

**GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-2 SECTOR)**

Dated: 21.12.2020

**MINUTES OF THE 26th MEETING OF THE EXPERT APPRAISAL COMMITTEE
(INDUSTRY-2 SECTOR PROJECTS),
HELD ON 10th December, 2020**

Venue: Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003 through Video Conferencing (VC)

(i) **Opening Remarks by the Chairman:** The Chairman made hearty welcome to the Committee members and appreciated the efforts of the Committee. After opening remarks, the Chairman opened the EAC meeting for further deliberations.

(ii) **Confirmation of minutes:** The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC members on the minutes of its 25th Meeting of the EAC (Industry-2 Chemical) held during 24th November, 2020 conducted through Video Conferencing (VC), confirmed the same.

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

Details of the proposals considered during the meeting **conducted through Video Conferencing (VC)**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under: -

10th December, 2020 (Thursday)

Agenda No. 26.1

Proposed New Technical Grade Pesticide Plant by M/s Crop Care Organics LLP located at Plot no. Khatauni No. 1426-1431; Khata No. 83 Gata No. 337, Rakba No. 279, Lagan 29.10 and Khata No. 168, Gata No. 332, Rakba No. 1.099, Lagan No. 39.70, Rakba No. 2.378, Village-Akbarpur Amla, Tehsil-Najibabad, District-Bijnor, Uttar Pradesh-246763 -Consideration of Environment Clearance regarding.

[IA/UP/IND2/184547/2019, IA-J-11011/254/2019-IA-II(I)]

The project proponent and their consultant M/s. EQMS India Pvt. Ltd. made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal is for environmental clearance to the project for proposed New Technical Grade Pesticide Plant by M/s Crop Care Organics LLP located at Plot no. Khatauni No. 1426-1431; Khata No. 83 Gata No. 337, Rakba No. 279, Lagan 29.10 and Khata No. 168, Gata No. 332, Rakba No. 1.099, Lagan No. 39.70, Rakba No. 2.378, Village-Akbarpur Amla, Tehsil-Najibabad, District-Bijnor, Uttar Pradesh-246763.

All Pesticides industry and pesticide specific intermediates units are listed at S. No. 5(b) of Schedule of Environment Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The standard ToR for the project was granted by Ministry vide letter No.IA- J-11011/254/2019-IA-II(I) dated 04.11.2019. Public Hearing for the proposed project has been successfully conducted by Uttar Pradesh State Pollution Control Board on 20.07.2020 at the project site i.e. Khasra No. 332 & 337, Akbarpur Awnla, Najibabad, Uttar Pradesh. The main issues raised during public hearing were related to wastewater /chemical effluent disposal, Corporate Environment Responsibility. The details of the same along with respective replies have been provided below:

S.No	Name & Address of Participant	Issues/Concern Raised during the Hearing	Replies from the Project Proponent/ Consultant/ Respective Department
1.	Sh. Gurudeep Singh Address : Akbarpur Awnla Village	If wastewater /chemical effluent generated from the factory will be discharged outside the premises. If so, Explain.	Wastewater generated from the plant will be treated with Mult-effect Evaporator and then Effluent Treatment Plant which will be reused within the premises for purposes like washing, cooling etc. The proposed project will be a "Zero-Liquid Discharge Project". Hence, there will be no impact of water bodies due to industrial effluent.
2.	Sh. Gurudeep Singh Address : Akbarpur Awnla Village	If there will be provision of Environment Management Cell and employment to locals of village.	Environment Consultant affirmed to the provision of EMC as well as employment provision to local people.
3.	Sh. Sushil Chauhan (Gram Pradhan) , Akbarpur Awnla	If farmers will be provided pesticides at a discounted rate?	Environment Consultant affirmed that pesticides will be provided at lower prices to local farmers.

4.	Additional District Magistrate, Bijnor	If there will be provision of developmental activities and infrastructure to nearby villages and areas.	Environment Consultant informed the public that approx. Rs. 60 Lakhs will be contributed to activities outside the project site under Corporate Environment Responsibility (CER) that will include provision of potable and drinking water facilities. Street lights and roads in nearby areas.
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The details of products and capacity are as under:

S. No.	Class	Sub-Class	Products	MT / Annum
1	FUNGICIDES	Aliphatic Nitrogen Fungicides	Cymoxanil Technical	100
2		Anilide Fungicide	Metalaxyl Technical	50
3		Conazole Fungicide	Hexaconazole Technical	500
4			Propiconazole Technical	
5			Tebuconazole Technical	
6			Prothioconazole Technical	
7			Epoxyconazole Technical	
8		Pyrazole Fungicide	Bixafen Technical	80
9			Fluxapyroxad Technical	
10		Pyridine Fungicide	Boscalid Technical	80
11			Fluopyram Technical	
12		Strobilurin Fungicides	Azoxystrobin Technical	200
13			Picoxystrobin Technical	
14			Pyraclostrobin Technical	
15		Unclassified Fungicide	Tricyclazole Technical	100
16	HERBICIDES	Aryloxyphenoxypropionic Herbicides	Clodinofof-propargyl Technical	150
17			Propaquizafop Technical	
18			Quizalofop ethyl Technical	
19		Chloroacetanilide Herbicides	Pretilachlor Technical	450
20			Butachlor Technical	
21		Chlorotriazine Herbicide	Atrazine Technical	200
22			Terbutylazine Technical	
23		Dinitroaniline Herbicides	Pendimethalin Technical	200

S. No.	Class	Sub-Class	Products	MT / Annum
24		OrganophosphorousHerbicide	Glyphosate Technical	450
25		Sulfonylurea Herbicide	Pyrazosulfuron Technical	60
26			Sulfosulfuron Technical	
27			Metsulfuron Methyl Technical	
28		Pyrimidinyloxybenzoic Acid Herbicides	Bispyribac Sodium Technical	100
29		Triazinone Herbicide	Metribuzine Technical	100
30	INSECTICIDES	Diamide Insecticides	Chlorantraniliprole Technical	30
31		Neonicotinoid Insecticides	Acetamiprid Technical	800
32			Clothianidine Technical	
33			Dinotofuron Technical	
34			Imidacloprid Technical	
35			Thiamethoxam Technical	
36		Organophosphorus Insecticides	Acephate Technical	350
37			Chlorpyriphos Technical	
38		Organothiophosphate Insecticide	Triazophos Technical	100
39			Profenofos Technical	
40		Phenylpyrazole Insecticide	Fipronil Technical	50
41		Pyrethroid Insecticide	Lambda Cyhalothrin Technical	100
42			Alphamethrin Technical	
43			Bifenthrin Technical	
44			Cypetmethrin Technical	
45		Acaricide Insecticide	Hexithiazox	100
46			Diafenthiuron	
47		Unclassified Insecticide	Flonicamide Technical	150
48	Pyridaben Technical			
TOTAL CAPACITY				4500

The land area of 23780 m² (2.378 ha.) has been proposed for the pesticide project. Industry will develop greenbelt in an area of 39.30 % i.e. 9345m² out of total area of the project. The estimated project cost of project is Rs 30 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 4.5 Crores and the Recurring cost (operation and maintenance) will be about Rs 2.35 Crores per annum. Total Employment will be 225 persons (Operation Phase: 150 no.; Construction Phase: 75) as direct & indirect employment.

