MINUTES OF THE 7th EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) MEETING HELD DURING 6-8 MAY, 2019

Venue: Indus Hall, Ground Floor, Jal Wing, Ministry of Environment, Forest and Climate Change, Indira ParyavaranBhawan, JorBagh Road, New Delhi-3

Time: 10:30 AM

7.1 Opening Remarks by the Chairman

7.2 Confirmation of the Minutes of the 6th Meeting of the EAC (Industry-2) held during8-9 April, 2019 at Indira Paryavaran Bhawan, New Delhi.

The EAC, having taken note that no comments were offered on the minutes of its 6th meeting held during 8-9 April, 2019 at New Delhi, confirmed the same.

Day One: 6th May, 2019

7.3 Environmental Clearance

Agenda No.7.3.1

Expansion of pesticide manufacturing unit by M/s HPM Chemicals and Fertilizers Limited at SP-9B, 9C, 9D, 9D1 and H1-39(O), RIICO Industrial Area, Khushkhera, Taluka Tijara, District Alwar (Rajasthan) - Environmental Clearance

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

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

7.3.1.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Pesticides from 900 TPA to 7140 TPA (48nos of products) manufacturing unit by M/s HPM Chemicals and Fertilizers Limited in an area of 30500 sqm located at SP-9B, 9C, 9D, 9D1 and H1-39(O), RIICO Industrial Area, Khushkhera, Taluka Tijara, District Alwar (Rajasthan).

The details of products are as under:-

#	Product Details	Existing (TPA)	Proposed (TPA)	Total quantity (TPA)
1.	Acetamiprid Tech	60	240	300
2.	Imidacloprid			
3.	Thiacloprid			
4.	Thiamethoxam			
5.	Novaluron (Insecticide Pgr)	10	100	110
6.	LamdaCyhalothrin	30	170	200
7.	Bifenthrin			
8.	Chlorpyrifos	150	850	1000
9.	Acephate			
10.	Profenofos			

11.	Fipronil	120	80	200
12.	Buprofezin			
13.	Cartap Hydrochloride			
14.	Azoxystrobin	50	100	150
15.	Emamectin Benzoate			
16.	Spinosad			
17.	Validamycine			
18.	Hexaconazole	50	300	350
19.	Tricyclazole			
20.	Propiconazole			
21.	Tebuconazole			
22.	Difenoconazole			
23.	Ipconazole			
24.	Paclobutrazol			
25.	Thiophanate-Methyl	20	20	40
26.	Metalaxyl			
27.	Imazethapyr	20	20	40
28.	Metsulfuron-Methyl	35	65	100
29.	Sulfosulfuron			
30.	Chlorimuron-Ethyl			
31.	Pyrazosulfuron			
32.	Bensulfuron-Methyl			
33.	Clodinafop-Propargyl	5	95	100
34.	Butachlor	100	900	1000
35.	Pretilachlor			
36.	Glyphosate	250	750	1000
37.	Oxyfluorfen			
38.	Atrazine			
39.	Metribuzin			
ADDITION OF NEWPRODUCTS				
40.	Diafenthiuron	0	100	100
41.	Pendimethalin	0	100	100
42.	Cypermethrin	0	1200	1200
43.	Alpha Cypermethrin			
44.	Permethrin			
45.	Deltamethrin	0	100	100
46.	Cypermethricacidchloride (CMAC)	0	850	850
47.	CloquintocetMexyl Technical (Safner)	0	100	100
48.	Myclobutanil	0	100	100
TOTAL		**900**	**6240**	**7140**

By Products:

S. No.	By Products	Exiting	Proposed	Total
		TPA		
1.	Sodium Sulphite - 20 %	370.92	877.28 + 5652.5 = 6529.78	6900.70
2.	Hydrochloric Acid - 30 %	71.38	56.036	187.40

S. No.	By Products	Exiting	Proposed	Total
		TPA		
3.	Ammonium Acetate – 98%	126.00	714.00	840.00
	Total	**568.30**	**7299.82**	**7928.10**

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

The Terms of Reference (ToR) for the project was granted on 24th May 2018. Public hearing is exempted as the project site is located inside the notified industrial area.

Existing land area is 20000 m^{2-}. Additional10500 m^2land will be required for proposed expansion. Industry has already developed greenbelt in an area of 33.18 % *i.e.*10118.56m^2 out of total area of the project. Additionally planted 956.98 m^2 and will plant 2149.62 m^2 outside plant area. The estimated project cost is Rs.27.8916 crores including existing investment of Rs4.6716crores.Total capital cost earmarked towards environmental pollution control measures is Rs.522 Lakhsand the recurring cost (operation and maintenance) will be about Rs.44.20 Lakhsper 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 Sahibi flows at a distance of 1.5 Km in North direction.

Total water requirement is estimated to be 610.78 cum/day, which includes fresh water requirement of 512.64 cum/day, proposed to be met from RIICO Water Supply.

Effluent of 124.73 cum/day quantity will be treated through full-fledged Effluent Treatment Plant (ETP) followed by MEE. Treated effluent shall be reused in the process. Domestic wastewater will be treated in Sewage Treatment Plant. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be increased from 650 kVA to 1850 kVA proposed to be met from Jaipur Vidyut Vitran Nigam Limited (JVVNL). Existing unit has one DG set of 62 kVA capacity, additionally DG sets of capacity 125 kVA (02 nos), 160 kVA (1 nos) and 750 kVA (1 nos) will be used as standby during power failure. Stack (height7.5 m)will be provided as per CPCB norms to the proposed DG sets.

Existing unit has two wood/coal fired boilers of 1 TPH capacity each. One mere Wood or Coal or Rice Husk fired boiler of 10 TPH capacity will be installed. Electrostatic Precipitator (ESP) with a stack of height of 35 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 Nos.locations during October 2017 to December 2017 and the baseline data indicates the ranges of concentrations as: PM10 (72.1 - 91.7 µg/m3), PM2.5 (36.0 – 52.8 µg/m3), SO2 (9.0 – 15.2 µg/m3) and NO2 (14.5 – 22.8 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be a. 90.11µg/m3,b. 15.51µg/m3 and 19.24µg/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% of the project cost as committed by the project proponent.

Earlier, the Ministry had granted EC vide letter dated 4th February 2010 for Pesticide manufacturing unit at Plot No.SP-9C, RIICO Industrial Area, Khushkhera, District Alwar (Rajasthan) in favour of M/s Hindustan Pulverizing Mills. The said The monitoring report on compliance status of above EC conditions forwarded by the Regional office at Nagpur vide letter dated 28th January, 2019 (site visit conducted on 8th January, 2019)was found to be satisfactory.

7.3.1.2 *The EAC, after deliberations, noted that for the existing pesticides production @900 TPA, environmental clearance was granted by the Ministry vide letter dated 4th February, 2010 in the name of M/s Hindustan Pulverizing Mills. Whereas, the present proposal involving expansion of pesticides from 900 TPA to 7140 TPA, has been submitted by M/s HPM Chemicals and Fertilizers Ltd. In such a case, the Committee questioned admissibility of the proposal, and insisted for first transfer of the EC in the name of M/s HPM Chemicals and Fertilizers Ltd.*

The proposal was therefore deferred.

Agenda No.7.3.2

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

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

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

7.3.2.1 During deliberations, the EAC noted the following: -

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

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

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

8	MORDENT YELLOW 20	6471-07-4	>1750		
9	SUNSET YELLOW	2783-94-0	10000		
	LIQUID DYES SOLN OF ABOVE MATERIAL	--	--		
PIGMENTS				--	
10	PIGMENT ORANGE 5	3468-63-1	8000		
11	PIGMENT ORANGE 13	3520-72-7	>5000		
12	PIGMENT ORANGE 34	15793-73-4	>5000		
13	PIGMENT RED 2	6041-94-7	3200		
14	PIGMENT RED 12	6410-32-8	8000		
15	PIGMENT RED 48	7023-61-2	3200		
16	PIGMENT RED 53	5160-02-1	>2000		
17	PIGMENT RED 57.1	5281-04-9	4200		
18	PIGMENT RED 63	6417-83-0	>5000		
19	PIGMENT RED 112	6535-46-2	8000		
20	PIGMENT RED 170	2786-76-7	>1500		
21	PIGMENT VIOLET 23	6358-30-1	>5000		
22	PIGMENT YELLOW 1	2512-29-0	>10000		
23	PIGMENT YELLOW 12	6358-85-6	>5000		
24	PIGMENT YELLOW 14	5408-75-7	>5000		
25	PIGMENT YELLOW 17	4531-49-1	8230		
26	PIGMENT YELLOW 61	12286-65-6	8160		
	PIGMENT PASTE OF ALL ABOVE PIGMENTS	--	-		
SOLVENT DYES*					
27	SOLVENT ORANGE 1	2051-85-6	>5000		
28	SOLVENT RED 24	85-83-6	8110		
29	SOLVENT RED 27	1320-06-5	>2000		
30	SOLVENT YELLOW 2	60-11-07	2000		
31	SOLVENT YELLOW 14	842-07-09	2000		
ACID DYES*					
32	ACID RED 1	3734-67-6	>2000		
33	ACID RED 4	2611-82-7	>2000		
34	ACID RED 18	5413-75-2	>2000		
35	ACID RED 73	1658-56-6	>2000		
36	ACID RED 88	10169-02-5	>2000		
37	ACID RED 97	6459-94-5	5000		
38	ACID RED 114	12220-20-1	1060		
39	ACID RED 119	6548-30-7	>8000		
40	ACID RED 128	6222-63-5	>5000		

41	ACID RED 137	2611-82-7	>8000		
42	ACID RED 214	6656-02-6	2000		
43	ACID RED 231	6360-06-01	>5000		
44	ACID YELLOW 1	846-70-8	2200		
45	ACID YELLOW 11	6359-82-6	1900		
46	ACID YELLOW 17	6359-98-4	>5000		
47	ACID YELLOW 23	1934-21-0	>2000		
48	ACID YELLOW 36	587-98-4	5000		
49	ACID YELLOW 42	6375-55-9	>2000		
50	ACID YELLOW 59	5601-29-6	2750		
51	ACID YELLOW 79	12220-70-1	>5000		
52	ACID BLACK 1	1064-48-8	2000		
53	ACID BLACK 18	6227-09-4	>8000		
54	ACID BLACK 21	10142-78-6	>5000		
55	ACID BLACK 26	6406-45-7	>5000		
56	ACID BLACK 41	5850-37-33	2000		
57	ACID BLACK 52	5610-64-0	5000		
58	ACID BLACK 58	12218-949/ 71839-85-5	2200		
59	ACID BLACK 63	32517-36-5	2000		
60	ACID BLACK 194	61931-02-0	>5000		
61	ACID BLACK 210	99576-15-5	>5000		
62	ACID BLUE 158	6370-08-7	1870		
63	ACID BROWN 14	5850-16-8	3200		
64	ACID BROWN 28	12238-94-7	>2000		
65	ACID BROWN 121	6487-04-3	>5000		
66	ACID GREEN 19	4587-81-2	>2000		
67	ACID ORANGE 7	633-96-5	>3200		
68	ACID ORANGE 10	1936-15-8	>3000		
69	ACID ORANGE 30	5572-43-0	>5000		
70	ACID ORANGE 72	6408-27-1	>3200		
	LIQUID DYES SOLN OF ABOVE MATERIAL	--	-		
DIRECT DYES*					
71	DIRECT BLACK NB	--	-		
72	DIRECT BLACK 19	6428-31-5	4900		
73	DIRECT BLACK 22	6473-13-8	2000		
74	DIRECT BLACK 168	85631-88-5	2000		
75	DIRECT BLUE G	--	-		
76	DIRECT BLUE 15	6428-60-0	2000		
77	DIRECT SKY BLUE FB	--	-		
78	DIRECT FAST VIOLET 2RL	--	-		
79	DIRECT ORANGE 34	12222-37-6	2000		
80	DIRECT RED 7	70209-93-7	2000		
81	DIRECT RED 23	3441-14-3	>5000		
82	DIRECT RED 26	3617-80-7	2000		
83	DIRECT RED 80	2610-10-8	>2000		
84	DIRECT RED 81	2610-11-9	1048		

85	DIRECT RED 89	12217-67-3	>2000		
86	DIRECT RED 239	60202-35-9	2000		
87	DIRECT YELLOW 4	3051-11-4	>2000		
88	DIRECT BROWN NB	--	-		
REACTIVE DYES*					
89	REACTIVE BLACK CNN	--	2000		
90	REACTIVE BLACK 5	12225-25-1	2500		
91	REACTIVE BLACK 8	12225-26-2	9120		
92	REACTIVE ORANGE 7	12225-83-1	2000		
93	REACTIVE ORANGE 122	12220-12-1	2000		
94	REACTIVE RED 3BS	93050-79-4	>5000		
95	REACTIVE RED M 5B	12226-03-8/ 17804-49-8	7460		
96	REACTIVE RED 120	61951-82-4	>6800		
97	REACTIVE YELLOW 15	12226-47-0	>2000		
98	REACTIVE YELLOW 37	12237-16-0	5000		
99	REACTIVE YELLOW 145	93050-80-7	>5000		
100	REACTIVE YELLOW 160	129898-77-7	2000		
Total				**15**	**100**

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

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

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

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

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

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

Industrial waste water of 16.3 m3/day will be treated in Effluent Treatment Plant (ETP) of primary treatment (neutralization) facility. Treated effluent will be sent to Spray Dryer/Single

Stage Vacuum Evaporation system to achieve zero discharge of waste water. Waste water converted in steam/clean water through condenser of single stage evaporation system will be recycled in process or used for makeup water in cooling tower. Domestic Waste water will be disposed through septic tank & soak pit.

The power requirement will be increased from 60- 80 kVA, proposed to be met from Madhya Gujarat Vij Company Limited (MGVCL). One D.G. Set (75 KVA) will be used as standby during power failure. Stack (Height – 10 m) will be provided as per CPCB norms to the proposed DG Set.

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

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

Consolidated Consent and Authorization(CC&A) for dyes manufacturing @ 5 TPM was issued by the SPCB on 16th December, 2003, without obtaining environmental clearance under the EIA Notification, 1994. No clarification was made available regarding non applicability of the EIA Notification, 1994.

Consent to establish for dyes manufacturing (blending & grinding) @10 TPM was obtained from the SPCB vide letter dated 21st March, 2016. CTO for the same was yet to be obtained.

7.3.2.2 *The EAC, after deliberations, noted that for the existing dyes production @ 5 TPM, Consolidated Consent and Authorization (CC&A) was issued by the SPCB on 16th December, 2003, without obtaining environmental clearance under the EIA Notification, 1994. The Committee insisted for adequate justification/clarification on non applicability of the EIA Notification, 1994.*

The Committee further noted that for dyes manufacturing (blending & grinding) @10 TPM, Consent to Establish was obtained from the GPCB vide letter dated 21st March, 2016, but CTO for the same was yet to be obtained. In such a case, the instant proposal for expansion from 15 TPM to 100 TPM is not justified.

The proposal was, therefore, deferred.

Agenda No.7.3.3

Active Pharmaceutical Ingredients andAPI Intermediates Manufacturing Unit at A-106/1, MIDC Paithan Industrial Area, Village Mudhalwadi, TalukaPaithan, District Aurangabad (Maharashtra) by M/s Quantinental Pharmachem Private Limited- Environmental Clearance

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

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

7.3.3.1 During deliberations, the EAC noted the following: -

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

The details of products are as under:

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

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.

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

The total land requirement is estimated to be 2499 sqm. Green belt will be develop in an area of 33 % i.e., 828 sqm out of total area of the project. The estimated project cost is Rs.2.59 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.54.5 lacs and the recurring cost (operation and maintenance) will be about Rs.5.67 lacsper annum. Total Employment will be 20 persons.

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

Total water requirement isestimated to be 28.1 cum/day, which includes fresh water requirement of 28.1 cum/day, proposed to be met from MIDC Water Supply.

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

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

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

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

7.3.3.2 *The EAC, during deliberations, observed that one of the NABET accredited consultant M/s Green Circle Inc was engaged for preparation of the EIA/EMP report for the project. The EIA Coordinator was, however, not present during the meeting. The consultant, presenting the proposal, was not having accreditation for the projects covered under item 5(f).*

The proposal was, therefore, not taken forward.

Agenda No.7.3.4

Proposed specialty chemical & pesticide Manufacturing Plant at Plot No.T-35,36,37,45,46,47, GIDC Saykha, Taluka Vagra, District Bharuch (Gujarat) by M/s Hemani Industries Ltd (Unit-VI) - Environmental Clearance

[IA/GJ/IND2/82838/2018, J-11011/231/2018-IA.II (I)]

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

7.3.4.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up Pesticide Technical (31200 TPM) and Synthetic organic chemical @ 16500 TPM manufacturing unit by M/s Hemani Industries Ltd(Unit-VI) in an area of 1,21,000 sqm at Plot No. T-35,36,37,45,46,47, GIDC Saykha, Taluka Vagra, District Bharuch (Gujarat).

