MINUTES OF THE 12th EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) MEETING HELD DURING 26-27, September, 2019

Venue: Teesta Conference Hall, First Floor, Vayu Wing, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-3

Time: 10:30 AM

12.1 Opening Remarks by the Chairman

12.2 Corrections/amendment in the Minutes of the earlier meeting(s)

Agenda 12.2.1

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

12.2.1.1 The proposal was earlier considered by the EAC (Industry-2) in its meeting held on 29-31 July 2019 in the Ministry, and has recommended the project for grant of environmental clearance.

12.2.1.2 The project proponent vide letter dated 22nd August, 2019 has requested to exclude the condition 'CO_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors'' considering the non-viability of the project; and vide letter dated 28th August, 2019 has requested permission to install a demo plant of 10 TPD 2G ethanol plant for R&D purpose in the present project.

12.2.1.3 *The Committee, after detailed deliberations, has agreed to remove the condition for 'CO_2 capturing' for faster implementation of the project considering its national importance, and also to install a demo plant of 10 TPD 2G ethanol plant for R&D purpose, and has recommended for amendment in the minutes of meeting held on 29-31 July 2019 accordingly, with all other terms and conditions remain unchanged.*

Day One: 26thSeptember, 2019

12.3 Environmental Clearance

Agenda No.12.3.1

Manufacturing of Synthetic Organic Resin & Acrylic Base Emulsion by M/s. Maruti Polymers located at Plot No.423/1, Opp. Kartvya Farm, and Village: Ravdapura, Taluka: Samarkha, District: Anand, State: Gujarat -Environmental Clearance

[IA/GJ/IND2/73366/2018, IA-J-11011/88/2018-IA-II(I)]

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

The proposal is for environmental clearance to the project for manufacturing synthetic organic resin and acrylic based emulsions located at plot no. 423/1, opposite Kartvya Farm, village Ravdapura, District Anand and State Gujarat by M/s Maruti Polymers. The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 in Category "A".

Standard Terms of Reference were issued vide Ministry letter dated 8thApril 2018.

Presently total 9 products are proposed with production capacity of 480 MT/M. The unit propose to manufacture Acrylic Based Emulsion (Styrene acrylic emulsion, pure acrylic emulsion and Vinyl acrylic emulsion) of 250 MT/M, Alkyd Resin (Soya long oil, D.C.O long oil, D.C.O rosinated and Linseed long oil) of 200 MT/M and Amino Resin (Melamine formaldehyde) of 30 MT/M.

Estimated cost of the proposed project is approximately Rs. 1.5 - 2 crores.

Total area of the project site is 1225 m^2. Large part of plant will be open area and will be utilized for road, parking, and green belt. The project activity does not require tree cutting during land clearing also, the study zone does not have any ecologically sensitive location. A total of 404.2 m2 area has been earmarked for greenbelt development.

The water required for the proposed project will meet through Ravdapura gram panchayat. The total water requirement for the proposed project will be 11.03 KLD. The total wastewater generation from industrial process will be 1.31 KLD, while 0.324 KLD domestic effluents will be generated.

Total waste water generation from the industry will be 1.31 KLD which will be evaporated by Evaporator & 0.324 KLD of domestic waste water will be generated and disposed off in the septic tank.

Electricity shall be obtained from MGVCL. The power demand for the proposed project will be 60 HP. DG set of 40 HP will be used as power back-up only.

Coal Pellets (60kg/hr) will be used as fuel for Boiler (200 kg/hr) & Diesel (8 L /hr) will be used as fuel for D.G. Set. Stack of adequate height will be provided to Boiler & D.G set.

The project will require 10 workers during the construction phase and 9 employees during operation phase.

Domestic waste generated will be disposed off through Municipal Corporation. Hazardous waste like Evaporator residue, Used oil/ Spent Oil, Discarded Container/ drums/Bags etc. will be generated and sell to the registered recycler/ re-processor or send to TSDF site.

The baseline data was collected during the sampling period of three months during pre monsoon season from March'18 to May'18.

AAQM was carried out in 8 locations on 24 hourly average bases as per guidelines of CPCB and NAAQS within 10 km radius of the study area. PM10 and PM2.5 was found in the range of 57.3 to 79.5 µg/m3 and 26.4 to 36.5 µg/m3 respectively. SO2 found in the range of 6.3 to 8.7 µg/m3 and NOx 12.0 to 16.7 µg/m3 . The PM10& PM2.5 parameters are found within the NAAQS level. Other parameters like VOCs, Heavy metals, Benzene etc. were found within permissible limit. predicted ground level concentrations when added to baseline scenario, the overall scenario levels of PM10, PM2.5, SO2, NOx, are observed well within the permissible limits specified by CPCB.

The details of Flue Gas Stacks and Process Vents:

Sl	Stack attached to	Capacity	Name of Fuel & Quantity	Stack Height (m)	Stack Dia. (m)	Temperature (◦C)	APCM	Pollutants
1	Boiler	200 kg/hr	Coal/ pallet	11	0.18	250	Adequate stack	PM:<150 mg/Nm3

2	Thermic Fluid Heater (2 no.)	2 X 5 lakh Kcal/hr.	Coal/ pallet	11	0.18	100	height	SO_2:<100 ppm NOx: <50 ppm
3	DG set (standby)	40 HP or 29.827 KVA	Diesel	4	0.5	90		

A total of 8 locations were identified for ambient noise monitoring in the study area. The daytime varied from 47.1 dB (A) Leq to 64.8 dB (A) Leq and night time noise varied of 38.0 dB (A) Leq to 54.3 dB (A) Leq. Both daytime noise and night time noise were found within the limit.

In order to establish the baseline water quality, 8 ground water and 8 surface water samples were collected and analyzed in the study area. The analysis result of ground water samples were within drinking water limit as per IS 10500:2012. The surface water quality is within class D as per classification of water quality criteria.

Budget allocation for environmental management include 1.5 lakhs/annum during the construction phase; 50 Lakhs as a capital const and 9.5 Lakhs/annum during the operation phase has been envisaged.

Public Hearing was conducted on 27.02.2019 at Plot No. 423/ 1, Opposite Kartavya Farm, Village: Ravdapura, Taluka: & District: Anand under chairmanship of Resident Additional Collector & Additional District Magistrate, Anand.

12.3.1.2 During deliberations, the EAC noted the following: -

(i) The EIA EMP report submitted by the project proponent is most generic in nature and does not specific to the project or Terms of Reference prescribed.

(ii) There is no declaration of Functional Area Experts involved in the EIA/EMP Report.

(iii) No specific mitigation measures for the proposed project were provided in the EIA/EMP report.

(iv) Issues raised during the public hearing and action plan on the same was not integrated in the EIA/EMP report.

(v) The CER plan did not address the concerns raised by the public during public hearing

(vi) The environmental policy of the company is not in consonance with the Terms of Reference prescribed under reference point No. 9 of the Standard ToR.

