Minutes of 35th meeting of Expert Appraisal Committee (Industry-2) held during 27-28 March, 2018 at Indira Paryavaran Bhawan, Jorbagh Road, Ministry of Environment, Forest and Climate Change, New Delhi - 3

Day 1: 27th March, 2018

35.1 Opening Remarks by the Chairman

35.2 Confirmation of minutes of the 34th meeting of the EAC (Industry-2) held on 26-28 February, 2018 at Indira Paryavaran Bhawan, New Delhi.

The EAC, having taken note that no comments were offered on the minutes of its 34th meeting held on 26-28 February, 2018 at New Delhi, confirmed the same.

35.3 Environmental Clearance

Agenda No.35.3.1

Expansion of Synthetic Organic Chemicals and Coal based power plant (76 MW) by M/s Sree Rayalaseema Alkalies and Allied Chemicals Limited at Survey No.51/1, 2A, 2B, 2C1, 2C2, 2C3, 56/1, 58/1, 59/1, 60, 62/3/2D2, 2C1/A2, 2C1/A3, 2C2/C, 2G/1, 2E, 2F, 1A, 1B, 62A, 62 B, 63, 64, 70/C2, 72/P, Village Gondiparla, Mandal and District Kurnool (Andhra Pradesh)

[IA/AP/IND2/50625/2016, J-11011/84/2016- IA II(I)]

35.3.1.1 The project proponent and the accredited consultant M/s Team Labs and Consultants, made a detailed presentation on salient features of the project and informed that:

(i) The proposal is for environmental clearance of expansion of Chlor-Alkali and Synthetic Organic Chemicals manufacturing unit at Sy. No. 51/1, 2A, 2B, 2C1, 2C2, 2C3, 56/1, 58/1, 59/1, 60, 62/3/2D2, 2C1/A2, 2C1/A3, 2C2/C, 2G/1, 2E, 2F, 1A, 1B, 62A, 62 B, 63, 64, 70/C2, 72/P, Gondiparla village, Kurnool mandal and district, Andhra Pradesh by M/s Sree Rayalaseema Alkalies and Allied Chemicals Limited.

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 7th EAC meeting held during 28-29th April, 2016 and recommended Terms of References (ToR) for the Project. The ToR has been granted by Ministry vide letter No. J-11011/84/2016 - IA II (I) dated 21st June, 2016.

(iii) All Chlor-Alkali and Synthetic organic chemicals manufacturing units located outside notified industrial area are listed at 4(d) and 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Ministry had issued EC earlier vide letter No.J-11011/619/2009-IA II (I) dated 14th February, 2012 for Synthetic Organic Chemicals manufacturing unit to include chloromethanes in the existing chlor alkali complex of M/s Sree Rayalaseema Alkalies and Allied Chemicals Limited.

(v) Existing land area is 152.4 ha land will be used for proposed expansion. Industry is already developed greenbelt in an area of 58.42% i.e., 89.03 ha out of 152.4 ha of area of the project site.

(vi) The estimated project cost for proposed expansion is Rs.360 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.8 crores and the Recurring cost (operation and maintenance) will be about Rs.6.52 crores Per annum.

(vii) Total employment will be 350 persons as direct and 300 persons indirect after expansion. Industry proposes to allocate Rs.9 crores @ 2.5% towards Corporate Social Responsibility.

(viii) It is reported that no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River/water body Tungabadra River is passing from NW to SE at 1.5 km in the south.

Interstate boundary between Telangana and Andhra Pradesh is at a distance of 1.3 km in northeast direction. There are two reserve forests in the study area. Gadidmadugu RF at a distance of 5.5 km in the east. Pullaiah RF at 9.3 km in the Southwest.

(ix) Ambient air quality monitoring was carried out at Nine locations during December 2016 to February 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (31 - 56 µg/m^3), $PM_{2.5}$ (14 - 26 µg/m^3), SO_2 (9 - 16 µg/m^3) and NO_2 (9 - 16 µg/m^3) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLC_S after the proposed project would be 11.53 µg/m^3, 5.79 µg/m^3 and 5.89 µg/m^3 with respect to $PM_{10,}$ SO_X and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(x) The total water requirement is 15684 KLD out of which 15167 KLD will be fresh water and 517 KLD is recycled water. The required water is drawn from Tungabadra River through infiltration wells. The unit obtained permission to abstract water from Tungabhadra River in the order of 20 MLD.

(xi) Total effluent of 1754 m^3/day will be treated in Effluent Treatment Plant followed and treated wastewater reused for process and greenbelt development. Rejects from effluent RO used for brine saturation.

(xii) Power requirement after expansion will be 125 MW including existing 75 MW and will be met from AP Transco and captive power plant. Existing unit has standby DG sets of capacity 5 x 6.2 MW, 1 x 160 kVA, 1 x 285 kVA, 1x 400 kVA and 1 x 500 kVA, additionally 1 x 500 kVA DG set is proposed as standby during power failure. Stack (height 5 m) will be provided as per CPCB norms to the proposed DG set of 1 x 500 kVA in addition to existing DG sets stack (height 3 m for 160 kVA, 3 m for 285 kVA, 4m for 400 kVA and 5 m for 500 kVA) which will be used as standby during power failure.

(xiii) No additional boiler proposed for expansion. Existing unit has 1 x 110 TPH, 1 x 100 TPH, 1 x 45 TPH coal fired boilers, 1 x 3 TPH oil fired boiler (standby), 1 x 3 TPH oil and hydrogen gas fired boiler and 1 x 3 TPH Waste heat recovery boiler. Electro Static Precipitators and stack with height of 89 m, 69 m and 55 m for 1 x 110 TPH, 1 x 100 TPH, 1 x 45 TPH coal fired boilers respectively are installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm^3).

(xiv) The gaseous emissions from Chlor-Alkali process are Chlorine and Hydrogen Chloride vapors. Scrubbers are provided to neutralize sniff gases effectively. The secondary gaseous pollutant from chloro-alkali plant is hydrogen chloride gas emissions. To avoid emissions in the plant, tail gas vents are connected to a water scrubber and the lean acid formed is used for absorption of Hydrogen chloride gas in absorber.

The gaseous emission from Chloromethane plant is chlorine and hydrogen chloride vapours. HCl gas produced from thermal chlorination unit is used to produce methyl chloride. Excess HCl available is absorbed in HCl absorber to produce 32% HCl. To avoid emissions from HCl absorber, tail gas vents are connected to a tail gas tower followed by organic stripper to remove organics. The gaseous emission from Chlorodifluoromethane plant is HCl which is sent to Hydrochloric acid absorption system, to produce 28 to 30% HCl.

(xv) Sludge is generated during brine purification stage. Barium sulphate is being recovered presently and it is proposed to recover sodium sulphate additionally, which are sold as by products. The sludge generated form effluent treatment plant will be disposed to landfill which contains mostly inorganics. Used silica gel, calcium chloride, Calcium Fluoride, Antimony Pentoxide and Spent sulfuric acid are the wastes generated from the Chloromethane and Chlorodifluoromethane process. Used silica gel and calcium chloride are sent to secured landfill within plant premises. Spent sulfuric acid sold as by-product and Calcium Fluoride is sold to hydrogen fluoride manufacturers. Waste oil and used batteries from the DG sets are sent to authorized recyclers. Other solid wastes expected from the unit are containers, empty drums which are returned to the product seller or sold to authorized buyers after detoxification. Coal ash from boiler is sold to brick manufacturers.

(xvi) Public Hearing for the proposed project has been conducted by the Andhra Pradesh Pollution Control Board on 29.11.2017 at 11.00 AM near the existing unit premises.

(xvii) The certified compliance letter from the regional office of MoEFCC, Chennai is obtained vide letter no. 29.09.2016/1927 dated 28th September, 2016

(xviii) List of proposed manufacturing capacities are as under:

Manufacturing Capacity

S. No.	Product Name	Unit	Production Capacity		
			Existing	Proposed	Total
I. Chlor-Alkali Plant					
1	Caustic Soda Lye (Or) Flakes Potassium Hydroxide Lye (or) Flakes (100 % basis)	TPD	520	500	1020
2	Hydrochloric Acid (100%)	TPD	173	140	313
3	Liquid Chlorine	TPD	300	300	600
4	Sodium Hypochlorite (100% Cl_2 basis)	TPD	8	7	15
5	Barium Sulphate	TPD	5	5	10
6	Potassium carbonate	TPD	50	--	50
7	Sodium Sulphate	TPD	--	10	10
II. Chloromethanes					
1	Methyl Chloride	TPD	0.45	10	10.45
2	Methylene Chloride	TPD	61	61	122
3	Chloroform	TPD	56	46.45	102.45
4	Carbon tetrachloride*	TPD	7.6	7.6	15.2
5	Hydrochloric Acid (100 %)	TPD	23.5	23.5	47
III. Chlorodifluoromethane					
1	Chlorodifluoromethane (R22)	TPD	--	10	10
2	Hydrochloric Acid (100 %)	TPD	--	8.27	8.27
IV. Captive Power Plant					
1	Captive Power Plant (Coal based)	MW	76	--	76
2	Power generation Furnace Oil**	MW	31	--	31

V. Oil and Fatty Acid Division					
1	Oil and Fatty Acid Products (Non EC Products)	TPD	498	--	498

**Carbon Tetrachloride (CCl_4) generated will be sold as a feed stack to Authorized users/excess will be incinerated.*

*** Shall be kept as standby.*

List of Utilities

S.No	Description	Existing	Proposed	Total after expansion
1	Coal Fired Boiler	110 TPH	-	110 TPH
		100 TPH	-	100 TPH
		45 TPH	-	45 TPH
2	DG Sets**	5 x 6.2 MW	-	5 x 6.2 MW
		1 x 160 kVA	-	1 x 160 kVA
		1 x 285 kVA	-	1 x 285 kVA
		1 x 400 kVA	-	1 x 400 kVA
		1 x 500 kVA	1 x 500 kVA	2 x 500 kVA
3	Oil and H2 fired boiler*	3 TPH	-	3 TPH
4	WHRB connected to DG sets*	3 TPH	-	3 TPH
5	Oil fired boiler*	3 TPH	-	3 TPH

** DG sets will be used during load shut down by AP TRANSCO*

35.3.1.2 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion of Chlor-Alkali Plant from 820 TPD to 1620 TPD and Synthetic Organic Chemicals (Chloromethanes/Chloro-difluoromethane) from 117.45 TPD to 244.90 TPD by M/s Sree Rayalaseema Alkalies and Allied Chemicals Limited in a total area of 152.4 ha at Sy. No.51/1, 2A, 2B, 2C1, 2C2, 2C3, 56/1, 58/1, 59/1, 60, 62/3/2D2, 2C1/A2, 2C1/A3, 2C2/C, 2G/1, 2E, 2F, 1A, 1B, 62A, 62 B, 63, 64, 70/C2, 72/P, Village Gondiparla, Mandal and District Kurnool (Andhra Pradesh).

The project/activity is covered under category A of item 4(d) 'Chlor-Alkali industry' and 5(f) 'Synthetic organic chemicals 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 21st June, 2016. Public hearing was conducted by the SPCB on 29th November, 2017.

The total water requirement is estimated to be 15167 KLD out of which fresh water demand of 14650 KLD shall be met from Tungabadra river through infiltration wells. Remaining 517 KLD shall be obtained from recycled water. The unit has already obtained permission to abstract water from Tungabhadra River of 20 MLD from the concerned regulatory authority.

Total effluent generated from different industrial operations is estimated to be 1754 KLD, which will be taken to the Effluent Treatment plant for treatment. The treated water shall be reused for process units and greenbelt development. There will be no discharge of treated/untreated waste water from the unit, and thus conforming to Zero Liquid Discharge.

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 details of earlier environmental clearances issued by the Ministry are as under:-

- EC dated 26th December, 2007 for chloro-alkali plant of capacity 820 TPD and coal based captive power plant of 76 MW (Also by-products namely HCl-173 TPD, NaClO-8 TPD, $BaSO_4$-5 TPD, K_2CO_3-50 TPD),
- EC dated 14th February, 2012 for manufacturing Synthetic Organic Chemicals/ Chloromethane (Methyl Chloride, Methylene Chloride & Chloroform) of capacity 117.45 TPD (Also by-products namely, CCl_4-7.6 TPD, HCl-23.5 TPD)

The monitoring report on compliance status of conditions in respect of above ECs, has been forwarded by the Regional Office at Chennai vide letter dated 28th September, 2016, which is found to be satisfactory.

Consent to operate for the present industrial operations has been obtained from the State PCB, which is presently valid up to 31st August, 2021.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *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.*
- *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 98% recovery.*
  - *(iv) Solvents shall be stored in a separate space specified with all safety measures.*
  - *(v) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - *(vi) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  - *(vii) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*

- *Total fresh water requirement shall not exceed 15167 cum/day to be met from Tungabadra River through infiltration wells. 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. 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 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:-*
  (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 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 held on 29th November, 2017 shall be satisfactorily implemented.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.*

Agenda No.35.3.2

Expansion of Pesticides, Herbicides, Fungicides and Intermediates manufacturing by M/s Mega Innovative Crops Pvt Ltd at Plot No.415, GIDC Industrial Estate Panoli, District Bharuch (Gujarat)

[IA/GJ/IND2/61950/2017, IA-J-11011/48/2017-IA-II]

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

(i) The proposal is for environmental clearance to the project having expansion at the existing premises by M/s Mega Innovative Crops Pvt Ltd located at Plot No. 415, Notified GIDC Industrial Estate, Panoli, District Bharuch (Gujarat).

(ii) The project was considered by the Expert Appraisal Committee (Industry-2) in its 20th meeting held during 27th February, 2017 and recommended Terms of References (ToR) for the project. The ToR has been granted by Ministry vide its letter No. J-11011/48/2017-IA II (I); dated 7th July, 2017.

(iii) All project is listed at S.N. 5 (b) of the schedule to the Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Ministry had issued EC earlier vide letter No. J-11011/425/2008-IA-ll(I) dated 24th October, 2008 to existing project of pesticides and agro chemicals unit in favour of M/s Mega Innovative Crops Pvt Ltd.

(v) Existing land area is 5000 sqm, no additional land will be used for proposed expansion. Industry will develop greenbelt in an area of 33% i.e., 1436.51 sqm (inside premises) + 228.63 sqm (outside premises) - 1665.14 sqm (total) out of total area of the project.

(vi) The estimated project cost is Rs.16.04 Crore (for expansion only). Total capital cost earmarked for pollution control measures is Rs.1.65 Crore and the recurring cost (operation and maintenance) will be about Rs.76 lakh per annum.

(vii) Total employment will be 65 nos. persons as company employee & 40 nos. persons contract employees after expansion. Industry proposes to allocate Rs 40 Lakh @ 2.5% of total project cost towards Corporate Social Responsibility.

(viii) There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. Narmada river is flowing at 12.22 Km in North and Amravati River is flowing at a distance of 10.62 Km in North East.

(ix) Ambient air quality monitoring was carried out at 9 (including project site) locations during February 2017 to April 2017 and the baseline data indicates that ranges of concentrations as: PM_{10} (74-91 µg/m^3), $PM_{2.5}$ (19-33 µg/m^3), SO_2 (19-26 µg/m^3) and NO_x (21-32 µg/m^3) (98th percentile values) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 0.094 µg/m^3, 0.083 µg/m^3 and 0.611 µg/m^3 with respect to PM_{10}, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(x) Total water requirement is 78 m^3/day of which fresh water requirement is 63 m^3/day and will be met from GIDC. The total industrial effluent after proposed expansion shall be 17 KLD.

During appraisal of the proposal during 20th meeting of EAC (Industry - 2) held on 27-02-2017, specific ToR (No. iii) was accorded by the committee to commit for Zero Liquid Discharge of effluent generated from expansion.

To comply with this ToR, proponent has proposed to implement following two ways of treatment and disposal of effluent: -

1. To upgrade existing MEE plant from 10 KLD to 20 KLD for recycling additional effluent of 8 KLD generated from proposed expansion. Approx. 15 KLD MEE condensate shall be available for recycle back to process, washing and utility uses thereby reducing the GIDC water consumption to 63 KLD instead of 78 KLD.
   OR

2. To send all industrial effluent to Common Spray Dryer Project of Panoli Industries Association (PIA), unit has obtained membership of this project, copy attached as Annexure - 8.

Status of Common Spray Dryer Project of Panoli Industries Association (PIA) as on 30-12-2017: The project is under construction and is expected to be operational by end of 2018.

- In this manner, there shall be no effluent discharge from the unit and unit shall remain zero discharge unit after expansion
- 8 KLD domestic effluent shall be disposed off through soak pit via septic tank.

(xi) Power requirement after expansion will be 950 KVA including existing 650 KVA and will be met from Dakshin Gujarat Vij Company Ltd. (DGVCL). Existing unit has One (1) no. D.G. set of 320 KVA is presently installed at site (on rent basis), additionally This D.G set shall be permanently installed after proposed expansion and will be used as standby during power failure. Stack (4.7 m) will be provided as per CPCB norms to the proposed DG sets

(xii) The existing Hot water unit of 2,00,000 kcal/hr shall be continued after expansion

- Proposed new Hot water units:- 2 Nos. Hot water units of 2,00,000 kcal/hr + 1 No. Hot water unit of 4,00,000 kcal/hr
- Proposed new Thermic fluid heaters:- 1 Nos. of 2,00,000 kcal/hr + 1 No. of 4,00,000 kcal/hr

Flue Gas Stacks after proposed expansion

Stack No.	Stack Attached to	Capacity / Remarks	Name of fuel	Quantity of fuel used	Air Pollution Control Measures (APCM)	Stack Height in Meter (From G.L.)	Parameters	Permissible Limits	Unit
1. (Existing)	Hot Water Unit (Existing)	Hot water unit (1 no.) 2,00,000 kcal/hr (Existing)	Natural gas	550 Nm^3/day	Not required as Natural Gas is used as fuel	12	PM SO_2 NOx	150 100 50	mg/Nm^3 ppm ppm
	Hot Water Unit (new)	Hot water unit (1 no.) 2,00,000 kcal/h (new)							
	Hot Water Unit (new)	Hot water unit (1 no.) 2,00,000 kcal/h (new)							
2. (New)	Thermic Fluid Heater	Thermic Fluid Heater (1 no.) 2, 00,000 Kcal/hr (new)	Natural gas	600 Nm^3/day	Not required as Natural Gas is used as fuel	12	PM SO_2 NOx	150 100 50	mg/Nm^3 ppm ppm
		Thermic Fluid Heater 4, 00,000 kcal/hr (new)							
3. (New)	Hot Water Unit	Hot water unit (1 no.)	Natural	350 Nm^3/d	Not required	12	PM SO_2	150 100	mg/Nm^3

		4,00,000 kcal/hr (new)	gas	ay	as Natural Gas is used as fuel		NOx	50	ppm ppm
4. (New)	D.G. Set	D.G. Set (320 kVA) (standby) ##	Diesel	80 L/h	Not required	4.7	PM SO_2 NOx	150 100 50	mg/N m^3 ppm ppm

D.G. set (320 kVA) is presently installed at site (on rent basis) and is used as a stand-by power source for emergency operations only. This D.G set shall be permanently installed after proposed expansion.

