2017 and the baseline data indicates that ranges of concentrations of PM10 (55.05 to 84.00 µg/m3), PM2.5 (22.57 to 43.68 µg/m3), SO2 (7.18 to 33.60 µg/m3) NO2 (20.02 to 47.63 µg/m3), CO (N.D.) and VOC (B.D.L.) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 7.94 µg/m3, 0.24 µg/m3, 1.65 µg/m3 with respect to PM10, SO2, NO2. The resultant concentrations are within the National Ambient Air Quality Standards.

Total fresh water requirement is estimated to be 18 cum/day, proposed to be met from borewell. Application in this regard has been submitted to the concerned authorities on 23rd April, 2018.

Effluent of 1.2 cum/day generated from different industrial operations will be treated through Effluent Treatment Plant followed by an Evaporator. Neither there will be any recycling of treated effluents nor discharge outside the premises and thus plant conforming to Zero Liquid discharge system. Domestic effluent of 0.8 m3/day will be disposed off through Septic tank/ Soak pit system.

Power requirement of proposed project will be 220 KW and will be met from Uttar Gujarat Vij Company Limited (UGVCL). DG set of 250 KVA capacity will be used as standby during power failure. Stack (height 6 m) will be provided as per CPCB norms to the proposed DG Set.

Agro-Waste Briquettes fired 0.4 TPH Boiler will be installed. Multi Cyclone Separator with a stack height of 11 m will be installed for controlling the Particulate Emissions within statutory limit for the proposed boiler.

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

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

4.7.7.3 *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 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/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *Storage of Ethylene Oxide and Tri-methyl amine shall be limited to 10 KL capacity each at a time, or as permissible under the MSIHC Rules, 1989, whichever is lesser.*
- *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 18 cum/day 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 should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash 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 to the public during public hearing/consultation shall be satisfactorily implemented.*
- *At least 2.5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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.4.7.8

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

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

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

4.7.8.1 During deliberations, the EAC noted the following: -

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

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

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

	Acid (PIA-4)						
10	S-Benzyl O, O Diisopropyl Phosphorothioate (PIZ)	26087-47-8	10	Nil	10	790	5 (f)
11	Dimethyl Amine Hydrochloride (DMA - HCl)	506-59-2	10	25	25	1600	5 (f)
12	Iso Propyl Alcohol Hydrochloride (IPA HCL)	7647-01-0				IPA - 12870 & HCL - 5010	5 (f)
13	Methanolic Hydrochloride	9004-54-0				15800	5 (f)
14	Ethyl Acetate Hydrochloride	5407-04-5	-			5000	5 (f)
15	Ethyl Alcohol Hydrochloride	9004-54-0	-			5000	5 (f)
16	Propionyl chloride	79-03-8	-	24	24	823	5 (f)
17	Propiophenone	93-55-0	-	30	30	4500	5 (f)
18	2-Bromo 3-Chloro Propiophenone	34911-51-8	-	4	4	2000	5 (f)
19	3-Methoxy Propiophenone	37951-49-8	-	4	4	1950	5 (f)
20	3-Hydroxy Propiophenone	13103-80-5	-	4	4	1310	5 (f)
21	Cyano Acetic Acid	372-09-8	-	10	10	1500	5 (f)
22	7-Ethyl Tryptophol (7-ETP)	41340-36-7	-	5	5	391	5 (f)
23	Closantel Amine	57808-65-8	-	5	5	5780	5 (f)
24	Diethyl Ketone	96-22-0	--	10	10	2900	5 (f)
25	TBPO (Tributyl phosphate)	126-73-8	--	60	60	2000	5 (f)
		Total	286	826	1112		

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

BY-PRODUCTS

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

4	Methyl Chloride	74-87-3	2.29	4.58
5	HBr	10035-10-6	6.45	42
6	Poly Aluminium Chloride (PAC) – 100%	1327-41-9	7.5	46
7	Sodium Hypochlorite (10%)	7681-52-9	90	120
* **Existing:**(656 - 11.5 = 644.5 MT). 11.5 MT converts to HCl gas & Consumes as raw material in existing products i.e. DMA – Hydrochloride, IPA HCL and Methaonolic Hydrochloride. * **Total after Proposed Expansion:** (1200 – 25 = 1175 MT). 25 MT will be converted to HCl gas & Consumed as raw material in existing products i.e. 3-CPP, DMA – Hydrochloride, IPA HCL and Methaonolic Hydrochloride and Propiophenone. ** HCl (20%) converts and to be converted to HCl (30-32%) and sell to actual user.				