12.3.1.3 *After detailed deliberation, the committee recommended the proposal to return in the present form and advised the project proponent to submit the revised EIA/EMP as per the generic structure provided in the Appendix III of EIA Notification, 206 addressing all the ToRs and specific to the project.*

Agenda No.12.3.2

Development Drilling (4 Wells) under NELP V Offshore Block: CB-OSN-2003/1, Ankleshwar Asset, Gujarat by M/s Oil And Natural Gas Corporation Limited, Ankleshwar Asset, Gujarat - Environmental Clearance

[IA/GJ/IND2/60507/2016, J-11011/339/2016-IA.II(I)]

The proposal was considered by the EAC (Industry-2) in its meeting held during 29-31 July, 2019 with the permission of the Chairman and recommended to grant environmental clearance to the project with the following additional condition:-

- *Water requirement for onshore drilling is permitted to the tune of 25 M3 per day per well. PP to install Mobile ETP coupled with RO to reuse the treated water in drilling system. Size of the waste shall be equal to the Hole volume+ volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above*

Agenda No.12.3.3

Manufacturing of 535 MT/M of Bulk drug & Bulk drug Intermediates at Plot No. A-86 of Maharashtra Industrial Development Corporation (MIDC) Paithan, Taluka-Paithan and District-Aurangabad by M/s AD Pharmachem Pvt. Ltd. - Environmental Clearance

[IA/MH/IND2/81668/2018, IA-J-11011/358/2018-IA-II(I)]

12.3.3.1 The project proponent and the accredited consultant M/s Sd Engineering Services Pvt Ltd made a detailed presentation on the salient features of the project.

The proposal is for environmental clearance to the project for manufacturing Bulk drug & Bulk drug Intermediates of capacity 535 TPM at Plot No. A-86 of Maharashtra Industrial Development Corporation (MIDC) Paithan, Taluka Paithan, District Aurangabad (Maharashtra) by M/s AD Pharmachem Private Limited. The project/t activity covered under item 5(f) of the schedule to the EIA Notification, 2006 in Category "B". However, the project was appraised at Central Level, as it falls within 5 km of Wildlife Sanctuary, notified under Wildlife (Protection) Act, 1972 {Ref. No. WLP. 1086/27206/CR39/86 (II) Dated 10th Oct 1986}.

Standard Terms of Reference were issued vide Ministry letter dated 3rd December, 2018.

The products proposed for manufacturing under Bulk drug & Bulk drug intermediates are categorized as Intermediate & Catalyst and Active Pharmaceutical Ingredients such as Tetra Butyl Ammonium Bromide, Tetra Butyl Ammonium Hydrogen Sulphate being catalysts, 4-Bromo Anisole, 4-Bromo Phenetole, 4-Methyl Phenacyl Bromide being intermediates and Metformin Hydrochloride & Pioglitazone as Anti-diabetic and Cetrimide as Antiseptic ingredients. The details of products are as follows:

Sr. No.	Name of the Product	UOM	Qty/Month	Therapeutic Category
Intermediate and Catalyst				
1.	Tetra Butyl Ammonium Bromide	MT	150	Catalyst
2.	Tetra Butyl Ammonium Hydroger Sulphate	MT	25	Catalyst
3.	4- Bromo Anisole	MT	50	Intermediate
4.	4-Bromo Phenetole	MT	50	Intermediate

5.	4-Methyl Phenacyl Bromide	MT	5	Intermediate
Active Pharmaceutical Ingredient				
1.	Metformin Hydrochloride	MT	200	Anti-diabetic
2.	Cetrimide	MT	50	Antiseptic
3.	Pioglitazone	MT	5	Anti-diabetic
	Total	**MT**	**535**	

Proposed land area is 5446.85 m^2. Industry will develop an area of 33 % i.e. 1807.85 m^2 out of total area of the project.

The estimated project cost is Rs.700 Lakh Total capital cost earmarked towards environmental pollution control measures is Rs.140 Lakh and the Recurring cost (operation and maintenance) will be about Rs.14 Lakhper annum.

Total Employment will be 55persons as direct &100 persons indirect after project commissioning. Industry proposes to allocate Rs.14 Lakh@ 2 % towards Corporate Environmental Responsibility.

Jayakwadi Bird Sanctuaryis located at a distance of 1.13 Km in the South-West Direction. Godavari River is flowing at a distance of 7.35 Km in the South direction. The ESZ of the sanctuary is upto 500m.

Ambient air quality monitoring was carried out at 9 locations duringMarch 2018to May 2018and the baseline data indicates that ranges of concentrations as: PM_{10}30.59µg/m^3 to 64.87 µg/m^3, $PM_{2.5}$ 16.03 µg/m^3 to 34.70 µg/m^3, $SO_2$9.59 µg/m^3 to 32.50µg/$m^3$and NOx 16.90µg/$m^3$to 40.17µg/m^3 respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.41µg/m^3 for PM_{10},0.09 µg/$m^3$for $PM_{2.5}$ and0.34 µg/$m^3$for NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is63CMD of which fresh water requirement of 30 CMDwhich will be received from MIDC Paithan&33CMD will be recycled water.

Effluent of 32.15 CMD, LCOD effluentswill be treatedthrough Primary, Secondary and Tertiary treatment unit. HCOD effluent will be treated in solvent stripper, MEE and ATFD. The plant is based on Zero Liquid discharge system.

Power requirement of proposed project will be 200 KVAwill be supplied by Maharashtra State power Distribution Corporation limited (MSEDCL). One DG Set capacity of 250 KVA will beused for proposed project as standby during power failure. Stack (height 6.5 m)is provided as per CPCB norms to propose DG Sets.

One Boiler of capacity 2 TPH will be provided for proposed project. Multi cyclone Dust Collector and bag filter with a stack of height of 30 m will be installed for controlling the Particulate emissions within statutory limit of 115 mg/$Nm^3$for proposed boiler.

Emission generation from process- Process Emission: Acid Fumes, CO_2, Hydrogen Bromide will be emitted during process. The gases will be scrubbed in two stage scrubber, water scrubber followed by caustic solution scrubber.

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

i. Non Hazardous Solid Waste

Sr. No.	Type of Waste	Quantity (MT/day)	Disposal
1	Boiler ash	0.600	Sale to Brick manufacturer
2	Paper	0.00038	Recycler
3	Mild Steel Scrap	0.00769	Scrap dealer
4	Stainless Steel scrap	0.00192	Scrap dealer
5	Polybags/Packaging waste	0.00384	Authorised Recycler
6	Damaged cart board and HDPE drums and cartoon.	0.00192	Authorised Scrap dealer or Recycler
7	PVC/HDPE Pipes and damaged accessories	0.00192	Authorised recycler or scrap dealer
8	Broken Glass	0.00192	Authorised scrap dealer
9	Electronic Waste	0.00057	Authorised Scrap dealer
	Total	0. 618	

ii. Hazardous **Solid Waste:**

Sr. No	Category	Category No.	Quantity (MT/Day)	Remark/Disposal
1	Off specification products	28.4	0.01	Regular Recycler
2	Used or Spent Oil/ Wastes or residues containing oil	5.1/5.2	0.02	Sale to authorised recycler, re-processor/ CHWTSDF
3	ETP Sludge	34.2	0.10	CHWTSDF
4	Process Residue &Waste	28.1	0.10	CHWTSDF
5	Solvent Residue	20.3	2.73	CHWTSDF
6	MEE Salt	34.2	1.25	CHWTSDF
7	Spent Carbon / Hyflow	28.2/28.3	0.04	CHWTSDF
8	Flue gas cleaning residue	35.1	0.01	CHWTSDF
Total			4.71	
9	Discarded containers Barrels, used for HW chemicals	33.1	100.0 Nos./Month	Sale to authorised recycler

Public Hearing for the proposed project is not applicable as the project site is located in the notified industrial area.