(xiii) Process Gas Emission after proposed expansion:

- HCl and HBr emissions at existing MPP (multipurpose plant) shall increase after proposed expansion
- One more set of Water and Alkali Scrubber shall be provided for increased load of HCl emissions
- Existing Water and Alkali Scrubber shall be adequate for controlling HBr emissions after proposed expansion
- One new Multipurpose plant shall be constructed for proposed expansion and HCl emissions from new plant shall be controlled by providing 2 sets of Water + Alkali scrubber systems.
- There is no new process emission from proposed new products.

Process emission stacks and pollution control systems after proposed expansion:

Stack No.	Stack Attached to	Name of Process / Plant	Air Pollution Control System	Height (m)	Air Emission	
					Pollutant	Permissible Limit
1. (Existing)	Reaction Vessels	MPP Plant 1 (Existing)	Water and Alkali Scrubber (2 nos.) (1 Existing set +1 additional set for proposed expansion)	15	HCl	20 mg/Nm^3
2 (Existing)	Reaction Vessels	MPP Plant 1 (Existing)	Water and Alkali Scrubber (1 set)	15	HBr	30 mg/Nm^3
3 (New)	Reaction Vessels	MPP Plant 2 (New)	Water and Alkali Scrubber (2 sets)	15	HCl	20 mg/Nm^3

Final solutions obtained from scrubbers and their disposal

- Quantity of 30-35% HCl Solution generated from scrubbing of HCl shall increase after proposed expansion
- It shall be used for captive consumption or It shall be sold to authorized actual users as far as possible and if total quantity is not sold, it shall be converted partially or totally to Calcium Chloride ($CaCl_2$) solution or $CaCl_2$ solid by reacting with lime.
- $CaCl_2$ solution or $CaCl_2$ solid so obtained shall be sold to authorized actual users.
- About 10 - 15 % Potassium Bromide solution is obtained from scrubbing of HBr which is crystallized, dried and sold as by-product to authorized actual users

(xiv) Proposed Hazardous waste list:-

S. No.	Type of Waste as per schedule of HW rules, 2016	Form of Waste	Sch.	Category (As Per Sch. of HW rules 2016)	Quantity Per Annum		Source of Generation	Mode of Storage	Mode of Treatment & Disposal
					Existing qty.	Total Qty after expansion			
1.	Empty barrels/ containers/ liners/ contaminated with hazardous chemicals/ waste	Discarded Bags	I	33.1	100 Nos.	24000 Nos. i.e. 4.8 MT	Raw material containers / bags	At separate area	Collection, storage, Transportation & Decontamination and reused OR sold to registered recycler
2.	Empty barrels/ containers/ liners/ contaminated with hazardous chemicals/ waste	Discarded containers	I	33.1	15 Nos.	7200 Nos. i.e. 144 MT			
3.	Sludge containing residual pesticides	ETP / MEE Sludge	I	29.2	36 MT	120 MT	From ETP / MEE	In bags in separate area	Collection, Storage, Transportation & shall be disposed at common TSDF site.
4.	Process wastes or residues	Process residue	I	29.1	24 MT	120 MT	From process	In bags in separate areas	Collection, Storage, Transportation & sent to CHWIF
5.	Distillation Residues	Residue after distillation	I	20.3	12 MT	120 MT	From process		Collection, Storage, Transportation and sent for co-processing or to CHWIF
LIST OF BY-PRODUCTS INCLUDED IN HAZARDOUS WASTE									
6.	--	Sodium chloride (Purity = 80-90%)	--	--	240 MT	600 MT	By-product from process	In bags in separate area	Collection, Storage, Transportation and sold to authorized actual users having authorization with valid

									CCA and rule 9 permission to receive this waste / or sent to TSDF
7.	Inorganic Acids	30-35% Hydrochloric acid sol. (Note 1) OR	II	B15	1050 MT	1900 MT	As scrubbing solution	In drums/ bags in separate areas	Collection, Storage, Transportation and captive consumption or sell to authorized users having authorization with valid CCA and rule 9 permission to receive this waste
	Halogen-containing compounds which produce acidic vapours on contact with humid air or water e.g. silicon tetrachloride, aluminum chloride, titanium tetrachloride	Calcium chloride solution (30%) OR	II	B10	1400 MT	1900 MT			
	Halogen-containing compounds which produce acidic vapours on contact with humid air or water e.g. silicon tetrachloride, aluminum chloride, titanium tetrachloride	Calcium chloride solid (Purity = 80-90%)	II	B10	600 MT	780 MT			
8.	Halogen-containing compounds which produce acidic vapor on contact with humid air or water e.g. silicon tetrachloride, aluminium chloride, titanium tetrachloride	Aluminium chloride hexahydrate solution (45-48%)	II	B10	1440 MT	3520 MT	By-product from process	In storage tank	Collection, Storage, Transportation and sell to authorized users having authorization with valid CCA and rule 9 permission to receive this waste
9.	--	Sodium	--	--	--	1310	By-	In	Collection,

		Sulphate purity= 80-90%				MT	product from process	bags in separate area	Storage, Transportation and sell to authorized users having authorization with valid CCA and rule 9 permission to receive this waste

(xv) M/s Mega Innovative Crops Pvt Ltd is an existing unit located in the Notified industrial estate GIDC Panoli. Hence Public hearing is exempted under the provisions as per Para 7 Stage III (3)(i)(b) of the EIA Notification, 2006.

(xvi) EC compliance Certificate is issued having file No.5-8/2009 (पर्या)/1487 dated 8th January, 2018.

(xvii) Product List is as under:

S. No	Products	CAS No.	EC available (MT / Annum)	EC applied for additional / new production MT / Annum	Total after EC expansion MT / Annum	End Use	Remarks	Category as per EIA Notification, 2006 (Note 1)	LD50 oral mg/kg
1.	Hexaconazole or its Intermediates	79983-71-4	360	1140 MTA (Either individual or total of all products from sr. no. 1 to 3 except 1,2,4 Triazole)	1500 MTA (Either individual or total of all products from sr. no. 1 to 16)	Fungicide	Existing Products To be continued except 1,2,4 Triazole which is applied for discontinuation (i.e Withdrawal from product list)	5(b)	612 mg/kg Mouse
	a. Valerophenone	61023-66-3				Intermediate		5(f)	6071mg/kg Rat
	b. Oxirane (2-butyl-2-(2,4-Dichlorophenyl) oxirane)	88374-07-6				Intermediate		5(f)	6071mg/kg Rat
	c. 1,2,4 Triazole *(applied for discontinuation (i.e withdrawal from product list)*	288-88-0				Intermediate		5(f)	1,648 mg/kg Rat
2.	Metalaxyl or its Intermediates	57837-19-1				Fungicide		5(b)	566 mg/kg Rat
	a. Methyl 2-N-(2,6 Dimethyl phenyl) Alaninate	52888-49-0				Intermediate		5(f)	Data not available
3.	Propiconazole or its Intermediates	60207-90-1				Fungicide		5(b)	1,517 mg/kg Rat
	a. 1,2-Pentanediol	5343-92-0				Intermediate		5(f)	12,700 mg/kg

									Rat
	b. Chloroacetophenone	2234-16-4				Intermediate		5(f)	1800 mg/kg Rat
	c. Bromoketal	60207-89-8				Intermediate		5(f)	980 mg/kg Rat
4.	Pretilachlor or its Intermediates	51218-49-6	600	900 MTA		Herbicide		5(b)	2,200 mg/kg Rat
	• .2,6 Di ethyl N-2 (propxyethyl) aniline	61874-13-3				Intermediate		5(f)	980 mg/kg Rat
5.	Tebuconazole	107534-96-3	--	1500 MTA (Either individual or total of all products from s. no. 6 to 16)		Fungicide	Proposed New Products	5(b)	1,700 mg/kg Rat
	a. 2-[2-(4-Chlorophenyl)ethyl]-2-(1,1-dimethyl ethyl)-oxirane	80443-63-6	--			Intermediate		5(f)	1,700 mg/kg Rat
6.	Imidacloprid	138261-41-3	--			Insecticide		5(b)	410 mg/kg Rat
7.	Tricyclazole	41814-78-2	--			Fungicide		5(b)	250 mg/kg Rat
8.	Thiamethoxam	153719-23-4	--			Insecticide		5(b)	1,563 mg/kg Rat
9.	Difenoconazole	119446-68-3	--			Fungicide		5(b)	1,453 mg/kg Rat
10	Myclobutanil	88671-89-0	--			Fungicide		5(b)	1,600 mg/kg Rat
11	Thiophanate methyl	23564-05-8	--			Fungicide		5(b)	6,640 mg/kg Rat
12	Fipronil	120068-37-3	--			Insecticide		5(b)	97 mg/kg Rat
13	Metalaxyl M	70630-17-0	--			Fungicide		5(b)	Data not available
14	Metribuzin	21087-64-9	--			Herbicide		5(b)	1,100 mg/kg Rat
15	Imazethapyr	81335-77-5	--			Herbicide		5(b)	> 5,000 mg/kg Rat
16	Clodinafop-Propargyl	105512-06-9	--			Herbicide		5(b)	1,392 mg/kg Rat
	a. Propargyl chloride	624-65-7	--			Intermediate		5(f)	Data not available
Total			**1140 (incl**	**--**	**1500**				

			udin g Sr. No. 17)						
17	Glyphosate or its Intermediate *(applied for discontinuation (i.e withdrawal from product list)*	1071-83-6	180#	--	--	Herbicide	Existing Products to be Discontinued *applied for discontinuation (i.e Withdrawal from product list)*	5(b)	5,000 mg/kg Rat
	a. N-(Phosphono methyl) Imino diacetic acid *(applied for discontinuation (i.e withdrawal from product list)*	5994-61-6						5(f)	Data not available

- *Format of Brief summary for Amendment/Extension of validity of EC/ToR proposals: Not applicable for this project*

35.3.2.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Pesticides, Herbicides, Fungicides and Intermediates manufacturing from the present capacity of 1140 TPA to 1500 TPA by M/s Mega Innovative Crops Pvt Ltd in a total area of 5000 sqm at Plot No. 415, Notified GIDC Industrial Estate, Panoli, District Bharuch (Gujarat).

The project/activity is covered under category A of item 5(b) 'Pesticide industry and pesticide specific intermediates' of Schedule of Environmental Impact Assessment (EIA) Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 7th July, 2017 with the exemption from public hearing under the provisions as per Para 7 Stage III (3)(i)(b) of the EIA Notification, 2006.

Total water requirement is estimated to be 78 m^3/day of which fresh water demand of 63 m^3/day is to be met from GIDC water supply.

Total effluent generated from different industrial operations is estimated to be 15 KLD, which will be taken to the Effluent Treatment plant followed by MEE for treatment. The treated water shall be reused in the plant. There will be no discharge of treated/untreated waste water from the unit, and thus conforming to Zero Liquid Discharge.

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 Ministry has earlier issued EC vide letter dated 24th October, 2008 to existing project of pesticides and agro chemicals unit in favour of M/s Mega Innovative Crops Pvt Ltd. The monitoring report on compliance status of existing EC conditions, has been forwarded by the Ministry's Regional Office vide letter dated 8th January, 2018, which is found to be satisfactory.

Consent to operate for the existing products/utilities have been obtained from the State PCB, which is presently valid up to 9th June, 2020.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *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.*
- *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 98% 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 63 cum/day to be met from GIDC water supply. 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. 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 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:-*
  - *(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 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 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.*

Agenda No.35.3.3

Storage of LPG (3 X 350 MT) Mounded Storage Vessels by M/s Hindustan Petroleum Corporation Ltd at Panapur & Kubeya, Tehsil Harsidhi, District East Champaran (Bihar)

[IA/BR/IND2/71618/2016, SIA/BR/IND2/17861/2016]

35.3.3.1 The project proponent and the accredited consultant M/s Hindustan Petroleum Corporation Ltd made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for environmental clearance to the project storage of LPG in 3 x 350 MT MSVs by M/s Hindustan Petroleum Corporation Ltd at Sy. No: 1, 1/2066, 5, 6, 201, 206, 207, Panapur and Kubeya Village, District East Champaran (Bihar)

(ii) The proposal was considered by the State Expert Appraisal Committee, Bihar its meeting held during 11.02.2017and recommended Terms of Reference (ToRs) for the project. The ToR has been issued by SEIAA, Bihar vide letter no.535 Patna-23 dated 16th February, 2017.

(iii) All Category B projects are listed at S.N. 6(b)of schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC), and in the absence of a duly constituted SEIAA & SEAC, category 'B' project shall be treated as a category 'A' project. As the SEAC/SEIAA, Bihar is dissolved, therefore, we are submitting the EC documents to MoEF&CC, New Delhi.

(iv) Total land area is 30 acres, for proposed project. Industry is already/will develop greenbelt in an area of 33% i.e., 11 acres out of 30 acres of area of the project. The estimated project cost is Rs.136.4 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.95 lakhs and the recurring cost (operation and maintenance) will be

about Rs. 25 Lac. Total employment will be100nos. of direct & indirect employees. Industry proposes to allocate Rs.160 lakhs@ 2.5% towards corporate social responsibility.

(v) There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km distance from the project site. River/water body DVC Canal is flowing at a distance of 0.50 km.

(vi) Ambient air quality monitoring was carried out at 8locations during March' 17toMay' 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (66.8 to 55.6µg/m^3), $PM_{2.5}$ (30.6 to 23.8µg/m^3), and NO_2 (12.8 to 8.9µg/m^3) respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(vii) Total water requirement is 10.0m^3/day fresh water requirement and will be met from Bore well/Harsidhi Tehsil Water Supply. Treated effluent of 4.0KLD, will be treated through ETP plant will be based on Zero liquid discharge system

(viii) Power requirement contracted demand is 500 kVA and will be met from NBPCL. Proposed project will provide 2 x 500 kVA and 1x 125 kVA DG capacity used as standby during power failure. Stack Height: (5 m from roof top for both the DG sets) is provided as per the norms.

(ix) Details of solid waste/Hazardous waste generation and its management are as under:

S.No	Hazardous waste generation	Generation Quantity	Its Management
1	Waste oil	500 Ltrs/ annum	Disposed thru PCB approved recyclers
2	Used batteries	4-5 nos. /annum	Disposed thru PCB approved recyclers
3	Lubricating oil	300 Ltrs/annum	
4	Paint sludge	1000 Kg/annum	
5	Domestic solid waste	100kgs/day	Will be followed as per MSW Rules, 2016

(x) Public hearing for the proposed project has been conducted by the State Pollution Control Board on 07.11.2017.

(xi) The details of products and capacity as under:

S.No	Products	Quantity
1	Storage of LPG	3x350 MT
2	Bottling capacity	120TMTPA

35.3.3.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for LPG storage (3 x 350 MT) in Mounded Storage Vessels (MSVs) by M/s Hindustan Petroleum Corporation Ltd in a total area of 30 acres at Sy. No.1, 1/2066, 5, 6, 201, 206, 207, Village Panapur and Kubeya, District East Champaran (Bihar).

The project/activity is covered under category B of item 6(b) 'Isolated storage & handling of hazardous chemicals' of the schedule to the Environment Impact Assessment (EIA) Notification. However, due to SEIAA/SEAC non functional in Bihar at the time of application, the project was appraised at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The ToR for the project was granted been issued by SEIAA, Bihar on 16th February, 2017. Public hearing was conducted by SPCB on 7th November, 2017.

Total water requirement is 10 m^3/day proposed to be met from bore wells/Harsidhi Water Supply.

Total effluent generated from different industrial operations shall be taken to the Effluent Treatment plant for treatment. The treated water of 4 KLD shall be recycled/reused in process. There will be no discharge of treated/untreated waste water from the unit.

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.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *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 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.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment and the details along with time bound action plan shall be 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.*
- *The project proponent shall conduct a traffic density survey on the approach road to be used for transportation of LPG tankers and LPG cylinders.*
- *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.*
- *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.*
- *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.*

- *The norms/guidelines of Oil Industry Safety Directorate (OISD) for installation and design of equipment and operation of the LPG Bottling Plants shall be strictly followed. Safety audit to be carried out and report submitted to the Regional Office.*
- *No packing/loading/unloading of LPG cylinders shall be made on road/outside factory premises. Vehicles loaded/unloaded with LPG cylinders shall be parked inside the plant premises only and not on road sides.*
- *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.*
- *Sections of pipeline and storage systems that can be isolated with valves or blinds should be equipped with safety valves to protect against possible damage as liquid LPG expands with increases in temperature.*
- *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 has to be undertaken on regular basis to control the polluting particles.*

Agenda No.35.3.4

Adhesives (chemical) manufacturing unit for captive consumption by M/s Hindustan Adhesives Limited at village Bhadreshwar, Tehsil Mundra, District Kutch (Gujarat)

[IA/GJ/IND2/72011/2018, IA-J-11011/205/2017-IA-II(I)]

35.3.4.1 The project proponent and the accredited consultant M/s Perfact Enviro Solutions Pvt. Ltd, made a detailed presentation on the salient features of the project and informed that: -

(i) The proposal is for environmental clearance to the project Adhesive (Chemical) manufacturing unit by M/s Hindustan Adhesives Limited at Village Bhadreshwar, District Kutch (Gujarat).

(ii) The project proposal was considered by the Expert Appraisal Committee (industry-2) in its 23rd meeting held during 04.05.2017 and recommended Terms of References (ToR) of the project. The ToR has been issued by Ministry vide letter No.J-11011/205/2017-IA.II (I) dated 10.07.2017. Then, we have applied for Amendment in TOR for change in Plot area and project cost on 24.08.2017 and case was considered in 32nd EAC (industry-2) meeting held on 22.12.2017. Then ADS was generated for the proposal to submit fresh proposal for grant of Terms of Reference instead of amendment in ToR. Thus, fresh proposal for grant of ToR was uploaded vide proposal no. IA/GJ/IND2/72011/2018 on 02.01.2018 and Standard ToR was recommended vide letter no. IA-J-11011/205/2017-IA-II(I) dated 03.02.2018.

(iii) The project falls under item 5(f) of the Environmental Impact Assessment (EIA) Notification, 2006 under category 'A', as industry falls outside the notified industrial area.

(iv) Total land area of 6000 sqm will be used for the proposed project. Industry will be developed greenbelt in area of 30% i.e., 1800 sqm out of total area of the project. The estimated project cost is Rs.10 Crores. Total capital cost earmarked for pollution control measures is Rs. 57 Lakhs and the recurring cost (operation and maintenance) will be about Rs.14.5 lakhs/annum. Total Employment will be 100 persons as directed & 50 persons indirect. Industry proposed to

allocated Rs.25 lakhs @ 2.5% towards Corporate Social Responsibility/ Enterprise Social Commitment.