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

S. NO.	PRODUCT	QUANTITY (TPM)	CAS NO.	LD50	TYPE OF PRODUCTS	CATEGORY
Pesticide Products which are covered under A-5(b) as per EIA Notification, 2006						
1	2,4 Di Nitro Chloro Benzene (DNCB)	1500	97-00-7	780 mg/kg	**Pesticide**	**5 (b)**
(i)	Di ChloroAnilline		95-76-1	400 mg/kg		
2	**Fungicide**				**Pesticide**	**5 (b)**
(i)	Hexaconozole (T)	6000	79983-71-4	> 2000 mg/kg		
(ii)	Pyraclostrobin (T)		175013-18-0	5000 mg/kg		
(iii)	Fluoxastrobin (T)		361377-29-9	>5000 mg/kg		
(iv)	Diathianon (T)		3347-22-6	285 mg/Kg		
(v)	Tebuconazole (T)		107534-96-3	3352 mg/kg		
(vi)	Cyproconazole (T)		94361-06-5	1020 mg/kg		
(vii)	Thiabedazole (T)		148-79-8	3600 mg/kg		
(viii)	Pencycuron (T)		66063-05-6	1000 mg/kg		
(ix)	Propiconazole (T)		60207-90-1	2105 mg/kg		
(x)	Picoxystrobin (T)		117428-22-5	2,250 mg/kg		
(xi)	Difenoconazole (T)		119446-68-3	1453 mg/kg		
(xii)	Prothioconazole (T)		178928-70-6	1320 - 6690 mg/kg		
(xiii)	Azoxystrobin (T)		131860-33-8	> 2000 mg/kg		
(xiv)	Fluazinam (T)		79622-59-6	1782 mg/kg		
(xv)	Chlorothalonil (T)		1897-45-6	10000 mg/kg		
(xvi)	Tricyclozole (T)		41814-78-2	>2000 mg/kg		

(xvii)	Epoxiconazole (T)		133855-98-8	3160 mg/Kg		
3	**Herbicide**				**Pesticide**	**5 (b)**
(i)	Dicamba	10000	1918-00-9	1039 mg/kg		
(ii)	2,4 D (T) and its salt		94-75-7	375 mg/kg		
(iii)	Glyphosate (T)		1071-83-6	5600 mg/kg		
(iv)	Bispyribac Sodium (T)		125401-92-5.	41110 mg/kg		
(v)	PyrithiobacSodium (T)		123343-16-8	>2000 mg/kg		
(vi)	Penoxsulam (T)		219714-96-2	>2000 mg/kg		
(vii)	Metsulfuron Methyl (T)		74223-64-6	>2000 mg/kg		
(viii)	Oxyflurfen (T)		42874-03-3	>5000 mg/kg		
(ix)	Floroxypyr (T)		69377-81-7	>5000 mg/kg		
(x)	Triclopyr (T)		55335-06-3	1,400 mg/kg		
(xi)	Pendimethalin (T)		40487-42-1	1050 mg/kg		
(xii)	Diflubenzuron (T)		35367-38-5	4,640 mg/kg		
(xiii)	Dichlobenil (T)		1194-65-6	2126 mg/kg		
(xiv)	Metamitron (T)		41394-05-2	2000 mg/kg		
(xv)	Quizalofop Methyl (T)		76578-13-7	1480 mg/kg		
(xvi)	Teflubenzuron (T)		83121-18-0	>2000 mg/kg		
(xvii)	Saflufenacil (T)		372137-35-4	>2000 mg/kg		
(xviii)	Pretilachlor (T)		51218-49-6	>2000 mg/kg		
(xix)	Tembotrione (T)		335104-84-2	>2000 mg/kg		
(xx)	Ethofumosate (T)		26225-79-6	>2000 mg/kg		
(xxi)	Propanil (T)		709-98-8	2500 mg/kg		
(xxii)	S. Metalachlor (T)		87392-12-9	1,200 mg/kg		
(xxiii)	Paraquat (T)		4685-14-7	150 mg/kg		
(xxiv)	Metribuzin (T)		21087-64-9	1865 mg/kg		

(xxv)	Mesotrione (T)		104206-82-8	>2000 mg/kg		
(xxvi)	Topramezone (T)		210631-68-8	>2000 mg/kg		
(xxvii)	Pyrazosulfuron (T)		93697-74-6	>2000 mg/kg		
(xxviii)	Atrzine (T)		1912-24-9	3090 mg/kg		
(xxix)	Glufosinate Ammonium (T)		77182-82-2	4000 mg/kg		
(xxx)	Diflurobenzamide (T)		18063-0301	900 mg/kg		
(xxxi)	Benzavindiflupyr(T)		1072957-71-1	>2000 mg/kg		
(xxxii)	Clomazone (T)		81777-89-1	1,369 mg/kg		
(xxxiii)	Bentazone (T)		25057-89-0	750 mg/kg		
(xxxivv)	Fluopyram (T)		658066-35-4	>5000 mg/kg		
(xxxv)	Sulfoxaflor (T)		946578-00-3	>2000 mg/kg		
(xxxvi)	Bixafen (T)		581809-46-3	2000 mg/kg		
(xxxvii)	Metiram (T)		9006-42-2	10,000 mg/kg		
(xxxviii)	Fluxapyroxad (T)		907204-31-3	2000 mg/kg		
(xxxix)	Cymoxanil (T)		57966-95-7	2000 mg/kg		
(xxxx)	Metamifop (T)		256412-89-2	3200 mg/kg;		
(xxxxi)	Pyridaben (T)		96489-71-3	>2000 mg/kg		
(xxxxii)	Oxadiazon (T)		19666-30-9	>2000 mg/kg		
(xxxxiii)	Spirotetramat (T)		203313-25-1	>2000 mg/kg		
(xxxxiv)	Propaquizafop (T)		111479-05-1	>2000 mg/kg		
4	**Insecticide**				**Pesticide**	**5 (b)**
(i)	Transfluthrin (T)	8000	118712-89-3	>5000 mg/kg		
(ii)	Deltamethrin (T)		52918-63-5	>2,250 mg/kg		
(iii)	Cyfluthrin & Beta isomer (T)		68359-37-5	380 mg/kg		
(iv)	Bifenthrin (T)		82657-04-3	153 mg/kg		
(v)	Permethrin (T)		*52645-53*-1	>500 mg/kg		

(vi)	Alpha Cypermethrin (T)		67375-30-8	>5000 mg/kg		
(vii)	Cypermethrin (T) & Beta/Zeta/ Theta Isomer (T)		52315-07-8	326 mg/kg		
(viii)	Chlorpyriphos (T)		2921-88-2	229 mg/kg		
(ix)	Temphos (T)		3383-96-8	4000 mg/Kg		
(x)	Spiromesifen (T)		283594-90-1	>2000 mg/kg		
(xi)	Clothianidin (T)		210880-92-5	5000 mg/kg		
(xii)	Chlorantraniliprole (T)		500008-45-7	5000 mg/kg		
(xiii)	Chlorothalonil (T)		1897-45-6	10000 mg/kg		
(xiv)	Lambda Cyhalothrin (T)		91465-08-6	5000 mg/kg		
(xv)	Imidacloprid (T)		138261-41-3.	4,820 mg/kg		
(xvi)	Carpat Hydrochloride (T)		7647-01-0	277 mg/Kg		
(xvii)	Dinotefuran (T)		165252-70-0	2000 mg/kg		
(xviii)	Clodinafop Propargyl (T) & its salt		105512-06-9	2000 mg/Kg		
(xix)	Acetamiprid (T)		135410-20-7	571 mg/kg		
(xx)	Etofenprox (T)		80844-07	2000 mg/Kg		
(xxi)	Metafluthrin (T)		240494-70-6	2000 mg/Kg		
(xxii)	Cloquintocet mexyl (T)		99607-70-2	2000 mg/Kg		
(xxiii)	Fipronil (T)		120068-37-3	197 mg/kg		
(xxiv)	Fenpropathrin (T)		39515-41-8	54 mg/kg		
(xxv)	Flubendiamide (T)		272451-65-7	2000 mg/Kg		
(xxvi)	Primiphos methyl (T)		29232-93-7	2050 mg/kg		
(xxvii)	Ethiprole (T)		181587-01-9	7080 mg/kg		
(xxviii)	Gamma Cyhalothrin (T)		76703-62-3	5000 mg/kg		
(xxix)	Indoxacarb (T)		144171-61-9	5000 mg/Kg		
(xxx)	Profenofos (T)		41198-	1178		

			08-7	mg/kg		
(xxxi)	Thiamethoxam (T)		153719-23-4	1563 mg/kg.		
(xxxii)	Lufenuron (T)		103055-07-8	200 mg/kg		
(xxxiii)	Mandipropamid (T)		374726-62-2	5000 mg/kg		
(xxxiv)	Flonicamid (T)		158062-67-0	1768 mg/kg		
(xxxv)	Chlorentraniliprole (T)		500008-45-7	5000 mg/kg		
5	DV Acid Chloride (CMAC)	1500	52314-67-7	1200 mg/Kg	**Pesticide**	**5 (b)**
6	Meta Phenoxy Benzaldehyde (T)	1000	39515-51-0	1222 mg/kg	**Pesticide**	**5 (b)**
7	Lambda Cyhlothric Acid	500	72748-35-7	5000 mg/kg	**Pesticide**	**5 (b)**
8	Ortho/Para Nitro Chloro Benzene & Derivative	500	100-00-5	1414 mg/kg	**Pesticide**	**5 (b)**
(i)	Ortho/Para Nitro Aniline		100-01-6	1838 mg/kg		
9	Para /Ortho Di Chloro Benzene & Derivative	1000	95-50-1		**Pesticide**	**5 (b)**
(i)	2,5 Di Chloro Aniline		95-82-9	1600 mg/kg		
(ii)	2,3 Di Chloro Aniline		95-82-9	250 mg/kg		
(iii)	3,4 Di Chloro Aniline		95-76-1	545 mg/kg		
(iv)	3 Chloro Aniline		95-51-2	250 mg/kg		
(v)	4 Chloro Aniline		95-51-2	300 mg/kg		
(vi)	2 Chloro Aniline		108-42-9	500 mg/kg		
(vii)	3 ,5 Di Chloro Aniline		626-43-7	1215 mg/Kg		
10	Bifenthrin Alcohol	100	76350-90-8	170 mg/kg	**Pesticide**	**5 (b)**
11	2,6 DichloroQuinaxaline	500	18671-97-1	150 mg/kg	**Pesticide Intermediates**	**5 (b)**
12	3,5loro -2,4 difluro Aniline	100	149144-05-8	2000 mg/Kg	**Pesticide Intermediates**	**5 (b)**
13	Sulfentrazone	500	122836-35-5	1750 mg/kg	**Pesticide**	**5 (b)**
Specialty Chemicals						
14	**CHLORINATION DERIVATIVES**				**Specialty Chemicals**	**5 (f)**
	Mono Chloro	3000	*108-90-7*	2300 mg/k		

	Benzene			g		
	Di Chloro Benzene		95-50-1	6000 mg/kg		
	Ortho Di Chloro Benzene		95-50-1	6000 mg/kg		
	Para Di ChloroBenzene		95-50-1	6000 mg/kg		
	Meta Di Chloro Benzene		95-50-1	6000 mg/kg		
	Tri Chloro Benzene		87-61-6	6139 mg/kg		
15	**Nitration of Chlorobenzene**				**Specialty Chemicals**	**5 (f)**
	Ortho Nitro Chloro Benzene	2000	88-73-3	1110 mg/kg		
	Para Nitro ChloroBenzene		100-00-5	1110 mg/kg		
	Meta Nitro Chloro Benzene		121-73-*3*	1110 mg/kg		
16	Nitro Benzene & Derivative	500	98-95-3	780 mg/kg	**Specialty Chemicals**	**5 (f)**
17	Chloro Toluene & derivative	3000			**Specialty Chemicals**	**5 (f)**
(i)	Benzyl Chloride		100-44-7	1231 mg/kg		
(ii)	Benzaldehyde		100-52-7	1300 mg/kg		
(iii)	Benzyl Alcohol		100-51-6	1230 mg/kg		
(iv)	Benzyl Benzoate, Sodium Benzoate		120-51-4	1121 mg/kg		
(v)	Benzyl acetone		2550-26-7	2490 mg/kg		
(vi)	Benzyl Cyanide		140-29-4	45500 ug/kg		
(vii)	Benzyledine Chloride		98-87-3	1285 mg/Kg		
(viii)	Benzo Tri Chloride		98-07-7	702mg/kg		
18	Caustic & Chlorine	2000	1310-73-2/ 7782-50-5	1350 mg/kg	**Specialty Chemicals**	**5 (f)**
19	Meta Chloro Acetic Acid	2000	79-11-8	305 mg/kg	**Specialty Chemicals**	**5 (f)**
20	Vinyl Sulphone	1000	42986-22-1	800 mg/kg	**Specialty Chemicals**	**5 (f)**
21	H Acid & Derivative	1500	90-20-0	2400 mg/kg	**Specialty Chemicals**	**5 (f)**
22	Hydrazine Hydrate	1500	7803-57-8	129 mg/kg	**Specialty Chemicals**	**5 (f)**

Total		**47700 (Pesticide -31200 MT/Month+ Specialty Chemicals - 16500 MT/Month)**				
Inorganic Chemicals (EC is not Applicable) – Dropped these products from product list.						
23	Calcium Chloride	1500	10043-52-4	1000 mg/kg	**Inorganic Chemicals**	
24	Di Calcium Phospate	3000	7757-93-9	7,100 mg/kg	**Inorganic Chemicals**	
25	Sulfuric Acid & Allied Products	1000	*7664-93-9*	2140 mg/kg	**Inorganic Chemicals**	
26	Aluminum Chloride	1000	7446-70-0	3470 mg/kg	**Inorganic Chemicals**	
27	Thionyl Chloride	1500	7719-09-7	270 mg/kg	**Inorganic Chemicals**	
	TOTAL	**8000**				

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

Standard ToR for the project was granted on 16th August, 2018. Public Hearing is exempted as per the para 7.III.Stage (3)(i)(b) as the project site is located inside the notified industrial area of GIDC Saykhawhich is covered under PCPIR region. PCPIR region has obtained EC from MoEFCC on September, 2017.

Total land requirement is estimated to be 1,21,000sqm. Green belt will be develop in an area of 33% i.e., 40000 sqm out of total area of the project. The estimated project cost is Rs. 120 Crores. Total Capital cost earmarked towards environmental pollution control measures is Rs. 25 Crore and recurring cost (Operation and Maintenance) will be around Rs.30 Crore per annum. Total employment will be 200 people as direct and 300 person indirect.

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 9235 cum/day including fresh water requirement of 1540 cum/day proposed to be met from GIDC supply.

Effluent generated shall be segregated in to high COD and low COD stream. Company proposes a new ETP consisting of primary, secondary and tertiary treatment & RO facility for Low COD/Low TDS stream (7120 m3/day). The low COD stream effluent (7120 m3/day) will be sent to propose ETP. Treated effluent shall be sent to RO and RO permeate will be reused in plant premises and RO Reject will be treated in MEE. The high COD stream and High TDS effluent (1000 m3/day) will be treated in primary ETP and then treated effluent will be sent to MEE and MEE Condensate will be treated in ETP. Final Treated effluent shall be reused in plant premises. Domestic Waste water will be treated in secondary treatment or disposed by septic tank & soak pit.

Total power requirement is estimated to be 15000 kVA, proposed to be met from the DGVCL from Dakshin Gujarat Vij Company Limited (DGVCL). Five DG sets (1010 KVA each) will be used as standby during power failure. Stack (Height - 11 m) will be provided as per CPCB norms to the proposed DG Set.

Proposed unit will have coal based 3 No. steam boiler (25 TPH), coal based 5 No. Thermic fluid heater (25 Lac Kcal/Hr (5 Lac Kcal/Hr x 5 Nos.)) and 5050 KVA – 5 Nos. D G Set (1010 KVA each). ESP with scrubber and a stack of height will be installed for controlling the Particulates Matter (PM) & SO2.

Ambient air quality monitoring is carried out at 7 locations during October, 2017 to December, 2017 and the baseline data indicates the ranges of concentrations asPM10 (72.40– 81.06 µg/m3), PM2.5 (42.76 – 45.78 µg/m3), SO2 (12.57 – 17.64 µg/m3), NOx (13.95 – 19.48 µg/m3), HCl (BDL), Cl2 (BDL), HBr (BDL), NH3 (BDL), O3 (10.62 – 11.85 µg/m3), HC (BDL). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.0051 µg/m3, 0.0045 µg/m3, 0.0017 µg/m3, 0.0017 µg/m3, 0.00027, 0.00213 and 0.0008 µg/m3 with respect to PM10, SOx, NOx, HCl, Cl_2, NH3 and HBr. 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.

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

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th June, 2011, as amended from time to time, shall be followed.*
- *No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having LD_{50}<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows:*
  - *(i) Reactor shall be connected to chilled brine condenser system.*
  - *(ii) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - *(iii) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
  - *(iv) Solvents shall be stored in a separate space specified with all safety measures.*

(v) *Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*

(vi) *Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*

(vii) *All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*

- *Total fresh water requirement shall not exceed 1540 cum/dayto be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.*
- *The company shall undertake waste minimization measures as below:-*
  - *(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 1.5% 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.7.3.5

Proposed bulk drugs and intermediate manufacturing unit by M/s Devi Chemscience Private Limited at Plot No.C-174/1, MIDC Chincholi, Taluka Mohol, District Solapur (Maharashtra) - Environmental Clearance

[IA/MH/IND2/71771/2017, A-J-11011/580/2017-IA-II(I)]

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

7.3.5.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up of Bulk Drugs and Intermediates manufacturing unit of capacity 158.23 TPM by M/s Devi Chemscience Private Limited in an area of 16309 sqm located at Plot No.C-174/1, MIDC Chincholi, Taluka Mohol, District Solapur (Maharashtra).

The details of products/byproducts are as under:-

S. No.	**Product**	**Capacity** (MT/M)
1	Metoprolol Succinate & Intermediates	3
2	Metoprolol Tartrate & Intermediates	3
3	Acetozolamide& Intermediates	2
4	Bambutetrol HCl & Intermediates	0.025
5	(R)-Bambutetrol HCl &Intermediates	0.025
6	Bromohexine Hydrochloride & Intermediates	3.9
7	Chlorphenesin& Intermediates	6
8	Clopidogrel Bisulfate & Intermediates	2.01
9	Defriprone& Intermediates	0.201
10	Dioctyl Calcium Sulfosuccinate & Intermediates	0.9
11	Dioctyl Potassium Sulfosuccinate & Intermediates	0.9
12	Dioctyl Sodium Sulfosuccinate & Intermediates	50.1
13	Dorzolamide Hydrochloride & Intermediates	0.025
14	Formoterol Fumarate Dihydrate & Intermediates	0.005
15	Furosemide & Intermediates	2.01
16	Guaifenesin & Intermediates	20.1
17	Ipratropium Bromide & Intermediates	0.005
18	Levetiracetam & Intermediates	5.01
19	Methocarbamol & Intermediates	5.01
20	Permethrin & Intermediates	2.01
21	Quinaldic Acid	6

22	Levo Salbutamol Sulphate & Intermediates	0.025
23	Salbutamol Sulphate & Intermediates	3
24	Salmetrol Xinafoate & Intermediates	0.005
25	Tiotropium Bromide& Intermediates	0.005
26	Diamyl Sodium sulfosuccinate & Solution	30
27	Moxifloxacin Hydrochloride	0.99
28	Moxifloxacin Intermediate	3
29	Pregabalin & Intermediate	6
30	Carbimazole& Intermediate	0.99
31	Methimazole & Intermediate	0.48
32	Ondansetron & Intermediate	0.7
33	Carvedilol & Intermediate	0.75
	Total	**158.23**
By-Product		
1	Sodium Bromide	0.414
2	Sodium Chloride	0.414
3	Ammonium Chloride	0.165
4	Sodium Sulphite	0.84
5	Sodium Sulphate	0.168
6	Potassium Chloride	0.084
	Total	**2.085**

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 (Great Indian Bustard (GIB) Sanctuary within 5 km), the proposal was appraised at central level by the sectoral EAC in the Ministry.