The existing technical pesticides are reported to have been manufactured from the year 2014, under product mix change category.

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

Standard ToR for the project was granted on 10th August, 2018. Public hearing is exempted as the project is located in the notified Industrial area as per Ministry's OM dated 27th April, 2018.

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

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, rivers etc. within 10 km distance from the project site.
Ambient air quality monitoring was carried out at 9 locations during March - May, 2017 and the baseline data indicates the ranges of concentrations as: PM10 (73.09-96.39 µg/m3), PM2.5 (43.45-51.28 µg/m3), SO2 (15.75-26.72 µg/m3) and NO2 (18.63-28.53 µg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.32 µg/m3, 0.56 µg/m3 and 0.20 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

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

Total industrial effluent generated from the plant will be 78.5 cum/day. Existing effluent of 6.37 cum/day is treated through ETP consisting of primary treatment facility, and domestic water of 5 cum/day, are being sent to CETP operated by M/s PETL for further treatment. Additional effluent of 48.7 cum/day will be treated in proposed ETP consisting of primary treatment facility and followed by solvent stripper and MEE. MEE condensate of 44 cum/day will be reused in

plant premises for boiler feed water, cooling water and washing purpose. Additional domestic wastewater of 23.5 cum/day will be sent to CETP of M/s PETL for further treatment. It is informed that treated water of 29.8 cum/day shall be sent to CETP of M/s PETL, only during emergency. It has been assured that existing and proposed unit shall ensure zero liquid discharge and there will be no discharge of treated/untreated waste water from the unit.

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

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

The unit has been operational since the year 1990 with CTE/CTO from Gujarat Pollution Control Board and hence EC is not made available for the existing operations.

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

4.7.8.2 *The Expert Appraisal Committee, after deliberations, observed that production of technical pesticides (products listed at S.No.1-6) including the presently banned Dichlorovos Technical, started in the year 2014 only without obtaining prior environmental clearance, which amounts to violation of the EIA Notification, 2006 and attracts action under the Environment (Protection) Act, 1986.*

However, for further action into the matter, the Committee desired for clarification/comments in respect of the following:-

- *Requirement of prior environmental clearance for the presently manufactured pesticides and other products.*
- *Justification for the product mix change, which in turn changes categorization vis-à-vis the schedule of the EIA Notification, 2006, duly endorsed by the State Pollution Control Board.*
- *CTO from the GPCB for the products started production before inception of the EIA Notification, 2006.*
- *Safety and risk assessment with advanced models.*

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

Items at Agenda No.4.7.9 & 4.7.10 were considered by the EAC with the permission of the Chair.

Agenda No.4.7.9

Onshore development and production of oil & gas from wells (Existing-2, Additional-9) in the existing PML area of 12.7 sq km of Modhera Field at Village Matresan, Tehsil

Becharaji, District Mehsana (Gujarat) by M/s Sun Petrochemicals Pvt Ltd - Environmental Clearance

[IA/GJ/IND2/81587/2009, J-11011/730/2009-IA II (I)]

4.7.9.1 The proposal was earlier considered by the EAC in its meeting held during 29-31 January, 2019. The Committee was informed that the Ministry has earlier granted environmental clearance vide letter dated 22nd November, 2014 in favour of M/s ONGC Ltd for the project 'Development of 350 wells in Mehsana Assets' in 45 PMLs, covering an area of 941.796 sq km in the Districts of Mehsana, Patan, Ahmedabad and Gandhinagar (Gujarat). It was further informed that Becharaji PMLs, covered under the said environmental clearance, finds mention in the instant project also.

The EAC, after deliberations, observed that there are all apprehensions for overlapping of PMLs covered under two different projects, to be implemented by different proponents, which needs to be clarified at this stage only. Accordingly, the Committee decided to defer the proposal for the present for want of the desired clarifications from the project proponent.

4.7.9.2 In response, the project proponent has informed that the PML of Modhera field covering an area of 12.7 sq km is not overlapping with the PML area of the said project of M/s ONGC Ltd. The Committee asked the project proponent to submit an affidavit in this regard. Also, the Ministry may seek inputs from M/s ONGC Ltd on the apprehensions, if so required, to take the proposal forward.