PP has reported that there are no environmentally sensitive components such as National Park, Wildlife Sanctuary, Elephant / Tiger Reserve, migratory routes of fauna and wet land present within 10 Km radius of plant site. However, there are

few reserve forests present within the study area. Nearest forest is Mohanwali RF located about 4.70 km NE of the site. Pelkhala river is flowing about 3.20 km in SE.

Ambient air quality monitoring was carried out at 8 locations during 1st March 2019 to 31st May 2019 and the baseline data indicates the ranges of concentrations as: PM₁₀ (46-95 µg/m³), PM_{2.5} (21-55 µg/m³), SO₂ (5.2-11.4 µg/m³) and NO_x (9-20.3 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.76971 µg/m³, 0.69253 µg/m³, 1.16524 µg/m³, 1.51172 µg/m³, µg/m³, 0.03356 µg/m³ and 0.00839 µg/m³ with respect to PM₁₀, PM_{2.5}, NO_x, SO₂, HCl & HBr. All parameter concentrations are within the National Ambient Air Quality Standards (NAAQS).

The total water requirement for the plant will be 137 KLD and the freshwater requirement will be 50 KLD. The source of water for the proposed project is Borewell. The project has been granted NOC for abstraction of ground water from 1 no. of proposed tubewell by Ministry of Jal Shakti, Department of Water Resources, River Development & Ganga Rejuvenation, Central Ground Water Authority vide *NOC No. CGWA/NOC/IND/ORIG/2020/8112 valid upto 31.05.2022*. Effluent of 93 KLD (Industrial Wastewater-85 KLD; Domestic Sewage- 8 KLD) treated with Fenton treatment followed by MEE with ATFD and ETP, for industrial effluent. The treated water shall be completely reused in plant for process, cooling tower, washing and boiler purposes. Domestic sewage shall be treated in proposed STP and treated water will be reused for gardening. The plant will be based on Zero Liquid discharge system.

Power requirement of the proposed project will be 1000 kVA to be met from Uttar Pradesh Power Corporation Ltd. (UPCL). 2x380 kVA DG Sets will be used as standby during power failure. Stack Height of 6 m will be provided as per CPCB norms to the proposed DG sets. 5.0 TPH boiler will be installed. Cyclone with bag filter and stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boiler. Incinerator will also be installed with a stack height of 30 m to mitigate air emissions.

Details of Process emissions generation and its management:

Area	Stack Height	Stack Dia	Stack exit velocity	Stack Exit Temperature	Flow Rate	Emission Parameters		Control Measures
	in M	in M	M/Sec	Deg °C	NM3/Hr	Parameter	Value	
Process Vents/Stack 1	30	0.1	47.26	35	1000	PM	< 10	Caustic / acid/ water scrubbers and Stack
						HCl	< 20	
						HBr	< 5	

Process Vents/Stack 2	30	0.1	47.26	35	1000	PM	< 10	Caustic / acid/ water scrubbers and Stack
						HCl	< 20	
						HBr	< 5	

The expected municipal solid waste generation at the project site will be 62 kg/day which will be segregated in biodegradable waste and recyclable waste. Recyclable waste will be sold off to authorized vendors. Biodegradable waste will be treated in small organic waste converter. The manure from OWC shall be used within the premises in landscaping.

Details of Solid waste/Hazardous waste generation and its management:

Sr. No	Type of waste	Category	Quantity	Facility
1	Chemical Sludge from wastewater Treatment (ETP sludge)	34.3	1.5 MTPM	Collection, Storage, Transportation, disposal at authorized TSDF.
2	MEE Salt	34.3	1.5 MTPM	Collection, Storage, Transportation, disposal at authorized TSDF.
3	Distillation Residues	20.3	77.8 MTPM	Collection, Storage, and disposal by Own incineration.
4	Ash	36.2	0.42 MTPM	Collection, Storage, Transportation, disposal at authorized TSDF/ to cement manufacture.
5	Used Oil	5.1	-	Collection, Storage, Transportation, disposal by selling registered Re-Refiners/ Recyclers.
6	Spent Acid	20.2	7.5 MTPM	Collection, storage, transportation, disposal at TSDF/Own Incineration/Sale to authorized vendor/End users/Co-Processing.
7	Discarded Containers/barrel/liners/contaminated with wastes/chemicals	33.3	-	Collection, Storage, Decontamination & Sale to authorized vendors.
8	Process waste	29.1	1.5 MTPM	Collection, Storage, disposal through onsite incineration

The Committee deliberated in detail about the location of the project in the village, having no industry in the region, and showed serious concerns as under;

- Pesticides are highly toxic. Such projects in village could pose a serious danger to the lives of the village, living nearby in the event of accident.
- Population density in the proposed location

- What are the facilities available for medical with details?
- Drainage system
- Other industries in the adjoining of the proposed location
- Fire fighters
- The Committee suggested to obtain the suitability of the project location from DC of the district as stated above and thus, the proposal was rejected and returned in present form.

The proposal was accordingly returned in present form.

Agenda No. 26.2

Proposed Pesticide, Pesticide Intermediates (633 MT/Month) and Specialty Chemicals (451 MT/Month) in Existing Unit by M/s Mangal Murti Bio-Chem Pvt. Ltd. located at Survey No. 311/2, Block No. 261, At & Po: Nana Borasara, Taluka: Mangrol, Dist: Surat, Gujarat – 394 125 - Reconsideration of Environment Clearance regarding.

[IA/GJ/IND2/146898/2017, J-11011/536/2017-IA-II(I)]

The proposal was earlier considered by the EAC in its meeting held during 20th-22nd October, 2020. The additional information desired by the Committee and response from the project proponent are as under:

S. No.	Query Raised in earlier EAC meeting	Query Reply Given by PP	Observation of EAC
1.	Regarding manufacturing of Di Ammonium Phosphate	CTO was obtained vide Consent Order No. AWH-80134 dated 07/07/2016 for manufacturing of Di Ammonium Phosphate. The unit has sold Inorganic Salt of Di Ammonium Phosphate in the year 2016-17 to the tune of 14.462 MT/Annum but after the year 2016-17, unit has not manufactured DAP. We hereby give undertaking that Di Ammonium Phosphate will be removed from product list.	The EAC deliberated the matter and found the reply to be satisfactory.