(v) As per Form-1 no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, etc lies within 10 km distance. River/waterbody within 10 km area are given below:

Name/ Identity	Aerial distance (within 10 km)
Water Bodies	
Sakra Nadi	2.18 Km NW
Chhela Nadi	3.10 Km SE
Mitti Nadi	4.44 Km SW
Lerakh Nadi	7.96 Km NE
High Tide Line	3.11 Km SE
Forest	
Bhadreshwar Reserve Forest	3.70 Km SW
Luni Reserve Forest	7.71 Km SW

(vi) Ambient air quality was carried out at 8 locations (3- Core Zone and 5- Buffer Zone) during March to May 2017 and revalidation from 1st June to 15th June. The ranges of concentration in core zone of PM_{10} (68.9 to 96.5 µg/m^3), $PM_{2.5}$ (39.3 to 42.1 µg/m^3), SO_2 (8.9 to 11.8 µg/m^3) and NO_2 (15.6 to 17.0 µg/m^3) respectively. The ranges of concentration in buffer zone of PM_{10} (67.5 to 88.2 µg/m^3), $PM_{2.5}$ (39.3 to 48.3 µg/m^3), SO_2 (7.2 to 11.4 µg/m^3) and NO_x (9.7 to 20.0 µg/m^3) respectively. AAQ modelling study for point source emissions indicated that the maximum incremental GLCs after the proposed project would be 0.762 µg/m^3, 1.54 µg/m^3 and 1.85 µg/m^3 with respect to PM_{10}, SO_2 and NO_X. The resultant predicted concentration are within the National Ambient Air Quality Standards (NAAQS, 2009).

(vii) Total water requirement will be 159 KLD of which fresh water requirement of 115 KLD and will be met from tanker supply sourced from canal water. Effluent of 46 KLD will be treated through ETP followed by MEE/Evaporator. The plant will be based on Zero liquid discharge system.

(viii) Power requirement will be 250 KW will be met from Gujrat State Electricity Corporation Ltd. DG set of 125 KVA capacity, shall be used during power failure. Stack (3.6 m above the roof) will be provided as per CPCB norms to the proposed DG sets.

(ix) 2nos. x 1 TPH boiler of agrofuel based shall be installed with Air Pollution Control System 'Multi cyclone bag followed by alkali wet scrubbing system' with a stack height of 30m will be installed for controlling the particulate emissions within the statutory limits prescribed by CPCB/ GPCB from time to time.

(x) Details of Process emissions generation and its management given below:

S.No.	Process/ Unit	Control System
1	Emissions at charging of vessels and material handling	Brine Chiller on top of storage tanks and control ducts connected to common wet scrubber system to treat workplace VOCs, Dust and any other emissions during process in the workplace and plant area.
2	Boiler (2nos. x 1 TPH)	Stack Height of 30m above Ground Level with control system of Multi-cyclone followed by alkali wet scrubbing system

	[Note:- Second Boiler shall be added at time of implementation of Phase III]	
3	DG sets of 125 KVA	Stack height of 3.6 m stack above roof level.

(xi) Details of Solid waste/Hazardous waste generation and its management given below:

Municipal Waste:

Waste Type	In Phase I	In Phase II	In Phase III	Remarks on Waste	Disposal Method
Municipal Waste (Kg/Day)	18	21	23	Domestic Waste	Municipal Solid Waste Management Site as approved by GPCB
Plastic Waste (Kg/Day)	20	22	25	Waste Plastic, Reject packaging Items, Misc. Office Plastic Waste items etc.	Authorized Plastic Waste Recycler as per Plastic Waste Management Rules, 2016

Process Waste (Non-hazardous Waste):

Waste Type	In Phase I	In Phase II	In Phase III	Remarks on Waste	Disposal Method
Industrial Waste (non-hazardous) (Kg/Day)	100	110	125	Boiler Ash - 25Kg/ Day and 100Kg/Day from MEE Residue/ Cyclone Dust/ Scrubber Ash after Phase III Implementation;	Boiler Ash shall be given to Brick Manufacturers/ Municipal Landfill site. Sludge/ reject of MEE/ Scrubber shall be disposed at TSDF site as approved by GPCB

Hazardous Waste:

Waste Type	In Phase I	In Phase II	In Phase III	Remarks on Waste	Disposal Method
Industrial Waste (Hazardous) (Kg/Day)	60	75	100	Used Oil; Process Waste; Chemical Container Waste etc.;	Approved TSDF Facility of GPCB
E-waste (Kg/Month)	12	14	15	Motors, Pumps, Electronic and Electrical Items etc.;	Authorised E-waste Recycler/ Dismantler as per E-waste Rules, 2016

(xii) Public Hearing for the proposed project has been conducted by the Gujarat State Pollution Control Board 26.12.2017. The main issued raised during the public hearing were related to approval from competed authority and employment for nearby area people. Project proponent has assured to Panchayat about the issues.

(xiii) The details of product and capacity as under:-

S. No.	Product	Phase I production	Phase II production	Phase III production
1.	Adhesive (Emulsion Polymer based in Water mainly of Butyl Acrylate and Methyl Acrylic Acid)	1000 TPM	2000 TPM	3000 TPM/ 36000TPA

35.3.4.2 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Adhesive (water based emulsion polymer of Butyl Acrylate and Methyl Acrylic Acid) manufacturing unit of total capacity 3000 TPM (Phase I - 1000 TPM, Phase II - 2000 TPM & Phase III - 3000 TPM) by M/s Hindustan Adhesives Limited in a total area of 6000 sqm at Village Bhadreshwar, District Kutch (Gujarat).

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals 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 earlier granted on 10th July, 2017. Based on recommendations of the EAC in its meeting held on 22nd December, 2017, the ToR was subsequently revised vide letter dated 3rd February, 2018 due to change in project area from 2000 sqm to 6000 sqm. Public hearing was conducted by the SPCB on 26th December, 2017.

Total water requirement is estimated to be 159 KLD out of which fresh water demand of 115 KLD shall be met from tanker supply sourced from canal water.

Total effluent generated from different industrial operations is estimated to be 46 KLD, which will be taken to the Effluent Treatment plant followed by MEE/Evaporator for treatment. The treated water of 44 KLD shall be reused for process units. There will be no discharge of treated/untreated waste water from the unit, and thus conforming to Zero Liquid Discharge.

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.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *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.*
- *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 98% 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 115 cum/day to be met from tanker supply sourced from canal 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. 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 through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  (i) Metering and control of quantities of active ingredients to minimize waste.
  (ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  (iii) Use of automated filling to minimize spillage.
  (iv) Use of Close Feed system into batch reactors.
  (v) Venting equipment through vapour recovery system.
  (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- *The green belt of at least 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting held on 26th December, 2017 shall be satisfactorily implemented.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the*

unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.

Agenda No.35.3.5

Expansion and modification of Molasses Based Distillery Plant from 60 KLPD to 70 KLPD through process modification in its existing Distillery Plant by M/s Siddapur Distilleries Limited at Bagalkot (Karnataka)

[IA/KA/IND2/61585/2017, IA-J-11011/10/2017-IA-II(I)]

35.3.5.1 The project proponent and the consultant M/s Samrakshan, made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for expansion and modification of Molasses Based Distillery Plant enhancement from 60 KLPD to 70 KLPD through process modification in Existing Distillery Plant by M/s Siddapur Distilleries Limited at Sy. Nos. 49/2B/1 & 2, 57/2D & 2E, 58/1B, 58/1A/3, 66/4D, 85/2, 87, 93/2/3, 95/1A,95/1B, 107/2, village Siddapur, Taluk Jamkhandi, District Bagalkot (Karnataka).

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 20th EAC meeting held during 27th February 2017 and recommended Terms of References (ToR) for the project. The ToR has been granted by Ministry vide letter no. IA-J-11011/10/2017-IA-II(I); dated 17th February, 2017.

(iii) All distillery activity is listed at S.No.5(g) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Ministry has issued EC earlier vide letter No. J-11011/274/2003-IA-II dated 1st July, 2004 for Molasses Based Distillery Plant of 60 KLPD capacity unit to M/s Siddapur Distilleries Limited.,

(v) Existing land area is 1,21,541.84 Sqm will be used and no additional land will be used for proposed expansion. Industry is already/ will be developed Greenbelt in an area of 82.94 % i.e., 1,00,807.41 m^2 out of 1,21,541.84 m^2 of area of the project.

(vi) The estimated project cost for expansion is Rs**.** 1.16 Crores. Existing investment is Rs. 25.47 Crores. Total capital cost towards environmental pollution control measures is Rs.1785 lakhs. The recurring cost (operation and maintenance) will be about Rs.88 lakhs per annum. Total Employment will be 100 persons as direct & 15 persons indirect after expansion. Industry proposes to allocate Rs. 6 lakhs @ 5 % of net profit towards Corporate Social Responsibility.

(vii) It is reported that as per Form-1, no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. lies within 10 km distance. Krishna River is flowing at a distance a distance of 14.3 km in the North.

(viii) Ambient air quality monitoring was carried out at 8 locations during April 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (41.58 to 84.29 µg/m^3), $PM_{2.5}$ (12.98 to 29.6 µg/m^3), SO_2 (2.46 to 4.98 µg/m^3) and NO_2 (7.52 to 10.58 µg/m^3). As there is no point source of emission from the expansion. AAQ modelling study was not done as the steam required for the plant is met from the boilers from Prabhulingeshwara sugar plant. The existing DG set is adequate to generate power during power failure.

(ix) Total water requirement is 770 m^3/day of which fresh water requirement of 770 m^3/day and will be met Krishna River Water supply.

(x) Treated effluent generation and treatment & disposal details is as follows and the project is based on Zero Discharge Plant.

S. No	Particulars	Existing Wastewater Generation	treatment & disposal (60KLPD)	Expansion Wastewater Generation, treatment & disposal (70KLPD)	treatment & disposal (70KLPD)
A	Spent Wash	420.0	Evaporator, Concentrate i.e Spent wash treated in Bio-methanization plant followed by Composting	420.0	Evaporator, Concentrate i.e Spent wash treated in Bio-methanization plant followed by Composting
B	Spent Leese	80.0	Treated along with the sugar plant effluent in Sugar Plant ETP	70.0	Treated in Physico chemical treatment and reused in dilution of molasses or cooling Tower make up water.
C	Condensate water	80.0		100.0	
D	Sewage	3.2	Septic Tank Followed Soak fit	3.2	Septic Tank Followed Soak fit
Total		**583.2**		**593.2**	

(xi) The proposed project is expansion of existing & consented operating unit & therefore power requirement of the distillery plant is 800 KW/Hr, Distillery has given on lease a 2.50 MW TG set to parent sugar factory i.e. Shri Prabhulingeshawar Sugars & Chemicals ltd. Siddapur the required power is available. During off season it shall depend on 1000 KVA DG set only.

(xii) Existing distillery unit draws steam from the adjacent Shri Prabhulingeshawar Sugars & Chemicals Ltd. They have installed 120 TPH 1 no. & 50 TPH -2 nos boiler of bagasse fired boiler for air pollution control they have installed ESP with stack height of 74 m. The emission of particulate is within 100 mg/Nm^3 as specified in the consent.

(xiii) Details of Process emissions generation and its management are as under:

Sources of air pollution, type of fuel used, APC details

S. No.	Stack attached to	Fuel used	Fuel consumption	Number of stacks	Stack/s height	Air pollution control unit	Predicted emissions
1	Existing D.G. set – 1000 kVA – 1 No.	HSD	58.75 L/h	1	31 m AGL	Stack	SO_x, NO_x, SPM

(xiv) Details of Solid waste/ Hazardous waste generation and its management are as under:

Solid waste generation during operation phase

Total no. of employees	115
Assuming per capita solid waste generation rate as 0.20 kg/capita/day	
Quantity of solid waste generated	23 kg/day
Organic solid waste : 60 % of the total waste	14 kg/day
Inorganic solid waste : 40 % of the total waste	9 kg/day
Disposal of domestic solid waste	The domestic wastes are segregated at source, collected in bins and composted along with spent wash.

Details of solid & hazardous waste generation

S No	Type	Quantity		Storage	Utilization/disposal
		Existing (60KLPD)	Proposed (70KLPD)		
1	Fermenter Sludge /Yeast sludge	20 TPD	26 TPD	Separated by Decanter machine & collected in Tractor Trolley	Mixed with Press Mud converting into organic manure with spent wash.
Hazardous Waste					
2	Waste oil	300 LPA	300 LPA	Sealed Carboys	Used as lubricant for Compost yard Aero tiller & Composting Machinery within the premises.

(xv) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 22nd November, 2017.

(xvi) Following are the list of existing and proposed products:

Distillery plant capacity.

1. Existing:- 60 KLPD
2. Proposed: - 70 KLPD

35.3.5.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for Expansion and modification of Molasses Based Distillery Plant enhancement from 60 KLPD to 70 KLPD through process modification/improvement in the existing plant by M/s Siddapur Distilleries Limited at Sy. Nos.49/2B/1 & 2, 57/2D & 2E, 58/1B, 58/1A/3, 66/4D, 85/2, 87, 93/2/3, 95/1A,95/1B, 107/2, village Siddapur, Taluk Jamkhandi, District Bagalkot (Karnataka).

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

The ToR for the project was granted on 17th February, 2017 and public hearing was conducted by the SPCB on 22nd November, 2017.

Total water requirement is estimated to be 940 cum/day, out of which fresh water demand of 770 cum/day is to be met from Krishna river water supply. The committee recommended reduction of fresh water consumption to 560 cum/day (8KL/KL of alcohol).

Total effluent of 593.2 KLD, consist of spent wash (420 KLD), treated in bio-methanization & composting; spent leese (80 KLD) & condensate water (80 KLD) shall be treated in the ETP and domestic sewage (3.2 KLD) in STP. The treated water of 170 KLD shall be used in the process. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

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

Ministry has issued EC earlier vide letter dated 1st July, 2004 for Molasses Based Distillery Plant of 60 KLPD capacity unit to M/s Siddapur Distilleries Limited. The monitoring report on compliance status of conditions in respect of said EC, was forwarded by the Regional Office at Bangalore vide letter dated 27th December, 2017, which is found to be satisfactory.

Consent to operate for the present industrial operations (60 KLPD) has been obtained from the State PCB, which is presently valid up to 30th June, 2021.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *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 560 cum/day proposed to be met from Krishna* river*. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in the ETP and then through RO system.*
- *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 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:-*

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 least 2.5% 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 held on 22nd November, 2017 shall be satisfactorily implemented.*
- *At of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues 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.*
- *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. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.*
- *CO_2 generated from the process shall be bottled/converted into dry ice and shall not be let free in atmosphere.*

Agenda No.35.3.6

Expansion of Synthetics Filaments Yarns (i.e, Partially Oriented Yarn, Polyester Filament Yarn, (POY) Textured Yarn and Twisted Yarn) having 255 MT/Day by M/s Geelon Industries Pvt Ltd at Survey No.255/1/16 & 255/1/17P, B/h IPCA Labs, Industrial Zone, Village Athal, Naroli, U.T. of Dadra and Nagar Haveli

[IA/DN/IND2/31527/2015 J-11011/286/2015-IA II (I)]

35.3.6.1 The project proponent and the accredited consultant M/s Unistar Environment and Research Labs Pvt Ltd, Vapi made a detailed Presentation on the salient features of the project and informed that:

(i) The proposal is for environmental clearance to the project "Expansion of Synthetics Filaments Yarns (i.e., Partially Oriented Yarn (POY), Polyester Filament Yarn (PFY), Textured Yarn and Twisted Yarn) manufacturing by capacity enhancement from 45 MT/Day to 300 MT/Day at Survey No. 255/1/16 & 255/1/17P, B/h IPCA Labs, Industrial Zone, Village- Athal, Naroli, U.T. of Dadra and Nagar Haveli -396230 by M/s Geelon Industries Pvt Ltd.

(ii) The project was considered by the Expert Appraisal Committee (Industry-2) in its 3rd meeting held during 18-19 January, 2015 and recommended Terms of References (ToR) for the project. The ToR has been issued by Ministry vide letter no. J-11011/286/2015-IA II (I), dated: 5th March, 2016 including public hearing.

Subsequently, the project proponent had requested for amendment in the ToR for exemption of public hearing. The project proposal for amendment in ToR was considered by the Expert Appraisal Committee (Industry-2) in its 13th EAC (Industry-2) meeting held during 26th-27th September, 2016. During discussion, the committee asked PP to submit authenticated documents w.r.t. the proper Gazette Notification issued by the concerned Authority for consideration of proposal in Ministry. It was also advised that the matter may be taken up by Ministry itself. The committee deferred the project for submission of aforesaid documents.

On submission of the aforesaid documents, committee considered the proposal for amendment in ToR in its 18th EAC (Industry-2) meeting held during 23rd -25th January 2017 and recommended for exemption from public consultation as per para 7 III. Stage (3) (b) of the EIA notification, 2006, being the industry is proposed to be located in the notified industrial area/estate. The amendment in ToR has been issued by Ministry vide letter no. J-11011/286/2015-IA II (I), dated 11th May, 2017.

(iii) All activities are listed at S.N. 5(d) – Manmade Fiber- Other than rayon of Schedule to the Environmental Impact Assessment (EIA) Notification, 2006 under category 'B', but are appraised at Central Level by Expert Appraisal Committee (EAC) due to applicability of General condition.

(iv) The existing unit was established before the implementation of EIA Notification 2006.

(v) Existing land area is 15147.96 sqm and no additional land shall be required for the proposed expansion. Industry will develop greenbelt in area of about 28% i.e., 4241.42 out of 15147.96 sqm of area of the project.

(vi) The estimated project cost is Rs 118.71 Crores including existing investment of Rs.41.71 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.1.52 Crores and the Recurring cost (operation and maintenance) will be about Rs.29.60 Lakhs/Annum. Total employment will be 325 persons as direct & considerable number of persons indirect after expansion. Industry proposes to allocate Rs.1.93 crores @ 2.5 % towards Corporate Social Responsibility.

(vii) There is DNH Wildlife Sanctuary (1.10 km South East) lies within 10 km distance. River/water body Damanganga River is flowing at a distance of 2.88 km in East direction.

(viii) Ambient air quality monitoring was carried out at 8 Locations during March 2016 to May 2016 and submitted baseline data indicates that ranges of concentrations as PM_{10} (59.63 to 85.04 µg/m^3), $PM_{2.5}$ (20.21 to 28.63 µg/m^3), SO_2 (11.10 to 13.88 µg/m^3), NO_x (12.83 to 18.54 µg/m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum

incremental GLCs after the proposed project would be 1.14 ug/m^3, 3.82 ug/m^3 and 24.61 ug/m^3 with respect to $PM_{10,}$ SO_x and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(ix) Total water requirement is 393.00 KL/day of which fresh water requirement of 393KL/day and will be met from existing bore well within premises.

(x) Industrial Effluent of 18.00 KL/day quantity generated from washing activity will be treated through in-house ETP and the treated effluent will be recycled. The Industrial wastewater of 40 KL/day from cooling tower is reused for gardening, toilet flushing and washing after pH correction. Hence, there is no discharge of treated effluent outside the premises. The plant will be based on Zero Liquid discharge system

(xi) Power requirement after expansion will be 4800 kVA including existing 2400 kVA and will be met from Electricity Department, Silvassa. Existing unit has one DG set of 1000 kVA capacity & two DG sets of 380 kVA capacity each and additionally two DG sets of 1000 kVA each is proposed which will be used as standby during power failure. One proposed DG Set will replace the existing two DG Sets of capacity 380 kVA each after proposed expansion. Stack (height 11 m) will be provided as per CPCB norms to the proposed DG sets of 1000 kVA (2 No.) in addition to the existing DG set of 1000 kVA.