4.7.9.3 *The Committee, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as applicable for such projects.*

Agenda No.4.7.10

Expansion of Pulp Plant, VSF Plant, Sulphuric Acid Plant, Carbon-Disulphide Plant and Captive Power Plant along with new Excel Fibre Plant at Village Kumarapatnam, Taluka Ranebennuru, District Kumarpatnam (Karnataka) by M/s Grasim Industries Limited - Environmental Clearance

[IA/KA/IND2/82389/2006, J-11011/371/2006-IA II (I)]

4.7.10.1 The proposal was earlier considered by the EAC in its meeting held during 29-31 January, 2019, and was deferred for additional clarifications/information. The information desired by the Committee and the reply submitted by the project proponent is as under:-

(a) Requirement of environmental clearance for the pulp plant of capacity 74400 TPA operated by Harihar Polyfibres Division of M/s Grasim Industries Ltd, and the compliance status thereof.

Reply - Harihar Polyfibres (Pulp Plant) was established in the year 1971; and presently, operating on the basis of consent. The unit has not gone for any expansion in the production capacity after EIA Notification, 2006 came into force. The current production capacity of Pulp Plant is 74,400 TPA.

S. No.	Year	Capacity	Remark

1.	2005-06	6200 TPM (74,400 TPA)	Before EIA Notification, 2006; company have valid CFO from KSPCB vide letter no. 17/CAT/WPC/HPF/2005-2006/34 dated 12th April, 2005
2.	As on date	6200 TPM (74,400 TPA)	The unit has not gone for any expansion in the production capacity after EIA Notification, 2006 came into force; therefore, EC is not required.
Compliance status of the latest renewed CFO is enclosed			

(b) Products not covered under the domain of the EIA Notification, 2006, to be excluded from the proposal and the products details to be revised accordingly.

Reply - Revised project proposal with product details is given in table below:

S. No.	Name of Products / Units	Unit	Capacity		
			Existing	Additional	Total after Expansion
Main Products					
1.	Pulp	TPA	74,400	74,400	1,48,800
2.	Viscose Staple Fibre	TPA	87,600	87,600 {Debottlenecking: 7,300 & New Installations: 80,300}	1,75,200
3.	Excel Fibre (Solvent Spun Cellulosic Fibre)	TPA	NA	36,500	36,500
4.	Captive Power Plant	MW	20	30	50
Associated Products*					
5.	Sulphuric Acid	TPA	75,110	75,110	1,50,220
6.	Carbon-Disulphide	TPA	14,365	14,365	28,730
7.	Recovery Boiler	MW	10	10	20
By-Product*					
8.	Anhydrous Sodium Sulphate	TPA	69,205	69,205	1,38,410

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

(c) Revised water balance for the reduced fresh water requirement of 90000 cum/day.

Reply - As discussed during the Final Technical Presentation, total water requirement after expansion has been reduced by 10% from 97,200 KLD to 87,480 KLD; revised water details are given below:

Water Requirement

Particular	Unit	Requirement			Source
		Existing	Additional	Total after expansion	
Fresh Water	Pulp Plant	36,000	17,244	53,244	Tungabhadra River
	Fibre Plant	18,670	12,750	31,420	

(KLD)	Excel Fibre Plant	NA	2,816	2,816	
	TOTAL	54,670	32,810*	87,480	

*The additional water requirement has been reduced by 66% from the quantity proposed for pulp plant & VSF plant at the time of EC application.

Effluent Generation

Effluents	Plant Unit	Effluent Generation (KLD)			Treatment / Management
		Existing	Additional	After Expansion	
Industrial Waste Water (including sewage)	Pulp Plant	33,000	13,800	46,800	Treated in the existing ETP by enhancing treatment capacity of the ETP from 36,000 KLD to 60,000 KLD and treated effluent will be discharged in Tunghbadra River.
	Fibre Plant (VSF)	15,120	8,388	25,668	Treated in the existing ETP along by enhancing its capacity from 20,000 KLD to 40,000 KLD and treated effluent will be discharged in Tunghbadra River after mixing with treated effluents of Pulp Plant.
	Excel Fibre Plant	NA	2,160		
Total		48,120	24,348	72,468	

(d) Status of Wildlife Clearance in view of Ranebennur Black Buck Sanctuary at a distance of ~4.5 km.