The project proponent and their consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd. made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal is for environmental clearance to the project for proposed Pesticide, Pesticide Intermediates (633 MT/Month) and Specialty Chemicals (451 MT/Month) in Existing Unit by M/s Mangal Murti Bio-Chem Pvt. Ltd. located at Survey No. 311/2, Block No. 261, At & Po: Nana Borasara, Taluka: Mangrol, Dist: Surat, Gujarat – 394 125.

All Pesticides industry and pesticide specific intermediates (excluding formulations), Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals and Chemical Intermediates) are listed in S.N. 5(b), & 5(f) respectively of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' to be appraised at Central Level by Expert Appraisal Committee (EAC).

The standard ToR for the project was granted by Ministry vide letter No. J-11011/536/2017-IA-II(I); dated 09th Dec, 2017. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 02-November-2018 at M/s. Mangal Murti Bio-Chem Pvt. Ltd., Survey No. 311/2, Block No. 261, At & Po: Nana Borasara – 394 125 Tal: Mangrol. Dist: Surat. It was informed that no litigation is pending against the proposal.

The details of products and capacity are as under:

Sr. No.	Products	CAS No.	LD50 (Oral) mg/Kg	End Use	Production Quantity (MT/Month)	
					Existing	Total after Proposed Expansion
Inorganic Chemical						
1	Liquid Bromine	7726-95-6	2600	Agro-Intermediate	50	50
Fertilizers						
2	NPK Fertilizer	66455-26-3	--	Farming	3000	3000
3	Magnesium Sulphate	10034-99-8	--		462	462
4	Ammonium Sulphate	7783-20-2	2840		52	52
5	Di Ammonium Phosphate	7783-28-0	--		51	0

6	Mono Ammonium Phosphate	7722-76-1	--		20	0
7	Calcium Nitrate	35054-52-5	--		20	20
8	Tri Sodium Phosphate	7601-54-9	4150		50	50
9	Mono Potassium Phosphate	7778-77-0	--		20	0
Pesticides & Pesticide Intermediates						
10	Ethion	563-12-2	13	Agro Formulation	--	633
11	Permethrin	586-78-7	1030	Agro Formulation	--	
12	Cypermethrin	34911-51-8	250-4150	Agro Formulation	--	
13	Meta Phenoxy Benzaldehyde (MPBD)	3915-51-0	1222	Agro Chemical	--	
14	Meta Phenoxy Benzyl Alcohol (MPBA)	13826-35-2	1496	Agro Chemical	--	
Specialty Chemicals						
15	Streneted Phenol	61788-44-1	2500	Rubber Chemicals	--	451
16	Meta Bromo Anisole	2398-37-0	--		--	
17	Para Bromo fluoro Benzene	460-00-4	2700		--	
18	Meta Bromo Nitro Benzene	585-79-5	--		--	
19	N-Butyl Bromide	109-65-9	2761		--	
20	Tetra Butyl Ammonium Bromide	1643-19-2	2143.38		--	
21	N-Propyl Bromide	106-94-5	4260		--	
22	1-Bromo 3 Chlorine Propane	109-70-6	--		--	
23	ISO-Butyl Bromide	78-77-3	--		--	
24	4-Amino, 1,2,4 Trizole	100-11-8	--		--	
25	Para Nitro Benzyl Bromide	110-53-2	--		--	
26	N-Pentyl Bromine	10035-10-6	--		--	

27	Hydro Bromic Acid in Water (48%)	106-93-4	--		--	
28	1,2-di bromo ethane	79-96-4	108	Pharma Intermediates	--	
29	Ethyl Bromide	603-35-0	1350		--	
30	Tri Phenyl Phosphine	--	1380 (mouse)		--	
31	Ethyl tri phenyl Phosnium Bromide	1530-32-1	200-2000		--	
32	Mono Bromo Acetic Acid	2398-37-0	--		--	
33	N-Bromo Succinimide	79-08-3	--		--	
34	Diethyl, Dipropyl Malonate	128-08-5	--		--	
35	Methyl Tri Phenyl Phosnium Bromide	6065-63-0	--		--	
36	Tri ethyl benzyl ammonium chloride	1779-49-3	--		--	
37	1H-1,2,4 Trizole	56-37-1	1750		--	
38	1,3 Dichloro Acetone	288-88-0	--			
39	Bromo Benzene	534-07-6	2699		--	
Total					3725	4718
PESTICIDES FORMULATION & PACKING						
40	Dichlorovos 76% EC	62-73-7	80	Farming	357.5	357.5
41	Monocrotophos 36% SL	6923-22-4	17-20			
42	Hexaconazole 5% E.C	79983-71-4	2200-6100			
43	Acephate 75% S.P.	30560-19-1	1030			
44	Glyphosate 41% SL	1071-83-6	>4000			
45	Mencozeb 75% WP	8018-01-7	>5000			
Total					357.5	357.5
BULK REPACKING						
46	Acetamipride 20% SP	160430-64-8	1065	Farming	--	195

47	Ammonium Salt of Glyphosate 71% SG	114370-14-8	>3000			
48	Atrazine 50% WP	1912-24-9	--			
49	Carbendazim 50% WP	10605-21-7	5826-15595			
50	Carbendizam 12% + Mencozeb 63% WP	10605-21-7 + 8018-01-7	--			
51	Carbofuran 3% CG	1563-66-2	8			
52	Cartop Hydrochloprid 50% GR	15263-52-2	--			
53	Cartop Hydrochloride 50% SP	15263-52-2	--			
54	Chloropyriphos 20% EC	2921-88-2	51-500			
55	Chloropyriphos 50% EC	2921-88-2	--			
56	Cypermethrin 25% EC	52315-07-8	>300-2000			
57	Ethion 50% EC	821-48-7	--			
58	Ethion 40% + Cypermethrin 5% EC	821-48-7 + 52315-07-8	--			
59	Fenvalrate 20% EC	51630-58-1	451			
60	Hexaconazole 5% SC	79983-71-4	>2000			
61	Imidachloprid 17.8% SL	138261-41-3	480-650			
62	Imidachloprid 70% WS	138261-41-3	695.74			
63	Imidachloprid 70% WG	138261-41-3	981			
64	Indoxacarb 14.5% SC	144171-61-9	268-1730			
65	Lamdacylotrin 2.5% EC	91465-08-6	--			
66	Lamdacylotrin 5% EC	91465-08-6	--			
67	Malathion 50% EC	121-75-5	>5500			
68	Mencozeb 64% + Metalaxyl 8% WP	8018-01-7 + 57837-19-1	--			