Total Cost of the Project at current price level is 7 Crores. Funds allocated for Environment Management (Capital) is 1.4 Crores. Funds allocated towards CER (Corporate Environment Responsibility) is 0.14 Crores. Funds allocated for Environment Management Plan (EMP) (Recurring per Annum) is 0.14 Crores.

12.3.3.2 The EAC noted the following

- Jayakwadi Bird Sanctuaryis located at a distance of 1.13 Km and the ESZ of the sanctuary is up to 500m. Therefore, the proposed project is out side the ESZ area.

- The project proponent has proposed for Zero Liquid Discharge.
- Rs. 14 lakhs were proposed for Corporate Environment Responsibility

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Sewage Treatment Plant (STP) shall be set up for treatment of domestic waste water.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Pharmaceuticals Industry (Bulk Drugs) issued by the Ministry vide G.S.R.149(E) dated 4th March, 2009 and amended from time to time shall be followed. Fugitive emissions shall be controlled at 99.95% with effective chillers.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows:*
  - *(a) Reactor shall be connected to chilled brine condenser system.*
  - *(b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - *(c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
  - *(d) Solvents shall be stored in a separate space specified with all safety measures.*
  - *(e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - *(f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  - *(g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed 30 cum/day, proposed to be met from MIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Rainwater harvesting system shall be installed in the unit and water shall be used in the plant operations.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*

- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
  (a) Metering and control of quantities of active ingredients to minimize waste.
  (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  (c) Use of automated filling to minimize spillage.
  (d) Use of Close Feed system into batch reactors.
  (e) Venting equipment through vapour recovery system.
  (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *As proposed, Rs.14 lakhs shall be allocated for Corporate Environment Responsibility (CER). The CER plan shall be implemented during the plant construction stage and before commissioning of the project.*
- *Due to the location of wildlife sanctuary near to the project site, Rs. 10 lakh shall be allocated towards Wildlife Conservation and Management, in addition to the CER allocation.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*

Agenda No.12.3.4

Proposed New Project with capacity of 166.1 MT/M for API & its Intermediate Products at Plot No. B-93/94, MIDC, Paithan Tal. & Dist. Aurangabad, Maharashtra by M/s Surya Industries- Environmental Clearance

[IA/MH/IND2/100045/2019, IA-J-11011/107/2019-IA-II(I)]

12.3.4.1 The project proponent and the accredited consultant M/s Sd Engineering Services Private Limited made a detailed presentation on the salient features of the project.

The proposal is for environmental clearance to the project for Setting up API and its Intermediates manufacturing plant of capacity 166.1 TPM at Plot No. B-93/94, MIDC, Paithan Taluka & District Aurangabad (Maharashtra) by M/s Surya Industries. The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 in Category “B”. However, the project was appraised at Central Level, as it falls within 5 km of Wildlife Sanctuary, notified under Wildlife (Protection) Act, 1972 {Ref. No. WLP. 1086/27206/CR39/86 (II) Dated 10th Oct 1986}.

Standard Terms of Reference were issued vide Ministry letter dated 26th April, 2019.

The products proposed for manufacturing are synthetic organic chemicals products @ 166.1 MT/Month with variety of 13 API products and its intermediates. The details of products are as follows:

Sr. No.	Product	Activity	Quantity (MT/Month)
1.	Glimepiride	Anti-Diabetic	4.2
2.	Pioglitazone	Anti-Diabetic	8.0
3.	Gliclazide	Anti-Diabetic	8.0
4.	Sitagliptin Phosphate Monohydrate	Anti-Diabetic	3.0
5.	Citicoline Sodium	Neuropathy	8.0
6.	Benfotiamine	Diabetic Neuropathy, Dietary Supplement	8.0
7.	Methylcobalamin	Vitamin B12	0.4
8.	Diosmin	Bioflavonoid	12.0
9.	Tadalafil	Prostatic Hypertrophy/Impotence	5.0
10.	Lamotrigine	Anticonvulsant	4.5
11.	Docusate Sodium	Stool Softener	25.0
12.	Saccharin Sodium	Sugar Substitute	30.0
13.	Permethrin	Anti-Scabies	50.0
	Total		**166.1**

The power requirement for proposed project is 200 KVA and it is supplied by MSEDCL.

Total plot area is 4200 Sq.m, out of which 1388.7 Sq.m will be utilized for green belt development. Industry will develop an area of 33 % i.e. 1386 m2 out of total area of the project.

The estimated project cost is Rs.476.63 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs.83 Lakh and the Recurring cost (operation and maintenance) will be about Rs.8.70 Lakh per annum.

Total Employment will be 55 persons as direct & 100 persons indirect after project commissioning. Industry proposes to allocateRs.9.53Lakhs@ 2 % towards Corporate Social Responsibility.

Jayakwadi Bird Sanctuary is located at a distance of 2.5 Km in the South-West Direction from the project site. Godavari River is flowing at a distance of 7.6 Km in the South direction.

Ambient air quality monitoring was carried out at 9 locations during March 2018to May 2018and the baseline data indicates that ranges of concentrations as: PM1030.59µg/m3 to 64.87 µg/m3, PM2.5 16.03 µg/m3 to 34.70 µg/m3, SO29.59 µg/m3 to 30.50µg/m3and NOx 16.90µg/m3to 40.17µg/m3 respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.039µg/m3 for PM10,0.010 µg/m3for PM2.5 and0.34 µg/m3for NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 35 m3/day out of which fresh water requirement of 14m3/day which will be received from MIDC Paithan and 21 m3/day recycled water will be used.

Effluent of 27m3/day will be generated. LCOD effluent will be treated through Primary, Secondary and Tertiary treatment unit. HCOD effluent will be treated in solvent stripper, MEE and ATFD. The plant is based on Zero Liquid discharge system.

Power requirement of proposed project will be 200 KVA supplied by Maharashtra State power distribution corporation limited (MSEDCL). Proposed One DG Set capacity of 50 KVA. DG Set will be used as standby during power failure. Stack (height 6.5 m)is provided as per CPCB norms to propose DG Sets.

One boiler proposed capacity of 0.45TPH will be installed. Multi cyclone Dust Collector and bag filter with a stack of height of 30 m will be installed for controlling the Particulate emissions within statutory limit of 115 mg/$Nm^3$for proposed boiler.

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

i. Non Hazardous Solid Waste:

Sr. No.	Type of Waste	Disposal	Quantity MT/Day
1	Boiler ash	Sale to Brick manufacturer/Cement industry	0.12
2	Paper	Recycler	0.001
3	MS Scrap	Scrap dealer	0.003
4	SS scrap	Scrap dealer	0.0015
5	Polybags	Authorised Recycler	0.003
6	Damaged cardboard and HDPE drums and cartoon	Authorised Scrap dealer or Recycler	0.0015
7	PVC/HDPE Pipes and damaged accessories	Authorised recycler or scrap dealer.	0.0015
8	Broken Glass	Authorised scrap dealer.	0.0015
	Total	---------	0.133

ii. Hazardous Solid Waste:

Sr. No	Category	Schedule No.	Quantity MT/Day	Remark/Disposal
1.	Off specification products	28.4	0.01	Co-processing
2.	Discarded containers Barrels, used for HW chemicals	33.1	100 nos.	Sale to authorised recycler
3.	Used or Spent oil/ Waste or residuescontaining oil	5.1/5.2	0.02	Sale to authorised recycler/ Co-processing/ CHWTSDF
4.	ETP Sludge	34.2	0.10	CHWTSDF
5.	Process Residue	28.1	0.10	CHWTSDF
6	Spent solvent	28.6	0.77	Sale to authorised recycler, Co-processing

Sr. No	Category	Schedule No.	Quantity MT/Day	Remark/Disposal
7.	Spent Carbon/ Hyflow	28.3	0.08	CHWTSDF
8.	Solvent Residue	20.3	0.45	CHWTSDF
9.	MEE Salt	34.2	0.85	CHWTSDF
	Total		**2.38**	**--**

Public Hearing for the proposed project is exempted as the project site is located in the Industrial area.