Reply - Ranebennur Black Buck Sanctuary falls at a distance of ~4.5 km from the project site. Eco-sensitive Zone of the Sanctuary have been notified vide MoEFCC Notification No.SO 2147 (E) dated 6th July, 2017. The distance of the project site from the notified Eco- Sensitive Zone is ~4.0 km. A map showing location of Project site and Ranebennur Black Buck Sanctuary within 10 km radius of the project site along with its Eco-Sensitive Zones, duly Authenticated by Chief Wildlife Warden, Karnataka has been enclosed.

Since, the Ranebennur Black Buck Sanctuary has already been notified and the project site not falls within declared ESZ of the sanctuary; therefore, Wildlife clearance is not required.

(e) Earlier EC dated 8th November, 2007 was issued in the name of M/s Grasim Industries Ltd (Grasilene Division). Whereas, the present proposal for expansion of the same products, involves two Divisions namely, Harihar Polyfibres and Grasiline Division.

Reply - M/s Grasim Industries Ltd. at Kumarapatnam comprises two divisions:

- Harihar Polyfibres (HPF) - Produces Rayon Grade Pulp (main raw material for Viscose Staple Fibre)
- Grasilene Division (GRD) - Produces Viscose Staple Fibre and Anhydrous Sodium Sulphate (as by-product).

Audited Financial Statement (AFS) for both the divisions is common. In the P. No. 114, of the enclosed AFS of the Grasim Industries Ltd. for the Financial Year 2017-18, both names of Harihar Polyfibers & Grasilene Division are mentioned as units of Grasim Industries Ltd.

The CTO valid up to 30th June, 2020 has been issued by the KSPCB, as M/s Harihar Polyfibers (Unit of Grasim Industries) & Grasilene Division (Unit of Grasim Industries).
Even GST No. 29AAACG4464BIZU and Central Excise Regn. No. AAACG4464BXM022 are common for both divisions.

Since, earlier EC dated 8th November, 2007 is of VSF only; therefore, the name has been mentioned as M/s. Grasim Industries Ltd (Grasilene Division).

Existing Harihar Polyfibres (Pulp Plant), established in the year 1971, is presently, operating on the basis of consent. The present proposal involves Expansion of both the divisions; therefore, applied for EC in the name of M/s. Grasim Industries Ltd.

4.7.10.2 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as applicable for such projects. However, the Committee desired that Ministry may take a view on the requirement of wildlife clearance from the Standing Committee of NBWL in consultation with the concerned Division in the Ministry, and also applicability of the EIA Notification, 1994/2006 for the pulp plant of capacity 74400 TPA operated by Harihar Polyfibres Division of M/s Grasim Industries Ltd.*

4.8 Any Other

Agenda No.4.8.1

Proposed Expansion of Active Pharmaceutical Ingredient & Intermediates (47 MTA to 300 MTA) in Existing Unit at Survey No.137, 144P & 145P, village Panelav, Tehsil Halol, District Panchmahal (Gujarat) by M/s Alembic Pharmaceuticals Limited (API Unit-II) - For amendment in EC

[IA/GJ/IND2/30971/2014, J-11011/313/2014-IA-II(I)]

4.8.1.1 The proposal is for amendment in environmental clearance dated 20th December, 2016 granted by the Ministry in favour of M/s Alembic Pharmaceuticals Limited (API Unit -II) for the proposed expansion of Active Pharmaceutical Ingredient & Intermediates in existing unit located at Survey No. 137, 144P & 145P, Village Panelav, Tehsil Halol, District Panchmahal (Gujarat).

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

S. No.	Para of ToR/EC issued by MoEF&CC	Details as per the ToR/EC	To be revised/read as	Justification/reasons
1	EC Condition no. **2**	The Ministry of Environment, Forests and	The Ministry of Environment, Forests and Climate	Separating manufacturing process from the existing multi