69	Metalaxyl 35% WS	57837- 19-1	>600			
70	Paraquate Dichloride 24% SL	1910- 42-5	612- 707			
71	Pendimethrine 30% EC	40487- 42-1	>2000			
72	Phorate 10% CG	298-02- 2	--			
73	Pretilachlore 50% EC	51218- 49-6	5508.1			
74	Profenophos 50% EC	41198- 08-7	358			
75	Profenophos 40% + Cypermethrin e 4% EC	41198- 08-7 + 52315- 07-8	--			
76	Qunolphos 25% EC	13593- 03-8	--			
77	Sulphur 80% WDG	7704- 34-9	>5000			
78	Thiomethoxa m 25% WG	153719 -23-4	>5000			
79	Trizophos 40% EC	24017- 47-8	--			
80	Trycyclozole 75% WP	41814- 78-2	245- 314			
Total				--		195

Land area 23,427 m² will be used for proposed project. Industry has already developed 7280 m² and will develop 4720 m² Greenbelt in an area of 51.22% i.e., 12,000 m² out of 23,427 m² of area of the project. The estimated project cost is Rs. 31.5694 Crores including existing investment of Rs. 9.6185 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 2.8210 Crores and the Recurring cost (operation and maintenance) will be about Rs. 1.2 Crores per annum. Total Employment will be 95 persons as direct & indirect for project. Industry proposes to allocate Rs 55.5 Lakhs (approx.) in next 5 years @ of 5/2.5% of the profit towards Corporate Social Responsibility & Rs 66.0 Lakhs (approx.) in next 2 years @ of 3% of the additional project cost towards Corporate Environment Responsibility.

PP has reported that (as per form-1) there are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site

Ambient air quality monitoring was carried out at 9 locations during March, 2017 to May, 2017 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (74.91 – 95.94 µg/m³), PM_{2.5} (43.55 – 51.28 µg/m³), SO₂ (15.75 – 26.72 µg/m³) and NO_x (18.63 – 28.53 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.349 µg/m³, 0.573 µg/m³, and 0.205 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 319.7 m³/day of which fresh water requirement of 173.7 m³/day will be met from GIDC Water Supply Authority. Total wastewater generation will be 94.4 KL/day (Industrial: 87.9 KL/day + Domestic: 6.5 KL/day). Low COD & TDS waste water (46 KLD) from Boiler, Cooling, Washing and Softener Generation will be treated in ETP within premises along with MEE Condensate (62 KLD) followed by RO. RO permeate (86 KLD) will be reused within plant premises. RO reject (22 KLD) will be sent to MEE. Cyanide Process waste water (7.5 KLD) will be treated in Reactors-1 & 2 followed by primary settling and treated waste water will be sent to MEE. High TDS Process waste water (34.4 KLD) will be given primary treatment and treated waste water will be sent to MEE. MEE Condensate (62 KLD) will be sent to ETP for further treatment.

Power requirement for proposed project will be 750 kVA and will be met from DGVCL. 2 Nos. DG set of 250 kVA & 500 kVA capacity shall be used as standby during power failure. Stack (height 11 m & 6 m) will be provided as per CPCB norms to the proposed DG sets of 250 kVA & 500 kVA respectively which will be used as standby during power failure. Existing unit has 2 TPH Coal/ Bio Coal fired boiler, 0.3 TPH Hot Air Generator and Closed Furnace. Additionally, 5 TPH Coal/ Bio Coal fired boiler will be installed. Multi cyclone separator, Mechanical Dust Collection, Dust Collector & Multi cyclone separator with Bag filter with a stack of height of 33 m will be installed for controlling the Particulate emissions (within statutory limit of 150 mg/Nm³) respectively.

Details of Process emissions generation and its management:

Flue Gas Stack

Sr. No.	Stack/Vent attached to	Stack Height (meter)	Stack Diameter (meter)	Fuel name & Quantity	Type of Emission	APCM
Existing						
1	Boiler (2 TPH)	33	0.45	Wood/Bio Coal (3 MT/day)	PM SO ₂ NO _x	Mechanical Dust Collection
2	Hot Air Generator (0.3 TPH)	11	0.35	Coal/Bio Coal (800 Kg/day)	PM SO ₂ NO _x	Multicyclone Separator
3	Closed Furnace	23	0.35	Wood (25 Kg/day)	PM SO ₂ NO _x	Dust Collector
4	D.G. Set (250 KVA) - emergency use only	11	0.15	Diesel (360 Liter/day)	PM SO ₂ NO _x	Adequate Stack Height
Proposed						
5	Boiler (5 TPH)	33	0.45	Coal/Bio Coal	PM SO ₂ NO _x	Multicyclone

				(34 MT/day)		Separator with Bag Filter
6	D.G. Set (500 KVA) - emergency use only	6	0.15	Diesel 750 Liter/day	PM SO ₂ NO _x	Adequate Stack Height

Process Stack

SR. NO.	VENT ATTACHED TO	VENT HEIGHT (METER)	APCM	PARAMETER	PERMISSIBLE LIMIT
Existing					
1.	Process Vent-I (attached to Drier & Cooler)	23	Multicyclone Separator	PM	150 mg/NM ³
2.	Process Vent-II (attached to Reaction Vessel)	11	Caustic Scrubber	Cl ₂	9 mg/Nm ³
Proposed					
3.	*Process Vent-III	12	Two Stage Water Scrubber followed by Alkali Water	HCl Cl ₂ HBr	20 mg/Nm ³ 9 mg/Nm ³ 5 mg/Nm ³
4.	**Process Vent-IV	12	Two Stage Caustic Water Scrubber	H ₂ S	6 mg/Nm ³
5.	***Process Vent-V	12	Two Stage Water Scrubber followed by Alkali Water	HBr HCl SO ₂	5 mg/Nm ³ 20 mg/Nm ³ 40 mg/Nm ³

* Attached to reactor of Meta Phenoxy Benzaldehyde (MPBD)

** Attached to reactor of Ethion

*** Attached to reactor of Para Bromo fluoro Benzene, Para Nitro Benzyl Bromide, Mono Bromo Acetic Acid, Meta Bromo Nitro Benzene, Permethrin Technical

Details of Solid waste/Hazardous waste generation and its management:

20 Categories of Hazardous/Solid Wastes shall be generated from this Unit. ETP Sludge @ 24 MT/Annum, Process Waste @ 6 MT/Annum and MEE Salts @ 1020 MT/Annum will be Collected, Stored, Transported and Disposal at nearest common

TSDF site. Used Oil @ 0.6 MT/Annum will be Collected, Stored, Transported & sell to registered refineries. Discarded Containers/ Barrels/ Liners @ 60 MT/Annum will be Collected, Stored, Decontaminated & Sell to GPCB authorized vendor. Date expired/ off specification pesticides @ 0.096 MT/Annum will be Collected, Stored & Re-used back in process or Transported and Disposal at CHWIF site. Distillation Residue @ 90 MT/Annum will be Collected, Stored, Transported and Disposal at CHWIF site. Hydrochloric Acid Solution (30%) @ 3636 MT/Annum, Aluminum Chloride Solution @ 7236 MT/Annum, Potassium Chloride Powder @ 1584 MT/Annum, Sodium Bromide Solution (30%) @ 1776 MT/Annum, Ortho Dichloro Benzene @ 42 MT/Annum, 10% HBr in Spent Sulphuric Acid @ 1800 MT/Annum, Dilute Sulphuric Acid (70%) @ 1320 MT/Annum, Spent Acetic Acid @ 66 MT/Annum, Sodium Dichromate @ 300 MT/Annum, Calcium Diphosphate @ 55.2 MT/Annum, Spent Trichloro Carbonilide @ 36 MT/Annum, Poly Aluminum Chloride @ 55.44MT/Annum and Spent Ethyl Acetate @ 17.64 MT/Annum will be Collected, Stored, Captive Consumption or Transported & Sell to actual user having Rule 9 Permission.