(xii) ETP waste (35.3) generated from ETP operation @82 MT/year will be collected and stored at designated place and disposal through TSDF. Used Oil (5.1) generated from plant machineries @ 4.10 KL/Year will be reused/ disposal by sale to registered recyclers. Empty drums/Bags/Liners (33.1) generated from raw materials @88000 Nos./Year will be reused for packing or sale to authorized scrap dealers. Non-hazardous Yarn waste from process @400 MT/Year will be recycled back/sale to actual uses.

(xiii) Public Hearing for the project is exempted (as per paragraph 7(i) (III) (i) (b) of the Environment Impact Assessment Notification-2006 since the project site is located in the Notified Industrial Zone. Public hearing is exempted as per amended TOR letter no. J-11011/286/2015-IA II (I), dated: 11th May, 2017.

(xiv) As the existing unit was established in the year 2004, before the implementation of EIA Notification -2006 (S.O. 1533 dated 14-09-2006).

(xv) Details of products and capacity as under:

S. No.	Product Details	Existing Quantity (MT/day)	Proposed Quantity (MT/day)	Total Quantity (MT/day)
1	Synthetics Filaments Yarns (i.e., Partially Oriented Yarn (POY), Polyester Filament Yarn (PFY), Textured Yarn and Twisted Yarn)	45.00	255.00	**300.00**

35.3.6.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Synthetics Filament Yarn (Partially Oriented Yarn, Polyester Filament Yarn, Textured Yarn and Twisted Yarn) manufacturing unit from 45 MT/Day to 300 MT/Day by M/s Geelon Industries Pvt Ltd in a total area of 15147.96 sqm at Survey No.255/1/16 & 255/1/17P, B/h IPCA Labs, Industrial Zone, Village Athal, Naroli, Dadra & Nagar Haveli (UT).

The project/activity is covered under category B of item 5(d) 'Manmade fiber (other than rayon)' of the schedule to the Environmental Impact Assessment Notification, 2006. However, due to applicability of general condition (D&NH wildlife sanctuary at ≈1.10 km in SSE direction), the project requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 5th March, 2016 followed by amendment on 11th May, 2017, providing exemption from public hearing as per the provisions contained in Para 7 Stage III (3) (i) (b) of the EIA Notification, 2006.

Total fresh water requirement is estimated to be 393 cum/day, which is proposed to be met from existing bore well within premises.

Total effluent generated from washing activity is estimated to be 18 KLD, which will be taken to the in-house Effluent Treatment plant for treatment. The Industrial wastewater of 40 KLD from cooling tower is reused for gardening, toilet flushing and washing after pH correction. There will be no discharge of treated/untreated waste water from the unit, and thus conforming to Zero Liquid Discharge.

The project is reported to be established prior to issue of the EIA Notification, 2006, and as such, there is no requirement of prior EC in terms of the said Notification. In support of their submission in this regard, the project proponent has submitted Consent to Establish issued by Pollution Control Committee, Daman & Diu and Dadra Nagar Haveli, vide letter dated 27th March, 2004 in favour of M/s Pamis Tex Pvt. Ltd.

Consolidated Consent and Authorization (CC&A) for the present production of 45 TPM has been obtained from the Pollution Control Committee, Daman & Diu and Dadra Nagar Haveli, which is presently valid up to 31st October, 2018.

35.3.6.3 *The Committee, after deliberations, desired for clarifications/inputs in respect of the following:-*

- *Requirement of EC to the existing project (engaged in manufacturing of Partially Oriented Yarn, Polyester Filament Yarn, Textured Yarn and Twisted Yarn) of capacity 45 TPD. An undertaking in this regard to be submitted along with supporting documents.*
- *Recycling of treated water and the revised water balance.*
- *Permission for withdrawal of ground water of 122.50 KLD to meet the present industrial operations, from the concerned regulatory authority/CGWA.*

The proposal was deferred for want of the needful as above.

Agenda No.35.3.7

Expansion of Synthetic Organic Chemicals and Coal based power plant by M/s Sree Rayalaseema Hi-Strength Hypo Limited at Survey No. 13/A1, 16, 17, 23, 67, 68, 69, 70/A, A2, Village Gondiparla, Mandal and District Kurnool (Andhra Pradesh)

[IA/AP/IND2/50587/2016, J-11011/82/2016- IA II(I)]

35.3.7.1 The Project Proponent and the accredited consultant M/s Team Labs and Consultants, made a detailed presentation on salient features of the project and informed that:

(i) The proposal is for environmental clearance for proposed expansion of synthetic organic chemicals and coal based co-generation power plant by M/s Sree Rayalaseema Hi-

Strength Hypo Limited at Sy. No. 13/A1, 16, 17, 23, 67, 68, 69, 70/A, A2, village Gondiparla, Mandal and District Kurnool (Andhra Pradesh).

(ii) The project was considered by the Expert Appraisal Committee (Industry-2) in its 7th meeting held during 28-29 April, 2016 and recommended Terms of References (ToR) for the project. The ToR has been issued by Ministry vide letter no. J-11011/82/2016 - IA II (I); dated 26th June, 2016.

(iii) All Synthetic organic chemicals manufacturing units and thermal power plants located outside notified industrial area are listed at S.No. 1(d) and 5(f) of the Schedule to the Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) M/s Sree Rayalaseema Hi-Strength Hypo Limited obtained CFE for existing capacity of Monochloro acetic acid was obtained vide order no. KRNL-4/PCB/ZO/C.Estt/2000-33 dated 28.04.2000. The latest CTO vide letter No. KNL-4/APPCB/ZO-KNL/CFO/2015-1049 dated 03.09.2015 valid till 31.03.2020.

(v) Existing land area of 35.45 ha land will be used for proposed expansion. Industry is already developed Greenbelt in an area of 33.85 % i.e., 12 ha out of 35.45 ha of area of the project site.

(vi) The estimated project cost for proposed expansion is Rs.150 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.4.34 crores and the Recurring cost (operation and maintenance) will be about Rs.1.83 crores Per annum. Total Employment will be 120 persons as direct and 75 persons indirect after expansion. It is proposed to allocate Rs. 3.75 crores @ 2.5 % towards Corporate Social Responsibility

(vii) It is reported that No National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River/water body Tungabadra River is passing from North West to South East at a Distance of 1.8 km in south direction.

Interstate boundary between Telangana and Andhra Pradesh is at a distance of 1.2 km in northeast direction. There are two reserve forests in the study area. Gadidmadugu RF at a distance of 6 km in southeast direction. Pullaiah RF at 9.5 km in the Southwest.

(viii) Ambient air quality monitoring was carried out at Nine locations during December 2016 to February 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (31 - 56 µg/m^3), $PM_{2.5}$ (14 - 26 µg/m^3), SO_2 (9 - 16 µg/m^3) and NO_2 (9 - 16 µg/m^3) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLC_S after the proposed project would be 11.53 µg/m^3, 5.79 µg/m^3 and 5.89 µg/m^3 with respect to PM_{10}, SO_X and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(ix) The total water requirement is 3518.5 KLD out of which 3148.5 KLD will be fresh water and 370 KLD is recycled water. Fresh water requirement shall be met from ground water.

(x) Total effluent of 773 m^3/day will be treated through "Zero Liquid Discharge" based effluent treatment system. Wastewater from washings, DM/softener and Non-EC products of 195.5 m^3/day sent to De-Chlorination, air stripping followed by multiple effect evaporators (MEE) and agitated thin film dryer (ATFD). Condensate from MEE and ATFD is reused for cooling towers make-up. Wastewater from boiler cooling tower blow downs of 428 m^3/day sent to primary treatment and treated water reused for greenbelt development and ash quenching.

Domestic wastewater of 39.5 sent to septic tank followed by soak pit. Rejects from RO of 110 m^3/day reused for milk of lime solution preparation for calcium hypochlorite (Non-EC product) manufacturing.

(xi) Power requirement after expansion will be 8285 kVA including existing 7535 kVA and will be met from co-generation power plant of 9MW. It is proposed to install 10 MW coal based co-generation power plant in addition to existing 6 MW coal based and 3MW bio-mass based co-generation power plants. Existing unit has 8 no.s DG sets of capacity 6 x 1010 kVA, 1 x 750 kVA and 1 x 725 kVA, additionally 1 x 750 kVA DG set is proposed as standby during power failure. Stack (height 5.5 m) will be provided as per CPCB norms to the proposed DG set of 1 x 750 kVA in addition to existing DG sets stack (height 6.5 m for 6 x 1010 kVA; 5.5 m for 750 kVA and 5m for 725 kVA) which will be used as standby during power failure.

(xii) Existing unit has 1 x 50 TPH coal/biomass fired boiler, 1 x 3 TPH husk fired boiler and proposed a 1 x 50 TPH coal fired boiler as part of expansion. Electro static precipitators and a stack with height of 55 m will be installed for controlling the Particulate emissions (within statutory limit of <50 mg/Nm^3) for proposed 1 x 50 TPH and existing 1 x 55 TPH coal/biomass fired boiler respectively.

(xiii) The process emissions contain Hydrogen chloride from Monochloro acetic acid process. Hydrogen chloride emissions are sent to scrubber in series. The scrubber contains 4 units with concentrate HCl, dilute HCl, water followed by caustic lye as scrubbing media. HCl after achieving concentration of 30% sold as by-product and scrubbed effluent from caustic scrubber contains mainly salt and sodium hypochlorite sold as by-product.

(xiv) Solid wastes are generated from process, wastewater treatment and utilities. The effluent treatment system generates evaporation salts and ETP sludge. The process operations generate solvent residue and spent catalyst. Solvent residue sent to cement plants for co-incineration. The evaporation salts and ETP sludge are sent to secured land fill of sister concern unit of Sree Rayalaseema Alkalies and Allied Chemicals Ltd. Waste oil and used batteries from the DG sets are sent to authorized recyclers. Coal ash is sold to brick manufacturers in the local area.

(xv) Public Hearing for the proposed project has been conducted by the Andhra Pradesh Pollution Control Board on 29th November, 2017 near the existing unit premises.

(xvi) M/s Sree Rayalaseema Hi-Strength Hypo Limited obtained CFE for existing capacity of Monochloro acetic acid vide order no. KRNL-4/PCB/ZO/C.Estt/2000-33 dated 28.04.2000. The product category was not attracting EIA Notification, 1994.

(xvii) Following are the list of proposed manufacturing capacities

Manufacturing Capacity

S. No.	Product Name	Unit	Capacity		
			Consented	Proposed	Total
1	Mono Chloro Acetic Acid	TPD	16.7	66.8	83.5
2	Sodium Methoxide	TPD	--	20	20
3	Co-generation Power Plant (Coal based)	MW	3	10	13
4	Co-generation Power Plant (Bio-Mass)	MW	6	--	6
5	Non EC Products	TPD	747.9	--	747.9
By-Product					

1	Hydrochloric acid (30%)	TPD	19.4	77.4	96.8
2	Decanted Mother liquor*	TPD	4.4	18	22.4
3	Scrubbed Effluent from Caustic Scrubber**	TPD	15.3	60	75.3

** Sold as by-product to downstream users of Sodium Monochloro acetate and Trichloro acetic acid manufactures.*

*** Sold as by-product to Textile industry for bleaching*

List of Utilities

S.No	Utility	Unit	Permitted	Proposed	After Expansion
1	Coal Fired Boilers	TPH		1 x 50	1 x 50
2	Coal/Biomass Fired Boiler	TPH	1 x 50	--	1 x 50
3	Husk Fired Boiler	TPH	1 x 3	--	1 x 3
4	DG Sets *	Kva	6 x 1010 1 x 750 1 x 725	1 x 750	6 x 1010 2 x 750 1 x 725

**DG sets will be used during load shut down period*

35.3.7.2 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion of synthetic organic chemicals from 16.7 TPD to 103.5 TPD and coal based co-generation power plant from 3 MW to 10 MW by M/s Sree Rayalaseema Hi-Strength Hypo Limited in a total area of 35.45 ha at Sy. No. 13/A1, 16, 17, 23, 67, 68, 69, 70/A, A2, village Gondiparla, Mandal and District Kurnool (Andhra Pradesh). Presently, the unit is manufacturing products of capacity 747.9 TPD not covered under the ambit of the EIA Notification, 2006 and thus not requiring prior EC.

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' 1(d) 'Thermal Power plant' 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 21st June, 2016. Public hearing was conducted by the SPCB on 29th November, 2017.

Total water requirement is estimated to be 3518.5 KLD out of which fresh water demand of 3148.5 KLD shall be met from ground water. Remaining 370 KLD shall be obtained from recycled water.

Total effluent generated from different industrial operations is estimated to be 773 KLD, which will be taken to the Effluent Treatment plant followed by MEE for treatment. The treated water shall be reused for process units and greenbelt development. There will be no discharge of treated/untreated waste water from the unit, and thus conforming to Zero Liquid Discharge.

Consent to operate for the present industrial operations and utilities have been obtained from the State PCB, which is presently valid up to 31st March, 2018.
35.3.7.3 *The Committee, after deliberations, desired for clarifications/inputs in respect of the following:-*

- *As per the ToR dated 21st June, 2016 for the project, fresh water requirement was to be reduced from that earlier envisaged of 2300.7 KLD. However, no such plan has been submitted in this regard. The Committee insisted for reducing the fresh water requirement by a minimum of 450 KLD and to submit the revised water scenario.*
- *Recycling of treated water and the revised water balance.*

- *Permission for withdrawal of ground water to meet the present industrial operations, from the concerned regulatory authority/CGWA. In case of utilization of surface water from Tungabhadra river, firm commitment from the concerned regulatory agencies shall be submitted.*

The proposal was deferred for want of the needful as above.

Agenda No.35.3.8

Manufacturing of Synthetic Organic Dyes by M/s FI Dye Chem at Plot No 1 & 13, Sikandar Market Opp. Chandola Talav Petrol Pump, Danilimbda, Ahmedabad (Gujarat)

[IA/GJ/IND2/59635/2016, J- 11011/326/2016-IA. II(I)]

35.3.8.1 The project proponent and the accredited consultant M/s Ultra-Tech, Environmental Consultancy & Laboratory), made a detailed presentation on the salient features of the project and informed that;

(i) The proposal is for environmental clearance to the project 'Manufacturing of Synthetic organic dyes' by M/s F I DYE CHEM at PLOT NO 3 &11, Sikandar market, Chandola dhal, Opposite Chandola petrol pump, Danilimda, Ahmedabad (Gujarat).

(ii) The project was considered by the Expert Appraisal Committee (Industry-2) in its 17th meeting held during 26-29 December, 2016 and recommended Terms of References (ToR) for the project. The ToR has been issued by Ministry vide letter No. J-11011/326/2016/2016-IA-II(I) dated 28th February 2017.

(iii) All Synthetic Organic Dyes are listed at S.N.5(f) of the Schedule to the Environment Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Total land area is 1202 m^2. Industry will develop greenbelt in an area 33% i.e., 400 m^2 out of total area of the project. The estimated project cost is Rs.65 Lakhs. Total capital cost earmarked twards environmental pollution control measures is Rs.15 lakhs and the recurring cost (operation and maintenance) will be about Rs.3.5 lakh per annum.

(v) Total Employment will be 30 persons as direct & indirect for the proposed Industry. Industry proposes to allocate Rs.1.6 lakhs @ 2.5 % towards Corporate Social Responsibility.

(vi) There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Sabarmati is flowing at 2.6 km in Southwest direction.

(vii) Total water requirement is 54 m^3/day of which fresh water requirement of 42 m^3/day will be met from water tankers. Effluent of 18 KL quantity will be treated through ETP. The plant will be based on Zero Liquid discharge system.

(viii) Power requirement will be 80 kVA and will be met from Torrent Power Ltd. Proposed unit has 1 DG set of 65 kVA capacities, which will be used as standby during power failure. Stack (height 5m) will be provided as per CPCB norms to the proposed DG set.

(ix) The proposed unit has 1 TPH Coal/Agro-waste fired boiler. Multi-cyclone separator with a stack of height of 12 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm^3 for the proposed boilers.

(x) Details of Process emissions generation and its management.

Particulate matter, SO_2 and NOx will be emitted during the process and stack of height 12 m is proposed.

(xi) Details of Solid waste/ Hazardous waste generation and its management are as under:

solid waste generation	**Type of waste**	**Total Quantity**	**Management**
From Domestic Activities	Dry garbage	0.100 MT/Month	Handed over to the authorised recyclers
	Wet garbage	0.100 MT/Month	Composting
From Process	White Coal/ Ash fromAgro Waste	6.0 MT/Month	Disposal at CHWTSDF / Brick Manufacturing
	Plastic Drums / Containers	100 no./Month/ 1800 no/Month	Handed over to the authorised recyclers
	Spent oil	0.03 MT/year	Will be sold to approved recycler
Hazardous waste	ETP Sludge	25 MT/Month	Disposal at CHWTSDF
	Process waste	40 MT/Month	Disposal at CHWTSDF
	Used oil/ spent oil	30 Lit/Year	Collection, Storage, Transportation, Sell to Registered Preprocessor
	Discarded Container	100 Nos./Month	To be Sold to Registered Re-processor
	Drum, Bags	1800 Nos./Month	To be Sold to Registered Recycler

(xii) Public Hearing for the proposed project has been conducted by the Gujarat State Pollution Control Board on 29/08/2017 at 11.00 hours at Laljibhai Parmar Municipal Community Hall, Ahmedabad. The main issues raised during the public hearing are related to treatment and disposal of waste water, provisions made for controlling air pollution, employment for the locals and CSR activity.

(xiii) The details of products and capacity as under:

S. No.	**Product**	**Quantity (Mt/month) Total Proposed**
1	Reactive Blue P3R (Crude)	20
2	Reactive MX7R (Crude)	5
3	Reactive Black B (Crude)	10
4	Reactive Blue 49 (Crude)	10
5	Reactive Green HE4BD (Crude)	10
Total		**55**

35.3.8.2 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for manufacturing Synthetic organic dyes by M/s F I Dye Chem in a total area of 1202 sqm at plot No.3 &11, Sikandar market, Chandola dhal, Opposite Chandola petrol pump, Danilimda, Ahmedabad (Gujarat).

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals 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 28th February, 2017. Public hearing was conducted by the SPCB on 29th August, 2017.

The total water requirement is estimated to be 54 cum/day, out of which fresh water demand of 42 cum/day shall be met from tanker supply. Remaining 12 cum/day shall be obtained from recycled water.

Total effluent generated from different industrial operations is estimated to be 18 KLD, which will be taken to the Effluent Treatment plant for treatment. The treated water shall be reused for process units and greenbelt development. There will be no discharge of treated/untreated waste water from the unit, and thus conforming to Zero Liquid Discharge.