The standard ToR for the project was granted on 5th February, 2018. Public hearing is exempted as the project site is located inside the notified industrial area.

Total land area is 16309 sqm. Green belt will be developed in an area of 33% i.e.5381.97 sqm out of total area of the project. The estimated project cost is Rs.25 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs.3.83 Cr. and the recurring cost (operation and maintenance) will be about Rs.0.43 Cr. per annum.

Great Indian Bustard Sanctuary is located at a distance of 0.65 km. Application for necessary recommendations from wildlife angle has been submitted with the Standing Committee of NBWL.

Total water requirement is estimated to be 70 cum/day, which includes fresh water requirement of 36 cum/day, proposed to be met from MIDC water supply.

Effluent of 29 cum/day quantity will be treated through Effluent Treatment Plant and Multi Effect Evaporator. Treated effluent will be reused in the plant. Domestic waste water5 cum/day will be treated in Sewage Treatment Plant. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 1.133 MW, proposed to be met from Maharashtra State power distribution corporation limited (MSPDCL). The details of boilers and DG sets are as under:

Source	Steam Boiler	Thermic Fluid Heater	D.G. Sets
Capacity	2 TPH	2 Lakh Kcal/Hr	1010 KVA
Fuel	Coal/Biomass	Furnace Oil	HSD
Qty.	24/48 TPD	0.576 TPD	100Ltr/Hr
Stack Ht.	30 M	18 M	6.5 M
APC Equip.	Bag Filter	--	--

Ambient air quality monitoring was carried out at 8 locations during February 2018 to April 2018 and the baseline data indicates the ranges of concentrations as: PM10 (48.3 - 73.15 µg/m3), PM2.5 (12.22 - 25.48 µg/m3), SO2 (16.47 - 29.26 µg/m3) and NO2 (17.21 - 36.28 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 68.04 µg/m^3 and 37.65 µg/m^3 with respect to PM_{10}, and SOx. 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.

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

- *Ground level concentration (GLCs) for different air pollutants to be ascertained for locations in and around the GIB Sanctuary.*
- *Prediction for one of the critical air pollutant NO_x to be made.*
- *Project details in respect of production, project area and other core parameters, presented for obtaining recommendations of Standing Committee of NBWL, need to be consistent with those mentioned in Form-2 for environmental clearance.*
- *Plan to achieve 99.95% solvent recovery.*

Agenda No.7.3.6

Setting up synthetic organic chemicals (4300 MT/month), dye intermediates (300 MT/month) and pesticide technical (1500 MT/month) at Plot No.S-163, GIDC Industrial Estate, Dahej-1, Taluka Vagra, District Bharuch(Gujarat) by M/s Organic Industries Private Limited - Environmental Clearance

[IA/GJ/IND2/91786/2014, WH-62742]

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

7.3.6.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up synthetic organic chemicals (4300 MT/month), dye intermediates (300 MT/month) and pesticide technical (1500 MT/month)by M/s Organic Industries Private Limited in an area of 171579 sqm located at Plot No.S-163, GIDC Industrial Estate, Dahej-1, Taluka Vagra, District Bharuch (Gujarat).

The details of products/byproducts are as under:-

S. NO.	Product	Existing (TPM)	Proposed (TPM)	Total (TPM)	CAS No.	LD50 (mg/Kg)	Category
EC Not Required (Existing)							
1	Potassium Permanganate	700	-	700	7722-64-7	1090	
2	Boric Acid Technical (All Grades)	2,000	-	2,000	10043-35-3	2660	
3	Borax Decahydrate (All Grades)	700	-	700	1303-96-4	6000	
4	Di-Sodium Octaborate Tetrahydrate	100	-	100	12280-03-4	2000	
EC Required (Proposed)							
5	**Ethylene Oxide / Propylene Oxide Condensate**	00	1000	1000	75-21-8/ 75-56-9		5 (f) – Specialty Chemicals
5.1	Castor oilethoxylate/propoxylates				61791-12-6	5000	
5.2	Nonylphenolethoxylate/ propoxylates				25154-52-3	2990	
5.3	Tridecylalcoholethoxylate/propoxylates				24938-91-8	2000	
5.4	Laurrylalcoholethoxylate/ propoxylates				9002-92-0	2000	
5.5	Cetostearylalcoholethoxylate /propoxylates				68439-49-6	5000	
5.6	Hydrogenated castor oilethoxylate/propoxylates				61788-85-0	7000	
5.7	Poly ethylene glycol & esters (H-PEG, M-PEG, V-PEG, P-PEG)				25322-68-3	30200	
5.8	Poly propylene glycol & esters				25322-69-4	20000	
5.9	Styrenatedphenolethoxylates/propoxylates				61788-44-1	1720	
5.10	Stearicacidethoxylates/propoxylates				9009-90-9	4600	
5.11	Oliecacidethoxylates/propoxylates				9004-96-0	2000	
5.12	P octylphenolethoxylates/pro				12708 7-	1231	

	poxylates				87-0		
5.13	Hydrophobes ethoxylates/propoxylates				6813 1-40-8	1410	
6	**Anionic Surfactants**						
6.1	SLES -(Sodium lauryl ether sulfate)	0	300	300	9004-82-4	1288	5 (f) – Specialty Chemicals
6.2	ALES -(Ammonium lauryl ether sulfate)				3261 2-48-9	12800	
6.3	ALS -(Ammonium lauryl sulfate)				2235-54-3	100	
6.4	TLS- (Tri ethanol amine lauryl sulfate)				139-96-8	1288	
6.5	CABS (Calcium alkyl benzene sulfonate)	00			2626 4-06-2	1280	
6.6	SABS (Sodium alkyl benzene sulfonate)				6841 1-30-3	207	
6.7	SCS (Sodium cumene sulfonate)				3207 3-22-6	39163	
6.8	Alkyl aryl ether sulfates				5534 8-40-8	500	
7	**Catoinic Surfactants**						
7.1	Cationic softners	00	300	300	9199 5-81-2	2395	5 (f) – Specialty Chemicals
7.2	Esterquates				67-63-0	2000	
7.3	Amphoteric softners				6833 4-21-4	4090	
7.4	COB -(COCOBetain)				8643 8-79-1	2000	
7.5	CAPB (Coco amido propyl betain)				6178 9-40-0	2335	
7.6	LAPB (Lauryl amido propyl betain)				4292-10-8	1117	
7.7	BKC 50, 80 (Benzalkonium chloride)				6344 9-41-2	240	
7.8	CTAC (Cetyl tri methyl ammonium chloride)				112-02-7	4300	
7.9	Polyquat 7				2659	2000	

					0-05-6		
8	**Non-Ionic Surfactants**						
8.1	Fatty Alcohol Ethoxylates/Propoxylates	00	300	300	3733 5-03-8	2000	5 (f) – Specialty Chemicals
8.2	Fatty Acids Ethoxylates/Propoxylates				9004-96-0/319 43-11-0	5045	
8.3	Fatty Amines Ethoxylate/Propoxylates				6179 1-26-2	2000	
8.4	Phenol Ethoxylates/Propoxylates				1270 87-87-0	1410	
8.5	Glycerin Ethoxylates/Propoxylates				3169 4-55-0	12600	
8.6	R-Ethoxylates/Propoxylates etc.				--	--	
9	**Anti-oxidants products**	00	400	400			
9.1	TNPP (Tris nonyl phenyl phosphite)				2652 3-78-4	1000	5 (f) – Specialty Chemicals
9.2	TPP (Tris phenyl phosphite)				917-23-7	6000	
9.3	DPP (Diphenyl phosphate)				838-85-7	2000	
9.4	PDDP (Phenyl di-isodecylphosphite)				2555 0-98-5	20,500	
9.5	TDP (Tris decyl phosphite)				2929-86-4	1600	
9.6	TLP (Tri lauryl phosphite)				3076-63-9	2740	
9.7	DPTDP (Di phenyl tri decyl phosphate)				6062 8-17-3	1530	
9.8	TDPP (Trisdipropylene glycol phosphite)				3678 8-39-3	16100	
9.9	DPDP (Diphenylisodecyl phosphate)				2654 4-23-0	5000	
10	**Alkonal Amines & derivatives**						

10.1	Mono ethanolamine(MEA)	00	2000	2000	141-43-5	2000	5 (f) – Specialty Chemicals
10.2	Di ethanolamine(DEA)				111-42-2	710	
10.3	Tri ethanolamine(TEA)				102-71-6	2200	
10.4	N-methyl mono ethanolamine(MMEA)				109-83-1	234	
10.5	Methyl di ethanolamine(MDEA)				105-59-9	4700	
10.6	Di methyl ethanolamine(DMEA)				108-01-0	2000	
10.7	Di ethyl ethanolamine(DMEA)				100-37-8	2200	
10.8	Ethyl mono ethanolamine(EMEA)				110-73-6	1720	
10.9	Ethyl Diethanolamine(EDEA)				139-87-7	460	
10.10	Propyl Monoethanolamine(PMEA)				16369-21-4	2140	
10.11	Propyl Diethanolamine(PDEA)				6735-35-9	380	
10.12	Butyl Monoethanolamine(BMEA)				111-75-1	7100	
10.13	Butyl Diethanolamine(BDEA)				102-79-4	4250	
10.14	Polyethanolamine(Poly)				68213-98-9	1720	
10.15	Tertiary butyl monoethanolamine(TBMEA)				4620-70-6	9274	
10.16	Tertiary butyl diethanolamine (TBDEA)				2160-93-2	4250	
10.17	Hydroxyethyl morpholine(HEM)				622-40-2	2500	
10.18	Phenoxy ethanol				122-99-6	22180	
10.19	N-(2-hydroxy ethyl)piperidine				3040-44-6	2236	
10.20	Diethanolisopropanolamine (DIEPA)				6712-98-7	710	
10.21	Monoisopropanolamine(MIPA)				78-96-6	1851	
10.22	Di isopropanolamine(DIPA)				110-97-4	8000	
10.23	Tri isopropanolamine(TIPA)				122-20-3	2520	
10.24	Dimethylamine 2-propanol(DMA 2-P)				108-16-7	1170	

10.25	Aminoethylethanolamine(AEEA)				111-41-1	10000	
11	**Dye Intermediates**						
11.1	Benzidine 2 – 2 Di Sulphonic Acid (BDSA)	00	300	300	117-61-3	2000	5 (f) – Dye Intermediates
11.2	N-Methyl J Acid (NMJ)				22346-43-6	1200	
11.3	Sulpho Tobias Acid (STA)				117-62-4	19400	
11.4	EBAMSA				101-11-1	2000	
11.5	Sulpho VS				42986-22-1	1200	
11.6	Sulpho OAVS – Ortho Aniline VinaylSulphone				121-88-0	5000	
11.7	4-Sulpho Antranilic Acid				98-43-1	5000	
11.8	DMAVS – Dimethyl Aniline Vinyl Sulphone				26672-24-2	800	
11.9	Para Chloro Vinyl Sulphone				2494-89-5	2000	
11.10	OAVS – Ortho Aniline VinaylSulphone				10079-20-6	5000	
11.11	DASA				16803-97-7	68	
11.12	DAASDA					285	
11.13	Acetanilide				103-84-4	1210	
11.14	K-Acid				118-03-6	200	
12	**Pesticide Technical**						
12.1	**Fungicide**	00	1500	1500			5 (b) – Pesticide Technical
	Hexaconzole (T)				79983-71-4	2000	
	Tebuconzole (T)				107534-96-3	5000	
	Propioconzole (T)				60207-90-1	4000	
	1,2,4-Triazole				288-88-0	2300	
12.2	**Insecticide**						
	Bifenthrin (T)				8265	1280	

					7-04-3		
	Profenofos (T)				41198-08-7	2560	
12.3	**Herbicide**						
	Pendimethalin (T)				40487-42-1	5000	
	Bispyribac Sodium				125401-92-5	2250	
	TOTAL	**3500**	**6100**	**9600**			

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

The standard ToR for the project was granted on 28th October, 2018, 2018. Public hearing is exempted as the project site is located inside the notified industrial area.

Existing land area is 171579 m2, no additional land shall be required. Green belt has developed in an area of 50000 m2 and Industry will be developed greenbelt in an area of 10000 m2 out of 171579 m2 total area of the project. After Expansion, total green belt area will be 60000 m2 (34.5%). The estimated project cost is Rs. 35.0 Crores (Existing –Rs.15 Crore + Proposed - Rs. 20 Crore). Total Capital cost earmarked towards environmental pollution control measures is Rs. 3 Crore and recurring cost (Operation and Maintenance) will be around Rs. 2.5 Crore per annum. Total employment will be 200 people as direct and 50 person indirect after expansion.

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

Total water requirement is estimated to be 1195 m3/day including fresh water requirement of 765 m3/day proposed to be met from GIDC Water Supply.

The wastewater generation will be 530 m3/day (Industrial Effluent -513 m3/day + Domestic -17 m3/day).

Effluent of 530 cum/day will be treated through Effluent Treatment Plant and Multi Effect Evaporator. Low COD effluent (50 m3/day) will be sent to ETP and the treated effluent is proposed to be sent to GIDC effluent pipeline for final disposal into deep sea. The Committee, however, suggested for no treated effluent to be discharged outside the premises and thus achieving Zero Liquid Discharge which was agreed to by the project proponent. The Committee also asked the project proponent to submit an undertaking that the unit will adopt the Zero Liquid Discharge system.

High COD stream and High TDS effluent (463 m3/day) will be treated in primary ETP and then treated effluent will be sent to MEE and MEE Condensate will be treated in ETP. Final Treated effluent shall be reused in plant premises. Domestic Waste water will be treated in secondary treatment or disposed by septic tank & soak pit. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Total Power requirement will be increased from 1300 to 4500 KVA proposed to be met from Dakshin Gujarat Vij Company Limited (DGVCL). Existing unit has 1 D G Set of 125 KVA, Additionally 2 DG Set (1010 KVA) will be required as standby during power failure. Stack (Height – 11 m) will be provided as per CPCB norms to the proposed DG Set.

Existing unit have coal based 1 No. steam boiler, coal based 2 No. Thermic fluid heater. Additionally, four more coal based boiler of 7 TPH capacity and two Thermic fluid heater of 10,00,000 Kcal/ hrwill be installed. Multi Cyclone Separator with Bag Filter with a stack of height will be installed to control the Particulates Matter (PM).

Ambient air quality monitoring is carried out at 8 locations during March, 2017 to May., 2017 and the baseline data indicates the ranges of concentrations as: PM10 (72.50- 83.54 µg/m3), PM2.5 (40.85-45.99 µg/m3), SO2 (12.41-17.57 µg/m3), NOx (14.06-18.65 µg/m3), HBr (BDL), NH3 (BDL), O3 (10.03-10.86 µg/m3), HC (1.18-1.68 ppm). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.012 µg/m3, 0.189 µg/m3, 0.314 µg/m3, 0.002 µg/m3 and 0.020 µg/m3 with respect to PM10, SOx, NOx, HBr and NH3. 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.

7.3.6.2 *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.*
- *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.*
- *National Emission Standards for Pesticides 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% or natural gas/lignite/bio-fuel/briquettes/bagasse/agro waste, shall be used as fuel in the boiler. LSHS/LDO/NG shall be used as fuel in place of furnace oil.*
- *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. 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 765cum/day proposed 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. 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% 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.*
- *Exposure on workers shall not increase more than 1 ppm over a period of 8 hours.*

Agenda No.7.3.7

Expansion of production capacity at Plot Nos.165-182, APIIC, IDA Thumukunta (V), Hindupur (M), District Ananthapur (Andhra Pradesh) by M/s RL Fine Chem Private Limited - Environmental Clearance

[IA/AP/IND2/88190/2017, J-11011/180/2016-IA.II(I)]

The project proponent and their accredited consultant M/s Pridhvi Envirotech Private Limited, made a detailed presentation on the salient features of the project.

7.3.7.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Active Pharmaceutical Ingredients(APIs) and drug intermediates manufacturing unit from 7.2 TPM to 48.6 TPM (26nos APIs &21 nosdrug intermediates) by M/s RL Fine Chem Private Limited in an area of 4.32 acres located at Plot. No.165-182, APIIC, IDA, Village Thumukunta, Mandal Hindupur, District Ananthapur (Andhra Pradesh).