Details of Certified compliance report submitted by RO, MoEF&CC. (In case of EC Proposal). Existing unit is inorganic manufacturing unit and has no earlier EC, so certification of monitoring report of EC report is Not Applicable.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain 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, from the State Pollution Control Board, prior to construction & operation of the project.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance and to compliance of terms and conditions as under, and general terms of conditions at **Annexure:-**

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iv). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.
- (v). Total fresh water requirement shall not exceed 173.7 m³/day, proposed to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- (vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (vii). 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.
- (viii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (ix). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/any wastewater shall not be allowed to mix with storm water.
- (x). 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 ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

- (xi). 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) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xii). Process organic residue and spent carbon, if any, shall be sent to Cement or other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xiii). 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.
- (xiv). The green belt of at least 5-10 m width shall be developed in nearly 40% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xv). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall to be completed within time as proposed.
- (xvi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

Agenda No. 26.3

Proposed Expansion of Insecticide Active Ingredients on plot area of 2995.00 m² with Total production of 20 TPM by M/s Solex Chemicals Pvt Ltd located at Brahmanpara, P.O & P.S Haripal, Dist. Hooghly, West Bengal - Reconsideration of Environment Clearance regarding.

[IA/WB/IND2/137286/2017, No. IA-J-11011/511/2017-IA-II(I)]

The proposal was earlier considered by the EAC in its meeting held during 27th Feb. 2020. The additional information desired by the Committee and response from the project proponent are as under:

S. No.	Query Raised in earlier EAC meeting	Query Reply Given by PP	Observation of EAC
1.	The committee after detailed deliberations noted that such proposals requires appraisal by the EAC (violation) and suggested for action as appropriate by the Ministry for onward transfer of the proposal to violation sector.	<p>Mandatory Requirement for a project to qualify as violation case: The violation case mandatorily requires closer of production, file case in the court for violation, pay for environment damage costs (remediation costs). While NGT has rules that proponent has not violated per say and no prohibitory order to be passed against proponent.</p> <p>Court judgement states: Applicant and authorities were under the impression that insecticides do not fall under 5(b) categories. Hence Hon'ble NGT also did not consider it necessary to pass any prohibitory orders against the private respondent.</p> <p>MOEF&CC letter directing to apply for normal EAC: Following NGT judgement dated 27th July 2017 MoEF&CC itself, directed company to apply for environment clearance under normal category and <i>not under violation category (as per Violation notification dated 14.03.2017)</i> vide its letter dated 23rd October 2017.</p>	<p>The case was examined in the Ministry and it is found that it is not a case of violation and should be sent to sectoral EAC for consideration.</p> <p>The EAC deliberated the matter and found the reply to be satisfactory.</p>

		<p>Call of natural Justice:</p> <p>Following NGT order and MOEF&CC directions, we have proceeded for environment clearance, conducted public hearing and applied for Appraisal at EAC (Ind-2) spending almost 28 months. Appraisal under violation committee means restarting the process and will be not be in line with intent given under NGT judgement.</p>	
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The project proponent and their consultant M/s. EQMS India Pvt. Ltd. made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal is for environmental clearance to the project for proposed expansion of insecticide active ingredients on plot area of 2995.00 m² with Total production of 20 TPM by M/s Solex Chemicals Pvt Ltd located at Brahmanpara, P.O & P.S Haripal, Dist. Hooghly, West Bengal.

All Pesticides industry and pesticide specific intermediates unit are listed at S.N. 5(b) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central level by Expert Appraisal Committee (EAC).

The standard ToR for the project was granted by Ministry vide letter No. J-11011/254/2019-IA-II(I) dated 16.11.2017. Public Hearing for the proposed project has been successfully conducted by West Bengal State Pollution Control Board on 25/09/2019 at the compound of Kashibishwanath Seva Samit, Brahmanpara, Haripal, Dist. Hooghly, West Bengal at 12.00 Hrs which was presided over by the WBCS (Exe.) Additional District Magistrate, (Div) Hooghly attended by officers of WBPCB, Hooghly. The main issues raised during public hearing were related to benefit to local community/local employment, effect on agricultural field, pollution control measures, infrastructure development, CSR implementation etc. It was informed that no litigation is pending against the proposal.

The details of products and capacity are as under:

Sr. No	Name of Technical Pesticide Products	Existing Capacity (TPM)	Proposed expansion capacity (TPM)	Total	End Use of the products
1.	d-Trans Allethrin (75/25)	10	10	20	Common household insecticide formulations
2.	Prallethrin				
3.	d-Allethrin	-			

4.	Transfluthrin				
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Land area of 2995 m² is for the pesticide project. Industry has developed greenbelt in an area of 33.02 % i.e. 989 m² out of total area of the project. The estimated project cost of project is Rs 8.7 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 0.53 Crores and the Recurring cost (operation and maintenance) will be about Rs 0.076 Crores per annum. Total Employment will be 35 persons as direct & indirect employment.

PP has reported that there are no national parks, wildlife sanctuaries, biosphere reserves, tiger/elephant reserves, wildlife corridors etc. within 10 km distance from the project site. Migratory routes of fauna and wet land present within 10 Km radius of plant site.

Ambient air quality monitoring was carried out at 14 locations during 1st October 2017 to 31st December 2017 and the baseline data indicates the ranges of concentrations as: PM₁₀ (33-77 µg/m³), PM_{2.5} (16-38 µg/m³), SO₂ (3.7-9.2 µg/m³) and NO_x (9.1-30.3 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.4 µg/m³, 0.3 µg/m³, 3.5 µg/m³, 1.8 µg/m³, µg/m³, with respect to PM₁₀, PM_{2.5}, SO₂, NO_x. All parameter concentrations are within the National Ambient Air Quality Standards (NAAQS).