		Climate Change has examined the application. It is noted that the proposal is for Expansion of Active Pharmaceutical Ingredient & Intermediates (47 MTA to 300 MTA) in Existing Unit at Survey No. 137, 144P & 145P, Village Panelav, Tehsil Halol, District Panchmahal Gujarat by M/s. Alembic Pharmaceuticals Limited (API Unit-II). Total plot area is 37332 m^2, out of which green belt developed on 20194 m^2 (i.e. 54 % of the total area)	Change has examined the application. It is noted that the proposal is for Expansion of Active Pharmaceutical Ingredient & Intermediates (47 MTA to 300 MTA) in Existing Unit at Survey No. 137, 144P & 145P, Village Panelav, Tehsil Halol, District Panchmahal Gujarat by M/s. Alembic Pharmaceuticals Limited (API Unit-II). Total plot area is 37332 m^2, out of which green belt developed on 15017.97 m^2 (40.22% of the total area) addition of two plants without increasing existing permitted production tonnage and pollution load.	steps production in multi product plants to avoid cross contaminations and to maintain smooth and safe process as per WHO GMP / USFDA requirement. There will not be any addition of Land/survey no. as there is enough land to establish proposed plants but greenbelt area will be reduced from 20194 m2 to 15017.97 m2 (40.22% of the total area) due to addition of Intermediate plants and ware House.
2	EC Condition no. **3**	Bag Filter will be provided to additional coal fired boiler to control particulate emissions. Scrubber will be provided to control process emissions viz. HCl, Cl_2 and SO_2. Total water requirement will be increased from 70.8 m^3/day to 106 m^3/day after expansion. Out of which fresh water requirement will be 50 m^3/day and	Bag Filter will be provided to additional coal fired boiler to control particulate emissions. Scrubber will be provided to control process emissions viz. HCl, Cl_2 and SO_2. Total water requirement will be increased from 70.8 m^3/day to 161 m^3/day after expansion. Out of which fresh water requirement will be 85 m^3/day and remaining water requirement will be	• Increase of 15 m3/day in cooling tower make up water due to day-to-day ambient temperature of the location which results in increase in out let cooling water temperature resulting impacting Process. Presently, we are having total 8 nos. of cooling towers. Blow down is being limited by adopting SCALE-OFF technology. • There will be 15 m3/day increases in Boiler make-up water quantity which was wrongly assumed

		remaining water requirement will be met from recycled/treated effluent. Total waste water generation will be 55 m^3/day after expansion and segregated into high TDS/ COD and Low TDS/ COD effluent stream. High TDS/ COD effluent will be treated through stripper followed by MEE. Low TDS/COD effluent stream will be treated in ETP and treated effluent will be passed through RO. RO permeate will be recycled/ reused in the process. No effluent will be discharged outside the plant premises. ETP sludge and sludge from scrubber will be sent to TSDF. Distillation residue and process waste will be sent to authorized recyclers / re-processors.	met from recycled/treated effluent. Total waste water generation will be 65 m^3/day out of which Industrial effluent will remain same i.e. 45 m^3/day and Domestic Waste water will increase from 15 m^3/day to 20 m^3/day The Industrial waste water shall be segregated into high TDS/ COD and Low TDS/ COD effluent stream. High TDS/ COD effluent will be treated through stripper followed by MEE. Low TDS/COD effluent stream will be treated in ETP and treated effluent will be passed through RO. RO permeate will be recycled/ reused in the process. No effluent will be discharged outside the plant premises. ETP sludge and sludge from scrubber will be sent to TSDF. Distillation residue and process waste will be sent to authorized recyclers / re-processors.	during production capacity enhancement i.e. in previous EC application. • TDS level of ground water is also being increased, which forced to increase withdrawal of fresh water. • 5 m3/day Domestic water requirement increases due to addition of Quality Control (QC), Quality Assurance (QA), Administration and Human Resource (HR) departments which were earlier centralized at our Vadodara Head Office. • 20 m3/day Domestic wastewater generated after proposed expansion will be treated in STP and reused back for gardening so gardening water requirement will be 25 m3/day which will be totally recycled water.

3	A. Specific Condition No. **iv**	Total fresh water requirement from ground water source shall not exceed 50 m^3/day and prior permission shall be obtained from CGWA/SGWA.	Total fresh water requirement from ground water source shall not exceed 85 m^3/day and prior permission shall be obtained from the CGWA/SGWA.	• Increase of 15 m3/day in cooling tower make up water due to day-to-day ambient temperature of the location which results in increase in out let cooling water temperature resulting impacting Process. Presently, we are having total 8 nos. of cooling towers. Blow down is being limited by adopting SCALE-OFF technology. • There will be 15 m3/day increases in Boiler make-up water quantity which was wrongly assumed during production capacity enhancement i.e. in previous EC application. • 5 m^3/day Domestic water requirement increases due to addition of Quality Control (QC), Quality Assurance (QA), Administration and Human Resource (HR) departments which were earlier centralized at our Vadodara Head Office.
4	A. Specific Condition No. **xiv**	As proposed, greenbelt of 20194 m^2 shall be developed within the plant premises with at least 10 m wide green belt on all sides along the periphery of the project area, in downwind direction, and	As proposed, greenbelt of 15017.97 m^2 shall be developed within the plant premises with at least 10 m wide green belt on all sides along the periphery of the project area, in downwind direction, and along the road sides etc. Selection	There will not be any addition of Land/survey no. as there is enough land to establish proposed plants but greenbelt area will be reduced from 20194 m^2 to 15017.97 m^2 due to addition of Intermediate plants and warehouse.