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

(a) Existing Products

S. No	Product	Quantity in Kg/Day proposed
	Group A	
1	Chloro acetyl benzo phenone	8.00
2	P-t- Butyl chloride	30.00
3	Piperidine propiophenone	28.00
4	Dotheipinone	94.00
5	Chloro ethyl piperidine HCl	30.00
6	Doxipinone	50.00
	Total Group A	**240.00**
	Group B	
1	Hydroxyl dimethyl thiophene	15.00
2	Di benzo suberone	40.00
	Total Group B	**55.00**
	Group C	
1	Benzophenone methyl ester	2.50
2	Dotheipinone	200.00

3	Chloro ethyl piperidine HCl	37.50
	Total Group C	**240.00**
	Group D	
1	Hydroxyl dimethyl di benzyl	4.50
	Total Group D	**4.50**
	Worst case Scenario (Any One Group of products will be manufactured at any given point of time)	**240.00**

(b) List of proposed products and their capacities for EC

S. No	Name of the Products	Quantity in Kgs/day	Quantity in TPM
	API's		
1	Nortrytyline HCl	37.33	1.12
2	Desipramine HCl	4.33	0.13
3	Cyproheptadine HCl	3.00	0.09
4	Pitofenone HCl	3.04	0.09
5	Pyrimethamine	2.22	0.07
6	Cyclobenzaprine HCl	3.96	0.12
7	Clomipramine HCl	2.67	0.08
8	Chloropromazine HCl	5.25	0.16
9	Doxlamine Succinate	4.79	0.14
10	Trimipramine Maleate	2.06	0.06
11	Flupentixol HCl	1.11	0.03
12	Melitracen HCl	1.64	0.05
13	Carbinoxamine Maleate	2.92	0.09
14	Opipramol HCL	1.50	0.05
15	Sulfadoxine	8.33	0.25
16	Doxiepin HCl	1.56	0.05
17	Dothiepin HCl	4.097	0.12
18	Flunarazine HCl	2.39	0.07
19	Duloxetine HCl	3.33	0.10
20	Dapoxetine HCl	1.67	0.05
21	Desvenlafaxine HCl	2.11	0.06
22	Trihexyphenaldyl HCl	3.33	0.10
23	Tramadol HCl	9.00	0.27
24	Sulfamethoxy Pyrazine HCl	2.08	0.06
25	Buclazine HCl	2.50	0.08
26	Meclazine HCl	2.28	0.07
	Total (APIs)	**118.50**	**3.55**
	Drug Intermediates		
1	Orphenadrine base	266.67	8.00
2	Carbamezapine	66.67	2.00
3	Hydroxy dimethyl dibenzyl Intermediate	20.00	0.60
4	Piperidine propiophenone	33.33	1.00
5	Cinnarizine crude	66.67	2.00
6	Doxiepinone	20.00	0.60
7	Ditheipinone	33.33	1.00

8	Methoxy Dichloro Pyrimidine	66.67	2.00
9	P- t- Butyl benzyl chloride	33.33	1.00
10	Chloro Acetyl benzo phenone	50.00	1.50
11	Chloro ethyl piperidino Hydrochloride	33.33	1.00
12	Dibenzo suberone	266.67	8.00
13	Hydroxy dimethyl amino thiophene	16.67	0.50
14	ChloroImino di benzyl	100.00	3.00
15	Benzophenone methyl ester	33.33	1.00
16	2-Amino Nitro Benzo Phenone	26.67	0.80
17	Dimethylaminocyclohexanone	83.33	2.50
18	Bromo anisole	83.33	2.50
19	ChloroPheno thiazine	66.67	2.00
20	Iso propyl propionate (Ester)	33.33	1.00
21	Di Methyl amino propyl chloride	100.00	3.00
	Total Intermediates	**1500.00**	**45.00**
	Total APIs + Intermediates	**1618.50**	**48.6**
	By Products		
1	Sodium chloride	9.59	0.3
2	Ammonium chloride	22.9	0.7
3	Spent Acid	270.41	8.1
4	Ammonium Phosphate	67.65	2.0
5	Sodium Acetate	35.27	1.1

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 (interstate boundary within 5 km), the proposal was appraised at central level by the sectoral EAC in the Ministry.

The Terms of Referencefor the project was granted on 31st January, 2018. Public hearing is exempted as the project site is located inside the notified industrial area.

Existing land area is 4.32 acres and the same will be used for proposed expansion. Industry has developed Greenbelt in an area of 1.24 acres and additional 0.18 Acres of green belt will be developed with a total of 33% i.e. Rs.1.42 acres out of total area of the project. The estimated project cost is Rs.3.0 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.30 lakhs per annum.Total Employment will be 70 persons as direct & 30 persons indirect for the proposed project.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc within 10 km distance from the project site. River Pennar flows at a distance of 2.2 Km in West direction from the site.

Total water requirement is estimated to be 67.9 cum/day, which includes fresh water requirement of 39.9 cum/day, proposed to be met from APIIC Water Supply.

Effluent of 30.9 cum/day quantity will be treated through Stripper, MEE and ATFD for high TDS Stream and Low TDS will be treated in Biological ETP followed by RO system. Treated effluent of 28 cum/day shall be reused in the process. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement after expansion will be – 500 KVA including existing and will be met from Andhra Pradesh State Power Distribution Corporation limited (APSPDCL). Existing unit has 1 DG Set of 200 KVA capacity, additionally 1 X 250 KVA DG Set will be used as standby during power failure. Stack (height 3.2 m) will be provided as per CPCB norms to the proposed DG set

Existing unit has 2 TPH Briquette fired boiler. Additionally 2 TPH Briquette fired boiler will be installed. Multi cyclone separator with a stack of height of 30 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm3) for the proposed boilers.Ambient air quality monitoring was carried out at 8 locations during October 2016 to December 2016 and submitted baseline data indicates that ranges of concentration of PM10 (50.6-88.2 µg/m3), PM2.5 (18.5-41.2 µg/m3), SO2 (7.30-16.3 µg/m3) and NO2 (14.50-22.6 µg/m3) respectively. AAQ modeling study for point source emissions indicated that the maximum incremental GLCs after the proposed project would be 1.27 µg/m3, 1.67 µg/m3 and 1.60 µg/m3 with respect to PM10, Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The existing industrial operations for manufacturing drug Intermediates is reported to have been established (CFE dated 30th March, 2002 for 40 kg/day, CFE dated March, 2006 for 200 kg/day) before inception of the EIA Notification, 2006 and thus not requiring prior environmental clearance.

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

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

Consent to Operate for the existing capacity has been obtained from the Andhra Pradesh PCB vide letter dated 30th July, 2016, which has validity up to 30th September, 2020.

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Bulk drugs Manufacturing Industry issued by the Ministry vide G.S.R.149(E) dated 4th March, 2009 and amended from time to time shall be followed. Fugitive emissions shall be controlled at 99.98% with effective chillers.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*

- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows:*
  (a) Reactor shall be connected to chilled brine condenser system.
  (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
  (d) Solvents shall be stored in a separate space specified with all safety measures.
  (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- *Total fresh water requirement shall not exceed 39.9 cum/day,* proposed to be met from APIIC 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 1% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*

- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *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.7.3.8

Onshore Oil & Gas Exploratory Drilling and Testing of hydrocarbons in NELP IX Block: AA-ONN-2010/3 in Sadiya Area of Tinsukia district (Assam) M/s Oil India limited - For Environmental Clearance

[IA/AS/IND2/63434/2017, IA-J-11011/147/2017-IA-II(I)]

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

7.3.8.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for onshore oil &gas exploration from 5 wells in NELP IX Block AA-ONN-2010/3 by M/s Oil India limitedin a total area of 171 sq km in Sadiya Area of District Tinsukia (Assam).MoP&NG has awarded the said Block to the JVC of M/s Oil India Ltd, M/s ONGC Ltd and M/s Bharat Ptero-Resources Limited for exploration of Hydrocarbon. The State Government of Assam has accorded Petroleum Exploration Licence (PEL) in the name of the lead company M/s Oil India Ltd in the year 2014.

The said block covers three Reserved Forests namely, Hallowgaon (3.71 sq km), Sadiya Station (West Block-4.51 sq km) and part of Kukuramara (2.71 sq km of 3.65 sq km). However, none of the proposed 5 exploratory wells falls in forest areaand no proposal has been submitted for diversion of the said forest land.

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

Terms of Reference for the project was issued on 31st May, 2017.Public Hearing for was conducted by the State Pollution Control Board on 15th September, 2018. The main issues raised during the public hearing are related to land Patta allotment to the Residents, Land Procurement/Compensation/Compensation Amount, CSR Activities and Employment opportunities, Pollution Control (Noise/Air/water).

The total land requirement for the project will be 30000 sqm. Green belt will be developed in an area of 33 % i.e.9900 m^2. The estimated project cost is Rs74 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.0.297 crores.

There are no National Parks, Wildlife sanctuaries, Elephant corridors, ESA, rivers located within 10 km from the project site. River Kundil flows at a distance of 0.9 km in South-East.

Total fresh water requirement is estimated to be 50cum/day/well, proposed to be met from

tubewell. The committee suggested to restrict the fresh water requirement to 30 cm/day/well instead on 50 cum/day/well. Effluent of 50-150 cum/day/well will be treated through Mobile Effluent Treatment Plant (ETP) and RO facility. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be met through five DG sets of 1250 kVA (3 nos.) and 1250 kVA (2 nos.) Adequate stack DG Sets will have Stack height and acoustic enclosures as per CPCB norms.

Ambientairqualitymonitoringwascarriedoutateightlocationsduring05 Dec 2017 To 02 Mar 2018 and the baseline data indicates the ranges of concentrations as PM10 (145-45 µg/m3), PM2.5 (78-21µg/m3),SO2 (9.6-4.1µg/m3) and NO2 (29.2-10.2µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.167µg/m3 and 3.994 µg/m3 with respect to PM10, and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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

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

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

- *No drilling shall be carried out in Forest areas.*
- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As proposed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16thNovember, 2009 for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, CH_4, HC, Non-methane HC etc.*
- *During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.*
- *The project proponent also to ensure trapping/storing of the CO_2 generated, if any, during the process and handling.*
- *Approach road shall be made pucca to minimize generation of suspended dust.*
- *The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.*
- *Total fresh water requirement shall not exceed* 30 *cum/day/well proposed to be met from tube wells, and prior permission shall be obtained from the concerned regulatory authority/CGWA.*

- *The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.*
- *Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.*
- *Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.*
- *The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.*
- *The company shall develop a contingency plan for H_2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H_2S detectors in locations of high risk of exposure along with self containing breathing apparatus.*
- *The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and Regional Office.*
- *Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.*
- *Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.*
- *The company shall take measures after completion of drilling process by well plugging and secured enclosures, and the drilling site shall be restored the area in original condition. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.*
- *All the commitments made to the public during public hearing/consultation shall be satisfactorily implemented.*
- *At least 2% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.*
- *Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office.*
- *Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.*
- *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.7.3.9

Expansion of Isolated Storage Terminal with additional One Storage Tanks at TIKRI KALAN TERMINAL, NEW DELHI by M/s Indian Oil Corporation Limited - Environmental Clearance

[IA/DL/IND2/83328/2007, J-11011/315/2007-IA II (I)]

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

7.3.9.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Petroleum Storage &Distribution Terminal from 39660 KL to 48660 KL (addition of one tank of 9000 KL for Motor Spirit) by M/s Indian Oil Corporation Ltd in a total area of 161874 sqm at Tikri Kalan Terminal in New Delhi.

Details of existing and proposed tanks and capacities are as under:

S. No.	Product Details	Existing Quantity (KL)	Proposed Quantity(KL)	Total Quantity(KL)
1	MS	14830	9000	23830
2	HSD	22879	0	22879
3	SKO	1351	0	1351
4	Ethanol	600	0	600
	Total	**39660**	**9000**	**48660**

The project/activity is covered under category B of item 6(b) 'Isolated storage & handling of hazardous chemicals' of the schedule to the EIANotification, 2006 and requires appraisal/approval at State level. However, due to no SEAC/SEIAA in Delhi, the project was appraised by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

Existing land area is 161874 sqm. No additional land will be required for the proposed expansion project. Greenbelt has developed in an area of 33 % i.e.,25 % out of total area of the project.The estimated project cost is Rs.19.3 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.6.70 crores and the recurring cost (operation and maintenance) will be about Rs. 0.261 Crores per annum.

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

Terms of Reference has been issued on 11th August, 2017. Public Hearing for the project has been conducted by the State Pollution Control Board on 27th August, 2018. The main issues raised during the public hearing are related to requirement of additional tanks and safety features provided along with new tank.

Total fresh water requirement will be 20 m^3/day proposed to be met from Delhi Jal Board through tankers.

Effluent of 5 KLD will be treated through Soak pit. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 1000 KVA including existing 1000 KVA and will be met from Grid supply State power distribution corporation limited (NA SPDCL). Existing unit has 3 DG sets of 400+400+82.5 KVAcapacity, additionally NA DG sets are used as standby during power failure. Stack (height NA)will be provided as per CPCB norms to the proposed DG sets.

Ambient air quality monitoring was carried out at 8 locations during March, 2017 to May, 2017 and the baseline data indicates the ranges of concentrations as: PM_{10} (156.9 - 216.1 µg/m^3), $PM_{2.5}$ (80.1-111.6 µg/m^3), SO_2 (9.6-17.4µg/m^3) and NO_2 (21.1 - 33.8 µg/m^3). The concentrations are within the National Ambient Air Quality Standards.

Earlier, the Ministry had granted EC vide letter dated 30th January, 2009 for Pipeline terminal for storage and marketing of petroleum products at Tikri Kalan including branch line from Mathura – Jalandhar pipeline (MJPL) in favour of M/s Indian Oil Corporation Limited. The monitoring report on compliance status of above EC conditions forwarded by the Regional Office Lucknow vide letter dated 22nd January, 2019, was found to be satisfactory.

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

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

7.3.9.2 *The EAC, after deliberations and in view of major risks involved due to existing facilities for storage of large quantity of flammable products and also the proposed tankage for 9000 KL of Motor Spirit, was not inclined to recommend the proposal till the process safety and risk assessment studies are carried out using advanced model for the worst case scenario, and the mitigating measures are taken accordingly.*

Agenda No.7.3.10

Expansion of production capacity at Sy No. 38, 38A, 39, 40A and 45, Aroor (V), Sadasivapet Mandal, Sangareddy District Telangana by M/s Everest Organics Limited- For Environmental Clearance

[IA/TG/IND2/95602/2016, J-11011/(328)/2016-IA.II(I)]

The project proponent and their accredited consultant M/s Pridhvi Envirotech Private Limited, made a detailed presentation on the salient features of the project.

7.3.10.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of bulk drugs & intermediates from 145.5 TPA to 1081.2 TPA by M/s Everest Organics Limited in an area of 33 acres located at Sy. No.38, 38A, 39, 40, 40A & 45, village Aroor, Mandal Sadasivapet, District Sangareddy (Telangana).

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

(a) Existing Products

S.No	Products	Quantity in Kg/day
	Group A	
1	Lansaprazole	70.83
2	Rabeprazole	166.66
3	Benzimidazole	166.66
	Maximum production capacity	**404.16 Kg/day**
	Group B	
1	Esmoprazole	83.33
2	Pantaprazole	83.33
3	Omeprazole	237.5
	Maximum production capacity	**404.16 Kg/day**
	Any one group of products shall be manufactured at any given point of time	

(b) List of proposed products and their capacities for EC

S. No	Name of the Products	Quantity in TPM	Quantity in TPA
1	Omeprazole	20.0	240.0
2	3- (chloro methyl)- 4-methoxy-3,5-dimethyl pyridine. Hydrochloride (Omeprazole chloro compound)	6.0	72.0
3	Esmoprazole Magnesium Trihydrate	10.0	120.0
4	Pantaprazole sodium	6.0	72.0
5	2-(chloromethyl)-3,4-dimethoxy pyridine hydrochloride (PantaprazoleChloro compound)	2.0	24.0
6	Rabeprazole Sodium	3.0	36.0
7	2-(Chloromethyl-4-(3-methoxy propoxy)-3-methyl pyridine hydrochloride (Rabeprazole Chloro compound)	3.0	36.0
8	Lansoprazole	1.0	12.0
9	2-(chloromethyl)-3-methyl-4-(2,2,2- tri fluro ethoxy) pyridine hydrochloride (Lansoprazole chloro compound)	1.0	12.0
10	Pregabalin	5.0	60.0
11	finofibrate	2.0	24.0
12	Sitagliptin phosphate	2.0	24.0
13	Vildagliptin	1.0	12.0
14	Lingagliptin	0.1	1.2

15	2- mercapto-5-Methoxy Benzimidazole	20.0	240.0
16	2- mercapto-5- Difluoro Methoxy Benzimidazole	5.0	60.0
17	Sumatriptan Succinate	0.5	6.0
18	Dexlansoprazole	1.0	12.0
19	Aripriprazole	0.5	6.0
20	Iso butyl glutaric acid	1.0	12.0
	Total	**90.1**	**1081.2**
	By products		
1	Ammonium sulphate	197.4	2368.8
2	Potassium acetate	2.8	33.6
3	Sodium sulphite	23.9	286.8
4	Potassium methyl sulphate	8.6	103.2
5	Di sodium phosphate	9.5	114.0
6	Sodium nitrite	8.8	105.6
7	Sodium acetate	5.3	63.6

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

Terms of Reference (ToR) for the project was granted on 9th December 2016. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 17th July, 2018 the main issues raised during the public hearing are related to Surface and ground water pollution, air pollution and employment to locals.

Existing land area is 33 acres and the same will be used for proposed expansion. Industry has developed Greenbelt in an area of 66% i.e., 22 acres out of total area of the project. The estimated project cost is Rs. 8.5 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 3.0 crores and the recurring cost (operation and maintenance) will be about Rs. 128 lakhs per annum.

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

Total water requirement is 219.7 m3/day of which fresh water requirement of 109.7 m3/day and will be met from Bore well. Permission for ground water withdrawal has been obtained from Ground Water Department, Government of Telangana vide letter dated 30th January, 2019.

Treated effluent of 110KLD will be reused out of total effluent of 138.7 KLD which will be treated through Stripper, MEE and ATFD for high TDS Stream and Low TDS will be treated in Biological ETP followed by RO system. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be – 1885 KVA including existing and will be met from Telangana State Power Distribution corporation limited (TSSPDCL). Existing unit has 3 DG Sets of 1 X 125 KVA and 2 x 380 KVA capacities, additionally 1 X 1000 KVA DG Set will be used as standby during power failure. Stack (height 6.3 m) will be provided as per CPCB norms to the proposed DG set.

Existing unit has 8 TPH Coal fired boiler. Additionally 8 TPH Coal fired boiler will be installed. Existing 8 TPH Boiler will be kept as stand by Boiler. Bag Filters with a stack of height of 30 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm3) for the proposed boilers.

Ambient air quality monitoring was carried out at 8 locations during January 2017 to March 2017 and submitted baseline data indicates that ranges of concentration of PM_{10} (47.2-82.3 µg/m3), $PM_{2.5}$ (16.7-34.2 µg/m3), SO_2 (8.3-19.2 µg/m3) & NO_x (12.3-21.3 µg/m3) respectively. AAQ modeling study for point source emissions indicated that the maximum incremental GLCs after the proposed project would be 1.321 µg/m3, 3.359 µg/m3 & 4.408 µg/m3 with respect to PM_{10}, SO_2 & NO_x.

The existing Drug Intermediate unit were not covered under EIA Notification of 1994prior EC requirements were not there.