The estimated project cost is Rs.476.63 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs.83 Lakh and the Recurring cost (operation and maintenance) will be about Rs.8.70 Lakh per annum.

No litigation is pending on the project or activity

12.3.4.2 The EAC noted the following

- Jayakwadi Bird Sanctuaryis located at a distance of 1.13 Km and the ESZ of the sanctuary is up to 500m. Therefore, the proposed project is out side the ESZ area.
- The project proponent has proposed for Zero Liquid Discharge.
- Rs. 9.53 lakhs were proposed for Corporate Environment Responsibility

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Sewage Treatment Plant (STP) shall be set up for treatment of domestic waste water.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Pharmaceuticals Industry (Bulk Drugs) issued by the Ministry vide G.S.R.149(E) dated 4th March, 2009 and amended from time to time shall be followed. Fugitive emissions shall be controlled at 99.95% with effective chillers.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows:*
  - *(h) Reactor shall be connected to chilled brine condenser system.*
  - *(i) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - *(j) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
  - *(k) Solvents shall be stored in a separate space specified with all safety measures.*
  - *(l) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*

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

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

- *Total fresh water requirement shall not exceed 14 cum/day, proposed to be met from MIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Rainwater harvesting system shall be installed in the unit and water shall be used in the plant operations.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*

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

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

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

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

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

(l) *Use of high pressure hoses for equipment clearing to reduce wastewater generation.*

- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *As proposed, Rs.9.53 lakhs shall be allocated for Corporate Environment Responsibility (CER). The CER plan shall be implemented during the plant construction stage and before commissioning of the project.*
- *Due to the location of wildlife sanctuary near to the project site, Rs. 10 lakh shall be allocated towards Wildlife Conservation and Management, in addition to the CER allocation.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*

Agenda No.12.3.5

Proposed manufacturing of Reactive Dyes (Production Capacity: 1000 MT/month) by M/s Sharp Chemicals at Survey No. 322, Village: Lunej, Tehsil: Khambhat, District: Anand, Gujarat - Environmental Clearance

[IA/GJ/IND2/73155/2018, IA-J-11011/68/2018-IA-II(I)]

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

The proposal is for environmental clearance to the project for manufacturing Reactive Dyes of capacity1000 TPM at Survey No. 322, Village Lunej, Tehsil Khambhat, District Anand (Gujarat) by M/s Sharp Chemicals. The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 in Category "A".

Standard Terms of Reference were issued vide Ministry letter dated 1st April, 2018.

The proposed products are known as dyes products and the details of the products are given below.

Sl.	Product/Activity (Capacity/Area)	Quantity	Unit	Mode of Transport / Transmission of Product
(1.)	Reactive Yellow 145	600	Tons per Annum	Road
(2.)	Reactive Orange 122	300	Tons per Annum	Road
(3.)	Reactive Orange 84	600	Tons per Annum	Road
(4.)	Reactive Red 24	600	Tons per Annum	Road
(5.)	Reactive Black 5 & mixture	3780	Tons per Annum	Road
(6.)	Reactive Blue HEXL	900	Tons per Annum	Road
(7.)	Reactive Blue 220	600	Tons per Annum	Road
(8.)	Reactive Blue 49/P3R	480	Tons per Annum	Road
(9.)	Reactive Navy Blue HER (Reactive Blue 171)	900	Tons per Annum	Road
(10.)	Reactive Orange H2R (Reactive Orange 13)	120	Tons per Annum	Road
(11.)	Reactive Orange 2R (Reactive Orange 7)	1200	Tons per Annum	Road
(12.)	Reactive Red 195	600	Tons per Annum	Road
(13.)	Reactive Red 111	120	Tons per Annum	Road
(14.)	Reactive Red 245	120	Tons per Annum	Road
(15.)	Reactive Red CD	600	Tons per Annum	Road

(16.)	Reactive Blue HEGN (Reactive Blue 198)	480	Tons per Annum	Road

The site for the proposed project is located at Survey No. 322, Village: Lunej, Tal: Khambhat, Dist. Anand, Gujarat. The site coordinates are 22°20'47.39"N and 72°34'58.10"E. The total plot area is 6972 m2. Greenbelt will be developed around 2300 m2 which tunes around 33% of the project area.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. Pond of Neja Village is at a distance of 2.8 km in E direction.

Proposed land area is 6972 m^2. Industry will develop greenbelt in an area of 33% i.e. 2300m2, out of total area of the project.

The estimated project cost of proposed unitis Rs. 8.0Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 1.70 Crore and the Recurring cost (operation and maintenance) will be about Rs. 1.60 Crore per annum.

Total employment including direct and indirect will be 35persons. Industry proposes to allocate Rs. 16.0 lakhs (2.0% of total project cost) towards Corporate Environmental Responsibility.

Ambient air quality monitoring was carried out at 8 locations during March, 2018 to May, 2018 and the baseline data indicates the ranges of concentrations as: PM_{10} (60.5–71.5µg/m^3), $PM_{2.5}$ (30.5–39.2 µg/m^3), SO_2 (10.8 –12.2 µg/m^3) and NOx (14.1–16.1 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.866µg/m^3, 0.668 µg/m^3, and 0.653µg/m^3, with respect to PM_{10}, SO_2, and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 165.5 m3/day of which fresh water requirement of 61.5m3/day will be met from Bore well water supply.

Total trade effluent generation will be 78.0 KLD which will be taken into ETP and then passed through RO. RO permeate (54.0 KLD) will be reused within premises and RO reject (24.0 KLD) will be spray dried in in-house spray dryer. Thus, unit proposed to achieve Zero Liquid Discharge (ZLD). If CETP will establish in the vicinity of plant, then unit will discharge effluent to CETP after obtaining prescribed norms and permission if any. Sewage (2.8 KLD) will be disposed into soak pit though septic tank.

Power requirement will be 450kVAand will be met from Madhya Gujarat Vij Company Ltd (MGVCL). Unit will install one D.G. Set of 125 kVA capacity and will be used as standby during power failure. Stack (height 11 meters) will be provided as per CPCB norms to the proposed DG set.

One Steam boiler (2 TPH) and 3 nos. of Hot Air Generator (2 nos. x 20 lakhs Kcal/hr. each and 1 no. x 7.5 lakhs Kcal/hr.) will be installed. Coal will be used as fuel in proposed Boiler & HAGs. Cyclone followed by bag filter with a stack height of 21 m & 30 m (Common for all HAGs) respectively will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm3for the proposed utilities.

Process emission generation will be from the vent attached with 3 nos. of Spray Dryers (2 nos. x 2500 lit/hr. and 1 no. x 1000 lit./hr.).Cyclone and water scrubber will be provided as an APCM to spray dryers.