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.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *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.*
- *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 98% 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 42 cum/day to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. 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 through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  - *(i) Metering and control of quantities of active ingredients to minimize waste.*
  - *(ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(iii) Use of automated filling to minimize spillage.*
  - *(iv) Use of Close Feed system into batch reactors.*
  - *(v) Venting equipment through vapour recovery system.*
  - *(vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 2.5-3 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 held on 29th August, 2017 shall be satisfactorily implemented.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.*

Agenda No.35.3.9

Manufacture of pesticides and its intermediates M/s PI Industries Limited (Unit II) at Plot No. SPM-29, Sterling SEZ & Infrastructure Ltd. At & PO: Sarod -392180, Taluka Jambusar, District Bharuch (Gujarat)

[IA/GJ/IND2/61491/2017, IA-J-11011/6/2017-IA-II(I)]

35.3.9.1 The project proponent and the accredited consultant M/s San Envirotech Pvt. Ltd., Ahmedabad has made detailed presentation on the salient features of the project and informed that:

(i) The proposal is for environment clearance to the project proposed manufacturing of Pesticides, pesticide intermediates & fine chemicals with the capacity of 44240 MT/annum at Plot No. SPM-29/2, Sterling SEZ & Infrastructure Ltd. At Post: Sarod, Taluka: Jambusar, District: Bharuch, Gujarat by M/s. PI Industries Ltd. (Unit-II). 90200 MT/annum will be recovered as by product.

(ii) The project was considered by the Expert Appraisal Committee (Industry 2) in its 18th meeting held during 23-25 January, 2017 and recommended Terms of References (ToRs) for the Project. The ToR has been issued by Ministry vide letter dated 29th April, 2017.

(iii) The proposal was further considered in 24th EAC meeting held during 14th to 16th June, 2017 based on request by the project proponent for exemption from Public Hearing and EAC has consider the request of PP to considering provision of EIA Notification, 2006 and O.M. dated 4th April, 2016 as the project is located in the notified industrial area/estate and subsequent amendment TOR letter dated 5th February 2018.

(iv) All Pesticides industry and pesticide specific intermediates (excluding formulations) units are listed at S.N. 5(b) along with Synthetic Organic Chemicals covered under 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(v) Proposed land area is 87300 m^2. Industry will develop greenbelt in an area of 33% i.e. 28810 m^2; either inside of the project premises or purchase land nearby project site to compensate 33% of total project land area. The estimated project cost will be Rs. 393.0 crores. Total capital cost earmarked towards environmental pollution control measures will be Rs. 26.0 crores and the recurring cost (operation and maintenance) will be about Rs.6.85 crores per annum. Total employment including direct and indirect will be 300 persons. Industry proposes to allocate Rs.9.825 crores @ 2.5% of total project cost towards Corporate Social Responsibility.

(vi) There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within the 10 km distance of the project site. Coastal area of Gulf of Cambay is at 2.5 km distance from project site.

(vii) Ambient air quality monitoring was carried out at 8 locations during January, 2017 to March, 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (54.1 - 76.6 µg/m^3), $PM_{2.5}$ (23.4 - 38.8 µg/m^3), SO_2 (7.8 - 13.4 µg/m^3) and NOx (11.7 - 19.4 µg/m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs from the proposed project would be 3.937µg/m^3, 2.336 µg/m^3, 1.070 µg/m^3, 0.128 µg/m^3, 0.043 µg/m^3, 0.213 µg/m^3, 0.009 µg/m^3 with respect to PM, SO_2, NOx, HCl, Cl_2, NH_3, and PPM. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(viii) Total water requirement is 2625.0 m^3/day of which fresh water requirement is 2491.0 m^3/day and 134 m^3/day will be recycled/treated water, which will be met from SEZ Authority.

(ix) Total effluent generation will be tune around 734 KLD; out of which 60 KLD of organic effluent will be incinerated, 40 KLD system loss & salt generation and 134 KLD treated water recycle. Remaining lean streams with low TDS and low COD (500 KLD), mainly from utilities taken to ETP of adjacent sister concern unit of PI Industries (Unit-I) and finally discharge to common SEZ sump.

(x) Unit will utilize Environmental facilities of its adjoining unit, which is at the adjacent plot, which has excess capacity of overall EMS including ETP, MEE and incinerator.

(xi) The unit proposes to discharge Low TDS and low COD effluent with reduced quantity of 500 m^3/day into Gulf of Cambay after treatment through approved channel of VECL.

(xii) Power requirement 15000 kVA will be met from DGVCL. 6 nos. of D.G. Set with capacity of 4000 kVA each will be installed and used as standby during power failure. Stack (height 30 meters) will be provided as per CPCB norms to the proposed DG sets.

(xiii) Proposed unit will have boilers of 6 TPH (1 nos.) & 12 TPH (2 nos.) and Thermic Fluid Heater (60 lakhs kcal/hr.). FO/NG (204 MT/day/195440 Nm^3/day) will be used as fuel. Boiler & TFH is connected with stacks of adequate stack height of 30 m & 20 m respectively.

(xiv) There will be process emission from stack attached to reactors of multipurpose plant for which alkali scrubber will be used as APCM.

(xv) Details of Solid waste/Hazardous waste generation and its management are as under:

S. No.	Type of waste	Category as per HWM rules, 2016	Quantity	Method of Disposal
1.	MEE salt	35.3	235 MT/month	Collection, Storage, Transportation & Disposal in approved common TSDF/ co-processing.
2.	Used Oil	5.1	25 KL/month	Collection, storage and reused or sold to registered refiners.
3.	Residues after distillation, fractionation, condensation recovery etc./ Solvent Distillation Residue	20.3	300 MT/month	Collection, storage, & Incineration at PI, Unit-I or in approved common incineration facility or co-Processing/ incineration
4.	Spent Carbon	36.2	50 MT/month	Collection, storage & Incineration at PI, Unit-I or in approved common incineration facility or Send to Authorized recyclers/ re-processors for recovery/ co-processing
5.	Process Waste (Process Waste Sludge/residue)	29.1	1800 MT/month	Collection, storage, & Incineration at PI, Unit-I or in approved common incineration facility or Co-processing/co-incineration facility
6.	Discarded containers / drums/ liners	33.1	300 MTPM & 50000 nos./month	Recycled or sold to authorized scrap dealer or end users or disposal in approved common TSDF/incineration at PI, Unit-I as well approved common

				facility or sent for common decontamination facility
7.	Date Expired off specification products	29.3	100 MT/month	Collection, storage, & Incineration at PI, Unit-I or in approved common incineration facility/co-processing
8.	Spent/Crude Solvent	29.4	1500 MT/month	Collection, storage, & Incineration at PI, Unit-I or at authorized CHWIF facility or Co-processing or reuse by in-house solvent distillation. In Some of the product where purity requirements are very high, recycling is not possible due to build-up of moisture or some specific impurity, such solvents are required to be sent to authorized as well as CPCB registered solvent distillation unit. Sold to GPCB Authorized recyclers/distillators/re-processor
9.	Spent Catalyst	29.5	50 MT/month	Collection, storage & Incineration at PI, Unit-I or in approved common incineration facility or co-processing, Send to Authorized recyclers/ re-processors for recovery or sent for regeneration to supplier.
10.	Spent Acid	29.6	1500 MT/month	Collection, storage, & sold to authorized recyclers/re-processors, re-user
11.	Spent Resin	34.2	2 MT/month	Collection, storage, transportation and disposal in approved common TSDF

(xvi) Public Hearing for the proposed project has been exempted as per the ToR amendment letter dated 22nd June, 2017.

(xvii) Following are the list of proposed products & by-products:

S. No.	Common Name	IUPAC Name	Quantity (MTPA)
A	**Pesticides and intermediates 5(b)**		
Insecticides and Intermediates			**4800**
1	Amino Triazines		
a	THM	Bis (1,2,3 - Trithiacyclohexyl Dimethyl Ammonium) Oxalate	
2	Diamides		
a	Flub	3-Iodo-N2-(2-Methyl-1-(Methyl sulfonyl) Propan-2-yl)-N1-(2-Methyl-4-(Perfluoropropan-2-yl) phenyl)	

		Phthalamide	
b	SOD	N2-(2-Methyl-1-(Methylsulfinyl)propan-2-yl)-N1-(2-Methyl- 4 - (perfluoropropan-2-yl) phenyl) phthalamide	
c	MMTPA/SAA	2-Methyl 1-Methylthio-2-Propanamine	
3	Hydazinopyridine		
a	CHDP	3-Chloro-2-Hydrazino Pyridine	
4	Nicotinamides		
a	TFNA	2,6-Dichloro-4-(Trifluromethyl) pyridine-3-Carbonitrile	
5	Nitroguanidines		
a	BNHT	5-Benzyl-1-Methyl, 2-Nitro 2 imino-tetrahydro 1, 3, 5-trizan.	
b	AETF	3-Amino methyl Tetrahydrofuran	
6	Organophosphorus Insecticide		
a	MTN	3-(Dimethoxy Phosphinothioyl sulfanyl methyl) -5-Methoxy-1,3,4-thiadiazol-2-one	
7	Phenyl organo thiophosphate		
a	PTF	(RS)-(O-2,4-Dichlorophenyl O-Ethyl S-Propyl Phosphorodithioate)	
8	Phthalimides		
a	PMT	Phosmet	
9	Pyrazole-diamides		
a	Q4039	3-Methyl Antranilic Acid	
b	YB449	3-Methyl-2-Nitrobenzoic acid	
c	DPX	2-Amino-5-Chloro-N,3-Dimethyl Benzamide	
d	BPCA	3-Bromo-1-(3-Chloropyridin-2-yl)-1H-pyrazole-5-Carboxylic Acid	
10	Quinazoline		
a	FNZQ	3-[2-[4-(1,1-Dimethylethyl) phenyl] ethoxy] Quinazoline	
11	Quinolinyl carbonate		
a	FMTQ	2-Ethyl-3,7-Dimethyl-6-[4-(trifluoromethoxy) phenoxy]-4-Quinolyl Methyl Carbonate	
12	Thiazolidines		
a	CCITM	Dimethyl Cyano Dithioimido Carbonate	
b	CCMP	2-Chloro-5-Chloromethyl Pyridine	
Herbicides and Intermediates			**5650**
1	Alkylazines		
a	DMI	2,6-Dimethylindanone	
b	DMAI	2,6-Dimethyl-2,3-Dihydro-1H-inden-1-amine	
2	Amide-triazolones		
a	IAT	3H-1,2,4-Triazol-3-one, 4-amino-2,4-dihydro-5-(1-methylethyl)-	
3	Aryloxyphenoxy propionates		
a	FPES	Ethyl(2R)-2-{4-[6-chloro-1,3-benzoxazol-2-yl)oxy] phenoxy} propanoate	
4	Benzoyl cyclohexanediones		
a	AE 473	(2-{2-chloro-4-mesyl-3-[(RS)]-tetrahydro-2-furylmethoxymethyl} benzoyl)-cyclohexane-1, 3-Dione)	
b	Tembutrion	2-{2-chloro-4-(methylsulfonyl)-3-[(2,2,2-trifluoroethoxy)methyl]benzoyl}cyclohexane-1,3-dione	
c	747 Either	2-Chloro-4-(methyl sulfonyl)-3-[(2, 2, 2-trifluoroethoxy) methyl] Benzoic acid	
d	2C6SMT	3-Chloro-2-Methylthioanisole	
5	Furanones		
a	FLURT	5-(Methylamino)-2-Phenyl-4-[3-(Trifluoromethyl) phenyl] furan-3(2H)-one	
6	Intermediate of Herbicide		

a	MTAA	Methyl (methylthio) Acetate	
7	Active nitrile Herbicide		
a	PYCL	1-(3-Chloro-4,5,6,7-tetra hydropyrazolo [1,5-a] pyridin-2-yl)-5-[methyl (prop-2-ynyl)amino] pyrazole-4-carbonitrile	
8	Oxazinones		
a	MY-100	3-[1-(3,5-dichlorophenyl)-1-methylethyl]-3,4-dihydro-6-methyl-5-phenyl-2H-1,3-oxazin-4-one	
9	Oxazoles		
a	Lake Palace	3-[[(2,5-dichloro-4-ethoxyphenyl) methyl] sulfonyl]-4,5-dihydro-5,5-dimethylisoxazole	
10	Oxazolidinediones		
a	KPP	Pantoxazone	
11	Phosphinates		
a	MPBS	Methyldichlorophosphine	
12	Pyrimidinediones		
a	PCM	N-(2 Chloro-4 Fluoro-5-((ethoxy carbonyl)-amino)-benzoyl)-N-iso-propyl-N-methyl-sulfamid	
b	EATB	Ethyl 3-amino-4,4,4-trifluorobut-2-enoate	
13	Pyrimidinyloxybenzoic acid		
a	Bispyribac sodium	2,6-bis(4,6-dimethoxypyrimidin-2-yloxy)benzoic acid	
14	Pyrimidinylsulfonylurea		
a	FRSF	N,N-Dimethyl-2-[N-[N-(4,6-dimethoxy pyrimidin-2-yl)-Amino carbonyl] Amino sulfonyl]-4-(N-formylamino) benzamide, sodium salt	
b	ESPS	3-ethylsulfonyl-2-pyridine sulfonamide	
15	Sulfonylurea		
a	AMSB(Mesylamide)	Methyl 2-Amino-4-{[(methyl sulfonyl)amino] methyl} benzoate	
b	OTMA	2-(Trifluoro Methoxy) Aniline	
16	Triazines		
a	CNZ	Cyanazine	
17	Triazopyrimidine sulfonamides		
a	DTPBS	N-(5,8-Dimethoxy [1,2,4] Triazolo [1,5-c] pyrimidine-2-yl)-2-Fluoro-6-(Trifluoro Methyl) Benzene Sulfonamide	
Fungicides and intermediates			**3550**
1	Active amide Fungicides		
a	SSF-126/OXIME	(2E)-2-(methoxyimino)-N-Methyl-2-(2-Phenoxy Phenyl) Acetamide	
b	TRFRN	N,N'-[1,4-Piperazinediyl-bis(2,2,2-Trichloro Ethylidene)]-Bis-[Formamide]	
c	FNXL	N-(1-Cyano-1,2-Dimethylpropyl)-2-(2,4— Dichlorophenoxy) Propanamide	
d	MIPD	(1E)-1-(2,5,5-Trimethyl-1,3-dioxan-2-yl) Propane -1,2-dione 1-(O-Methyloxime)	
e	ORST	Orysastrobin	
2	Benzamides		
a	ZXMD	(RS)-3,5-Dichloro-N-(3-Chloro-1-Ethyl-1-Methyl-2-Oxopropyl)-p-Toluamide	
3	Carboxamides		
a	AMB	3,4,5-Trifluoro-Amino biphenyl	
4	Organophosphates		
a	KTZ(Kitazin)	S-benzyl O,O-Diisopropyl Phosphorothioate	
5	Pyridine Fungicides		
a	CTPE	2-[3-Chloro-5-(Trifluoro methyl) Pyridin-2-yl] Ethanamine	

6	Pyrimidines		
a	AZST	Methyl (E)-2-{2-[6-(2-Cyanophenoxy) pyrimidin-4-yloxy] phenyl}-3-Methoxy acrylate	
7	Quinoxalines		
a	CMTH	4-(Methoxy-6-(trifluoro methyl)-1,3,5-triazin-2-amine	
8	Triazoles		
a	IPCZ	(1RS, 2SR, 5RS; 1RS, 2SR, 5SR)-2-(4-Chlorobenzyl)-5-Isopropyl-1-(1H-1,2,4-triazol-1-ylmethyl) Cyclopentanol	
b	FTL	1-(2-Fluorophenyl)-1-(4-Fluorophenyl)-2-(1, 2, 4-Triazol-1-yl) Ethanol	
c	FOX	2-(2-Fluorophenyl)-2-(4-Fluoro phenyl) Oxirane	
d	IBCZ	(4-Chlorophenyl) Methyl N-(2,4-Dichlorophenyl)-1H-1,2,4-Triazole-1-Ethanimidothioate	
B	**Synthetic organic chemical 5(f)**		
Fine Chemicals			**7500**
1	Substituted Anthraanilic acid		
a	ACBM	2-Amino-3-Chlorobenzoic Acid Methyl Ester	
2	Substituted 1,2,4-Triazole		
a	AMT	5-Amino-1,2,4-Triazole-3-thiol	
3	Substituted tetrahydo pyran		
a	ATHP	1-(Tetrahydropyran-4-yl) Ethanone	
4	Dimethyl halo substituted benzene		
a	CDMA	4-Chloro-2,6-Dimethyl Aniline	
b	CDMB	4-Chloro 2,6-Dimethyl-Bromo benzene.	
5	Substituted cyclopropyl ethanone		
a	CPFK	1-Cyclopropy-2(2 Fluorophenyl) Ethanone	
6	Substituted alkyl diamine		
a	DAEEA	N,N'-Bis(2-Hydroxyethyl) Ethylene Diamine	
7	Substituted dihalo pyridine		
a	DCTFP	2,3-Dichloro-5-(Trichloromethyl) Pyridine	
8	Subsituted dimethyl dioxane methanol		
a	DHD	2, 2-Dimethyl-5-Hydroxymethyl-1, 3-Dioxane	
9	Substituted Butanone		
a	DMB	4,4-Dimethoxy-2-Butanone	
10	Substituted Butanoic acid		
a	EMBA	2-Ethyl-2-Methyl Butanoic acid	
11	Substituted Hydrazine		
a	MMH	Mono Methyl Hydrazine	
b	UDMH	1,1,-Dimethyl Hydrazine	
C	SDMH	1,2-Dimethyl Hydrazine	
12	Substituted Phenothiazine		
a	10-H Phenotiazine	10-H Phenotiazine	
13	Substituted diphenyl ether		
a	Metaphenoxy benzaldehyde	3-Phenoxy Benzaldehyde	
14	Phosgene	Carbonyl dichloride	
Pyrazoles			**5500**
1	n-alkyl 3,4,5 sustituted pyrazoles		
a	PFD	N-{3-Isobutyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl) ethyl] phenyl}-1,3,5- Trimethyl Pyrazole -4- Carboxylic Amide	
b	TBFN	4-Chloro-N-[[4-(1,1-Dimethylethyl) Phenyl] Methyl]-3-Ethyl-1-Methyl-1H-Pyrazole-5-Carboxamide	

c	TLF	Tolfenpyrad	
d	IBA	3-Isobutylanoline	
e	OCTOPUSSY	3-[[[5-(Difluoro methoxy)-1-methyl-3-(Trifluoromethyl)-1H-pyrazol-4-yl] methyl] sulfonyl]-4,5-Dihydro-5,5-Dimethyl isoxazole	
f	MY-71	3-[1-(3,5-Dichlorophenyl)-1-Methylethyl]-3,4-Dihydro-6-Methyl-5-Phenyl-2H-1,3-oxazin-4-one	
g	MTP	1-Methyl-3-(Trifluro methyl)1H-Pyrazol-5-ol	
h	DCPA	1,3-Dimethyl-5-Chloro-4-Pyrazolyl Carboxylic Acid Chloride	
i	CFPA	3,4-Dichloro-5-Fluoro Biphenyl-2-Amine	
j	ACH	3-(Difluoro Methyl)-1-Methyl-1H-Pyrazole-4-Carboxylic Acid	
k	BDB	4-Bromo- 1,2-Dichloro Benzene	
l	PRZ	Difluoro Methyl-N-Methyl Pyrazolic acid	
Fluoro-speciality products			**2000**
1	Fluoro substituted alkyl amine		
a	DFEA	2,2-Difluoro Ethylamine	
Pharma intermediates			**1000**
1	Substituted triazole carboxylate		
a	EMTC	Ethyl-4-Methyl-1,3-Thiazole-5-Carboxylate	
Specialty Chemicals			**1000**
1	Substituted cyclohexane carboxylate		
a	ETMD	Methyl cis-1-[2-(2,5-Dimethyl phenyl)-Acetyl amino]-4-Methoxy-Cyclohexane Carboxylate	
2	Hepta Fluoro Alkane		
a	HFMOP	1,1,1,3,3,3-Hexafluoro Isopropyl Methyl Ether	
3	Substituted 1,3-dioxalane		
a	MDO	2,2-Dimethyl-4-Methylene-1,3-Dioxalane	
4	Substituted Isobutyrate		
a	CMIBA	Chloromethyl 2-Methyl Propanoate	
5	Substituted phenyl ether		
a	CMTB	2-Chloro-4-(Methyl sulfonyl)-3-[(2,2,2-trifluoro ethoxy) methyl] Benzoic Acid	
Performance Chemicals			**13000**
1	Substituted phenyl morpholoine Ketone		
a	PCBM	1-(4-Chlorophenyl)-2-methyl-2-(morpholin-4-yl)propan-1-one	
2	Catecol mixed salt		
a	Negolyte	Titanium Biscatecholate Monopyrogallate Sodium Potassium Salt	
New R&D product for Pilot scale			**240**
		Total	**44240**

List of by-products

S. No.	List of By-products	Quantity (MTPA)
1	27% NaSH	1000
2	30 % HCl	12000
3	Ammonia Solution 15%	1000
4	H_2SO_4	300
5	Distill Solvent	6900

6	Sodium Propionate	2400
7	NaBr/MgBr	60000
8	Acetic Acid	1200
9	Orthocresol	300
10	Propionic Acid	900
11	Ammonium Chloride	500
12	HBr	1000
13	Sodium hypochloride solution	900
14	$AlCl_3$	1800
	Total	**90200**

35.3.9.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for manufacturing of Pesticides, pesticide intermediates and fine chemicals of total capacity 43240 TPA (excluding pharma intermediates of 1000 TPA) by M/s PI Industries Ltd (Unit-II) in a total area of 87300 sqm at Post Sarod, Taluka Jambusar, District Bharuch (Gujarat).