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

Earlier, the Ministry had granted EC vide letter dated 15th July, 2005, and amended/issued corrigendum on 13th April, 2006 for production capacity of 145.5 TPA at by M/s Everest Organics Limited. The monitoring report on compliance status of above EC conditions issued by the Regional Office Chennai vide letter dated 13th September 2017, was found to be satisfactory.

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

Consent to Operate for the existing capacity has been obtained from the Telangana PCB vide letter dated 22nd November 2017, which has validity up to 28th February, 2022.

7.3.12.2 *The EAC, after deliberations, suggested the project proponent to recheck the incremental air quality values in respect of SO_2 & NO_x and to submit a clarification in this regard. The Committee also 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 Bulk drugs Manufacturing Industry issued by the Ministry vide G.S.R.149(E) dated 4th March, 2009 and amended from time to time shall be followed. Fugitive emissions shall be controlled at 99.98% with effective chillers.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*

- *Solvent management shall be carried out as follows:*
  - *(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 109.7 m3/day which is proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
  - *(i) Metering and control of quantities of active ingredients to minimize waste.*
  - *(ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(iii) Use of automated filling to minimize spillage.*
  - *(iv) Use of Close Feed system into batch reactors.*
  - *(v) Venting equipment through vapour recovery system.*
  - *(vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made to the public during public consultation/hearing shall be satisfactorily implemented.*
- *At least 1% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*

- *Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*
- *No Asbestos, in any form, shall be used in the plant premises.*

Day Two: 7th May, 2019

Agenda No.7.3.11

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

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

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

7.3.11.1 During deliberations, the EAC noted the following: -

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

The details of products/byproducts are as under:-

S. No.	Product	Quantity (TPM)
1	1-(2,3 Dichlorophenyl) piperazine Hydrochloride (Aripiparazol Intermediate)	6
2	1-(4-Methoxy-Phenyl)-4-(4-Nitro-Phenyl)-Piperazine(Itraconazole Intermediate)	6
3	1-Acetyl-4-(Hydroxy Phenyl) Piperazine(Itraconazole Intermediate)	6
4	4-Phenyl butanol (Intermediate)	2
5	5-Cyano Phthalide (Citalopram Intermediate)	5
6	Bis (2-chloroethyl) amine Hydrochloride (Itraconazole Intermediate)	6
7	Diphenyl (Piperidin-4-yl) Methanol (Fexofenadine intermediate)	6
8	n-Acetyl Piperzine(Intermediate)	2
9	N-Methyl-1-Napthalenemethylamine Hydrochloride(Terbinafine Hydrochloride)	6
	Total	**45**

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

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

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

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

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

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

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

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

Ambient air quality monitoring was carried out at 8 locations during October, 2017 - December, 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (54.7-60.8 µg/ m3), $PM_{2.5}$ (20.7-26.4 µg/ m3), SO_2 (12.6-15.9 µg/ m3), NO_x (20.7-23.8 µg/ m3), CO (0.41-0.56 mg/ m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be PM_{10}, SO_2, NO_x would be 2.11 µg/m3, 2.82 µg/m3 & 3.91 µg/m3 respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NQQS).

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

7.3.11.2 *The EAC, after deliberations, observed that incremental concentrations for critical air pollutants namely PM_{10}, SO_2 & NO_x, measured as 2.11 ug/m^3, 2.82 ug/m^3& 3.91 ug/m^3, were on higher side and desired for confirmation of the same. The Committee also suggested for changing the boiler fuel from coal to bio-briquette or any other bio-fuel and rework on air quality modeling.*

Agenda No.7.3.12

Proposed Project of Increase in Production Capacity of Existing Synthetic Organic Chemical Manufacturing Unit (Unit-III), Plot No.22, IDA, Jeedimetla, Quthbullapur (M), District Medchal-Malkajgiri (Telangana) by M/s Deepak Nitrite Limited, Hyderabad Specialties Division, Unit-III - Environmental Clearance

[IA/TG/IND2/95620/2018, SEIAA/TS/OL/MDCL-45/2018-1124]

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

7.3.12.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Synthetic Organic Chemical manufacturing unit from 2520 TPA to 5040 TPA by M/s Deepak Nitrite Limited, Hyderabad Specialties Division, Unit-III in an area of 0.424 ha located at Plot No.22, Phase-I, IDA, Jeedimetla, Quthbullapur (M), Medchal-Malkajgiri District (Telangana).

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

S. No.	Product	Existing Quantity (TPA)	Proposed Quantity (TPA)	Total Quantity (TPA)
Main Product				
1.	Diamino Stilbene Di-Sulphonic Acid (DASDA)	2520	2520	5040
	Or 3-Aceto Amine Phenone	-	5040	5040
By-products				
1.	Iron Oxide	-	7616 from DASDA (or) 9085 from 3-Aceto Amino Phenone	7616 from DASDA (or) 9085 from 3-Aceto Amino Phenone
2.	Dilute Sulphuric Acid (55%)	-	13170	13170

Stage-1 involves manufacturing of Para Nitro Toluene Sulphonic Acid (PNTSA 35%) in Unit-I&III. During stage-2, Di-Nitro Stilbene Di-Sulphonic Acid (DNSDA) as output is taken from Unit-II to Units-I&III. Stage-3 involves conversion from DNSDA to DASDA (final product).

The project/activity is covered under category B of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at State level by the concerned SEAC/SEIAA. In absence of SEIAA in the State, the project was appraised at Central level in the Ministry.

Terms of Reference for the project was granted by the SEIAA, Telangana vide letter dated 26th April, 2018. While granting the ToR, a sub- committee was constituted to inspect the unit, verify records and submit a report in respect of certain key issues including distance of the industry

from nearest boundary of Patancheru and Bollaram Industrial Areas, project modification, project cost, ZLD system & its adequacy, ETP modifications, products - comparison of existing and proposed, verify production details with respect to permitted for the past one year, raw materials comparison, solid waste comparison, impact on surroundings, justification of project w.r.to GOMs No.95 dated 21st September, 2007 & GOMs No.64 dated 25th July, 2013, applicability of the MoEF&CC Notification dated 14th March, 2017. The report submitted by the sub-committee requires authentication from the State authorities.

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

Existing land area is 0.424 ha and the same will be used for proposed expansion. Greenbelt will be develop in an area of 23.8% i.e. 0.1 ha out of total area of the project. The estimated project cost Rs.17.59 crores including existing investment of Rs.5.29 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.1.46 crores including existing Rs.0.51 crores and Recurring cost (Operation and maintenance) will be about Rs.6.46 croresper 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. Water bodies viz., Fox sagar (Kottacheruvu) – 1.9 km in E direction; Amber cheruvu – 5.5 km in SSW direction; Yellammakunta – 5.5 km in SW direction; Vennalgaddacheruvu – 3.3 km in SE direction; Kattamysamma Lake – 3 km in NNW direction; Kistappavagu – 4 km in SW direction; Hussainsagar – 9.8 km in SSE direction; Pond near Kukkatpally (IDL lake) – 5.8 km in SSWdirection; Kamunonicheruvu – 7.8 km in SSW direction; Maisammacheruvu – 7.2 km in SSW direction; Bon Cheruvu (Hasmathpet Lake) – 6.9 km in SE direction.

Total water requirement is 275 m3/day including fresh water requirement of 255 m3/day proposed to be met from Hyderabad Metropolitan Water Supply & Sewerage Board (HMWS&SB) supplied in industrial area.

Effluent of 21 m3/day will be treated through Effluent Treatment plant. Treated effluent of 20 cum/day will be recycled/reused within the premises. Domestic effluent of 12 m3/day will be sent to CETP of M/s JETL, Jeedimetla to support the Biological Treatment at CETP. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be increased from 375 kVA to 700 kVA proposed to be met from Telangana State Power Distribution Corporation Limited (TSPDCL). Existing unit has 3nos. DG sets of 250 KVA, 160 KVA and 125 KVA capacity. One more DG set of 160 kVA capacity will be installed and used as standby during power failure. Stack (height 7 m) will be provided as per CPCB norms to the proposed DG set.

Existing unit has 1.5 TPH coal fired boiler. Additionally, 3& 2 TPH Coal fired boilers will be installed. Multi cyclone separator & bag filter with a combined stack of height of 30 m will be provided to control the for particulate emissions within statutory limit of 115 mg/Nm3. for proposed3& 2 TPH Coal fired boilers. Existing 1.5 TPH coal fired boiler will be removed and proposed 2 TPH will be stand by. Additionally 10 lakh Kcal/hr Coal fired Thermic Fluid Heater will be installed. Multicyclone separator with a stack height of 30m will be installed for controlling the Particulate emissions within statutory limit of 115 mg/Nm3 for proposed10 lakh Kcal/hr Coal fired Thermic Fluid Heater.

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

The unit was established in the year 1992 in the name of M/s Vasant Chemicals Limited for manufacturing of Diamino Stilbene Di-Sulphonic Acid (DASDA) with a production capacity of 7000 kg/day (2520 TPA). DASDA is an API (Bulk Drug) intermediate and is exempted from Environmental Clearance as per EIA Notification 1994. In August 2006, M/s. Deepak Nitrite Limited has taken over the assets of M/s Vasant Chemicals.

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

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

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

7.3.12.2 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to confirmation of the sub-committee report by the SPCB and their observations, if any, and further subject to compliance of terms and conditions as under: -*

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed. Fugitive emissions shall be controlled at 99.98% with effective chillers.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows:*
  - *(viii) Reactor shall be connected to chilled brine condenser system.*
  - *(ix) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - *(x) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
  - *(xi) Solvents shall be stored in a separate space specified with all safety measures.*
  - *(xii) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*

(xiii) *Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*

(xiv) *All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*

- *Total fresh water requirement shall not exceed 255 cum/day*, proposed to be met from Hyderabad Metropolitan Water Supply & Sewerage Board (HMWS&SB)*. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*

  (vii) *Metering and control of quantities of active ingredients to minimize waste.*

  (viii) *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*

  (ix) *Use of automated filling to minimize spillage.*

  (x) *Use of Close Feed system into batch reactors.*

  (xi) *Venting equipment through vapour recovery system.*

  (xii) *Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *At least 1% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*
- *Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*
- *No Asbestos, in any form, shall be used in the plant premises.*

Agenda No.7.3.13

Expansion of Synthetic Organic Chemical manufacturing unit (5040 TPA) by M/s Deepak Nitrite Limited (Hyderabad Specialties Division) Unit-I at Plot No. 90 F, IDA, Jeedimetla, Quthbullapur (M), Medchal-Malkajgiri District (Telangana) - Environmental Clearance

[IA/TG/IND2/95585/2018, SEIAA/TS/OL/MDCL-46/2018-1122]

The project proponent and the accredited Consultant M/s KKB Envirocare Consultants Pvt. Ltd made a detailed presentation on the salient features of the project and informed that:

7.3.13.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Synthetic Organic Chemical manufacturing unit from 2520 TPA to 5040 TPA by M/s Deepak Nitrite Limited, Hyderabad Specialties Division, Unit-I in an area of 0.516 ha located at Plot No.90 F, Phase-I, IDA, Jeedimetla, Quthbullapur (M), District MedchalMalkajgiri (Telangana).

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

S. No.	Product	Existing Quantity (TPA)	Proposed Quantity (TPA)	Total Quantity (TPA)
Main Product				
1.	Diamino Stilbene Di-Sulphonic Acid (DASDA)	2520	2520	5040
By-products				
1.	Iron Oxide	-	7616	7616
2.	Dilute Sulphuric Acid (55%)	-	13170	13170

Stage-1 involves manufacturing of Para Nitro Toluene Sulphonic Acid (PNTSA 35%) in Unit-I&III. During stage-2, Di-Nitro Stilbene Di-Sulphonic Acid (DNSDA) as output is taken from Unit-II to Units-I&III. Stage-3 involves conversion from DNSDA to DASDA (final product).

The project/activity is covered under category B of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at State level by the concerned SEAC/SEIAA. In absence of SEIAA in the State, the project was appraised at Central level in the Ministry.

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

Existing land area is 0.516 ha and the same will be used for proposed expansion. Greenbelt will be develop in an area of 33% i.e. 0.17 ha out of total area of the project. The estimated project cost is Rs.20.48 crores including existing investment of Rs.8.18 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.1.46 crores including existing Rs.0.51 crores and recurring cost (Operation and maintenance) will be about Rs.6.46 crores per annum. Total Employment will be 75persons as direct &110persons indirect after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc within 10 km distance from the project site. Water bodies viz., Fox sagar (Kottacheruvu) – 2.1 km in NE direction; Amber cheruvu – 5.3 km in W direction; Yellammakunta – 5.4 km in WSW direction; Vennelagaddacheruvu – 2.2 km in SE direction; Kattamysamma lake – 4.6 km in NNW direction; Kistappavagu – 3.4 km in SW direction; Hussain sagar– 8 km in S direction; Pond near Kukkatpally (IDL Lake) – 5 km in SW direction; Kamunonicheruvu – 6.8 km in SSW direction; Maisammacheruvu – 6 km in SSW direction; Boncheruvu (Hasmathpet Lake) – 5.5 km in SE direction.

Total water requirement is 275 m3/day including fresh water requirement of 255 m3/day proposed to be met from Hyderabad Metropolitan Water Supply & Sewerage Board (HMWS&SB) supplied in industrial area.

Effluent of 21 m3/day will be treated through Effluent Treatment plant. Treated effluent of 20 cum/day will be recycled/reused within the premises. Domestic effluent of 12 m3/day will be sent to CETP of M/s JETL, Jeedimetla to support the Biological Treatment at CETP. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be increased from 500 kVA to 700 kVA proposed to be met from Telangana State Power Distribution Corporation Limited (TSPDCL). Existing unit has 2nos. DG sets of *200 kVA and 160 kVA* capacity. One more DG set of 100 kVA capacity will be installed and used as standby during power failure. Stack (height 6 m) will be provided as per CPCB norms to the proposed DG set.

Existing unit has 1& 1.5 TPH coal fired boilers. Additionally 3 & 2 TPH Coal fired boilers will be installed. Multi cyclone separator & bag filter with a combined stack of height of 30 m will be installed for controlling the Particulate emissions within statutory limit of 115 mg/Nm3. Existing 1 & 1.5 TPH coal boilers will be removed in proposal and proposed 2 TPH boiler will be standby. Additionally 10 lakh Kcal/hr Coal fired Thermic Fluid Heater will be installed. Multicyclone separator with a stack height of 30m will be installed for controlling the Particulate emissions within statutory limit of 115 mg/Nm3 for proposed10 lakh Kcal/hr Coal fired Thermic Fluid Heater.

Ambient air quality monitoring was carried out at 9 locations during March toMay 2017 and submitted baseline data indicates that ranges of concentrations of PM10 (43-76µg/m3), PM2.5 (16-37µg/m3), SO2 (4-12µg/m3) and NO2 (10-27µg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.315 µg/m3, 3.264µg/m3 and 1.986 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The unit was originally established in the year 1980 in the name of M/s. Vasant Chemicals Limited for manufacturing of Diamino Stilbene Di-Sulphonic Acid (DASDA) with a production

capacity of 7000 kg/day (2520 TPA). DASDA is an API (Bulk Drug) intermediate and is exempted from Environmental Clearance as per EIA Notification 1994. In August 2006, M/s. Deepak Nitrite Limited has taken over the assets of M/s Vasant Chemicals.

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

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

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

7.3.13.2 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to confirmation of the sub-committee report by the SPCB and their observations, if any, and further subject to compliance of terms and conditions as under: -*

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed. Fugitive emissions shall be controlled at 99.98% with effective chillers.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows:*
  (i) Reactor shall be connected to chilled brine condenser system.
  (ii) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  (iii) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
  (iv) Solvents shall be stored in a separate space specified with all safety measures.
  (v) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  (vi) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  (vii) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- *Total fresh water requirement shall not exceed 255 m3/day, proposed to be met from Hyderabad Metropolitan Water Supply & Sewerage Board (HMWS&SB). Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*

- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
  - *(xiii) Metering and control of quantities of active ingredients to minimize waste.*
  - *(xiv) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(xv) Use of automated filling to minimize spillage.*
  - *(xvi) Use of Close Feed system into batch reactors.*
  - *(xvii) Venting equipment through vapour recovery system.*
  - *(xviii) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *At least 1% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*
- *Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*
- *No Asbestos, in any form, shall be used in the plant premises.*

Agenda No.7.3.14

Expansion of Viscose Staple Fibre, Sulphuric Acid, Carbon-Disulphide along with Proposed Solvent Spun Cellulosic Fibre and Captive Power Plant at Plot No.1, GIDC Industrial Area, Vilayat, Tehsil Vagra, District Bharuch (Gujarat) by M/s Grasim Industries Ltd (Grasim Cellulosic Division) - Environmental Clearance

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

7.3.14.1 *The project proponent vide email dated 4th May, 2019 has informed their inability to attend the meeting due to absence of their senior technical expert.*

The EAC deferred the proposal.

Agenda No.7.3.15

Onshore Oil & Gas Exploratory Drilling and Testing of hydrocarbons (7 wells) by M/s Oil India limited in North-West of Baghjan PML under Tinsukia District (Assam) - Environmental Clearance

[IA/AS/IND2/92824/2007, IA/AS/IND2/60371/2007]

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

7.3.15.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for onshore oil & gas exploration and testing of hydrocarbons (7 wells) by M/s Oil India limited in North-West of Baghjan PML under Tinsukia District (Assam). The project involves drilling of seven deep sub-surface exploratory wells at depth ranging 3900-4000 m below the forest surface using Extended Reach Drilling (ERD) from outside of Dibru-Saikhowa National Park in the State of Assam. Existing three well plinths drilled during 1997-2003 in Baghjan PML (BGN 3/Pad 1, BGN 5/Pad 2 & BGN 11/Pad 3), located at distances more than 1 km from the National Park, will be used for the proposed ERD programme.

Pursuant to the orders of Hon'ble Supreme Court in the matters filed by M/s Oil India Ltd seeking permission due to the proposed location of wells/reservoirs within Dibru-Saikhowa National Park, the project was considered by the Standing Committee of NBWL, and was recommended in its meeting held on 29th July, 2017.