Surface water samples were collected from Akhol Pond, Khambhat pond & Neja pond. The results have been compared with the drinking water quality standards specified in IS: 10500-2012. It was observed that all the physico-chemical parameters and heavy metals from surface water samples, except turbidity, are below stipulated drinking water standards and selected source are suitable for drinking and other purposes. The ground water samples were collected and analysed. The results have been compared with the drinking water quality standards specified in IS: 10500-2012. It is found that, all the samples meet the permissible limit authority (BIS), except TDS & Chloride. TDS and Chloride in all the samples, except Navagam Bara village, meet the permissible limit of BIS.

The monitored noise level in the day time Leq (Ld) varies from 50.8 to 54.8 dB(A) and the night time Leq (Ln) varies from 38.5 to 41.9 dB(A) within the study area.

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

Sr. No.	Name of waste	Category as per HWM, Rule, 2016	Quantity	Disposal method
1.	ETP Sludge Salt from spray dryer	35.3	25 MT/month 22.5 MT/month	Collection, Storage, Transportation, Disposal at TSDF site.
2.	Discarded Containers/ Liner/Bags	33.1	2000 Nos./year 5 Mt/month	Collection, Storage, Decontamination, Transportation, Disposal by selling to Authorized Recycler.
3.	Used Oil	5.1	250 Lit/year	Collection, Storage, Transportation, Disposal by selling to Registered Reprocess.
Solid waste				
1.	Fly Ash	--	43 MT/month	Collection, Storage, sell to brick manufacturers.

The Public Hearing was conducted by Gujarat State Pollution Control Board on 27.11.2018 at Sharp Chemicals, S.No.322, Village:Lunej, Taluka: Khambhat-388620, District: Anand under chairmanship of Additional District Megistrate, Anandissues raised during the public hearing inter alia including development of green belt and adhering to ZLD, local employment, and check dam construction on seasonal canal.

No Litigation is pending against the proposal.

12.3.5.2 The EAC noted the following

- The project proponent has proposed for Zero Liquid Discharge.
- Rs. 16 lakhs were proposed for Corporate Environment Responsibility
- Issues raised during the Public hearing inter alia including development of green belt and adhering to ZLD, local employment, and check dam construction on seasonal canal

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed. Fugitive emissions shall be controlled at 99.98% with effective chillers.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *No coal shall be used as fuel in the boiler.*
- *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 61.5 cum/day*, proposed to be met from ground water*. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided. Brick manufacturing unit shall be set up in the premises for effective utilization of the ash.*
- *The company shall undertake waste minimization measures as below:-*
  (i) Metering and control of quantities of active ingredients to minimize waste.
  (ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  (iii) Use of automated filling to minimize spillage.
  (iv) Use of Close Feed system into batch reactors.

(v) *Venting equipment through vapour recovery system.*
(vi) *Use of high pressure hoses for equipment clearing to reduce wastewater generation.*

- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made to the public during public consultation/hearing shall be satisfactorily implemented.*
- *As proposed Rs. 16 lakhs shall be allocated for Corporate Environment Responsibility (CER).The CER funds shall be utilized for greenbelt development, skill development and check dam construction, as suggested during public hearing. The CER plan shall be completed within a period of two years or before commissioning of the project.*
- *For the DG sets, emission limits and the stack height (>30m) shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*
- *Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*

Agenda No.12.3.6

Proposed Speciality Chemical Manufacturing Plant at 902/1, Jhagadia GIDC, Taluka Jhagadia, District Bharuch by M/s Metropolitan Eximchem Pvt. Ltd. - Environmental Clearance

[IA/GJ/IND2/75861/2018, IA-J-11011/242/2018-IA-II(I)]

12.3.6.1 The project proponent along with EIA Consultant M/s Kadam Environmental Consultants gave a detailed presentation on the salient features of the project.

The proposal was earlier considered by the EAC in its meeting held during 26-28 June, 2019. Additional information desired by the Committee and the response of the project proponent is as under:

S.No	Information desired by the EAC	Response from the PP
1	Revised layout plan with greenbelt development all along the periphery.	Revised layout plan submitted
2	Revised product list vis-à-vis the EIA Notification, 2006, along with toxicity details,	Revised product list submitted
3	Plan for Corporate Environmental Responsibility.	Corporate Environmental Responsibility plan has been prepared and presented
4	Plan for solvent recovery at 99.5%.	Solvent recovery plan has been submitted
5	Process safety, risk, chemical and health management plan and mitigation	Risk analysis has been done using advanced models

	measures	
6	Revised water balance and plan to achieve to ZLD.	Revised water balance submitted. Effluent discharge plan submitted

The proposal is for environmental clearance to the project for Setting up Speciality Chemical Manufacturing Plant of capacity 4150 TPA at 902/1, GIDC Jhagadia, Taluka Jhagadia, District Bharuch (Gujarat) by M/s Metropolitan Eximchem Pvt Ltd. The project activity is covered under item 5(b)- Pesticides industry and pesticide specific intermediates (excluding formulations) and 5(f)- Synthetic organic chemicals industry of the schedule to the EIA Notification, 2006 in Category "A".

Standard Terms of Reference were issued vide Ministry letter dated 2nd September, 2018.

The proposed project is a new project for manufacturing of speciality chemicals at Plot No. 902/1, Jhagadia GIDC, Taluka Jhagadia, District Bharuch. Thedetails of the products are given below:

Sl.	**Product/Activity (Capacity/Area)**	**Quantity (**Tons per Annum)	**Mode of Transport / Transmission of Product**	**Other Mode of Transport / Transmission of Product**
(1.)	5 Chloro 8 Hdroxy quinolene	200	Road,Rail,Others	sea
(2.)	2,5 Dichloro p-Phenylene diamine	120	Road,Rail,Others	sea, air
(3.)	2,3-Dibromo propanyl chloride	50	Road,Rail,Others	sea, air
(4.)	2-Amino 4[(2,3,-Di Bromo 1-oxypropyl)amine],Benzene Sulfonic Acid	30	Road,Rail,Others	sea, air
(5.)	4,4'-Diamino Diphenyl Amine Sulphate	20	Road,Rail,Others	sea, air
(6.)	3-(4-Chloro-2-Fluro-5-mercaptophenyl)-1-Methyl-6-trifluromethyl,H-pyrinidine-2-,4-dione	300	Road,Rail,Others	sea, Air
(7.)	3(2-Chloro ropionyl aniline)propionic acid methyl ester	200	Road,Rail,Others	Sea, Air
(8.)	Diamino Benzoic Acid	10	Road,Others	Sea, Air
(9.)	3,3 Dinitro di Phenyl Sulfone	20	Road,Others	sea, Air
(10.)	2,2-Bis(4-hydroxy-3-nitrophenol,hexafluro) propane	20	Road,Others	Sea, Air
(11.)	3-(2,4-Dichlorophenyl)-6-Fluroquinazoline-2,4 (1H,3H-Dione	10	Road,Others	Sea, Air