		along the road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.	of plant species shall be as per the CPCB guidelines in consultation with the DFO.	

4.8.1.3 *The EAC, after detailed deliberations, observed that the proposed amendment in the environmental clearance dated 20th December, 2016 would involve substantive changes in the project profile, water requirement, waste generation, disposal mechanism, etc. Considering the same and especially in view of no permission obtained even for ground water withdrawal of 50 cum/day to meet the present requirements, the Committee found no merit in the proposal and insisted for compliance status of the conditions stipulated in the said EC from the Ministry's Regional Office.*

Agenda No.4.8.2

Onshore Development and Production of Oil and Gas from 72 Wells in two onland PML Blocks in KG Basin covering districts East Godavari, West Godavari and Krishna (Andhra Pradesh) by M/s Oil And natural Gas Corporation - For amendment in EC

[IA/AP/IND2/88581/2018, J-11011/173/2015-IA-II(I)]

4.8.2.1 The proposal is for amendment in environmental clearance dated 31st October, 2018 granted by Ministry in favour of M/s Oil and Natural Gas Corporation Ltd for the project 'Onshore Development and Production of Oil and Gas from 72 wells' in two onland PML Blocks (Godavari Onland and West Godavari) in KG Basin covering districts East Godavari, West Godavari and Krishna (Andhra Pradesh).

4.8.2.2 The project proponent has requested for amendment in the 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.	Title	Onshore Development and Production of Oil and Gas from 72 wells in two onland PML Blocks (Godavari Onland and West Godavari) in KG Basin covering districts East Godavari, West Godavari and	Onshore Development and Production of Oil and Gas from 72 wells in two onland PML Blocks (Godavari Onland and West Godavari) in KG Basin covering districts East Godavari, West	A separate proposal submitted for obtaining EC for the project "Establishment of EPS at BTSAD, Bhimavaram, West Godavari District, Andhra Pradesh" Proposal No. IA/AP/IND2/62860/2017 Dated 25.05.2018 (Ref 2) for which Amendment of TORs obtained for exemption from Public Hearing (Ref 3)
2.	9.			

		Krishna (Andhra Pradesh) by M/s Oil and Natural Gas Corporation Ltd. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for Onshore Development and Production of Oil and Gas from 72 wells in two onland PML Blocks (Godavari Onland and West Godavari) in KG Basin covering districts East Godavari, West Godavari and Krishna (Andhra Pradesh) by M/s Oil and Natural Gas Corporation Ltd.	Godavari and Krishna (Andhra Pradesh) and establishment of EPS at BTSAD, Bhimavaram, West Godavari District by M/s Oil and Natural Gas Corporation Ltd. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for Onshore Development and Production of Oil and Gas from 72 wells in two onland PML Blocks (Godavari Onland and West Godavari) in KG Basin covering districts East Godavari, West Godavari and Krishna (Andhra Pradesh) and Establishment of EPS at BTSAD, Bhimavaram, West Godavari District by M/s Oil and Natural Gas Corporation Ltd.	With reference to this proposal a query from MoEFCC was put up as follows: Quote “Please refer our earlier observations regarding applicability of the EIA Notification, 2006 to the project. In case, the proposed EPS is one of the associated facilities of the project for which EC was granted on 31/10/2018, then proposal may be submitted for amendment in the said EC.” Unquote In view of the above Amendment of EC is sought for the project

4.8.2.3 *The EAC, after detailed deliberations on the information made available, observed that the proposed Early Production System remains a part of the above said project as one of the associated facilities for onshore development and production of oil and gas from 72 wells, for*

which environmental clearance has already been obtained vide letter dated 31st October, 2018. Accordingly, the Committee found no rationale for considering any amendment therein.