The project/activity is covered under category A of item 5(b) 'Pesticide industry and pesticide specific intermediates' of Schedule of Environmental Impact Assessment (EIA) Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.
The ToR for the project was granted on 29th April, 2017 and public hearing was conducted by the SPCB on 22nd June, 2017.

Total water requirement is estimated to be 2625 m^3/day, of which fresh water demand of 2491 cum/day is to be met from SEZ water supply. Effluent of 734 KLD shall be treated through ETP of adjacent sister concern unit of PI Industries (Unit-I) and finally discharged to common SEZ sump. Treated effluent of 500 m^3/day shall be discharged into Gulf of Cambay through approved channel of M/s VECL.

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

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

- *Total production of pesticides shall include manufacturing at least 25% of bio-pesticides.*
- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *Effluent treatment of 500 cum/day, shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, to take it to the common SEZ sump followed by discharge into Gulf of Cambay through approved channel of M/s VECL.*
- *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.*
- *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 2491 cum/day to be met from SEZ water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP/RO to meet the prescribed standards.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. 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 through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
  - *(a) Metering and control of quantities of active ingredients to minimize waste.*
  - *(b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(c) Use of automated filling to minimize spillage.*
  - *(d) Use of Close Feed system into batch reactors.*
  - *(e) Venting equipment through vapour recovery system.*
  - *(f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment 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 and the effluent, shall be installed for measurement of flow/discharge and the pollutants concentration, and the emission and effluent monitoring data to be transmitted to the CPCB and SPCB server as per the directions of CPCB in this regard.*

Agenda No.35.3.10

Expansion of Pesticide (Technical) from 2940 MT/Annum to 4260 MT/Annum by M/s Bharat Rasayan Limited at 2 km Stone, Madina-Mokhra Road, Village Mokhra, Tehsil Meham, District Rohtak (Haryana)

[IA/HR/IND2/31067/2015, J-11011/253/2015-IA II (I)]

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

(i) The proposal is for expansion of existing Pesticide technical (2940 to 4260 TPA) project by M/s Bharat Rasayan Ltd at 2 km Stone, Madina Mokhra Road, Village Mokhra, Tehsil Meham, District Rohtak, Haryana.

(ii) The project was considered by the Expert Appraisal Committee (Industry-2) in its 29th meeting held during 12-13 October, 2017 and recommended ADS for Zero Liquid Discharge then for reconsideration in 33rd EAC meeting held on 22-24 January 2018. The ToR has been issued by Ministry vide letter No. J-11011/253/2015-IA II(I); dated 2nd August 2016.

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

(iv) Ministry has not issued EC earlier as the plant is running since1991 on the basis of valid consent.

(v) Existing land area is 44517 sqm and no additional land will be required for proposed expansion. Industry has already/ will be developed Greenbelt in an area of 33 % i.e. 16068.65 m^2 out of 44517 m^2 of area of the project.

(vi) The estimated project cost is Rs 150 Lakhs while existing investment of Rs 2900 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs 200 Lakhs and the Recurring cost (operation and maintenance) will be about Rs 234 Lakhs per annum. Total Employment will be 230 persons as direct & 275 person indirect after expansion. Industry proposes to allocate Rs 19.65 @ 5/2.5 % towards Corporate Social Responsibility.

(vii) There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Mokra Minor is flowing at 1.80 km in NW direction.

(viii) Ambient air quality monitoring was carried out at 8 locations during 1st Dec 2015 to 29th Feb 2016. The baseline data indicates the ranges of concentrations as: PM_{10} (61-78 µg/m^3),

$PM_{2.5}$ (26-35 µg/m^3), SO_2 (5.4 -6.6 µg/m^3) and NO_2 (11.1 -13.1 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 6.7 µg/m^3, 3.6 µg/m^3 and 3,6 µg/m^3 with respect to PM_{10}, SOx and HCl. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(ix) Total water requirement is 234.719 m^3/day sand will be met from Borewell. Effluent of 49.61 KLD from process and 35 KLD from domestic will be treated through MEE/ETP/STP. The plant will be based on Zero Liquid discharge system.

(x) Power requirement after expansion will be 1720 kVA including existing 1450 kVA and will be met From State Electricity Board (UHBVNL). Existing unit has 2 DG sets of 1250 kVA & 275 kVA capacity, additionally 275 kVA DG sets are used as standby during power failure. Stack (height 10 m) will be provided as per CPCB norms to the 2 DG sets of 1250KVA & 275 kVA which will be used as standby during power failure.

(xi) Existing unit has 6 TPH coal fired, 3TPH & 2 TPH LDO fired boiler with 2 numbers Thermic fluid heater of 2 Lac Kcal each, LDO fired. Additionally, 2 TPH coal fired boiler or replacement of existing 6 TPH boiler by 8 TPH boiler and thermic fluid heater 6 Lac Kcal will be installed. Multi cyclone separator/ bag filter/scrubber with a stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm^3 for the proposed boilers.

(xii) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 15th June 2017.

(xiii) The existing and proposed products are as under:

S.No	Particulars	Existing Capacity (TPA)	Proposed Capacity (TPA)
INSECTICIDE			
1	Alphacypermethrin Technical	0	100
2	Bifenthrin Technical	0	120
3	Cypermethrin Technical	600	350
4	Fenvalerate Tech.	900	300
5	Fipronil Tech.	0	100
6	Lambda Cyhalothrin Tech.	0	300
7	Permethrin Tech.	0	100
8	Thiamethoxam Tech.	0	300
9	Diafenthiroun Tech.	0	150
HERBICIDE			
1	Clodinafop Tech.	0	100
2	Propanil Tech.	0	50
3	Pyrazosulfuron Tech.	0	20
4	Imiazethapyre Tech.	0	25
5	Safener	0	30
FUNGICIDES			
1	Tebuconazole Tech.	0	50
2	Diafenconazole Tech.	0	50
3	Myclobutanil	0	15
INTERMEDIATE			
1	Methaphenoxybenzaldehyde	960	1800
2	Parachlorophenyl Isopropyl Acetic Acid	0	200
3	Parachlorobenzylcyanide	480	100
	TOTAL CAPACITY	**2940**	**4260**

35.3.10.2 The proposal was earlier considered by the EAC in its meeting held on 12-13 October, 2017, wherein the Committee in view of the submissions by the project proponent regarding zero liquid discharge stipulations, asked for a certification in this regard by the CPCB and/or the SPCB to ensure compliance of the directions by CPCB. The project proponent has since submitted the desired document from the Haryana Pollution Control Board.

Further, the EAC, in its meeting held on 22-24 January, 2018, preferred for a site visit by a sub-committee of 2-3 of its members to be decided by the Ministry in consultation with EAC Chairman. However, the site visit could not be planned due to some or the other reasons.

35.3.10.3 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Pesticides Technical manufacturing from the present capacity of 2940 TPA to 4260 TPA by M/s Bharat Rasayan Ltd in a total area of 44517 sqm at 2 km Stone, Madina Mokhra Road, Village Mokhra, Tehsil Meham, District Rohtak (Haryana).

The project/activity is covered under category A of item 5(b) 'Pesticide industry and pesticide specific intermediates' of Schedule of Environmental Impact Assessment (EIA) Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 2nd August 2016 and public hearing was conducted by the SPCB on 15th June 2017.

Total water requirement is estimated to be 234.719 m^3/day, to be met from borewell. Effluent of 49.61 KLD from process and 35 KLD from domestic shall be treated through MEE/ETP/STP. There will be no discharge of treated/untreated waste water from the unit, and thus conforming to Zero Liquid Discharge.

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.

In response to the observations of the EAC in its meeting held on 13th October, 2017, the project proponent has submitted a certificate from Haryana PCB vide their letter dated 24th October, 2017 regarding ZLD. The SPCB has informed that the unit is recycling/reusing treated trade effluent in their process i.e. cooling towers, scrubber etc. and the treated domestic effluent for horticulture purpose. The unit was not found discharging any effluent outside the premises during the inspections done by the Board.

The unit was established in the year 1991 i.e. prior to EIA Notification,1994/2006 and thus not requiring prior EC. Consent to operate for the present industrial operations (2940 TPA) has been obtained from the State PCB, which is presently valid up to 30th September, 2021.

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

- *Total production of pesticides shall include manufacturing at least 25% of bio-pesticides.*
- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*

- *Treatment of effluent of 148.98 cum/day, shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, to take it to the FETP followed by discharge through GIDC pipeline to deep sea.*
- *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.*
- *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 234.719 cum/day to be met from borewell. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP/RO to meet the prescribed standards.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. 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 through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
    - *(i) Metering and control of quantities of active ingredients to minimize waste.*
    - *(ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
    - *(iii) Use of automated filling to minimize spillage.*
    - *(iv) Use of Close Feed system into batch reactors.*
    - *(v) Venting equipment through vapour recovery system.*
    - *(vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*

- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment 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 and the effluent, shall be installed for measurement of flow/discharge and the pollutants concentration, and the emission and effluent monitoring data to be transmitted to the CPCB and SPCB server as per the directions of CPCB in this regard.*

Day 2: 28th March, 2018

Agenda No.35.3.11

Expansion of Active Pharmaceuticals Ingredients (APIs) with R&D Facility by M/s Harika Drugs Pvt Ltd at Sy. Nos.165/A, 165/AA & 165/E, Gummadidala (V&M), District Sangareddy (Telangana)

[IA/TG/IND2/66988/2017, IA-J-11011/398/2017-IA-II(I)

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

(i) The proposal is for Environmental Clearance to the project for expansion of Active Pharmaceutical Ingredients (APIs) manufacturing Unit with R&D facility at Sy. No.165/A, 165/AA & 165/E, Gummadidala (V & M), Sangareddy District (Telangana) by M/s Harika Drugs Pvt. Ltd.

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 28thmeeting held during 20thSeptember, 2017 and recommended Terms of References (ToRs) for the Project. The ToR has been issued by Ministry vide letter no. J-11011/398/2017-IA II(I); dated 25-09-2017.

(iii) All projects are listed at S.N. 5 (f) of the Schedule to the Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Ministry had issued EC earlier vide letter no. J-11011/79/2004-IA-II (I); dated 15-07-2005 to the existing project in favour of M/s. Harika Drugs Pvt. Ltd.

(v) Existing land area is 11043 m^2, additional 11230 m^2 land will be used for proposed expansion. Total area would be 22273 m^2 (2.23 ha). Industry had developed greenbelt in an area of 35.4% i.e. 7886 m^2 out of total area of the project.

(vi) The estimated project cost is Rs.36.97 Crores including existing investment of Rs.15.97 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 6.04 crores including existing Rs.2.44 Crores and the Recurring cost (operation and maintenance) will be about Rs. 4.5 crores per annum. Total Employment will be 85 persons as direct &154 persons indirect after expansion. Industry proposes to allocate Rs. 105 lakhs@ 5% towards Corporate Social Responsibility (Enterprise Social Commitment).

(vii) There are No National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km distance. Water bodies like Pond near Nawabpet is at a distance of 3.3 km in NE direction; Pond near Kanukunta is at a distance of 2 km in E direction; Pond near Anantaram is at a distance of 2 km in ESE direction; Pond Near Gummadidala is at a distance of 1 km in SSE direction; Pond Near Bonthapally is at a distance of 3.4 km in SSW direction; ErraCheruvu Gummadidala is at a distance of 0.7 km in SW direction; Pond near Mambapur is at a distance of 1.7 km in SW direction; Pond Near Nallavalli is at a distance of 2.2 km in NW direction.

(viii) Ambient air quality monitoring was carried out at 9 locations during March to May 2017 and the baseline data indicates the ranges of concentrations as: PM_{10}:28- 50µg/m^3, $PM_{2.5}$: 10-22µg/m^3, SO_2: BDL - 15µg/m^3 and NO_2: BDL-19µg/m^3 respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.472µg/m^3, 4.96µg/m^3 and 2.84µg/m^3 with respect to PM_{10}, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(ix) Total water requirement is 206.9 m^3/day of which fresh water requirement of 141.4m^3/day will be met from ground water through bore wells. Effluent of 73.2 KLD quantity will be treated through Effluent Treatment plant. The plant will be based on Zero Liquid discharge system.

(x) Power requirement after expansion will be 1200 kVA including existing 200 kVA and will be met from Telangana State Power Distribution Corporation limited (TSPDCL). Existing unit has 2 nos. of DG sets of 75 kVA capacities, additionally 2 nos. of DG sets of 1000 kVA are used as standby during power failure. Stack height of 11 m will be provided as per CPCB norms to the proposed DG sets.

(xi) Existing unit has 0.5 TPH coal fired boiler. Additional 2 TPH & 4 TPH coal fired boilers will be installed. Multi cyclone separator & bag filter with a stack of height of 30 m will be installed for controlling the Particulate emissions within statutory limit of 115 mg/Nm^3 for proposed boilers. Additional 4 lakh Kcal/hr coal fired Thermic Fluid Heater (TFH) will be installed in addition to the existing 2 lakh Kcal/hr Diesel fired TFH. Existing 2 lakh Kcal/hr TFH will be used as standby after expansion. Existing 0.5 TPH boiler will be dismantled after expansion.

(xii) Details of Process emissions generation and its management.
(xiii)

S. No.	Process Emission	Maximum Quantity on various combinations (kg/day)	Treatment
1.	HCl	47.67	• Scrubbed by using water & CS lye sol.
2.	SO_2	301.4	• Scrubbed by using CS lye solution
3.	NH_3	60.9	• Scrubbed by using Chilled water / dil. H_2SO_4 solution.
4.	H_2	1.5	• Diluted with Nitrogen and Diffused with Flame Arrestor

(xiii) Details of Solid waste/ Hazardous waste generation and its management are as under:

S. No.	Description	Proposed Quantity (TPD)	Stream	Handling Method	Disposal
1.	Organic residue from Process	1.41	28.1 of Schedule -I	HDPE Drums	Sent to SPCB Authorized Cement industries through GEPIL (**or**) to TSDF for Incineration
2.	Distillation Bottom Residue (1% of spent solvents)	0.2	36.1of Schedule -I		
3.	Spent carbon	0.1	28.3 of Schedule -I		
4.	Inorganic & Evaporation salt (Process) (10% moisture)	2	35.3 of Schedule -I	HDPE Bags	Sent to TSDF for Landfill **(or)** to SPCB Authorized Cement industries through GEPIL
5.	Evaporation salt (Non-Process)	0.5	35.3 of Schedule -I		
6.	ETP Sludge	0.3	35.3 of Schedule -I		
7.	Boiler ash	11	--	HDPE Bags	Sent to Brick Manufacturers
Other Hazardous Waste generation from the Plant					
8.	a) Detoxified Container / Liners drums, HDPE Carboys, Fiber Drums,	100 Nos./ month	33.1 of Schedule-I	Designated covered area	Disposed to SPCB Authorized agencies after complete detoxification
	b) PP Bags	100 Kg/month	--		
9.	Spent solvents (17.2 KLD + 0.8 KLD water)	18 KLD	28.6 of Schedule -I	Tanks / Drums	Recovered within the plant premises
10.	Recovered Solvents from Spent solvents (85% recovery from spent solvents)	14.5 KLD	28.6 of Schedule -I	Tanks / Drums	Reuse **(or)** sold to Recyclers
11.	Spent Mixed solvents (unrecovered solvents)	2.7 KLD	28.6 of Schedule -I	Tanks/ Drums	Sent to SPCB Authorized agencies
12.	Waste oils & Grease	3	5.1 of	MS Drums	Sent to SPCB

		KL/annum	Schedule -I		Authorized agencies for reprocessing
13.	Used Lead acid Batteries	50 Nos. / annum	A1160 of Schedule-III	Stored in Covered shed	Sent to suppliers on buy-back basis.
14.	Misc. Waste (spill control waste)	L.S.	--	Stored in Drums	TSDF
15.	Rejects	L.S.	--		
16.	E- waste	L.S.	--	Designated covered area	Authorized reprocessor **(or)** TSDF
17.	Waste papers & other types of packing scrap	L.S.	--		Sold to scrap venders
18.	Canteen waste	L.S.	--	HDPE bags	Composted on site and reused for green belt
19	Bio Medical Waste	LS.	--	Color coded containers	Sent to SPCB authorized Biomedical waste incinerator

Note: Hazardous / Solid waste quantities maximum on various combinations i.e., 6 products on campaign products at a point of time and R&D products.