(12.)	2-Amino di methyl terephthalate	150	Road,Others	Sea,Air
(13.)	Zinc tetraisopropyl bis(dithiophosphate)	150	Road,Others	Sea, Air
(14.)	Zink O,O- Dibutyl DiThiophosphate	100	Road,Others	Sea, Air
(15.)	BTCA(1,2,3,4-Butanetetracarboxylic acid)	100	Road,Others	Sea, Air
(16.)	2 anilino 6 dibutyl amino, 3 methyl fluoran	500	Road,Others	Sea, Air
(17.)	Oligomer of Phenyl phthalimide para bis phenol	100	Road,Others	Sea, Air
(18.)	Ortho toludine Diamine (Co-Product)	225	Road,Others	Sea, Air
(19.)	4-Amino-3-Methoxy Azobenzene-3-Sulphuric Acid	140	Road,Rail,Others	sea
(20.)	5-Nito 2-Amino Phenol	150	Road,Rail,Others	sea
(21.)	5 Amino 6 Methyl Benzimidazolone	150	Road,Rail,Others	sea
(22.)	2,4,6-Tri[(2,4-Dihydroxy3-Methyl) Phenyl] 1,3,5- Trizine	100	Road,Rail,Others	sea, air
(23.)	2-(4,6-Di Phenyl-1,3,5-Triazine-2-yl)-5(2-Hydroxyethoxy) Phenol	50	Road,Rail,Others	sea, air
(24.)	Anilino methane sulfonic acid	25	Road,Rail,Others	sea, air
(25.)	3,7-Diamino-2-,8-Dimethyl dibenzothiophenne 5,5 dioxide hyrochloride	10	Road,Others	Sea, Air
(26.)	Di Phenyl Sulfone	150	Road,Others	sea, Air
(27.)	Direct yeoolw F6GZ	100	Road,Others	Sea, Air
(28.)	4-(2 Chloro-Ethyl Sulfonyl) Butric Acid	50	Road,Rail,Others	sea, air
(29.)	2-Chloro 4-(2 Chloro Ethyl sulfonyl) Butric Acid	100	Road,Rail,Others	sea, air
(30.)	3-(Dibromo Propionyl)Amido-Benzoyl K Acid	10	Road,Others	Sea, Air
(31.)	Dipropyleneglycol methyl-n-propylether	30	Road,Others	Sea, Air
(32.)	3-Amino-4-[(4-Amino 2 sulfophenyl)-Diazynyl]5 hydroxynapthalene,2,7	20	Road,Rail,Others	sea, air

	Disulfonic acid			
(33.)	2,3 Dichloro 6-quinoaline carbonyl chloride	30	Road,Others	Sea, Air
(34.)	4,4`Thio diphenol	150	Road,Others	Sea, Air
(35.)	1,3,benzene diol 4 (4,6,bis 2 dimethyl phenyl) 1,3,5 triazine 2-yl	100	Road,Others	Sea, Air
(36.)	2-(2-hydroxy,4-methoxy phenyl) 4,6 diphenyl 1,3,5 triazine	100	Road,Others	Sea, Air
(37.)	Cuprate{2-[1-amino-4-hydroxyl 3-(2 hydroxyl-5-sulfophenyl)azo-4,5-dimethoxy phenyl]}azo-2-Naphthalene sulfonic acid	20	Road,Rail,Others	sea, Air
(38.)	Diethyl sulfate	200	Road,Others	Sea, Air
(39.)	m-cresol pure	10	Road,Others	Sea, Air
(40.)	IPFENCARBAZONE	150	Road,Others	Sea, Air
	Total	4150		

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

Proposed land area is 70242.11 sqm. Industry will develop greenbelt in an area of 33% i.e. 23291.67 sqm, out of total area of the project.

The estimated project cost of proposed unitis Rs. 60.0 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 11.0215 Crore and the Recurring cost (operation and maintenance) will be about Rs. 8.9848Crore per annum.

Total employment including direct and indirect will be 300 persons. Industry proposes to allocate Rs. 1.2 Crores (2.0% of total project cost) towards Corporate Social Responsibility.

Ambient air quality monitoring was carried out at 8 locations during 03.12.2017 to 28.02.2018 during the winter season and the baseline data indicates the ranges of concentrations as: PM_{10} (61-129 µg/m^3), $PM_{2.5}$ (19-37 µg/m^3), SO_2 (4.3 -28.1 µg/m^3) and NOx (8-26.8 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.82 µg/m^3, 9.93µg/m^3, and 0.96 µg/m^3, with respect to PM_{10}, SO_2, and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The detail of water requirement is as follows:

Source	Required Quantity	Distance from Source	Mode of Transport	Letter No.	Date of Issue	Permitted Quantity
GIDC water supply	528	1.0	Pipeline	GIDC/DEE/JHG/468	19 Feb 2019	528

Details of wastewater management are as follows:

Type/Source	Quantity of Waste Water Generated (KLD)	Treatment Capacity (KLD)	Treatment Method	Mode of Disposal	Quantity of Treated Water Used in Recycling/Reuse (KLD)	Quantity of Discharged Water (KLD)
Industrial + Domestic	492	400	ETP + STP+ MEE	Discharge into Seawater Body,Reuse within the Plant & Recycling	97	395

Power requirement will be 2000 kVAand will be met from Dakshin Gujarat Vij Company Limited (DGVCL). Unit will install one D.G. Set of 1000 kVA capacity and will be used as standby during power failure. Stack (height 10 meters) will be provided as per CPCB norms to the proposed DG set.

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

Name of Waste	Quantity per Annum (in Ton)	Distance from Site(KM)	Mode of Transport	Mode of Disposal
MEE salt	1862	22	Road	Treatment, Storage and Disposal Facility(TSDF)
ETP Sludge	666	22	Road	Treatment, Storage and Disposal Facility(TSDF)
Process waste sludge	805.3	22	Road	Treatment, Storage and Disposal Facility(TSDF)
Spent Carbon	46	22	Road	Treatment, Storage and Disposal Facility(TSDF)
Empty Bags	2	22	Road	Authorized Recyclers
MEE organic	694	22	Road	Treatment, Storage and Disposal Facility(TSDF)
Distillation Residue	1862	22	Road	Treatment, Storage and Disposal Facility(TSDF)
Empty barrels	36	22	Road	Authorized Recyclers
ETP Sludge	666	22	Road	Treatment, Storage and Disposal Facility(TSDF)

The Public Hearing was exempted for the proposed project as the project is located in the notified industrial area.

No Litigation is pending against the proposal.

12.3.6.2 *The EAC, during deliberations has noted that the reply submitted by the project proponent in respect of layout plan with green belt cover, effluent treatment plant not conforming to ZLD etc are not satisfactory. The committee desired to implement ZLD. The project proponent has requested for additional time and requested for deferment of the proposal for working out the products for confirming to ZLD. The Committee, after deliberations, also asked for clarifications and inputs in respect of the following:-*

- *Revised layout plan with greenbelt development all along the periphery.*

- *Revised water balance and plan to achieve to ZLD.*
- *Commitment for not using Coal and furnace oil in the unit.*
- *Plan for Corporate Environmental Responsibility at 2.5 % of the project cost.*

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

Agenda No.12.3.7

Expansion of Methyl Bromide manufacturing (from 40 MT/month to 200 MT/month) at Plot No. H-254 and H-267, GIDC Kuvadva, Taluka & District Rajkot, Gujarat by M/s Sarthi Chem Pvt. Ltd. - Environmental Clearance.

[IA/GJ/IND2/105593/2011, J-11011/462/2011]

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

The proposal is for environmental clearance to the project for expansion of Methyl Bromide manufacturing from 40 TPM to 200 TPM at Plot No. H-254 and H-267, GIDC Kuvadva, Taluka & District Rajkot (Gujarat) by M/s Sarthi Chem Pvt Ltd. The project activity covered under item 5(b) 'Pesticides industry and pesticide specific intermediates (excluding formulations)' of the schedule to the EIA Notification, 2006 in Category "A".