Agenda No.4.8.3

Proposed API plant at Naickenpatti Village, Madurai East Taluk, District Madurai (Tamil Nadu) by M/s Abhilash Chemicals & Pharmaceuticals Pvt Ltd - For amendment in ToR

[IA/TN/IND2/56404/2016, J-11011/170/2016- IA II(I)]

4.8.3.1 The proposal is for amendment in the Terms of Reference dated 19th July, 2017 granted by the Ministry in favour of M/s Abhilash Chemicals and Pharmaceuticals Pvt Ltd for setting up of APIs manufacturing unit @ 2225 TPM at Sy. No.28/8, 29/(1,2), 30/(1,4), 31/(IA,IB,IC,3), 32/2, 33/(7,8,9), 34/(3,4,5) 35/(3A,3B, 4A,4B,4C,4D,4E,), 37/(8A, 8C, 8E, 8F, 8G, 8H)), Naickenpatti Village Madurai East Taluka, District Madurai (Tamil Nadu).

4.8.3.2 The project proponent has requested for amendment in the ToR with the details as under:

<table>
<tr><th>S. No.</th><th>Para of ToR issued by MoEF&CC</th><th>Details as per the ToR/EC</th><th>To be revised/read as</th><th>Justification/reasons</th></tr>
<tr><td>1.</td><td>Product List</td><td>
<table>
<tr><th>S.No.</th><th>Name of Products</th><th>Production Capacity in MT/Month</th></tr>
<tr><td colspan="3">Products</td></tr>
<tr><td>1</td><td>Metformin Hydrochloride</td><td>1000</td></tr>
<tr><td>2</td><td>Paracetamol</td><td>1200</td></tr>
<tr><td>3</td><td>Bronopol</td><td>25</td></tr>
<tr><td></td><td>Total</td><td>2225</td></tr>
<tr><td colspan="3">By-Products</td></tr>
<tr><td>1</td><td>Acetic acid (dilute)</td><td>2400</td></tr>
<tr><td>2</td><td>NaBr solution</td><td>55</td></tr>
<tr><td>3</td><td>NaCl Salt</td><td>800</td></tr>
<tr><td></td><td>Total</td><td>3255</td></tr>
</table>
</td><td>
<table>
<tr><th>S.No.</th><th>Name of Products</th><th>Production Capacity in MT/Month</th></tr>
<tr><td>1</td><td>Metformin Hydrochloride</td><td>1000</td></tr>
</table>
</td><td>
• The company has received “No Objection Certificate” vide Lr. No. OT 9/G-3/50/2018/NOC/Madurai 2018 dated 22.05.2018 for withdrawal of 120 KLD from onsite borewells against 270 KLD required for the full project described in our original proposal IA/TN/IND2/56404/2016.
• Hence, in the view of the above position, the company wishes to scale down the project from 3 products (Total 2225 MT/Month @ 270
</td></tr>
</table>

				KLD water requirement) to 1 Product (Total 1000 MT/Month @ 99 KLD water requirement) with no other changes or additions.

4.8.3.3 During deliberations, the Committee noted that the proposal for amendment in the ToR is for reduction in the proposed production of APIs from 2225 TPM (3 products) to 1000 TPM (one product), and the corresponding decrease in fresh water requirement from 270 cum/day to 120 cum/day. The project proponent has obtained permission from CGWA for ground water withdrawal of 120 cum/day from onsite borewells.

4.8.3.4 *The Committee, after deliberations and in view of the proposed revision in the scope of the project, found no rationale for amendment in the said ToR dated 19th July, 2017. The project proponent was asked to submit the proposal for environmental clearance.*

Agenda No.4.8.4

Expansion Dyes and Dyes intermediates at Plot No. A-1/4701 & 202/B, GIDC Industrial Estate, Ankleshwar, Bharuch (Gujarat) by M/s A-One Chemicals - For amendment in ToR

[IA/GJ/IND2/62708/2016, J- 11011/383/2016-IA-II(I)]

4.8.4.1 The proposal is for amendment in the Terms of Reference dated 7th July, 2017 granted by the Ministry in favour of M/s A-One Chemicals to the project for expansion Dyes and Dyes intermediates located at Plot No.A-1/4701 & 202/B, GIDC Industrial Estate, Ankleshwar, District Bharuch (Gujarat).