(xiv) Public consultation is exempted in terms of provisions of para 7(ii) of the EIA Notification, 2006 as per the ToR issued by MoEF&CC dated 25th September, 2017.

(xv) Certified Compliance report was issued by Regional Office of MoEF&CC, Chennai dated 5th September, 2017.

(xvi) The details of products and capacity as under:

S. No.	Products	Quantity kg/day	Quantity (TPA)	CAS No.	Therapeutic Category
1.	Benzydamine HCl	13.33	4.8	132-69-4	Anti- Inflammatory
2.	Buclizine Dihydrochloride	25	9	129-74-8	Antihistamine
3.	Carisoprodol	**333.33**	**120**	78-44-4	Muscle Relaxant
4	Chlorpheniramine Maleate	16.67	6	113-92-8	Antihistamine
5	Chromium Picolinate	83.33	30	14639-25-9	Nutritional supplement
6	Doxylamine Succinate	25	9	562-10-7	antihistamine
7	Gliclazide	**200**	**72**	21187-98-4	Oral antidiabetic
8	Hydroxyzine Dihydrochloride	66.67	24	2192-20-3	Antihistamine
9	Imipramine Hydrochloride	20	7.2	113-52-0	Antidepressant
10	Meclizine Dihydrochloride Monohydrate	25	9	1104-22-9	Antihistamine
11	Meloxicam	33.33	12	71125-38-7	Anti-inflammatory
12	Orphenadrine Citrate	**333.33**	**120**	4682-36-4	Anticholinergic
13	Oxomemazine Hydrochloride	13.33	4.8	4784-40-1	antihistamine
14	Oxomemazine	20	7.2	3689-50-	antihistamine

S. No.	Products	Quantity kg/day	Quantity (TPA)	CAS No.	Therapeutic Category
				7	
15	Pheniramine Maleate	**233.33**	**84**	132-20-7	antihistamine
16	Prochlorperazine Maleate	26.67	9.6	84-02-6	Neuroleptic
17	Promethazine Hydrochloride	**333.33**	**120**	58-33-3	Antihistamine
18	Promethazine Theoclate	16.67	6	17693-51-5	Antihistamine
19	Sertraline Hydrochloride	**233.33**	**84**	113-92-8	Antidepressant
Total 6 products at time out of total 19products		**1666.65**	**600**		
R & D Activity					
1	R&D	0.5	0.2		
Total 6 products at time out of total 19 products and R&D products		**1667.2**	**600.2**		

35.3.11.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Active Pharmaceuticals Ingredients (APIs) with R&D Facility from 1.93 TPM to 50 TPM by M/s Harika Drugs Pvt Ltd in a total area of 22273 m^2 at Sy. Nos. 165/A, 165/AA & 165/E, Gummadidala (V & M), District Sangareddy (Telangana).

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

The ToR for the project was granted on 25th September, 2017, exempting public consultation in terms of provisions contained in para 7(ii) of the EIA Notification, 2006.

Total water requirement is 206.9 cum/day, of which fresh water requirement is estimated to be 141.4 cum/day, which is proposed to be reduced to 120 cum/day by enhancing the efficiency of cooling tower recycling, to be met from ground water through bore wells. The State Ground Water Department of the Government of Telangana has given permission for withdrawal of 210 KLD from the existing bore wells.

Total effluent generated from different industrial operations is estimated to be 73.2 KLD, which will be taken to the Effluent Treatment plant for treatment. The treated water of 65.5 KLD shall be recycled to supplement the water requirement of cooling tower. There will be no discharge of treated/untreated waste water from the unit, and thus conforming to Zero Liquid Discharge.

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

Earlier, the Ministry had granted EC vide letter dated 15th July, 2005 for bulk drug unit for manufacturing Pheniramine meleate (1 TPM), Promethzzine hydrochloride (0.67 TPM) and Imipramine hydrochloride (0.26 TPM) by M/s Harika Drugs Pvt Ltd at Village Gummadidala, Tehsil Jinnaram, District Medak (Andhra Pradesh). The monitoring report on compliance status of existing EC conditions, has been forwarded by the Ministry's Regional Office at Chennai vide

letter dated 5th September, 2017 (site visit carried out 21st August, 2017). The compliance status of existing EC conditions, forwarded by the Ministry's Regional Office found to be satisfactory.

Consent to Operate for the existing products/utilities has been obtained from the Telangana PCB, which is presently valid up to 31st December, 2021.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *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.*
- *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 98% recovery.*
  - *(iv) Solvents shall be stored in a separate space specified with all safety measures.*
  - *(v) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - *(vi) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  - *(vii) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed* 120 cum/day to be met from ground water through bore wells*. 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. 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 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:-*
  - *(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 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 2.5% of the total project cost shall be allocated for Enterprise Social Commitment and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.*
- *The energy sources for lighting purposes shall preferably be LED based.*

Agenda No.35.3.12

Expansion of Pesticide Specific Intermediates and Specialty Chemicals manufacturing unit by M/s Pragna Life Science Pvt Ltd at Plot No. 409/b/2, GIDC Industrial Estate, Panoli, Taluka Ankleshwar, District Bharuch (Gujarat)

[IA/GJ/IND2/63992/2017, IA-J-11011/188/2017-IA-II(I)]

35.3.12.1 The project proponent and accredited consultant M/s Aqua-Air Environmental Engineers Pvt Ltd made a detailed presentation on the salient features of the project & informed that:

(i) The proposal is for Environmental Clearance to the project for expansion of pesticide specific intermediates (104.15 MT/Month) and specialty chemicals (96.6 MT/Month) manufacturing unit in existing unit at Plot No. 409/B/2, GIDC Industrial Estate, Panoli-394116, District Bharuch (Gujarat) by M/s. Pragna Life Science Pvt. Ltd.

(ii) The project was considered by the Expert Appraisal Committee (industry-2) in its 24th meeting held during 14th June, 2017 and recommended Terms of References (ToRs) for the project. The ToR has been issued by Ministry vide letter No. J-11011/188/2017-IA II (I) dated 24/07/2017.

(iii) All Products are listed at S.N. 5(b) & 5(f) of the Schedule to the Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Existing land area is 3500 m^2, no additional land required for expansion. Industry will develop Greenbelt in an area of 20 % i.e. 700 m^2 out of 3500 m^2 total area of the project.

(v) The estimated project cost is Rs. 5.50 Crores including existing investment of Rs. 1.5 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 1.0 Crore and recurring cost (Operation and Maintenance) will be around Rs. 1.5 Crore per annum. Total employment will be 20 people as direct and 25 person indirect after expansion. Industry purposes to allocate Rs. 0.20 Crore of 5% towards Corporate Social Responsibility.

(vi) There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Amla Khadi is flowing at a distance of 6 Km in North Direction.

(vii) Ambient air quality monitoring is carried out at 9 locations during March 1, 2017 to May 31, 2017.The dispersion of pollutants in the atmosphere is a function of several meteorological parameters viz. temperature, wind speed and direction, mixing depths, inversion level, etc. The ambient air samples were collected and analyzed for Particulate Matter (PM_{10}), Particulate Matter ($PM_{2.5}$), Sulphur Dioxide (SO_2), Oxides of Nitrogen (NOx), Ozone (O_3), Lead (Pb), Carbon Monoxide (CO), Ammonia (NH_3), Benzene (C_6H_6), Benzo (a) Pyrene (BaP), Arsenic (AS), Nickel (Ni), HCl, Cl_2, HC, & VOCs were monitored at site and nearby villages for identification, prediction, evaluation and assessment of potential impact on ambient air environment. The PM_{10} values at all the locations in residential/rural areas ranged between 74.09 – 96.39 $\mu g/m^3$ respectively in pre-monsoon season. Similarly, the values of $PM_{2.5}$ varied in the range of 42.95 – 51.28 $\mu g/m^3$. The PM_{10} and $PM_{2.5}$ concentrations at all the AAQM locations were primarily caused by local phenomena including vehicular activities and natural dust getting air borne due to manmade activities and blowing wind. The values of NO_x at all the locations in residential/rural areas were observed to be in the range of 8.11 – 28.53 $\mu g/m^3$. The values of SO_2 at all the locations in residential/rural areas ranged between 10.87-26.72 $\mu g/m^3$. The values of O_3 at all the locations in residential/rural areas ranged between 10.51 – 11.73 $\mu g/m^3$. At all the air quality monitoring locations in residential/rural areas, the values of NOx, SO_2& O_3 were observed to be within limits. The values of CO at all the locations in residential/rural areas ranged between BDL – 1.30 mg/m^3.The values of NH_3 at all the locations in residential/rural areas ranged between BDL – 8.73 $\mu g/m^3$. The values of Ni at all the locations in residential/rural areas ranged between BDL – 10.94 ng/m^3. The values of HCl at all the locations in residential/rural areas ranged between <1.0 – 11.49 $\mu g/m^3$. The values of Cl_2 at all the locations in residential/rural areas is found to be <5.0 $\mu g/m^3$.The values of VOCs at all the locations in residential/rural areas ranged between 0.3 – 0.7 ppm. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(viii) Total water requirement will be 34.88 m^3/day of which fresh water requirement of 26.88 m^3/day will be met from GIDC Water Supply.

(ix) Low COD & Low TDS Treated Effluent (10 KL/Day) will be sent to CETP, M/s. PETL, GIDC Panoli for further treatment. High COD effluent (3.3 KL/Day) will be sent to Common Spray, M/s. PETL, GIDC Panoli for further treatment. High TDS and COD treated Effluent (8KL/Day) will be reused in plant premises.

Total water requirement will be 34.88 m^3/day after proposed expansion. Total 23.3 m^3/day wastewater (17.3 m^3/day Industrial + 6.0 m^3/day domestic) shall be generated. 10 m^3/day industrial (low COD) & domestic wastewater will be given primary treatment & then after sent to CETP of PETL, Panoli for treatment & disposal. 3.3 m^3/day High COD & TDS wastewater will be given primary treatment and then after sent to Common Spray Dryer of PETL, Panoli. 10 m^3/day High TDS & COD wastewater will be treated in primary ETP and then sent to MEE & ATFD

within premises for evaporation and condensate ($8m^3$/day) will be reused for industrial purposes.

(x) Total Power Requirement - 1000 kVA from DGVCL (Existing -250 kVA + Proposed -750 kVA) from Dakshin Gujarat Vij Company Limited (DGVCL). Existing unit has 1 D G Set of 125 kVA, additionally 1 DG Set will be used as standby during power failure. Stack (Height – 11 m) will be provided as per CPCB norms to the proposed DG Set.

(xi) Existing unit have 0.6 TPH Natural gas base 1 No. steam boiler, 0.6 TPH 1 steam boiler is standby and 4 Lac Kcal/hr Natural gas base 1 No. Thermic fluid heater. Additionally, will have 0.8 TPH Agro waste/Coal base 1 No. steam boiler, 1 steam boiler (0.8 TPH) is standby and 6 Lac Kcal/hr Natural gas base 1 No. Thermic fluid heater, 6 Lac Kcal/hr Natural gas base 1 No. Thermic fluid heater is standby. Multi Cyclone Separator with Bag Filter, scrubber with a stack of height of 30m, 12 m will be installed for controlling the Particulates Matter (PM) within statutory limit of 115 mg/Nm^3 for the proposed boilers.

(xii) Details of Solid waste / Hazardous waste generation and its management are as under:

S.No.	Type of waste	Category	Qty. (MT/Month)			Mode of Treatment & Disposal
			Existing	Additional	Total	
1	ETP Sludge	35.3	5	25	30	Collection, Storage, Transportation and disposal at TSDF of BEIL or PSWMCL
2	Inorganic salts	35.3	0	75	75	
3	Used Oil	5.1	0.001	0.10	0.101	Collection, Storage, Transportation & disposal by Selling to registered re-refiners
4	Discarded Containers	33.1	180 Nos	500 Nos	680 Nos	Collection, Storage, Transportation, Decontamination and Sale to GPCB authorized vendor
	bags/liners		2400 Nos	550 Nos	2950 Nos.	
5	Incinerable Waste (Residue)	20.3	0	54	54	Collection, Storage, Transportation and co-processing in cement industries or sent to common incineration facility
6	Incinerable Waste (Spent Charcoal & Hyflow)	28.3	0	7	7	
7	Date expired & Off-specification material	28.4	0	0.4	0.4	
8	Spent Catalyst	28.2	0	2	2	Collection, Storage, Transportation and return back to supplier
9	Spent Sulfuric Acid	D2	0	280	280	Collection, Storage, Transportation and Sale to re-processors/end users
10	Spent Formic Acid	--	0	100	100	
11	Acetic Acid	--	0	10	10	
12	Dilute HCl	D2	0	50	50	

13	NaBr solution	B5	0	180	180	
14	NaHs solution	--	0	50	50	

(xiii) The project site is located in the notified Industrial and thus public hearing is not applicable.

(xiv) The unit was established during 2003 ie before EIA Notification, 2006 and thus prior EC was not required. Comapny has valid Consent to Operate for existing unit vide letter no. AWH-59710 dated: 10/01/2014 and valid up to 26/05/2018.

(xv) Following are the list of products:

S. No.	Product	EXISTING CAPACITY	PROPOSED CAPACITY	TOTAL
		MT/MONTH	MT/MONTH	MT/MONTH
1.	N-Ethyl 2 Pyridone	3.25	0	3.25
2.	Diethyl Malonate	2	0	2
3.	Ethyl Cyano Acetate	8	0	8
4.	2,5 DiChloro Para Phenylene Diamine	0	29.16	29.16
5.	2 Nitro 4 Methoxy Aniline			
6.	2,5 Dimethyl-P-Phenylenediamine			
7.	2-Mercapto 5-Methoxy Benzimedazole			
8.	3-[4-chloro-5-(cyclopentyloxy)-2-fluorophenyl]-5-(1-methylethylidene)-1,3-oxazolidin-2,4-dione			
9.	Sodium/Potassium {2-[2,6 Dichloro Phenyl] Amino} Phenyl} Acetate	0	41.66	41.66
10.	2 Chlor PPD			
11.	2 –{2[2-{2, 6 dichloro phenyl} Amino] Phenyl Acetyl] Oxyacetic Acid			
12.	2-Chloro 1-Phenoxy Benzene			
13.	2,3 Xylil Anthranilic Acid	0	33.33	33.33
14.	2 Chloro 5 Methyl PPD			
15.	5 Amino Ortho Toluedine			
16.	4-Bromo Anisole			
17.	2 Chloro 4 Flouro 5 Nitro Benzyl Chloride			
18.	3 Amino 4 Methoxy Acetanilide	0	83.33	83.33
19.	Para Anisidine			

20.	Para Amino Salicylic Acid			
21.	Nitro to amino conversion by catalytic hydrogenation			
22.	Aldehyde to alcohol conversion by catalytic hydrogenation			
TOTAL		**13.25**	**187.5**	**200.75**

Note: Total Specialty Chemicals means category – 5 (f)= 96.6 MT/Month
Total Pesticide Specific Intermediates means category – 5 (b) = 104.15MT/Month

35.3.12.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of pesticide specific intermediates and specialty chemicals manufacturing unit by M/s. Pragna Life Science Pvt. Ltd in a total area of 3500 sqm at Plot No. 409/B/2, GIDC Industrial Estate, Panoli, District Bharuch (Gujarat).

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

The ToR for the project was granted on 24th July, 2017, exempting public consultation, as the project site is located in the notified Industrial area.
Total water requirement is 34.88 m^3/day, of which fresh water requirement of 26.88 m^3/day will be met from GIDC Water Supply.

The unit was established during 2003 i.e. before the EIA Notification, 2006 and thus prior EC was not required. Company has valid Consent to Operate for existing unit vide letter no. AWH-59710 dated: 10/01/2014 and valid up to 26/05/2018.

35.3.12.3 *The EAC, after deliberations, noted that the different products proposed to be manufactured included pesticides specific intermediates, and speciality chemicals which are to be utilized in making pharmaceuticals products. The Committee was of the opinion that such campaign operations shall not be allowed within the same unit/premises from environmental and health perspective. The Committee insisted for restructuring of the proposal accordingly, which would involve substantial changes in scope of work, assessment of pollution concerns and the EMP.*

The proposal was, therefore, deferred for the needful.

Agenda No.35.3.13

Construction of new POL storage terminal and LPG bottling plant by M/s Indian Oil Corporation Limited at Motihari, District East Champaran (Bihar)

[IA/BR/IND2/73423/2017, F.No. IA-J-11011/89/2018-IA-II(I)]

35.3.13.1 The project proponent and the accredited consultant M/s S.V. Enviro Labs & consultants made a detailed presentation on the salient features of the project and informed that:

i The proposal is for environmental clearance to the project storage of LPG in 3 x 1200 MT MSVs and POL products of capacity 76,216 KL in 18 nos tanks at NH-28A, Chhapwa Bahas, Motihari, District East Champaran (Bihar) by M/s Indian Oil Corporation Ltd.

ii The project was considered by the State Expert Appraisal Committee, Bihar in its meeting held during 24.06.2017 and recommended Terms of Reference (ToRs) for the project. The ToR has been issued by SEIAA, Bihar vide letter No. 134/SEIAA/17, Patna dated 30th June, 2017.

iii All Category B projects are listed at S.N 6 (b) of schedule of the Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC), and in the absence of a duly constituted SEIAA & SEAC, category 'B' Project shall be treated as a category 'A' project. As the SEAC, Bihar committee is dissolved, therefore, we are submitting the EC documents to MoEF&CC, New Delhi.

iv Total land area is 51 acres, for proposed project. Industry will develop greenbelt in an area of 18% i.e., 9 acres out of 51 acres of area of the project. Only 18% of greenbelt will be provided within the site and remaining 15% will be provided outside the premises.

v The estimated project cost is Rs 572 crores (Rs. Five hundred and seventy two crores). Total capital cost earmarked towards environmental pollution control measures is Rs. 10 Crores and the Recurring cost (operation and maintenance) will be about Rs. 2.5 crore. Total employment will be 250 nos. as direct & indirect employees. Industry proposes to allocate Rs. 160 lakhs towards corporate social responsibility.

vi There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km distance from the project site. Burthi Gandhak River is flowing at a distance of 2.0 km and Dhanawati River at 3.15 kms from the project site.

vii Ambient air quality monitoring was carried out at 8 locations during Oct' 17 to Dec' 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (65.3 to 58.7µg/m3), $PM_{2.5}$ (31.6 to 25.1µg/m3), and NO_2 (13.1 to 11.4µg/m3) respectively. The concentrations are within the National Ambient Air Quality Standards (NAAQS).

viii Total water requirement is 30 m^3/day fresh water requirement and will be met from Bore well/Panchayat Supply. Effluent of 20.5 KLD, will be routed through ETP plant will be based on Zero liquid discharge system.

ix Power requirement contracted demand is 4 MVA and will be met from Bihar State Electricity Board. Proposed project will provide 2 nos of DG sets, each of 1250 KVA Capacity used as standby during power failure. Stack Height: (30.0 mts for both the DG sets) is provided as per the norms.

x There is no process emissions generation.

xi Details of solid waste/hazardous waste generation and its management are as under:

S.No	Hazardous waste generation	Generation Quantity	It's Management
1	Waste oil	Minor qty. Salvaged from OWS	Disposed through PCB approved recyclers

2	Used batteries	As required for DG Sets and Fire Engines.	Disposed through PCB approved recyclers
3	Lubricating oil	As required for DG Sets and Fire Engines.	
4	Paint sludge	5 kg/Month	
5	Domestic solid waste	100 kgs/day	Will be followed as per MSW Rules, 2016

(xii) No litigation is pending against the proposal.