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

Terms of Reference for the project was issued on 3rd August, 2016. The EAC in its meeting held on 27-28 February, 2017 has recommended for the exemption from the Public Hearing as per para 7 (ii) of EIA Notification, 2006. However, the recommendations of the EAC was not accepted by the Ministry.

Total land requirement for the project will be 96000 sqm. The estimated project cost is Rs.300 crores and Total recurring cost earmarked towards environmental pollution control measures is Rs.0.2618 crore per annum.

Dibru Saikhowa National Park and Bherjan Segment of BherjanBorjanPodumoni Wildlife Sanctuary within 10 km of the well locations. Dangori River flows at a distance of 0.9 km in east-west.

Total fresh water requirement is estimated to be 50 cum/day/well, proposed to be met from Tube Well. Effluent of 24.8 cum/day/well will be treated through effluent treatment plant and septic tank soak pit. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be met through DG sets of 2500 kVA capacity One1250 KVA DG set is will kept as standby. Stack height of 7 m will be provided as per CPCB norms to the proposed DG sets.

Ambient air quality monitoring was carried out at 8 locations during October 2017-December 2017 and the baseline data indicates the ranges of concentrations as: PM10(21-74.µg/m3), PM2.5 (39.08-47.92µg/m3), SO2(5.37-6.18µg/m3) and NO2(19.39- 24.19µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.17µg/m3, 13.0µg/m3 and 30.99µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The project proponent has confirmed the expenditure towards CER @ 0.75% 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.

7.3.15.2 *The EAC, after deliberations, acknowledged national importance of the project and in view of last public hearing conducted on 26th December, 2016 in the same district, recommended again for exemption from fresh public hearing. However, to consider the present proposal for environmental clearance, the Committee desired to know the distance of the proposed wells from the locations for which public hearing was earlier conducted.*

The Committee further desired for a confirmation from the concerned regulatory authority for diversion of the forest land involved, if any, as mandated under the provisions of the Forest (Conservation) Act, 1980.

The proposal was deferred for the needful.

Agenda No.7.3.16

Offshore Oil & Gas Drilling/ Development and Production from 8 wells in Western Offshore Block MB/OSDF/B80/2016 of Heera Panna Basin in Arabian Sea by M/s Hindustan Oil Exploration Company Ltd (HOEC) - Environmental Clearance

[IA/MH/IND2/95746/2017, IA/MH/IND2/70980/2017]

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

7.3.16.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for offshore oil & gas drilling/ development and production from 8 wells by M/s Hindustan Oil Exploration Company Ltd (HOEC) in Western Offshore Block MB/OSDF/B80/2016 having an area of 56.016 sq km in Heera Panna Basin in Arabian Sea. The Block B-80, a marginal field located amidst multiple producing fields of M/s ONGC Ltd 110 km from the shore, was awarded to HOEC JV (M/s HOECL 50% & M/s Adbhoot Estates Private Ltd 50%) as part of the first Discovered Small Fields bid round.

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 EAC in the Ministry.

Standard Terms of Reference (ToR) for the project was issued on 1st February 2018. Public hearing is not applicable as the project involves offshore operations.

The estimated project cost is Rs.228 crores. The EMP budget for drilling phase will be Rs.36.27 lakh, operational (production) phase will be 28.8 lakh (6 years operational phase) and decommission phase 14.4 lakh.

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

The proposed drilling activity will be carried out at a distance of about 110 km from the shore; there is no receptor. Therefore ambient air quality has not been monitored.

Total fresh water requirement is estimated to be 69.15 m^3/day including fresh water of 45.65 m3/day proposed to be supplied through supply vessel from nearby Mumbai Port facility and stored on board the rig.

Power requirement will be sourced through DG sets. Approximately 3750 kW of power generating capacity will be available at rig using approximately 6-9 m3/day of High Speed Diesel.

7.3.16.2 *The EAC, after deliberations, found the proposal deficient in respect of compliance of many of the terms and conditions stipulated in the standard ToR dated 1st February, 2018, with the details as under:-*

(i) Baseline air quality of the areas immediately affected by the development drilling, particularly with reference to Sulphur Dioxide, NOx and background levels of Hydrocarbons and VOCs (primary or secondary data with source).
(ii) Details on estimation and computation of air emissions (such as Nitrogen Oxides, Sulphur Oxides, Carbon Monoxide, Hydrocarbons, VOCs, etc) resulting from flaring, DG sets, combustion, etc.
(iii) Baseline data collection within 1km of each development well, in respect of oil/metal/hydrocarbon content in the surface water and sediments (Primary data)
(iv) Source of fresh water, water balance and waste water treatment mechanism and details of produced water facility.
(v) Procedure for handling oily water discharges from deck washing, drainage systems, bilges, preventing spills and spill contingency plans, treatment and disposal of produced water.
(vi) Details of blowout preventer installation.
(vii) Risk assessment and mitigation measures.
(viii) Details of all environment and safety related documentation within the company (regarding Life of pipeline, Corrosion prevention method, inspection etc)in the form of guidelines, manuals, monitoring programmes including Occupational Health Surveillance Programme etc.
(ix) Applicability of OISD Standards.

The proposal was deferred for the needful.

Agenda No.7.3.17

Onshore Oil and Gas development and production activities in the Block CB-ONN-2010/8, Cambay (Gujarat) by M/s Bharat Petro Resources Ltd - Environmental Clearance

[IA/GJ/IND2/75954/2018, J-11011/324/2013-IA-II (I)]

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

7.3.17.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for onshore development and production of oil & gas from ten wells (Two existing and 8 new development wells) in the Block CB-ONN-2010/8by M/s Bharat PetroResources Ltd (BPRL) in an area of 42 sq km covering Districts Gandhinagar, Ahmedabad and Kheda in Pasunia Field in Cambay Basin (Gujarat).

The said Block was awarded to BPRL led consortium (BPRL 25%, GAIL 25%, M/s EIL 20%, M/s BF Infra Ltd 20% and M/s Monnet Ispat& Energy Ltd 10%) under NELP-IX bid round.

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

Existing Block area is 42 sq km. Industry will develop greenbelt in an area of 33% out of total area of the QPF Facility. The estimated project cost is Rs.43 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs.43 lakhs and the Recurring cost (operation and maintenance) will be about Rs.25 lakhs per annum.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wild life Corridors etc within 10 km distance from the project site. Meswah River flows through the block area.

The standard ToR for the project was granted on 2nd September, 2018. Public hearing for the project has been conducted by the SPCB on 29th January 2019.

Total fresh water requirement is 35 m3/day of which fresh water requirement of 35 m3/day will be met from Tanker Supply. Effluent of 5 m3/day quantity will be treated through mobile ETP system. The plant will be based on Zero Liquid discharge system.

Power requirement after operation will be 80 kVA and will be met from Gujarat State Electricity Board. Proposed 4 X 500 KVA DG sets DG sets are used as standby during developmental drilling activities.

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

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *Effluent shall be treated in mobile ETP, 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 to ensure conformity with the National Ambient Air Quality Emission Standards issued by the Ministry vide GSRNo.826(E) dated 16thNovember, 2009 for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, CH_4, HC, Non-methane HC etc.*
- *During exploration, production, storage and handling, the fugitive emissions of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.*
- *The project proponent also to ensure trapping/storing of the CO_2 generated, if any, during the process and handling.*
- *Approach road shall be made pucca to minimize generation of suspended dust.*
- *The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.*
- *Total fresh water requirement shall not exceed the proposed quantum of 35 cum/day proposed to be met through tankers.*
- *The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.*
- *Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.*
- *Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.*
- *The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.*
- *The company shall develop a contingency plan for H_2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H_2S detectors in locations of high risk of exposure along with self containing breathing apparatus.*

- *The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and Regional Office.*
- *Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.*
- *Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.*
- *After completion of drilling process, suitable measures shall be taken for well plugging and secured enclosures, and drilling site shall be restored to the original condition. In case of the hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.*
- *All the commitments made to the public during public consultation/hearing 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.*
- *Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.*
- *An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to the Ministry's Regional Office.*
- *Company shall have own Environment Management Cell having qualified persons with proper background.*
- *Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.*
- *Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.*

Agenda No.7.3.18

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

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

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

7.3.18.1 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for expansion of molasses based distillery from 60 KLPD to 150 KLPD by M/s Gangamai Industries And Constructions Ltd (GIACL) in a total area of 27.06 ha at Village NajikBabhulgaon, Post Rakshi, Taluka Shvgaon,

District Ahmednagar (Maharashtra). The unit is also engaged in sugar production @5500 TCD and co-generation power plant of 32 MW.

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

Industrial Unit	Product	Quantity		
		Existing (60 KLPD)	**Expansion** (90 KLPD)	**Total** (150 KLPD)
Distillery	Rectified Spirit	1800 KL/M	2700 KL/M	4500 KL/M
	Extra Neutral Alcohol	1800 KL/M	2700 KL/M	4500 KL/M
	Ethanol	1800 KL/M	2700 KL/M	4500 KL/M
	By-product			
	Fusel Oil	34 KL/Annum	47 KL/Annum	81KL/Annum
	CO_2 gas	1380 MT/M	2036 MT/M	3416 MT/M
	Compost (from Spent wash treatment)	20935 MT/Annum	--	20935 MT/Annum
	Spentwash Dry Powder (99% Solids)	--	--	3000 MT/M
	Spentwash Dry Powder (95% Solids)	--	--	2190 MT/M

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

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

Total plot area acquired by industry is 27.66 Ha. Green belt will be developed in an area of 38% i.e. 10.18 Ha out of the total project area. The estimated project cost for expansion will be Rs.19.18 Cr to that of existing investment for distillery is Rs. 55.93 Cr. Total capital cost earmarked towards environmental pollution control measures under expansion is Rs. 7.70 Crores and the recurring cost (operation and maintenance) will be about Rs. 0.53 Crores per annum. Total Employment will be 50 persons as direct as well as indirect for expansion.
There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km distance from the project site.

Total water requirement will be 1619 cum/day proposed to be met from Jayakwadi dam.

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

Power required for GIACL project complex shall be met from its own co-gen plant. Existing unit has1 DG set of 900 KVA. No new DG set will be installed under expansion project.

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

Ambient air quality monitoring was carried out at 8 locations during March 2018 – December 2018 and submitted baseline data indicates that ranges of concentrations of PM10 (61.16 – 64.6µg/m3), PM2.5 (17.05 – 22.13µg/m3), SO2 (19.02 – 27.35 µg/m3) and NO2 (26.9 – 35.75 µg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.013 µg/m3 and 0.0031 µg/m3 with respect to PM10 and PM2.5 respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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

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

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

SEIAA Maharashtra, vide letter dated 11th March, 2015, has granted environmental clearance in favour of M/s Gangamai Industries And Construction Ltd for expansion of sugar factory from 2500 to 5500 TCD and co-generation from 12 to 32 MW. No compliance status for the said EC was made available.

Approval from PESO has been obtained vide letter dated 22nd January, 2019 for the proposed site and layout plan of storage facilities (Petroleum storage Class A installation).

Consent to Operate for the present alcohol production @60 KLPD has been obtained from Maharashtra PCB vide letter dated 18th May, 2018, which is valid up to 31st August, 2019. CTO for sugar plant of 5500 TCD & 32 MW co-gen unit was last obtained on 8th December, 2017, valid up to 31st July, 2018.

7.3.18.2 *The EAC, after deliberations, insisted for compliance status of the conditions stipulated in the environmental clearance dated 11th March, 2015 granted by SEIAA Maharashtra to the project for expansion of sugar plant within the same premises.*

The proposal was therefore not taken forward.

Agenda No.7.3.19

Installation of Petro Resid Fluidized Catalytic Cracking Unit and Associated Facilities at BPCL Mumbai Refinery by M/s Bharat Petroleum Corporation Limited - Environmental Clearance

[IA/MH/IND2/96004/2018, IA-J-11011/145/2018-IA-II(I)]

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

7.3.19.1 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for modernization of Mumbai Refinery by replacing old Catalytic Cracking Unit (CCU) and Fluidized Catalytic Cracking Unit (FCCU) with the new state of the art Petro Resid Fluidized Catalytic Cracking Unit (PRFCC) and associated facilities in the existing refinery complex of total area454 acresat village Mahul, tehsil Kurla, Mumbai Suburban (Maharashtra).

Details of existing and the proposed products are as under:-

S. No.	Product	Exiting (TPD)	Proposed (TPD)
1	Propylene	330	1,350
2	LPG	1,530	1,950
3	Hexane	120	120
4	Toluene	36	36
5	Benzene	144	144
6	Naphtha	1,809	615
7	BS6 MS	7,500	7,800
8	KEROSENE	210	210
9	MTO	240	240
10	JET FUEL	3,000	3,000
11	BS6 DIESEL	19,500	19,800
12	LOBS	900	900
15	FUEL OIL	3,270	1,800
17	BITUMEN	1,650	1,650

18	SULPHUR	195	270
20	INTERNAL FUEL	1,566	2,115

Main objectives of the project are-

- Improved safety (Blast Proof Control Room, Closed Sampling, Closed Cooling Water Circulation, etc),
- Incorporating latest environmental management technologies (Reduction in Oxides of Notrogen and Particulate Matter),
- Improved Energy Efficiency and Product Yield.

Salient features of the project are-

- Reduction in emissions of Sulphur Dioxide (from 10.44 TPD to 9.40 TPD) and Oxides of Nitrogen (7 TPD to 6.8 TPD) by implementing modern technologies,
- No additional land requirement,
- No additional fresh water requirements,
- No additional ETP, Power generation facility, etc.
- EIA and RRA studies shows no adverse impacts on the environment.

Different facilities envisaged under the project would include reactor & regenerator, product separation section, treatment facilities for FG/LPG, New Sulphur Recovery Unit, mounded bullets, etc.

The project/activity is covered under category A of item 4 (a) 'Petroleum refining industry' 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 1st June, 2018. The Expert Appraisal Committee (Industry-2) in its 2nd meeting held on 29-31 January, 2019has recommended for exemption from public hearing as per the extant rules/regulations.The same is, however, yet to be approved and communicated.

Total land area of the refinery is 454 acres. The proposed project will be implemented in the existing plant area (6.0 acres) by dismantling old Crude Distillation units. Industry has already developed green cover inside the refinery premises. Additional plantation program has been carried out in nearby areas in consultation with local authorities, which will be continued. The estimated project cost is Rs.6,877 Crore. Total capital cost earmarked towards environmental pollution control measures is about Rs.400 Crores.

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

Total water requirement for entire refinery will remain within the approved limit of 15950 m3/day. No additional raw water is required for the proposed project. Water requirement will be met from existing raw water system from Municipal Corporation of Greater Mumbai (MCGM) and treated sewage water from Rashtriya Chemicals and Fertilizer (RCF). Additional wastewater generation estimated at 50 m3/hr will be treated in existing ETP Plant which has adequate capacity margins. The treated water will be reused in the Refinery.

Power requirement for the proposed project at 50 MWwill be met from State Grid. Diesel Generator (DG) sets will be used as standby during power failure.

For the proposed stacks in PRFCC project, minimum 60 m stack height will be provided to control the particulate emissions within statutory limit.

Ambient air quality monitoring was carried out at five locations during March to June 2016. The baseline data indicates SO2 (8.9-10.8 µg/m3), NO2 (22.2-26.5 µg/m3), PM10 (64.8-77.8 µg/m3) and PM2.5 (22.3–27.7 µg/m3) respectively. Further, ambient air quality monitoring was carried out at 8 locations for re-validation of past data during the period of October to December 2018. The baseline data indicates SO2 (7-20 µg/m3), NO2 (16-34 µg/m3), PM10 (48-88 µg/m3) and PM2.5 (26–50 µg/m3) respectively.There will be no increase in GLC of SO2 and NOx from proposed PRFCC project as there is no net increase in emissions. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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

The details of earlier ECs granted by the Ministry for the refinery are as under:-.

Sl No	**Project Name**	**MoEFCC File No.**	**EC issuance Date**
1	Installation of CDU/VDU 3 Units	J-11012/12/99-IA.II(I)	5th October, 1999
2	Revamp of Hydrocracker (HCU) & setting up CCR Reformer Unit.	J-11011/180/2008-IA II(I)	28th April, 2008
3	Revamp of CCR Reformer Unit.	J-11011/582/2011-IA II (I)	7th June, 2013
4	Installation of CDU/VDU 4 Units.	J-11011/140/2012- IA II (I)	12th June 2013
5	Conversion of Catalytic Reforming Unit (CRU) to ISOM and revamp of NHDS.	J-11011/270/2013-IA II (I)	8th August, 2014
6	Installation of new Diesel Hydro treater Unit (DHT)	J-11011/21/2013-IA II (I)	13th August, 2015
7	Installation of new Gasoline Treatment Unit (GTU)	J-11011/98/2016-IA-II(I)	20th March, 2017

The monitoring report on compliance status of EC conditions has been forwarded by the Ministry's Regional Office at Nagpur vide letter dated 18thJanuary, 2019. The Committee found the certified compliance report to be satisfactory.

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

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

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

- *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.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *The National Emission Standards for Petroleum Oil Refinery issued by the Ministry vide G.S.R. 186(E) dated 18th March, 2008 and G.S.R.595(E) dated 21st August, 2009 as amended from time to time, shall be followed.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed with different stacks to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stacks of adequate height as per CPCB/SPCB guidelines.*
- *Existing water requirement is 15950 m3/day. No additional raw water shall be required for the proposed modernization project..*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.*
- *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.*
- *Regular VOC monitoring to be done at vulnerable points.*
- *The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.*
- *Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.*
- *Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.*
- *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 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *At least 0.25% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*

- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*

Agenda No.7.3.20

Expansion of Bulk Drugs manufacturing unit by M/s Endoc Lifecare Private Limitedat Plot No.4-7, S. No.52 & 53, B/H Saurashtra Paper Board Mill, Shapar(Veraval), Taluka KotdaSanghani, District Rajkot (Gujarat) M/s Endoc Lifecare Private Limited - Environmental Clearance

[IA/GJ/IND2/28061/2008, J-11011/484/2008-IA-II(I)]

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

7.3.20.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Bulk Drugs manufacturingunit from 51 TPM to 122 TPM by M/s Endoc Lifecare Private Limited in an area of 5053.68 sqm located at Plot No. 4-7, S.No. 52 & 53, B/H Saurashtra Paper Board Mill, Shapar(Veraval), Taluka KotdaSanghani, District Rajkot (Gujarat).