The ToR has been issued by Ministry vide letter dated 18th May, 2018.

The details of products and capacity are as under:

Sr. No.	Name of Products	Quantity (MT/Month)		
		Existing	Proposed	Total after expansion
1.	Methyl Bromide	40.0	160.0	200.0

Existing land area is 2211m^2. Proposed expansion will be carried out in the open area of existing premises as well as adjoining new plot having an area of 2211 m2. Therefore, the total area of the premises will be 4422 m^2.

Industry has already developed Greenbelt in an area of 620 m^2out of 2211m^2 of project area. After expansion unit will be increasing the greenbelt area up to 1460 m^2 which will be 33% of the total area (i.e. 33% of 4422 m^2).

The estimated total project cost is Rs. 3.5 Crore including existing investment of Rs. 0.5Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 36.0 Lakhs and the Recurring cost (operation and maintenance) will be about Rs. 21.0 Lakhs per annum.

Total employment will be 25 persons as direct &15 persons indirect after expansion. Industry proposes to allocate Rs. 3.0 lakh @1.0% of proposed expansion cost towards Corporate Social Responsibility/Corporate Environment Responsibility.

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. Rupavati River & Fofal Dam is at a distance of 4.4km and 0.8 km respectively.

Ambient air quality monitoring was carried out at 8 locations during March, 2018 to May, 2018 and submitted baseline data indicates that ranges of concentrations as: PM10 (60.9–68.9 µg/m3), PM2.5 (32.3–40.3 µg/m3), SO2 (13.7–17.3µg/m3) and NOx (15.1–18.7 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs from the project would be 1.845 µg/m3, 1.108 µg/m3, 0.592 µg/m3, 0.041µg/m3 and 0.011 µg/m3 with respect to SPM, SO2, NOx, HBr and Br2.The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement will be31.7 m^3/day, of which fresh water requirement of 25.7 m^3/day will be met from GIDC water supply and 6.0 m^3/day will be recycled/treated water.

Industrial effluent of 8.0 m3/day will be treated through ETP-RO-evaporator setup. 2.0 m3/day RO reject will be evaporated into evaporator. 6.0 m3/day RO permeate will be recycled/reused again. Domestic wastewater of 3.5 m3/day will be disposed in soak pit/septic tank.

Power requirement after expansion will be 450 kVA including existing 100 kVA and will be met from Paschim Gujarat Vij Company Ltd. (PGVCL). Unit has one stand by DG set of 125 kVA capacity and proposed to install one stand by D.G set of 325 kVA capacity; which is and will be used as stand by during power failure. Stack (height 11 meters) is provided as per CPCB norms to the DG set.

Existing unit has one HSD fired DG Set of 125 kVA capacity. Additionally, one HSD fired DG Set of 325 kVA capacity and one HSD fired Boiler of 1 TPH capacity will be installed. Resulting emission will be within norms, hence no air pollution control equipment will be required, except adequate stack height.

Existing unit has one process stack attached with reaction vessel. After expansion, 2 additional process vents will be added which will be attached with process reactor and exhaust of work area cleaning. Alkali scrubber will be installed as APCM to control process emission.

Details of Solid waste/Hazardous waste generation and its management is as below,

Sr. No.	Waste	Category as per HWM Rules 2016	Quantity		Management
			Existing	Total after expansion	
1.	ETP waste & Evaporation salt	35.3	1.2 MTPM	3.4 MTPM	Collection, storage, transportation, disposal at TSDF site
2.	Used oil	5.1	0.0240 MT/yr.	0.500 MT/yr.	Collection, storage, transportation, disposal by selling to registered re-processors
3.	Discarded container/ bags	33.1	0.05 MT/yr.	1.0 MT/yr.	Collection, storage, and disposal to the authorized recyclers after decontamination
4.	Process waste/ Sulphur sludge	29.1	1.2 MT/yr.	6.0 MT/yr.	Collection, storage, transportation, disposal at TSDF site.
5.	Spent Sulfuric Acid	29.6	--	120 MTPM	Collection, storage, transportation and sale to

					actual users under Rule-9 of HAZ Rule-2016.
6.	Hydrogen Bromide	29.6	10.3 MTPM	20.0 MTPM	Collection, storage, transportation and sale to actual users under Rule-9 of HAZ Rule-2016.

Public Hearing for the project is exempted as the industry is located in notified industrial area at Kuvadava GIDC.

Unit has valid consent AWH-100723 issued by Gujarat State Pollution Control Board valid up to 13/03/2024.

No Litigation pending against the proposal.

12.3.7.2 *The EAC, after deliberations, asked for clarifications and inputs in respect of the following:-*

- *Considering Methyl Bromide, the proposed product, is one of the ozone depleting substances, and its production is to be phased out as per the Montreal Protocol, recommendation/opinion of Ozone cell of the Ministry shall be obtained by PP for further consideration of proposal.*
- *Project site being located in Tehsil & District Rajkot, one of the critically polluted area reported, clarification from SPCB/GPCB regarding applicability of CPA in GIDC Kuvadava.*
- *Action Taken Report on the non-complied points to be forwarded by the Regional Office of the Ministry, with their comments and observations.*

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

Agenda No.12.3.8

Bulk Drug Intermediates Manufacturing Unit at Plot. No: F-24, MIDC, Chincholi Industrial Area, Chincholi Village, Mohal Taluk, Solapur District, Maharashtra state by M/s Urmila Chemopharma Private Limited- Environmental Clearance

[IA/MH/IND2/108626/2018 , IA-J-11011/345/2018-IA-II(I)]

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

The proposal is for Setting up Bulk Drug Intermediates Manufacturing Unit of capacity 10 TPM at Plot No. F-24, MIDCChincholi Industrial Area, Chincholi Village, Mohal Taluk, District Solapur (Maharashtra) by M/s Urmila Chemopharma Private Limited. The project activity covered under item 5(f) 'Synthetic organic chemicals industry' of the schedule to the EIA Notification, 2006 under Category B, however, due to location of the project site within 5 km of the GIB sanctuary, the project requires appraisal at the central level by the EAC in the Ministry.

The proposed project is located in a notified industrial area i.e., Maharashtra Industrial Development Corporation (MIDC), Chincholi which is notified as Industrial area/ estate by Government of Maharashtra state on 16.05.1988. But the project boundary is located at a distance of 2.45 Km away from Great Indian Bustard Sanctuary (GIBS), Kondi (Gat No. 104),

and satisfies the General Condition as per EIA Notification, 14th Sep, 2006. Hence, the project covered under Category **"A"**.

The ToR has been issued by Ministry vide letter dated 1stApril, 2019.

The details of products and capacity as under:

S. No	Name of the Product	Quantity in MT/Month
1	3,5Dimethyl - 4 - Nitropyridine – N-Oxide	5.0
2	3-Carbamoylmethyl-5-Methyl-hexanoic acid	5.0
	Total	10.0

The proposed project will be established in a land area of 1.48 Acres (6000 Sq.m). Industry will develop Greenbelt in an area of 35.8% i.e. 0.53 Acres out of 1.48 Acres of area of the project.

The estimated project cost is Rs. 2.5 Crores including investment on proposed project. Total capital cost earmarked towards environmental pollution control measures is Rs. 56 Lakhs and the recurring cost (operation and maintenance) will be about Rs. 11 Lakhs per annum.