(xiii) The details of products and capacity are as under:

S.No	Products	Quantity
1	Storage of LPG	3 x 1200 MT
2	POL Terminal	76,216 KL in 18 nos tanks

35.3.13.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for construction of POL storage terminal of capacity 76216 KL (18 nos of tanks) and LPG storage of 3x1200 MT at Motihari, District East Champaran (Bihar) by M/s Indian Oil Corporation Limited in a total area of 51 acres at Motihari, District East Champaran (Bihar).

The project/activity is covered under category B of item 6(b) 'Isolated storage & handling of hazardous chemicals' of schedule to the Environment Impact Assessment (EIA) Notification. However, due to non-functioning of SEIAA Bihar, the project was appraised at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The ToR for the project was granted by SEIAA Bihar vide letter dated 30th June, 2017. Based on the request of Ministry of Petroleum & Natural Gas and considering the national importance of the project, public consultation for the project has been exempted by the Ministry.

Total fresh water requirement is 30 cum/day, to be met from Bore well/Panchayat Supply. Effluent will be treated in ETP and reused for green belt development. The unit will be based on Zero Liquid Discharge system.

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.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *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 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.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment and the details along with time bound action plan shall be 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.*
- *The project proponent shall conduct a traffic density survey on the approach road to be used for transportation of LPG tankers and LPG cylinders.*
- *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.*
- *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.*
- *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.*
- *The norms/guidelines of Oil Industry Safety Directorate (OISD) for installation and design of equipment and operation of the LPG Bottling Plants shall be strictly followed. Safety audit to be carried out and report submitted to the Regional Office.*
- *No packing/loading/unloading of LPG cylinders shall be made on road/outside factory premises. Vehicles loaded/unloaded with LPG cylinders shall be parked inside the plant premises only and not on road sides.*
- *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.*
- *Sections of pipeline and storage systems that can be isolated with valves or blinds should be equipped with safety valves to protect against possible damage as liquid LPG expands with increases in temperature.*
- *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 has to be undertaken on regular basis to control the polluting particles.*

35.4 Amendment in Environmental Clearance

Agenda No.35.4.1

Mumbai-Manglya pipeline extension project to Piyala/Bijwasan by M/s Bharat Petroleum Corporation Limited

[IA/UP/IND2/67185/2005 J-11011/1/2005-1AII(I)]

35.4.1.1 The proposal is for further amendment in Environmental Clearance dated 11th March, 2005 granted by the Ministry to M/s Bharat Petroleum Corporation Limited for the project 'Mumbai-Manglya pipeline extension project to Piyala/Bijwasan' for transportation of petroleum products (HSD/SKO/MS/ATF/Naphtha) of 3.5 MMTPA. The EC was earlier amended on 10th December, 2012 for capacity augmentation from 3.5 MMTPA to 4.4 MMTPA.

35.4.1.2 The project proponent has now sought amendment in the EC for change of capacity of DG sets required to operate, mainly pumping stations at Kota, Bharatpur and Malarna in Rajasthan stretch of the pipeline extension project, as per the details below:

Sr. No.	Location	Earlier DG Capacity (OLD)	New DG Capacity (Regularisation)
1	MMBPL Bharatpur, Bharatpur	320 KVA	380 KVA
2	IPS Malarna, Malarna	320 KVA	380 KVA
3	Pipelines Kota, Kota	125 & 62.5 KVA	200 KVA

35.4.1.3 *The EAC, after deliberations, noted that the instant proposal neither involves any increase in transportation of petroleum products through the MMB pipeline, nor any change in scope of the project. In fact, DG set details, for which amendment has been sought in the environmental clearance dated 11th March, 2005, are not mentioned therein and as such, there is no rationale and/or locus standi for amending the said EC in this regard.*

The Committee further observed that such pipeline projects, not passing through any National Parks/Sanctuaries/Coral-reefs/Eco-sensitive areas, are actually not covered under the ambit of the EIA Notification, 2006 and thus not requiring any environmental clearance.

Agenda No.35.4.2

Expansion of Viscose Staple Fibre, Sulphuric Acid, Carbon-Disulphide along with Proposed Solvent Spun Cellulosic Fibre and Captive Power Plant of 55 MW by M/s Grasim Industries Ltd (Grasim Cellulosic Division) at Plot No.1, GIDC Industrial Area, Vilayat, Tehsil Vagra, District Bharuch (Gujarat)

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

35.4.2.1 The proposal is for amendment in environmental clearance granted by the Ministry vide letter dated 15th January, 2018 to M/s Grasim Industries Ltd (Grasim Cellulosic Division) for the project for expansion of Viscose Staple Fibre (1,27,750 to 2,55,500 TPA), Sulphuric Acid (1,38,700 to 2,19,000 TPA), Carbon-Disulphide (54,750 to 65,700 TPA) along with Proposed Solvent Spun Cellulosic Fibre (Excel Fibre) (36,500 TPA) and Captive Power Plant (55 MW) located at Plot No.1, GIDC Industrial Area, Vilayat, Taluka Vagra, District Bharuch (Gujarat).

35.4.2.2 The project proponent has requested for amendment in the specific conditions of existing EC with the details are as under;

S. No.	Para of EC issued by MoEFCC	Details as per the EC Letter	To be Revised / Read as	Justification / Reason
1.	Specific Condition no. (iv); Page no. 3	Atleast, 50% of the fuel requirement shall be met from natural gas and rest 50 % may be met from briquette / coal (with Sulphur content less than 0.5 %)	The fuel requirement shall be met from *briquette / coal (with Sulphur content less than 0.5%) and biomass*.	Unavailability of gas supply & increasing demand supply gap.
2.	Specific Condition no. (v); Page no. 3	Proposed effluent generation (27160 KLD) shall be reused after treating / processing through RO, etc. and fresh water requirement shall accordingly be restricted to 22,000 KLD.	Proposed effluent generation (27160 KLD) shall be reused after treating / processing through RO, etc. and fresh water requirement shall accordingly be restricted to 28,000 KLD from 35,000 KLD.	Grasim Industries Limited has explored that the fresh water intake will be reduced from 35,000 KLD to 28,000 KLD after treatment with RO plant, instead of 22,000 KLD.
3.	Specific Condition no. (vii); Page no. 3	As assured, 5 MW of Power (of the total power requirement) shall be generated from solar power / renewable energy sources.	As assured, 5 MW Solar Power / renewable energy sources shall be installed through Our Corporate Solar Division of Aditya Birla Group in Karwar (Karnataka) / Sambalpur (Odisha) /.	▪ Unavailability of required land for installation of solar panels. ▪ Poor Performance (low efficiency) of solar panels due to corrosive atmosphere. ▪ Idle contract demand from grid during sunlight hours.

35.4.2.3 *The Committee, after deliberations, expressed concerns over the project proponent not willing to use natural gas to meet the fuel requirements due to their commercial interests, and insisted for compliance of the said condition from environmental perspective. In case of amendment desired in specific condition (v) due to the proposed change in requirement of fresh water (item 2 above), the committee asked for the revised details, including changes in fresh water requirement separately for different operations, effluent generation and the revised water balance. Regarding generation of solar power of 5 MW, the Committee observed that the said EC specific condition (vii) already permits for the changes desired therein, and thus found no rationale in the justification given by the project proponent.*

The proposal was therefore not taken forward and deferred. Instead, the committee desired that the specific condition No.(i)& (ii) of the EC dated 15th January, 2018 shall be complied with and documents shall be submitted.

Agenda No.35.4.3

Bulk Drugs Manufacturing Unit (2684.4 MTPA) at Village Ranu, Tehsil Padra, District Vadodara (Gujarat) by M/s IPCA Laboratories Limited

[IA/GJ/IND2/73097/2013, J-11011/353/2010-IA-II(I)]

35.4.3.1 The proposal is for amendment in environmental clearance and extension of validity of EC granted by the Ministry vide letter dated 18th January, 2013 to the project 'Bulk Drugs Manufacturing Unit (2684.4 MTPA) at Village Ranu, Tehsil Padra, District Vadodara (Gujarat) in favour of M/s IPCA Laboratories Limited.

35.4.3.2 The project proponent has submitted a proposal seeking extension of validity of the EC and amendment in EC, as per the details below:

<table>
<tr><th>S. No</th><th>Para of EC</th><th>Details as per the EC</th><th>To be revised/read as</th><th>Justification/reasons</th></tr>
<tr><td>1.</td><td>2.</td><td>The Ministry of Environment and Forests has examined the application. It is noted that the proposal is for setting up of bulk drugs manufacturing unit (2539.43 MTPA) at Sy. No. 99-101, 115, 119, 120, 121, 123, 124, 125, 126, 127, 130, 133, 134, 136, 1160, 112, 117, 118, 1146, 138/A, 122,131,100,113,114,116,128,129,132, Village Ranu, Tehsil Padra, District Vadodara, Gujarat by M/s IPCA Laboratories Limited. It is also noted that GPCB vide letter no. GPCB/CTE-VRD-3311/GPCB-ID-30549/107788 dated 20th March, 2012 recommended the project proposal with zero effluent discharge condition. Total plot area is 59.06 acres. Total project cost is Rs.303.55 Crores. No national park/wildlife sanctuary/ reserve forest are located within 10 Km. Following products will be manufactured:-
<table>
<tr><th>Sr. No.</th><th>Name</th><th>Quantity (MT/Month)</th><th>Quantity(MT/Annum)</th></tr>
<tr><td>1.</td><td>Extraction of Artemisinin</td><td>0.5</td><td>6</td></tr>
<tr><td>2.</td><td>Arte Range Products</td><td>4.2</td><td>50</td></tr>
<tr><td>3.</td><td>Frusemide – DMF</td><td>20</td><td>240</td></tr>
<tr><td>4.</td><td>Losartan Potassium (LB 4 & LB5)</td><td>10</td><td>120</td></tr>
<tr><td>5.</td><td>Allopurinol</td><td>10</td><td>120</td></tr>
<tr><td>6</td><td>Ramipril</td><td>2.5</td><td>30</td></tr>
</table></td><td>The Ministry of Environment and Forests has examined the application.It is noted that the proposal is for setting up of bulk drugs manufacturing unit (2539.43 MTPA) at Sy. No. 99-101, 115, 119, 120, 121, 123, 124, 125, 126, 127, 130, 133, 134, 136, 1160, 112, 117, 118, 1146, 138/A,122,131,100,113,114,116,128,129,132, Village Ranu, Tehsil Padra, District Vadodara, Gujarat by M/s IPCA Laboratories Limited. It is also noted that GPCB vide letter no. GPCB/CTE-VRD-3311/GPCB-ID-30549/107788 dated 20th March, 2012 recommended the project proposal with zero effluent discharge condition. Total plot area is 59.06 acres. Total project cost is Rs. 303.55 Crores. No national park/wildlife sanctuary/ reserve forest are located within 10 km. Following products will be manufactured:-
<table>
<tr><th>S. No.</th><th>Product</th><th>Quantity in MT/Month</th></tr>
<tr><td>1.</td><td>Synth etc Bulk Drugs & its Intermedi</td><td>223.7</td></tr>
</table></td><td>Due to nature of Bulk Drug industries, frequent change in product is necessary. Unit is Zero Liquid Discharge industry. Unit has provided treatment plant along with RO System & MEE to meet any flucuation in parameters. Sister concern established at Sejavta, Ratlam, Madhya Pradesh has got EC for same.</td></tr>
</table>

		.				ates	
		7.	Lisinopril	1.7	20		
		8.	4,7, DCQ	50	600		
		9.	Amodiaquine HCl / Base	20	240		
		10.	Chloroquine phosphate	66.7	800		
		11.	Quetiapine Hemifumarate	8.3	100		
		12.	Gabapentene	8.3	100		
		13.	Mesalamine	8.3	100		
		14	Mycophenolic acid	1.1	12.75		
		15..	Rapamycin / Sirolimus	0.015	0.18		
		16.	Serratiopeptidase	2	24.0		
		17.	Tacrolimus	0.025	0.3		
		18.	Tramadol	8.3	100		
		19.	Febuxastat	1.7	20		
		20.	R&D Products	0.1	1.2		
		Total		**223.7**	**2684.4**		

35.4.3.3 *The Committee, after detailed deliberations noted that the EIA Notification, 2006, read with subsequent amendments therein, provides for validity of EC of 7 years for such projects. As such, the EC to the project remains valid up to 18th January, 2020, and therefore, extending its validity at this stage would be premature and may not be allowed.*

In case of the proposal for amendment in the EC for not mentioning the details of products, but to extend the same for manufacturing any synthetic organic chemicals within the total production capacity sanctioned, the Committee found the proposal not in conformity with the EIA Notification, 2006 and not recommended.

35.5 Any other agenda/item with permission of the chair

Item No.35.5.1

Addition of Kerosene Hydro Desulphurisation section and associated storage facilities in ongoing Debottlenecking project of Bina refinery - For ToR

(IA/MP/IND2/73451/2018, IA-J-11011/95/2018-IA-II(I))

35.5.1.1 The project involves addition of Kerosene Hydro Desulphurisation section of 600 KTA and associated storage facilities of 16683 KL in ongoing debottlenecking project of Bina refinery of capacity 7.8 MMTPA by M/s Bharat Oman Refineries Ltd at Bina (Madhya Pradesh). The Ministry had earlier granted environmental clearance vide letter dated 28th November, 2014 to the project for expansion of refinery (from 6 MMTPA to 7.5 MMTPA) by debottlenecking in favour of M/s Bharat Oman Refineries Limited (BORL) at Village Agasode, Tehsil Bina, District Sagar (Madhya Pradesh) and EC was later amended vide letter dated 12th May, 2015 by increasing the production capacity from 7.5 MMTPA to 7.8 MMTPA.

35.5.1.2 For the above project, the proposal for amendment in environmental clearance was earlier considered by the EAC in its meeting held on 17-18 April, 2017. The Committee had recommended for amendment in environmental clearance subject to compliance of certain conditions. However, the Ministry observed the project to be expansion of the existing facilities, mainly due to proposed additional storage of kerosene and not accepted recommendations of the Committee.

Based on the suggestion of the Ministry, the project proponent has submitted the proposal afresh for grant of ToR to the project to facilitate preparation of EIA/EMP report for the proposed expansion.

35.5.1.3 *The EAC, after deliberations, noted that the proposal actually involves modernization of the existing plant, without any increase in capacity of the Refinery and/or pollution load but eventually increase in kerosene storage. Accordingly, in terms of the provisions of para 7(ii)(b) of this Ministry's Notification dated 23rd November, 2016, the EAC again recommended for no requirement of any environmental clearance to the proposed project and/or amendment in the existing EC for the Refinery.*

Item No.35.5.2

Manufacturing of Sodium Cyanide Other Cyanide based products at Plot No. 26-37, 54-57, 122, 143, Village Asnabad, Tehsil Olpad, District Surat (Gujarat) by M/s Hindustan Chemicals Company

35.5.2.1 The Member Secretary informed the EAC about the directions contained in the judgment of Hon'ble National Green Tribunal (Western Zone) Bench, Pune vide order dated 7th December, 2017 in Appeal No.17/2016 (WZ) in the matter of 'Gujarat Khedut Samaj & othrs Vs MoEF&CC & othrs' regarding environmental clearance granted by the Ministry to the expansion project of M/s Hindusthan Chemicals Company. It was further informed that the said judgment was delivered by hand to the Member Secretary by the project proponent in the Ministry on 27th March, 2018.

35.5.2.2 Hon'ble Tribunal vide order dated 7th December, 2017 has given the following directions:-

(a) The EC dated 22nd January, 2016 granted to the expansion project of M/s Hindustan Chemicals Company is set aside.

(b) The EAC of MoEF shall consider the outcome of the public consultation including public hearing dated 14th November, 2014 along with suggestions/objection/documents made/raised/submitted by the stakeholders including the parties to the appeal, and the EAC shall take appropriate decision in the matter within sixty days and make recommendations accordingly to the MoEF in accordance with law.

(c) Liberty granted to the parties to make representations to the EAC along with all the relevant material in their possession or control within two weeks.

(d) MoEF is directed to take decision in light of the recommendations made by the EAC in accordance with law.

35.5.2.3 During deliberations, the EAC noted the following:-

The Ministry had granted environmental clearance vide letter dated 22nd January, 2016 in favour of M/s Hindusthan Chemicals Company for the project 'Manufacturing of Sodium Cyanide & other Cyanide based products' at Plot No.26-37, 54-57, 122, 143, Village Asnabad, Tehsil Olpad, District Surat (Gujarat).

The project/activity is covered under category A of item 5(b) 'Pesticides industry and pesticide specific intermediates (excluding formulation)' of Schedule of Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 17th February, 2012 and the public hearing was conducted on 14th November, 2014 by the Gujarat Pollution Control Board. However, the proposal for environmental clearance was considered by the EAC, considering the project site located in notified Industrial area (Olpad Industrial Area) and thus exempting from public consultation/hearing. The EC dated 22nd January, 2016 granted to the project finds mention that 'Public hearing/consultation was exempted as per stage Section 7(i), III stage (3) Para (i)(b) of the EIA Notification, 2006.

35.5.2.4 *The Expert Appraisal Committee, after deliberations and in compliance of the orders of Hon'ble Tribunal, recommended the following:-*

- *The Appellants may be consulted/heard in person during next meeting of the EAC, along with their submissions and suggestions to the Committee, if any, for better understanding of the case and also for the Committee to take appropriate decision in the matter.*
- *The Environment Department of the State Government may be requested for their comments on the public hearing conducted by the State Pollution Control Board on 14th November, 2014, and also on the suggestions/objections/documents submitted by the stakeholders. Such comments may address the pollution concerns vis-à-vis the developmental projects in the study area.*
- *The Ministry may file an application before the Hon'ble Tribunal for extension and seeking adequate time to comply with their orders in letter and spirit.*

*****

Members of the EAC (Industry-2) present during 35th meeting held on 27-28 March, 2018 at MoEF&CC, New Delhi

1	Dr. J. P. Gupta	Chairman
2	Dr. R. K. Singh	Member
3	Prof. J.R. Mudakavi	Member
4	Dr. Ahmed Kamal	Member
5	Prof. (Dr.) H.R.V. Reddy	Member
6	Shri Suhas Ramchandra Pharande	Member
7	Ms. Saloni Goel	Member
8	Sh. Paritosh Kumar	Member
9	Sh. Sanjay Bist	Member
10	Prof. (Dr.) Y.V. Rami Reddy	Member
11	Shri S.K. Srivastava	Member Secretary