The details of products are as under:-

S. No.	Name of Products	Quantity (MTPM)		
		Existing	Proposed	Total
1	Ornidazole	46	54	100
2	Fluconazole	05	5	10
3	Tizanidine Hydrochloride	00	5	05
4	Fluoxetine Hydrochloride	00	5	05
5	R & D Product	00	2	02
Total		**51**	**71**	**122**

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

The Terms of Reference (ToR) for the project was granted on 13th October, 2015. Public Hearing has been conducted by the State Pollution Control Board on 22.08.2017.The main issues/suggestions raised during the public hearing are related to project benefits and overall EMS.

Existing land area is 5053.68 sqm. Additional 20337 sqmland will be required for proposed expansion. Greenbelt will be developed in an area of 33% *i.e.* 8400 sqmout of total area of the project. The estimated project cost is Rs.8.33 Crore including existing investment of Rs.3.83Crore. Total capital cost earmarked towards environmental pollution control measures will be Rs.35Lakhs and the Recurring cost (O&M) will be about Rs.30Lakhs per annum. Total employment including direct and indirect after expansion will be 70 persons.

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

Total water requirement is estimated to be 87.17 cum/day, which includes fresh water requirement of 59.72 m^3/day proposed to be met from Bore well water.

Total effluent generation will be around 31.95m3/day; out of which 4.5m3/day of domestic wastewater which will be disposed to soak pit. Industrial effluent from process 19.75 m3/day will be subjected to MEE. MEE condensate of 18.7 m3/day will be further treated in ETP along with effluent from washing and utilities (boiler and cooling) 8.75 m3/day. ETP treated effluent will be utilized in greenbelt.

Power requirement after expansion will be 700kVA including existing 300 kVA and will be met from Paschim Gujarat Vij Company Ltd. (PGVCL). Existing unit has one stand by D.G. set of 400 kVA capacity. Stack (height 4 m) is provided as per CPCB norms to the D.G. set.

Existing unit has one CNG fired boiler (1.0 TPH). After expansion unit has proposed to install one additional CNG fired Boiler (2 TPH) and one Agro Briquettes/Coal fired Boiler (2 TPH). Cyclone & Bag filter with a stack of height of 21 m will be installed to control the particulate emissions within the statutory limit of 150 mg/Nm3 for the proposed boilers. There will be no process emission from the unit.

Ambient air quality monitoring was carried out at 8 locations during March, 2016 to May, 2016and submitted baseline data indicates that ranges of concentrations of PM10 (64.3-73.4 µg/m3), PM2.5 (32.2-37.2 µg/m3), SO2 (18-28.3µg/m3)&NOx (21.3-32.1 µg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs from the proposed project would be 0.493µg/m3, 0.185µg/m3 and0.388µg/m3with respect to SPM, SO2and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

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

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

Earlier, the Ministry had granted EC vide letter dated 30th October, 2008 for Bulk Drug manufacturing at Plot No. 4-7, S. No. 52 & 53, B/H Saurashtra Paper Board Mill, Shapar(Veraval), Taluka Kotda Sanghani, District Rajkot (Gujarat) in favour of M/s. Endoc Pharma. The application has been submitted for transfer of EC from M/s Endoc Pharma to M/s Endoc Lifecare Pvt Ltd. The monitoring report on compliance status of above EC conditions forwarded by the Regional office at Bhopal vide letter dated 12th September, 2018 was found to be satisfactory.

7.3.20.2 *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 99.98% with effective chillers.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows:-*
  (a) Reactor shall be connected to chilled brine condenser system.
  (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
  (d) Solvents shall be stored in a separate space specified with all safety measures.
  (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- *Total fresh water requirement shall not exceed 59.72 cum/day to be met from Bore well. 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 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.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.*
- *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.7.3.21

Setting up 5000 TCD Sugar cane crushing unit, Cogeneration plant of 30MW and Molasses based distillery of 60 KLPD at Village Shirur, Taluk & District Bagalkot (Karnataka) by M/s Mellbro Sugar Pvt Ltd - Environmental Clearance

[IA/KA/IND2/75099/201, J-11011/380/2017-IA-II(I)]

The project proponent and the accredited consultant M/s Ultra Tech Environmental Consultancy & laboratory, gave a detailed presentation on the salient features of the project.

7.3.21.1 The proposal was earlier considered by the EAC in its meeting held during 25-27 July, 2018 and was deferred for additional information/inputs and clarifications 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**
Revised water balance, both for crushing season and the off season, to be submitted.	The revised water balance has been submitted
Firm commitment of the regulatory authority (State Water Resources Department)	The permission for withdrawal of 2100 cum/day has been received from the Water Resource Department, Govt. of Karnataka.

to meet the presently proposed fresh water requirement of 1220 cum/day (both for sugar plant and the distillery),	
Plan for Corporate Environment Responsibility (CER) and the traffic management to be submitted. Traffic management plan to be duly certified by the concerned regulatory authority.	Plan for Corporate Environment Responsibility (CER) and the traffic management has been submitted.
Bagasse/slop/bio-gas to be used as a fuel for the proposed boilers of 125 TPH & 22 TPH.	The project proponent has confirmed that Bagasse will be the main fuel for the cogeneration unit and 22 TPH Boiler will be used as incineration boiler for firing of slops generated from spent wash treatment

7.3.21.2 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for setting up distillery unit of 60 KLPD by M/s Mellbro Sugars Pvt Ltd in a total area of 408700 sqm at Shirur village, Taluk and District Bagalkot (Karnataka). The project also involves setting up Sugar Crushing Unit (5000 TCD Sugar Plant) and Cogeneration Power Plant (30 MW).

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

The ToR for the project was granted on 11th September, 2017. Public hearing was conducted by the SPCB on 14th March, 2018.

Total land area is 408700 sqm. Industry will develop green belt an area of 33% i.e. 136800 sqm out of the total area. The estimated project cost is Rs.331.26 crores. Total capital cost earmarking towards environmental pollution control measures is Rs.15 crores and the recurring cost (O&M) will be about Rs.1.7 crore per annum. Total employment will be 270 persons as direct and 1000 indirect persons.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site. Malaprabha River flows at a distance of 6 km in East to South East direction.

Total fresh water requirement of 448 cum/day during season and 868 cum/day during offseason will be met from Malaprabha River

Effluent of 470 m^3 quantities from Sugar & distillery units will be treated through 1000 m^3 plant and 322 m^3 effluent from distillery will be treated in Condensate Polishing Unit. Spent wash will be sent to MEE for concentration and the same will be used as fuel in incineration boiler. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 9.25 MW (season) and will be met from in house cogeneration plant and excess 22.75 MW power will be supplied to Grid and during off season 4.25 MW is the requirement and 27.25 MW excess power will be supplied to Grid . Additionally DG sets 1000 KVA (2 nos) are used as standby during power failure. Stack height will be provided as per CPCB norms to the proposed DG sets.

For the proposed unit 125 TPH Boiler, Bagasse and coal fired boiler will be installed. ESP/Bag filter with a stack height of 85 M will be installed for controlling the particulate emissions with the statutory limit of 115 mg/Nm^3 for the proposed boilers.

Ambient Air quality monitoring was carried out at 8 locations during October 2017 to December 2017 and the Baseline data indicates the range of concentrations as: PM10 (58.75 µg/m^3), PM2.5 (24.3 µg/m^3), SO2 (9.4 µg/m^3), & NO2 (17.3µg/m^3). AAQ Model study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 6.63 µg/m^3, 5.07 µg/m^3) and 3.2 µg/$m^3$with respect to PM_{10}, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards.

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

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

- *Prior approval shall be obtained from the Petroleum & Explosives Safety Organization (PESO) for the site and layout plan submitted to this Ministry along with the proposal for EC. In case of any change therein post PESO approval, the proposal shall require fresh appraisal by the sectoral EAC.*
- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board as required.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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 448 cum/day (during season) and 868 cum/day (during off season) proposed to be met from Malaprabha River. Prior permission shall be obtained from the concerned regulatory authority 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.*

Day Three: 8th May, 2019

Agenda No.7.3.22

Manufacturing of Pesticides (Aluminium Phosphide, Zinc Phosphide, Magnesium Phosphide Technical & Its Formulation) at Plot No. 4924, GIDC Industrial Area Sarigam, District Valsad (Gujarat) by M/s Integrated Chemisol Pvt Ltd- Environmental Clearance [IA/GJ/IND2/91857/2018, IA-J-11011/201/2018-IA-II(I)]

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

7.3.22.1 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for setting up pesticides and pesticide specific intermediates manufacturing unit of capacity 500 TPM by M/s Integrated Chemisol Pvt Ltd in an area of 2351.25 sqm located at Plot No. 4924, GIDC Industrial AreaSarigam, District Valsad (Gujarat).

Details of products are as under:

S. No.	Product	Quantity
1	Aluminium Phosphide / Zinc Phosphide / Magnesium Phosphide	500 TPM

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

ToR for the project was granted on 22nd July, 2018. Public hearing is exempted as the project site is located inside the notified industrial area.

Land area available for the project is 2351.25 sqm. Industry will develop greenbelt in an area of 801.25 sqm covering 34% of total project area. The estimated project cost is Rs. 6 crore. Total capital cost earmarked towards environmental pollution control measures is Rs.10 lakh and the recurring cost (operation and maintenance) will be about Rs.5 lakh per annum. Employment opportunity will be for 45 persons directly & 30 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. Darotha river is flowing at a distance of 9.1 Km in NE direction.

Total water requirement is estimated to be 9.3 cum/day, which includes fresh water requirement of 6.3 cum/day, proposed to be met from GIDC Sarigam water supply.

Industrial effluent of 2.8 cum/day will be treated through ETP. Treated water will be utilized for scrubber. Domestic effluent 0.8 cum/day was now proposed to treat through STP in place of dispose through septic tank. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement is estimated to be 125 kVA, proposed to be met from Dakshin Gujarat Vij Company Limited (DGVCL). DG set of 100 kVA shall be used as standby during power failure.

Stack (height 11 m) will be provided as per CPCB norms to the proposed DG set. Natural gas fired steam boiler of 0.2 TPH shall be installed with a stack of height of 11 m.

Ambient air quality monitoring was carried out at 8 locations during October to December 2018 and the baseline data indicates the ranges of concentrations as: PM_{10} (61.9-86.1µg/m^3), $PM_{2.5}$ (32-47.1µg/m^3), SO_2 (9.4 -17.6 µg/m^3) and NO2 (16.2- 23.0µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.91 µg/m^3, 0.0088 µg/m^3, 0.0050 µg/m^3 and 0.0046 µg/m3 with respect to NOx, P_2O_5, PM and SO_2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

7.3.22.2 *The EAC, after deliberations and in view of highly hazardous nature of the products, insisted for process safety and risk assessment studies using advanced models, and mitigating measures to be suggested accordingly. The Committee also desired for details regarding chemicals proposed as raw materials, risks involved, precautionary measures for occupational health, and the proposal for monitoring of Phosphine (PH_3) emissions.*

The proposal was therefore deferred.

Agenda No.7.3.23

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

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

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

7.3.23.1 During deliberations, the EAC noted the following: -

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

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

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

hearing are related to road, local benefit, impact to crematorium and nallah, safety of school children during etc.

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

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

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

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

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

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

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

7.3.23.2 *The EAC, in the first instance observed that baseline air quality values in terms of critical air pollutants namely Particulate Matter, SO_2& NOx, were already exceeding the prescribed standards. Also, incremental concentrations for these pollutants due to the proposed project, were also found to be on much higher side. The Committee insisted for confirmation of the air quality values from the CPCB data and also revisiting the modeling exercise.*

The Committee also desired for clarifications/inputs in respect of the following:

- *For the proposed LNG storage/re-gasification, approval to be obtained from the Petroleum & Explosives Safety Organization (PESO) for the site and layout plan.*
- *Permission required for the project, if any, from the Inland Water Ways Authority of India.*

- *Issues raised during public hearing to be adequately addressed along with the time bound action plan and firm commitments.*
- *Process safety and risk assessment studies shall be carried out using advanced models, and the mitigating measures shall be undertaken accordingly.*
- *Formulation of occupational health programme.*

The proposal was therefore deferred for the needful.

Agenda No.7.3.24

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

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

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

7.3.24.1 During deliberations, the EAC noted the following:

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

Details of products are as under:

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

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

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

Land area available for the project is 4800 sqm. Industry will develop a greenbelt in an area of 1600 sqm covering 33% of total project area. The estimated project cost is Rs. 5 crore. Total capital cost earmarked towards environmental pollution control measures is Rs.70 lakhs and

the recurring cost (O&M) will be about Rs.16 lakhs per annum. Employment opportunity will be for 50 persons.

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

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

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

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

Ambient air quality monitoring was carried out at 8 locations during 15thMarch to 15thJune 2017 and the baseline data indicates the ranges of concentrations as: PM_{10} (39-88 µg/m^3), $PM_{2.5}$ (18-52 µg/m^3), SO_2 (4.6-12.8 µg/m^3) and NO_2 (8.2-18.6 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.152 µg/m^3, 0.408 µg/m^3 and 0.408 µg/m^3 with respect to PM_{10}, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

7.3.24.2 *The EAC, after deliberations, expressed concerns over hazardous nature of different products/pesticides and the risks involved, especially while their field application. The Committee desired for a confirmation on safety aspects from the concerned regulatory authority/Central Insecticides Board. Further, in view of fresh water requirement of 10 cum/day, the Committee desired for revisiting the same, along with detailed plan for achieving ZLD.*

The proposal was deferred for the needful.

Agenda No.7.3.25

Augmentation of LPG storage by addition of Mounded Storage Vessel (MSV) of 300 MT X 3 nos. (900) MT by M/s Bharat Petroleum Corporation Ltd at Village and PO Ambabai, Gwalior Road, District Jhansi(UP)- Environmental Clearance

[IA/UP/IND2/69498/2017, IA-J-11011/471/2017-IA-II(I)]

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

7.3.25.1 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for augmentation of LPG storage from 450 MT to 1350 MT (addition of 3 mounded storage vessel of 300 MT each) by M/s Bharat

Petroleum Corporation Limited in an area of 10.52 ha located at Village Ambabai, Taluka Jhansi, District Jhansi (Uttar Pradesh).

Details of existing and proposed storage facilities/tanks are as under:

Particulars	Existing	Proposed	Total
LPG Storage Capacity	A/G Bullets (3 X 150 MT = 450 MT)	Mounded Storage vessel (3 X 300 MT= 900 MT)	1350 MT
LPG Bottling Capacity	12000 cylinders /Shift	--	12000 cylinders /shift

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 Madhya Pradesh at 3.8 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 26th October 2017 by the Ministry. Public hearing for the proposed project has been conducted by the State Pollution Control Board on 28 November, 2018.The main issues raised during the public hearing are related to employment and safety.

The existing land area is 26 acre (10.52 ha). No additional land is required for the proposed expansion. Industry has developed greenbelt in an area of 3.56 ha covering 34% of total project area. The estimated project cost is Rs.26.11 crore. Total capital cost earmarked towards environmental pollution control measures is Rs.9 lakhs and the recurring cost (operation and maintenance) will be about Rs.1 lakhs per annum. Employment opportunity will be for 170 persons.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Pahuj river is flowing at a distance of 3.5 km in ESE direction.

Total water requirement is estimated to be 10 cum/day, proposed to be met from bore well. Application in this regard has been submitted to the CGWA.

Effluent of 2.9 cum/day will be routed through septic tank followed by soak pit and settling tank. 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 860 kVA, which will be met from DG set. Existing unit has 2 DG sets of 320 & 160 kVA capacity each, additionally 1 DG set of 380 kVA will be installed. Stack will be provided as per CPCB norms to the DG sets.

Ambient air quality monitoring was carried out at 8 locations during October to December, 2017 and the baseline data indicates the ranges of concentrations as: PM10 (65.0-89.3 µg/m3), PM2.5 (35.1- 55.9 µg/m3), SO2 (6.0 – 12.9µg/m3) and NO2 (17.1-29.9 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.37 µg/m3, 0.016µg/m3 and 13.58 µg/m3 with respect to PM10 and SOx and NOx. The resultant concentrations 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 vide letter dated 14th January, 2016, which is presently valid up to 31st December, 2020.

PESO has given approval for the site and layout plan of storage facilities (Petroleum storage Class A installation) vide letter dated 14th March, 2000 for the existing unit, which is presently valid till 30th September, 2019 and the mandatory licence in Form XV as per the Petroleum Rules, 2002.

7.3.25.2 *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* 10 *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.7.3.26

Setting up Formaldehyde manufacturing unit at A-526, RIICO Industrial area, Chopanki, Bhiwadi, Tehsil Tijara, District Alwar (Rajasthan) by M/s Pine Laminates Pvt Ltd - Environmental Clearance

[IA/RJ/IND2/74569/2018, IA-J-11011/143/2018-IA-II(I)]

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

7.3.26.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up Formaldehyde manufacturing unit of capacity 80 TPD by M/s Pine Laminates Pvt Ltd in an area of 1960 sqm located at A-526, RIICO Industrial area, Chopanki, Bhiwadi, Tehsil Tijara, District Alwar (Rajasthan).

The project/activity is covered under category B of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006. Due to applicability of general condition (Interstate boundary of Haryana at 3.22 km), the project requires appraisal at central level by the EAC in the Ministry.

Standard ToR for the project was granted on 24th May 2018. Public hearing is exempted as the project is located in the notified Industrial area/estate.

Land area available for the project is 1960 sqm. Industry will develop greenbelt in an area of 646.8 sqm covering 33% of the total project area. The estimated project cost is Rs. 2.5 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 5 lakhs and the recurring cost (operation and maintenance) will be about Rs. 50,000/- per annum. Employment opportunity will be for 12 persons.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Indori nala is at a distance of 7km towards NE direction.

Total fresh water requirement is estimated to be 60 cum/day, proposed to be met through ground water. Application in this regard has been submitted to the CGWA. In view of the prevailing ground water scenario, the Committee was not comfortable with the proposed use of ground water of 60 cum/day to meet the process requirements and suggested for exploring alternate source of water or otherwise, after prior approval from the concerned regulatory authority/CGWA in this regard.