The total water requirement for the plant will be 17.1 KLD and the freshwater requirement will be 11.6 KLD. The source of water for the proposed project is Borewell. The project has been granted NOC for abstraction of ground water from 1 no. of tubewell by West Bengal ground water resources (permit no P070907500000094601TSE). Effluent of 6.08 KLD (Industrial Wastewater-3.2 KLD; Domestic Sewage- 2.88 KLD) treated in ETP, for industrial effluent. The treated water shall be completely reused in plant. Domestic sewage shall be treated in proposed STP and treated water will be reused for gardening. The plant will be based on Zero Liquid discharge system.

Power requirement of the project will be 145 kVA to be met from West Bengal State Electricity Distribution Company Ltd. (WBSEDCL). 1x45 kVA, 2x160 kVA DG Sets will be used as standby during power failure. Stack Height of 7.9~8 m will be provided as per CPCB norms to the proposed DG sets. No boiler is proposed.

Details of Process emissions generation and its management:

Process emissions shall be scrubbed into wet scrubber before releasing through vent of 6 m height.

Details of Solid waste/Hazardous waste generation and its management:

The expected municipal solid waste generation at the project site will be 17.5 kg/day which will be segregated in biodegradable waste and recyclable waste. Recyclable waste will be sold off to authorized vendors. Biodegradable waste will be given to local body for disposal.

Details of Solid Hazardous Waste Management

Sr. No	Particulars	Existing	Proposal	Total
1.	Aqua Waste	2 TPM	16 TPM	18 TPM
2.	Organic Waste	5000 kg/month	90 kg/month	5090 kg/month
3.	Iron Drums	--	50 nos.	50 nos.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain 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, from the State Pollution Control Board, prior to construction & operation of the project.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance and to compliance of terms and conditions as under, and general terms of conditions at **Annexure**: -

- (i). Land conversion documents is to be submitted to the Ministry.
- (ii). 33 % green belt should be covered and additional land may be acquired as per requirement.
- (iii). Mitigation plan and remedial plan to be submitted to the Ministry within six months.

- (iv). Action plan for rain water harvesting to be submitted.
- (v). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (vi). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (vii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (viii). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.
- (ix). Total fresh water requirement shall not exceed 11.6 KLD, proposed to be met from Borewell. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- (x). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xi). 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.
- (xii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xiii). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/any wastewater shall not be allowed to mix with storm water.
- (xiv). 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 ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xv). 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) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be

- flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xvi). Process organic residue and spent carbon, if any, shall be sent to Cement or other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
 - (xvii). 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.
 - (xviii). The green belt of at least 5-10 m width shall be developed in nearly 40% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
 - (xix). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall to be completed within time as proposed.
 - (xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

Agenda No. 26.4

Expansion of Pesticide Intermediates, Pesticide Technical and Synthetic Organic Chemicals Manufacturing Unit (2762 MT/Month to 8720 MT/Month) by M/s. Hemani Industries Limited (Unit-III) located at Plot No. CH-5, E-362, GIDC Estate - Dahej, Taluka: Vagra, Dist: Bharuch, Gujarat - Amendment in Environmental Clearance regarding.

[IA/GJ/IND2/180771/2020, J-11011/583/2010-IA II (I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter No. J-11011/583/2010-IA II (I) dated: 09/04/2020 for Expansion of Pesticide Intermediates, Pesticide Technical and Synthetic Organic

Chemicals Manufacturing Unit (2762 MT/Month to 8720 MT/Month) at Plot No. CH-5, E-362, GIDC Estate - Dahej, Taluka: Vagra, Dist: Bharuch, Gujarat of M/s. Hemani Industries Limited (Unit-III).

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

S. No.	Point of EC issued by MoEFCC	Details as per the EC	To be revised	Justification/Reasons
1	A. Specific Condition (ii)	Treated effluent of 709 cum/day shall conform to the standards prescribed under the Environment Protection (Rules), 1986, for discharge to the NCT Pipeline for deep sea disposal.	Treated effluent of 1383 cum/day shall conform to the standards prescribed under the Environment Protection (Rules), 1986, for discharge to the GIDC Pipeline for deep sea disposal.	Economic Viability w.r.t. Cost is main concern for ZLD and Availability of Water in this area is quite good. To achieve ZLD is a matter of huge finance. Industries cannot afford ZLD technologies as the cost of the project goes too high. We have checked the Cost feasibility. Due to 100% ZLD, Capital cost of effluent treatment scheme will increase up to 64.25 % and recurring cost will increase 71.67 %.
2	A. Specific Condition (iii)	Zero Liquid Discharge shall be ensured including existing facility and the proposed expansion facility and no waste/treated water shall be discharged outside the premises. Existing facility shall achieve Zero Liquid Discharge within 3 years period.	We need to discharge treated effluent 1383 cum/day into deep sea via CETP through GIDC drain Pipeline and require it permanent. Remaining treated effluent 564 cum/day will be reused in plant premises. So this unit is not complete Zero Liquid Discharge unit.	Design of ZLD plants is a big challenge as it varies in different Industries for efficient operation and successful results. There is no space available for maintaining total ZLD in company. Total wastewater generation is 2008 m ³ /day. We want to discharge treated effluent only 1383 m³/Day out of 2008 m ³ /day. Total ZLD is not possible because of the capital investment of ZLD is very huge.
3	A. Specific Condition (iv)	Necessary authorization required under the Hazardous	Generation Quantity of evaporation salt will be reduced	We shall not reuse total treated wastewater due

		and other wastes (Management and trans-boundary movement) Rules, 2016 shall be obtained and the previous contained in the Rules shall be strictly adhere to.	from 1350 MT/Month to 1110 MT/Month and evaporation salt shall be disposed off to the TSDF.	to cross contamination of different type wastewater generated from different products like fungicides, herbicides, insecticides, etc. as EU & USA do not allow any impurity in products. More than 90% of our production is exported. ZLD seems very difficult in pesticide Industries
4	A. Specific Condition (ix)	Total Fresh water requirement shall not exceed 2411 cum/day and will be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.	Total fresh water requirement shall not exceed 3101 cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.	due to its very complex streams. If cross contamination will occur, then exported products will be rejected and it may result in huge financial loss to the company and we & our country shall not earn foreign currency. We have taken the loan of Rs. 125 Crores from Bank for the Plant and our financial condition is poor due to present slowdown in the market. We cannot survive in the international Market with ZLD condition due to high competition from global players. Due to ZLD condition, we may lose export orders and foreign currency. Due to this, we will discharge the treated effluent 1383 m³/Day into deep sea through GIDC Drain Pipeline, So that total fresh water requirement will increase from 2411 m³/Day to 3101 m³/Day.

The Committee after detailed deliberations **recommended** for amendment in EC as proposed by the project proponent. All other terms and conditions shall remain unchanged.