4.8.4.2 The project proponent has requested for amendment in the ToR with the details as under:-

S. No.	Para of ToR	Details as per the ToR	To be revised/ read as	Justification/ reasons
	Specific TOR	Zero Liquid Discharge shall be ensured.	Unit will maintain existing discharge 254.5 KL/Day	At the time of our TOR application, we considered scenario of Zero Liquid Discharge (ZLD) for our project after expansion (which includes both existing project as well as the proposed expansion project) as GIDC Ankleshwar was still covered under the moratorium of Critically Polluted Area and as per information, the SEAC / SEIAA and the GPCB were considering permissions in this way only. However, recently we have learnt that in similar existing projects

				applying for TOR for their proposed expansion, the Gujarat SEAC/SEIAA is kindly permitting to continue with the existing permitted effluent discharge and considering ZLD only for the proposed expansion.
	Specific TOR	Green belt area of 10 m width with perennial trees (Neem, Seasam, Teak etc.) shall be developed around the periphery of the unit.	Unit shall developed 20% greenbelt	EAC committee has granted TOR for green belt area of 10 m width with perennial trees (Neem, Seasam, Teak etc.) shall be developed around the periphery of the unit. But, Unit have plot area (94.14m X 58m = 5460 m2). If unit will develop 10m width green belt around periphery, then green belt area will be 2662.8 m2 (45% of total area) & remaining area for plant 2797.2 m2 which is not feasible to run unit. So, we are requesting to grant amendment to develop 20% green belt.

4.8.4.3 *The EAC, after detailed deliberations, noted that the above project is covered under category B of item 5(f) of the schedule to the EIA Notification, 2006. Accordingly, amendment in the ToR, even if granted by the Ministry, should be considered by the concerned SEAC/SEIAA.*

Agenda No.4.8.5

Proposed to establish a new 100 KLD capacity molasses based distillery (Rectified Spirit/Extra Neutral alcohol / Absolute Alcohol) along with 4.3 MW co-generation of power at Village Khamaria Pandit, Aira Estate District Lakhimpur kheri (UP) by M/s Gobind Sugar Mills Limited (Distillery Division) - For amendment in ToR

[IA/UP/IND2/82439/2018, IA-J-11011/322/2018-IA-II(I)]

4.8.5.1 The proposal is for amendment in standard Terms of Reference dated 17th November, 2018 granted by the Ministry in favour of M/s Gobind Sugar Mills Limited (Distillery Division) for setting up 100 KLD capacity molasses based distillery (Rectified Spirit/Extra Neutral alcohol/Absolute Alcohol) along with 4.3 MW co-generation of power located at Village Khamaria Pandit, Aira Estate District Lakhimpur kheri (UP).

4.8.5.2 The project proponent has requested for amendment in the ToR with the details as under:

S. No.	Para of ToR issued by MoEF&CC	Details as per the ToR	To be revised/ read as	Justification/reasons

1.	1.	"The Standard ToR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed with public consultation".	Exemption from public hearing and permission to use existing base line data in preparation of EIA report.	The proposal is revised in order to assist new 'National Policy on Bio-fuels, 2018' and due to availability of excess molasses in Uttar Pradesh. M/s Gobind Sugar Mills Limited (Distillery Unit) were granted Environmental Clearance by MOEF&CC vide letter No.J-I1011/199/2015-IA-11 (I) dated 29th November, 2017 for setting up of distillery at village Khamaria Pandit, Aira Estate, Tehsil Dhaurahra, District Kheri (UP). Note: The earlier environmental clearance issued on 29.11.2017 is still valid and no work related to the EC earlier issued has been undertaken at the site.

4.8.5.3 *The EAC, after deliberations, noted that the project for distillery of capacity 60 KLPD, was granted environmental clearance by the Ministry on 29th November, 2017 based on public hearing conducted by the State Pollution Control Board on 16th November, 2016. The said project is yet to be implemented. In such a case, the present proposal for setting up 100 KLPD molasses based distillery, may not be construed under expansion category and thus not qualifying for consideration as category B_2 project under the Ministry's Notification dated 17th January, 2019.*

List of the Expert Appraisal Committee (EAC-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.	Shri S C Mann	Member
6.	Shri Ashok Agarwal	Member
7.	Dr T K Joshi	Member
8.	Shri. Dinabandhu Gouda	Member
9.	Shri S.K. Srivastava	Member Secretary

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