No effluent will be generated due to the proposed project. Domestic waste water of 1 cum/day will be disposed off to soak pit via septic tank.

Power requirement for the proposed project will be 250 Kw, which will be met JVVNL. One DG set of 250 kVA will be used as standby during power failure. Adequate stack height will be provided as per CPCB norms to the proposed DG set. There will not be any type of process emissions from the proposed activities.

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} (57.46µg/m^3 - 67.47µg/m^3), $PM_{2.5}$ (29.95µg/m^3-37.08µg/m^3), SO_2 7.06µg/m^3 -9.03µg/m^3) and NO_x (15.40µg/m^3 -19.38µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.514 µg/m^3, 1.13 µg/m^3 and 0.354 µg/m^3 with respect to PM_{10}, NO_x & CO. The resultant concentrations are within the National AAQ Standards.

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.

7.3.26.2 *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% or natural gas/lignite/bio-fuel/briquettes/bagasse/agro waste, 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 60 cum/day to be met from the through surface/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% 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.7.3.27

Expansion of APIs and Bulk drugs Production Unit at SP-3, 10 & 11, RIICO Industrial Area, Village Keshwana Rajpoot, Kotputli (Rajasthan) by M/s Otsuka Chemicals India Pvt Ltd -Environmental Clearance

[IA/RJ/IND2/89107/2015, J-11011/241/2012-IA II (I)]

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

7.3.27.1 The proposal was earlier considered by the EAC in its meeting held during on 22-24 January, 2018. The Committee desired for a clarification in respect of independent existence of the proposed unit of capacity 25 TPM in an area of 26800 sqm in the total plot area of 88000 sqm, to confirm its no linkage with the existing unit and thus to arrive at the requirement of compliance status of the existing EC conditions.

In response, the project proponent has informed that the proposed unit is located adjacent to the existing unit. Monitoring report on compliance status of the existing EC conditions has been

forwarded by the Ministry's Regional Office (after conducting site visit on 19th July, 2018) vide letter dated 23rd August, 2018 was found to be satisfactory.

7.3.27.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up APIs and Bulk drugs manufacturing unit of capacity 25 TPM by M/s Otsuka Chemical India Pvt Ltd in an area of 26800 sqm (out of total area of 88000 sqm) located at SP-3, 10 & 11, RIICO Industrial Area, Village Keshwana Rajpoot, Kotputli, District Jaipur (Rajasthan).

The details of products are as under:

S. No.	Product	Existing (TPM)	Proposed (TPM)	Total (TPM)
1	GCLE	58.3	-	58.3
2	Cefexime	-	22.5	22.5
3	CefditorenPivoxil	-		
4	Cefdinir	-		
5	Cefprozil	-		
6	ACLE	-		
7	Ceftaroline	-		
8	Ceftibuten	-		
9	CefpodoximeProxetil	-		
10	CefcapenePivoxil	-		
11	Cefuroxime Axetil	-		
Penicillin –G, Intermediates & its APIs				
1	Tazobactum Sodium	-		
2	Sulbactum sodium	-		
3	SulbactumPivoxil	-		
R & D Product				
	R & D Products under above categories	-	2.5	2.5

The project/activity is covered under category B of item 5(f) 'Synthetic Organic chemical' of the Schedule to the EnvironmentImpact Assessment (EIA) Notification, 2006. Due to applicability of general condition (Interstate boundary of Haryana at 2.38km), the project requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 30thMay 2017. Public hearing is exempted as the project is located in the notified industrial area/estate.

Total land area available for the project is 88000 sqm. No additional land is required for the proposed expansion. Industry has developed greenbelt in an area of 28776 sqm covering 33% of the total project area. The estimated project cost is Rs.150 crore. Total capital cost earmarked towards environmental pollution control measures is Rs.200 lakhs and the recurring cost (operation and maintenance) will be about Rs.145 lakhs per annum. Employment opportunity will be for 100 persons directly and 54 persons indirectly after expansion.

There are no National parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. SotaNala (0.7 km in the NW) and Sahibi River (4.8-km in SE direction) are two dry river stretches present within the study area.

Total water requirement is estimated to be 106.3 cum/day, which includes fresh water requirement of 75 cum/day, proposed to be met from bore well. Permission in this regard has been obtained from the CGWA vide letter dated 31st January, 2019 for a total capacity of 800 cum/day which meets the demand of both the units.

Effluent of 18.5 cum/day will be treated through existing ETP. High TDS/ high COD effluent will be treated in MEE & ATFD. Treated effluent 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 after expansion will be 10 MVA, which will be met from Jaipur VidyutVitran Nigam Limited (JVVNL). Existing unit has 4DG sets of 1500 KVA capacity, additionally 1 DG sets 2000 KVA will be used as standby during power failure. Stack (height 30m) will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 10 TPH steam coal based boiler. Additionally, 2 Boiler of 10 TPH each (1 Boiler standby) steam coal based boiler will be installed. Multi-cyclone separator/ bag filter with a stack height of 50 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm^3.

Ambient air quality monitoring was carried out at 8 locations during 15thMarch 2017 to 15thJune 2017 and the baseline data indicates the ranges of concentrations as: PM_{10} (42-95 µg/m^3), $PM_{2.5}$ (18-47 µg/m^3), SO_2 (4.3-9.4 µg/m^3) and NO_2 (10.4-25.5 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.92 µg/m^3, 6.0 µg/m^3 and 1.0 µg/m^3 with respect to PM_{10}, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards.

Ministry has issued EC vide letter dated 10th December, 2015 in favour of M/s Otsuka Chemicals (India) Pvt Ltd to the project 'Expansion of Bulk Drug manufacturing unit at the same plot of area 88000 sqm at Village Keshwana Rajpoot, Tehsil Kotputli, District Jaipur (Rajasthan). The monitoring report on compliance status of EC conditions forwarded by the Regional Office (after conducting site visit on 19th July, 2018) vide their letter dated 23rd August, 2018, was found to be satisfactory.

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

As committed by the project proponent, CER shall be 2% of the project cost.

Consent to Operate for the existing products has been obtained from the Rajasthan State PCB vide letter dated 2nd February, 2017, which is presently valid up to 30th June, 2021.

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*

- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed.*
- *Coal with Sulphur content less than 0.5% shall be used as fuel in the boiler, and/or, lignite/bio-fuel/briquettes/bagasse/agro waste.*
- *No raw material/solvents prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines. Fugitive emissions shall be controlled at 99.5% with effective chillers.*
- *Solvent management shall be carried out as follows:*
  - *(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 75 cum/day,* proposed to be met from ground water*. 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:-*
  - *(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.*
- *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.*

Agenda No.7.3.28

Expansion of Distillery Plant from 40 KLPD to 100 KLPD and power from 1MW to 3.5 MW at Village Firozpur, Hafiz, District Bijnor (UP) by M/s Mohit Petrochemical Private Limited - Environmental Clearance

[IA/UP/IND2/92646/2018, IA-J-11011/461/2017-IA-II(I)

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

7.3.28.1 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for expansion of molasses based Distillery (Extra Neutral Alcohol/Rectified Spirit/Absolute Alcohol) from 40 KLPD to 100 KLPD by M/s Mohit Petrochemicals Private Limited in an area of 8.90 ha located at Village Firozpur Hafiz, Tehsil Bijnor, District Bijnor (Uttar Pradesh). The project also involves expansion of co-generation power plant from 1 MW to 3.5 MW. The unit shall operate for 350 day/annum.

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

Terms of Reference for the project was issued on 20th July, 2017. Public Hearing for the proposed distillery project has been conducted by the State Pollution Control on 24th July, 2018. The main issues raised during the public hearing are related to employment, effluent management, rain water harvesting, air pollution control system, etc.

Land area available for the project is 8.9 ha. No additional land shall be required for the proposed expansion. Industry will develop greenbelt in an area of 2.937 ha covering 33% of

total project area. The estimated project cost is Rs.47.50 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.29 crores and the recurring cost (operation and maintenance) will be about Rs.1 crore per annum. Employment opportunity will be for 35 persons direct and 45 persons indirectly after proposed expansion

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site. Chhoiya river is flowing at distance of 300m in South direction and Malan river is flowing at distance of 8.7 km (NW).

Total water requirement is estimated to be 1950 cum/day, which includes fresh water requirement of 610 cum/day, proposed to be met from ground water, which is proposed to be reduced to 500 cum/day. Application in this regard has been submitted to CGWA.

Spent wash of 500 cum/day shall be treated through MEE and the concentrate from MEE shall be incinerated in Slop fired boiler. Other effluent of 724 cum/day will be treated through Condensate Polishing unit. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement after expansion will be 2.5 MW, which willbe met from own cogeneration of power. Slop fired boiler of 30 TPH shall be installed. Electro static precipitators with a stack of height of 60m will beinstalled to control particulate emissions within the statutory limit of 150mg/Nm^3 for the proposed boiler. Ash of 40TPD shall be mixed with fermenter sludge (15.0 TPD) and utilized as manure. Unit will be installing granulation plant for manufacturing of potash rich granules.

Ambient air quality monitoring was carried out at 8 locations during December 2017 to February 2018 and the baseline data indicates the ranges of concentrations as: PM_{10} (68.4-88.25 µg/m^3), $PM_{2.5}$ (48.6-54.22 µg/m^3), SO_2 (17.1 -23.6 µg/m^3) and NO_2 (22.8 -27.6 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.4 µg/m^3, 5.68 µg/m^3 respect to PM_{10}, SOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Earlier the Ministry has issued environmental clearance vide letter dated 10th March, 2004 to the project 'Distillery unit of capacity 40 KLPD by M/s Mohit Petrochemicals Private Limited. Monitoring report on compliance status of the EC conditions forwarded by the Ministry's Regional Office at Lucknow (after conducting site visit on 16th November, 2018) vide letter dated 26th December, 2018 and further action taken report dated 12th March, 2019, was found to be satisfactory.

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

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

PESO has given approval for the site and layout plan of storage facilities (Petroleum storage Class A installation) vide letter dated 18th April, 2017 to enable the mandatory licence in Form XV as per the Petroleum Rules, 2002.

Consent to *Operate* for the existing industrial operations have been obtained from UP PCB vide letter dated 17th September, 2018 which is presently valid up to 31st December, 2019.

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

- *Prior approval shall be obtained from the Petroleum & Explosives Safety Organization (PESO) for the site and layout plan submitted to this Ministry along with the proposal for EC. In case of any change therein post PESO approval, the proposal shall require fresh appraisal by the sectoral EAC.*
- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board as required.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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 500 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 1% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*

- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*
- *CO_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*

Agenda No.7.3.29

Expansion of Pigments Manufacturing from 100 to 1400 TPM at S.No. 85/B, ECP Canal Road, At & P: Karakhadi, Taluka Padra,District Vadodara (Gujarat) by M/s Choksi Colours Private Limited (Unit-II)-Environmental Clearance

[IA/GJ/IND2/91091/2017, IA-J-11011/179//2017-IA-II(I)]

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

7.3.29.1 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of pigments manufacturing from 100 TPM to 1400 TPM in an area of 17165 sqm located at Survey No. 85/B, ECP Canal Road, Karakhadi, Taluka Padra, District Vadodara (Gujarat) by M/s Choksi Colours Private Limited (Unit-II).

Details of products are as under:

S. No.	Product	Existing (TPM)	Proposed (TPM)	Total (TPM)
1	CPC Blue Crude	100	500	600
2	Pigment Alpha Blue	---	200	200
3	Pigment Beta Blue	---	250	250
4	Activated Crude Blue	---	250	250
5	Pigment Green – 7	---	100	100
	Total	**100**	**1300**	**1400**

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

Standard ToR for the project was granted on 26th July, 2017. Public hearing for the project has been conducted by the Gujarat State Pollution Control Board on 2nd November, 2018. The main

issues raised during the public hearing are related to ground water contamination, air pollution, greenbelt development, CSR, employment to locals, etc.

The existing land area is 17165 sqm. No additional land is required for the proposed expansion. Industry will develop greenbelt in an area of 8865 sqm, covering 33% of total project area. The estimated total project cost is Rs.42 crore including existing investment of Rs.14 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs.4 Crore and the recurring cost (O&M) will be about Rs.9.25 crore per annum. Employment opportunity will be for 100 persons directly and 40 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. Mahi river is flowing at a distance of 4.5 km in N direction.

Total water requirement is estimated to be 1537 cum/day, which includes fresh water requirement of 479 cum/day, proposed to be met from bore well. Application in this regard has been submitted to CGWA on 9th January, 2019.

Industrial effluent of 1075 cum/day will be treated through ETP-RO-MEE/ATFD setup. RO reject (22 cum/day) from utilities was proposed to be sent to CETP-EICL, Umraya for final disposal, which will be now treated through MEE. RO permeate of 853 cum/day and MEE condensate of 180 cum/day shall be recycled/reused. Domestic wastewater of 30 cum/day will be treated in STP and treated water of 25 cum/day will be used in greenbelt development. 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 750 kVA including existing 300 kVA, which will be met from Madhya Gujarat Vij Company Ltd(MGVCL). Existing unit has one DG set of 300 kVA capacity, which will be used as stand by during power failure. Stack (height 9 meters) is provided as per CPCB norms to the DG set.

Existing unit has coal/agro waste fired one 2 TPH boiler, one 6.5 Lakhs Kcal/Hr Thermic Fluid Heater, and one 3Lakhs Kcal/Hr Hot Air Generator. Additionally, coal/agro waste fired one 5 TPH boiler, one 15 Lakhs Kcal/Hr Thermic Fluid Heater, and one 20 Lakhs Kcal/Hr Hot Air Generator will be installed. Multi cyclone separator with bag filter with a stack of height of 30 m will be installed to controlparticulate emissions within the statutory limit of 150 mg/Nm3 for the proposed utilities.

Ambient air quality monitoring was carried out at 8 locations during October, 2017 to December, 2017 and the baseline data indicates the ranges of concentrations as: PM_{10} (55.5-89.1 µg/m^3), $PM_{2.5}$ (25.1-44.8 µg/m^3), SO_2 (10-17.2 µg/m^3) and NOx (12.1-19.6 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs from the proposed project would be 6.921 µg/m^3, 2.743 µg/m^3, 1.549 µg/m^3, 4.515 µg/m^3, 0.179 µg/m^3, and 0.089 µg/m^3 with respect to SPM, SO_2, NOx, NH_3, HCl, and Cl_2 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.

Existing unit is in operation before year 2006 and hence environmental clearance is not available.

Consent to Operate for the present Industrial operations has been obtained from the Gujarat PCB vide letter dated 6th July, 2018, which is valid upto 31st December, 2022.

7.3.29.2 *The EAC, after deliberations and in view of the project proposed in non-industrial area and incremental concentrations for critical air pollutants namely SPM& SO_2 on higher side, asked for confirmation of the same and also prediction of maximum GLC for PM_{10}. Further, in view of significant quantum of fresh water requirement, the Committee desired for some progress in this regard.*

The proposal was deferred for the needful.

Agenda No.7.3.30

Setting up molasses based distillery of 160 KLD (RS/ENA/Ethanol) along with 8MW co-gen power plant at Village Rudrapur Gularia, Block Bijua, Tehsil Golagokarannath, District Lakhimpur Kheri (UP) by M/s Gularia Chini Mills Unit-Distillery (A unit of Balrampur Chini Mills Limited) - Environmental Clearance

[IA/UP/IND2/75830/2018, IA-J-11011/236/2018-IA-II(I)]

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

7.3.30.1 During deliberations, the Committee noted the following:

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

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

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

Land area available for the project is 8.747 ha. Industry shall develop greenbelt in an area of 2.88 ha, covering 33% of total project area. The estimated project cost is Rs 208.742 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 110 crores and the recurring cost (operation and maintenance) will be about Rs 11 crores per annum. Employment opportunity will be for 160persons.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site. Sharda River is flowing 6.6 Km in the East direction from the project location.

Total water requirement is estimated to be 2816 cum/day, which includes fresh water requirement of 960 cum/day, proposed to be met from Ground water. The proposal in this

regard has been recommended to CGWA by CGWB (Northern Region), Lucknow vide letter dated 22nd February, 2019.

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

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

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

Ambient air quality monitoring was carried out at 8 locations during 15th September 2018 to 15th December 2018 and the baseline data indicates the ranges of concentrations as: -PM_{10} (67.5-88.2 µg/m^3), $PM_{2.5}$ (40.8-58.2 µg/m^3), SO_2 (13.6-15.7 µg/m^3) and NO_2 (21.5-26.4 µg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.53 µg/m^3 and 4.62 µg/m^3 with respect to PM_{10} and SO_x.

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

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

7.3.30.2 *The EAC, after deliberations, observed that incremental concentrations for critical air pollutants namely PM_{10}&SO_2 were on much higher side and asked for confirmation of the same. Further, in view of increased transportation activities due to the project and thus more vehicular emissions, the Committee desired for prediction of maximum GLC for NO_x also.*

The proposal was deferred for the needful.

Agenda No.7.3.31

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

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

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

7.3.31.1 During deliberations, the Committee noted the following:

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

Rajasthan Liquors Limited in an area of 73500 sqm located at Village Chiraura, Tehsil Akbarpur, District Kanpur Dehat (UP).

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

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

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

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

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

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

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

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

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

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

By-products from the grain based operations (DDGS) shall be sold as cattle feed. Yeast sludge shall be sent to the sludge drying beds/added to the wet cake.ETP sludge will be dewatered

using filter press and used as manure. Ash from the boiler will be given to brick manufacturing unit or used in soil amelioration.

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

The expenditure towards CER for the project would be 3.5% of the project cost as committed by the project proponent. In view of the issues/concerns raised during public hearing, the Committee stressed for improvement of roads and development of storm water drainage to be taken up on priority as a part of CER.

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

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

The proposal was deferred for the needful.

*****

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

S. No.	Name and Address	Designation
1.	Dr. J. P. Gupta	Chairman
2.	Dr. Y.V. Rami Reddy	Member
3.	Dr TudiIndrasen Reddy	Member
4.	Dr J S Sharma	Member
5.	Shri S C Mann	Member
6.	Shri Ashok Agarwal	Member
7.	Dr T K Joshi	Member
8.	Ms. Saloni Goel	Member
9.	Shri S.K. Srivastava	Member Secretary