Agenda No. 26.5

Setting up Pesticide Technical (31,200 MT/Month) and Synthetic Organic Chemicals (16,500 MT/Month) manufacturing Plant Unit by M/S Hemani Industries Limited (Unit-VI) located at Plot No. T-35,36,37,45,46,47, GIDC Saykha, Taluka: Vagra, Dist: Bharuch, Gujarat - Amendment in Environmental Clearance regarding.

[IA/GJ/IND2/185724/2020, J-11011/231/2018-IA II (I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter No. J-11011/231/2018-IA II (I) dated: 16/10/2019 for Setting up Pesticide Technical and Synthetic Organic Chemicals Manufacturing Plant at Plot No. T-35,36,37,45,46,47, GIDC Saykha, Taluka: Vagra, Dist: Bharuch, Gujarat of M/s. Hemani Industries Limited (Unit-VI).

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

S. No.	Point of EC issued by MoEFCC	Details as per the EC	To be revised	Justification/Reasons
1	Point-6	Total water requirement is estimated to be 9,235 cum/day including fresh water requirement of 1,540 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,	Total water requirement is estimated to be 9,235 m ³ /Day including fresh water requirement of 3061 m³/Day proposed to be met from GIDC supply. Company proposes a new ETP consisting of primary, secondary and tertiary treatment & RO facility for Low COD/Low TDS stream (7,120 m ³ /day). The low COD stream effluent (7,120 m ³ /day) will be sent to proposed ETP.	Economic Viability w.r.t. Cost is main concern for ZLD and Availability of Water in this area is quite good. To achieve ZLD is a matter of huge finance. Industries cannot afford ZLD technologies as the cost of the project goes too high. We have checked the Cost feasibility. Due to 100% ZLD, Capital cost of effluent treatment scheme will increase up to 14 % and recurring cost will increase 11.5 %. When we applied for EC to MoEFCC, New Delhi, CETP, Saykha did not exist & did not give the membership. Now, CETP, Saykha is

		<p>secondary and tertiary treatment & RO facility for Low COD/Low TDS stream (7,120 m³/day). The low COD stream effluent (7,120 m³/day) will be sent to proposed 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 (1,000 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.</p>	<p>1,600 m³/Day treated effluent will be sent to CETP, Saykha for further treatment and remaining effluent (5520 KL/day) will be sent to RO. Treated effluent shall be sent to RO and RO permeate (4416 KL/day) will be reused in plant premises and RO Reject will be treated in MEE.</p>	<p>completed & it gives membership to discharge the treated effluent into CETP and we have obtained membership from CETP, Saykha to discharge the treated effluent of 1,600 m³/Day into CETP, saykha.</p> <p>Design of ZLD plants is a big challenge as it varies from Industry to industry for efficient operation and successful results. There is no space available for maintaining total ZLD in the company.</p> <p>Total wastewater generation is 8,136 m³/day. We want to discharge treated effluent 1,600 m³/Day out of 8,136 m³/day. Total ZLD is not possible because of the capital investment of ZLD is very huge.</p> <p>We shall not reuse the total treated wastewater due to cross contamination of different type wastewater generated from different products like fungicides, herbicides, insecticides, etc. as EU & USA do not allow any impurity in products. More than 90% of our production is exported.</p> <p>ZLD seems very difficult in pesticide Industries due to its very complex streams. If cross contamination will occur, then exported products will be rejected and it</p>
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2	<p>Point No. 10:</p> <p>Specific Condition (b):</p>	<p>Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.</p>	<p>We propose a new ETP consisting of primary, secondary and tertiary treatment & RO facility for Low COD/Low TDS stream (7,120 m³/day). The low COD stream effluent (7,120 m³/day) will be sent to proposed ETP. 1,600 m³/Day treated effluent will be sent to CETP, Saykha for further treatment and remaining effluent will be passed through RO and treated effluent from RO shall be reused in plant premises. Treated effluent shall be sent to RO and RO permeate will be reused in plant premises and RO Reject will be treated in MEE.</p>	<p>may result in huge financial loss to us and we & our country shall not earn foreign currency.</p> <p>We cannot survive in the international Market with ZLD condition due to high competition from global players.</p> <p>Due to ZLD condition, we may lose export orders and foreign currency.</p> <p>Due to this, we shall discharge the treated effluent 1,600 m³/Day into CETP, Saykha, So that total fresh water requirement will increase from 1,540 m³/Day to 3061 m³/Day.</p>
3	<p>Point No. 10:</p> <p>Specific Condition (h):</p>	<p>Total fresh water requirement shall not exceed 1,540 cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.</p>	<p>Total fresh water requirement shall not exceed 3061 cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.</p>	
4	--	<p>Process organic residue and</p>	<p>Generation Quantity of evaporation salt</p>	<p>1,600 m³/Day treated effluent will send to CETP</p>

		spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.	will be reduced from 12,150 MT/Month to 6,120 MT/Month and evaporation salt shall be disposed off to the TSDF.	for further treatment & disposal. Due to this, capacity of RO and MEE will be reduced and Generation Quantity of evaporation salt will be reduced.
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The Committee after detailed deliberations **recommended** for amendment in EC as proposed by the project proponent. All other terms and conditions shall remain unchanged.

Agenda No. 26.6

Proposed Pesticide Technical, Specialty Chemicals & Pigments Unit (22,000 MT/Month) by M/s. Hemani Intermediates Pvt. Ltd. (Unit-V) located at Plot NO. 73 & 74, GIDC Saykha, Taluka: Vagra, Dist: Bharuch, Gujarat - Amendment in Environmental Clearance regarding.

[IA/GJ/IND2/185735/2020, J-11011/04/2016-IA II (I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter No. J-11011/04/2016-IA II (I) dated: 15/06/2017 for Setting up Specialty Chemicals, Pigments, and Pesticide Technical (22000 MT/Month) manufacturing Plant at Plot No. 73,74, GIDC Saykha, Taluka: Vagra, Dist: Bharuch, Gujarat of M/s. Hemani Intermediates Pvt. Ltd. (Unit-V).

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

S. No.	Point of EC issued by MOEFCC	Details as per the EC	To be revised	Justification/Reasons
1	Point-8	Total water requirement will be 972 m ³ /day of which fresh water requirement of 363 m ³ /day and will be met from GIDC Water Supply.	Total water requirement will be 972 m ³ /day of which fresh water requirement of 797 m³/day and will be met from GIDC Water Supply. Treated Effluent (434 m ³ /day) will be sent to GIDC	As per Point No. 8 of EC, Total water requirement will be 972 m ³ /day of which fresh water requirement of 797 m³/day and will be met from GIDC Water Supply. Treated Effluent (434 m ³ /day) will be sent to GIDC drain for deep sea disposal via CETP .

		<p>Treated Effluent (434 m³/day) will be sent to GIDC drain for deep sea disposal. Condensate (175 m³/day) from MEE shall be reuse.</p>	<p>drain for deep sea disposal via CETP. Condensate (175 m³/day) from MEE shall be reused.</p>	<p>Condensate (175 m³/day) from MEE shall be reused.</p> <p>We have obtained membership from CETP/GIDC Pipeline, Saykha to discharge the treated effluent of 434 m³/day into CETP/GIDC Pipeline, saykha.</p>
2	<p>Point No. A. Specific Condition No. i</p>	<p>Zero Liquid Discharge shall be ensured by the project proponent.</p>	<p>Total water requirement will be 972 m³/day of which fresh water requirement of 797 m³/day and will be met from GIDC Water Supply. Treated Effluent (434 m³/day) will be sent to GIDC drain for deep sea disposal via CETP. Condensate (175 m³/day) from MEE shall be reused.</p>	<p>Economic Viability w.r.t Cost is main concern for ZLD and Availability of Water in this area is quite good. To achieve ZLD is a matter of huge finance. Industries cannot afford ZLD technologies as the cost of the project goes too high. We have checked the Cost feasibility.</p> <p>Design of ZLD plants is a big challenge as it varies in different Industries for efficient operation and successful results. There is no space available for maintaining total ZLD in the company.</p> <p>Total wastewater generation is 634 m³/day. We want to discharge treated effluent only 434 m³/day out of 634 m³/day. Total ZLD is not possible because of capital cost of ZLD is very huge.</p> <p>We shall not reuse total treated wastewater due to cross contamination of different type wastewater generated from different products like fungicides, herbicides and insecticides as EU & USA do not allow any impurity in products. More than</p>

				<p>90% of our production is exported.</p> <p>ZLD is very difficult in pesticide Industries due to its very complex streams. If cross contamination will occur, then exported products will be rejected and it may result in huge financial loss to us and we & our country shall not earn foreign currency.</p> <p>We have taken loan of Rs. 100 Crores from Bank for the Plant and financial condition of our company is poor due to present slow down in the market.</p> <p>We cannot survive in international Market with ZLD condition due to high competition from global players.</p> <p>Due to ZLD condition, we may lose export orders and foreign currency.</p> <p>Due to this, We shall discharge the treated effluent 434 m³/day into CETP, Saykha/GIDC Pipeline, So that total fresh water requirement will increase from 363 m³/Day to 797 m³/Day.</p>
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The Committee after detailed deliberations **recommended** for amendment in EC as proposed by the project proponent. All other terms and conditions shall remain unchanged.

Agenda No. 26.7 Any other Items with permission of the Chair

Subsequent to the review meeting with MoP&G held on 13.11.2020, Secretary (EFCC) desired that Ministry should review the requirement of EC for the oil and gas transportation pipeline (crude and refinery/petrochemical products), passing through national parks/ sanctuaries/coral reefs/ecologically sensitive areas

including LNG Terminal as per the category 6(a) schedule of EIA Notification, 2006. Secretary (EFCC) desired that IA (Policy) Division should take up this task.

2. The matter was forwarded to IA Policy Division for their views.

3. IA Policy Division has stated That, *"The projects and activities in respect of oil and gas transportation pipeline (crude and refinery/petrochemical products), passing through national parks/ sanctuaries/coral reefs/ecologically sensitive areas including LNG Terminal are covered under Category-A under item number 6(a) schedule of the EIA Notification, 2006. During the review of the EIA Notification, 2006, the Expert committee has not suggested any changes in the provisions in this regard in draft EIA, 2020. However, to refer back the matter to the expert committee of Policy division, it is to inform that, at present, the tenure of the committee completed.*

Therefore, they requested the Industry-II sector to provide their views and inputs before taking up of the matter further. If required, the concerned division may take up to sectoral EAC for providing the recommendations on requirement of EC or re-categorisation".

Therefore, this case was placed before this EAC.

The EAC deliberated the case and it is observed that:

- Transportation of oil and gas petrochemicals, are through closed pipeline network with almost nil chances of leakage /spillage which may have no impact on ecology & biodiversity of the region.
- Pipelines are designed with sound engineering & best international practices/standards/codes which take care of engineering controls. Effective administrative controls are also in place like effective maintenance through regular Inspection Reporting Requirement (IRR) procedure, adhering to Standard Operating Procedure (SOP) of pipelines and compliance to prevailing OISD guidelines.
- Pipelines are designed, constructed and operated as per international codes, standards & guidelines i.e. ASME 31.4 for Liquid Pipelines & ASME 31.8 for Gas Pipelines, OISD-STD-139, OISD-STD-141 and OISD-233 for effective maintenance, inspections and surveillance to prevent disasters. Pipelines are replaced based on their residual life analysis.
- All trunk pipelines are catholically protected.
- Leakage Detection System (LDS) & Pipelines Intrusion Detection System (PIDS) in oil trunk pipelines are being used to curb pipelines leakages and pilferages.

In view of the above, illustrated safety measures in place, there is no likelihood of any oil spillage which may adversely impact the surrounding environment. Hence, it is suggested to re-categorize the subject pipelines, outside the purview of EC.

Note: The view of one of the EAC member Sh. Satish Chander Mann was somewhat different and is recorded as follows:

"While I agree with safety measures being taken by oil& gas pipeline projects but still I believe there are some adverse impacts of such projects while passing through ecological sensitive areas such as impact on biodiversity, flora/ fauna due to accidental leakages from pipelines, air emissions, noise etc. generated from DG sets installed in booster stations located after specific distances etc. In view of these environmental impacts such projects may be categorized as category B projects being dealt by SEIAA at State level."

The meeting ended with thanks to the Chair.

GENERAL CONDITIONS

- (i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iii) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (iv) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (v) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (vi) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (vii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

- (viii) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
- (ix) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at <https://parivesh.nic.in/>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- (x) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- (xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

List of the Expert Appraisal Committee (Industry-2) members participated during Video Conferencing (VC) meeting

S. No.	Name and Address	Designation
1.	Dr. J. P. Gupta	Chairman
2.	Shri R. K. Singh	Member
3.	Shri Ashok Agarwal	Member
4.	Dr. Y.V. Rami Reddy	Member
5.	Shri S.C. Mann	Member
6.	Dr. I. Indrasena Reddy	Member
7.	Dr. T. K. Joshi	Member
8.	Dr. J. S. Sharma	Member
9.	Dr. Uma Kapoor, CGWA	Member
10.	Shri Dinabandhu Gouda, CPCB	Member
11.	Sh. Ashok Kr. Pateshwary, Director, MoEFCC	Member Secretary
MoEFCC		
12.	Dr. Mahendra Phulwaria	Scientist 'C'
13.	Sh. Kanaka Teja	Research Assistant