Total Employment will be 65 persons as direct &10 persons indirect. Industry proposed to allocate Rs. 5.0 Lakhs for 5 years @ 2.0 % of Project cost towards Corporate Social Responsibility & Rs. 5.0 Lakhs for 5 years @ 2.0 % of the Project cost towards Corporate Environment Responsibility.

The project boundary is located at a distance of 2.45 Km from Great Indian Bustard Sanctuary (GIBS), Kondi (Gat No. 104).

Ambient air quality monitoring was carried out at 8 locations during March 2019 - May 2019and submitted baseline data indicates that ranges of concentrations of PM10 (53.0 – 65.1µg/ m3), PM2.5(22.1 – 29.5µg/ m3), SO2(12.3 – 16.4µg/ m3), NOx (19.7 – 23.8 µg/ m3), CO (0.11 – 0.88mg/ m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be PM10, PM2.5, SO2& NOx would be 0.4µg/ m3, 0.1 µg/ m3, 0.85µg/ m3& 1.55 µg/ m3 respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NQQS).

The total water requirement is 35.43 m3/day of which fresh water requirement of 26.08 m3/day and will be met from Maharashtra Industrial Development Corporation(MIDC) water supply.

Generated effluent of 10.82 m^3/day will be treated through stripper followed by MEE/ATFD, Biological Treatment Plant followed by RO plant will be based on Zero Liquid Discharge System.

Power requirement will be 200 KVA and will be met from MSEDCL. DG set of 125 KVA capacity, Stack (height 10 mts) will be provided as per CPCB norms to the proposed DG set.

2 TPH Coal fired boiler is proposed with stacks of height 20 mtrs each, Multi cyclone separator/ bag filter each will be installed for controlling the particulate emissions (within statutory limit of 115 mg/ Nm^3).

Details of Process emissions generation and its management.

S. No.	**Name of the Gas**	**Quantity**	**Treatment Method**
1	Carbon dioxide	175 Kg/Day	Dispersed into the atmosphere
2	Ammonia	21 Kg/Day	Scrubbed by using chilled water media

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

S. No	Name of the Solid/ Hazardous Waste	Quantity	Disposal Method
1	Organic waste (Process Residue)	134 Kg/Day	Sent to Cement Industries
2	Spent Carbon	3.0 Kg/Day	
3	Solvent Distillation Residue	10 Kg/Day	
4	Organic distillate from Stripper	30 Kg/ Day	
5	MEE Salts	197 Kg/Day	Sent to TSDF
6	ETP Sludge	50 Kg/Day	
7	Used Oils	500 Ltrs/Annum	SPCB Authorized Agencies for Reprocessing/Recycling
8	Detoxified Containers	300 No's / Month	After Detoxification sent to SPCB Authorized Agencies
9	Used Lead Acid Batteries	2 No's/ Annum	Send back to suppliers for buyback of New Batteries
10	Ash from boiler	2800 Kg/Day	Sent to Brick Manufacturers

Public hearing is exempted under the provisions of 7(i) III of the EIA Notification, 2006, since the proposed project which is located in a notified Industrial area i.e., MIDC, Chincholi.

Since it is a Greenfield project, Certified Compliance report is not applicable.

No Litigation Pending against the proposal

12.3.8.2: The EAC, after presentation by PP, noted the following

- The project proponent has committed for adhering to ZLD
- The project boundary is located at a distance of 2.45 Km from Great Indian Bustard Sanctuary (GIBS), Kondi (Gat No. 104).
- There are some threatened and vulnerable species reported in the study area. However it was noted that the impact potential of the proposed project is not significant.

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

- *The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposals for Wildlife Clearance will be considered by the respective authorities on their merits and decision taken.*
- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Pharmaceuticals Industry (Bulk Drugs) issued by the Ministry vide G.S.R.149(E) dated 4th March, 2009 and amended from time to time shall be followed. Fugitive emissions shall be controlled at 99.95% with effective chillers.*
- *Coal shall not be used as fuel in the boiler.*

- *Height of the stack shall be less than 30m.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows:*
  - *(a) Reactor shall be connected to chilled brine condenser system.*
  - *(b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - *(c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
  - *(d) Solvents shall be stored in a separate space specified with all safety measures.*
  - *(e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - *(f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  - *(g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed* 26.08 *cum/day, proposed to be met from MIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Rainwater harvesting system shall be installed in the unit and water shall be used in the plant operations.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided. Brick manufacturing unit shall be setup in the plant premises for effective handling of ash.*
- *The company shall undertake waste minimization measures as below:-*
  - *(m) Metering and control of quantities of active ingredients to minimize waste.*
  - *(n) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(o) Use of automated filling to minimize spillage.*
  - *(p) Use of Close Feed system into batch reactors.*
  - *(q) Venting equipment through vapour recovery system.*
  - *(r) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *As proposed, 2.5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER). The CER plan shall be implemented during the plant construction stage and before commissioning of the project.*

- *Due to the location of wildlife sanctuary near to the project site, Rs. 10 lakh shall be allocated towards Wildlife Conservation and Management, in addition to the CER allocation.*
- *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.*
- *Nearby hospitals shall be informed regarding the raw materials/chemicals being handled in the unit and expected hazards/accidents and health care for the same.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*

Agenda No.12.3.9

Proposed expansion of Various Dye Intermediates along with Dyes and Pigments Manufacturing (from 35 MT/month to 600 MT/month) at Survey No. 347, Village:Lunej, Tal. Khambhat, Dist. Anand, Gujarat by M/s Technichem Organics Pvt. Ltd. - Environmental Clearance- Environmental Clearance

[IA/GJ/IND2/108923/2018 , J-11011/348/2018-IA-II(I)]

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

The proposal is for environmental clearance to the project for expansion of Dye Intermediates along with Dyes and Pigments Manufacturing from 35 TPM to 600 TPM at Survey No. 347, VillageLunej, Taluka Khambhat, District Anand (Gujarat) by M/sTechnichem Organics Pvt Ltd. The proposal is covered under item S.N. 5(f) of Schedule to the Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).

The ToR has been issued by Ministry vide letter dated 3rd December, 2018.

The details of the products and their capacity is given below:

Sr. No.	Name of Products	CAS No./ CI No.	Quantity (MT/month)		
			Existing	Proposed	Total
(A)	**Dye Intermediates**				
1.	1-(4 Sulpho Phenyl)-3-Carboxy-5-Pyrazolone (1,4 SPCP)	118-47-8	**20**	**130**	**150**
2.	3-Amino Crotononitrile (3 AC)	1118-61-2			
3.	1-(3-Sulpho Phenyl)-3 Methyl 5-Amino-Pyrazolone) (1:3 SPMAP)	23646-86-8			
4.	1 (3-Sulfo Phenyl)-3 Methyl 5-Pyrazolone (1:3 SPMP)	119-17-5			
5.	3,5 Dimethyl Pyrazolone (Dimpa)	67-51-6			

6.	1-(4 Sulpho Phenyl)-3-Methyl-5-Pyrazolone (1:4 SPMP)	89-36-1	**10**	**40**	**50**
7.	2-Amino Dimethyl Terpthalate (ADMT)	5372-81-6			
8.	3,4 dichloro-6-sulfo Aniline (3,4 DC 6-SA)	6331-96-0			
9.	BisphenolSulfony/Ester	68015-60-1			
10.	1-(3-sulfomido phenyl)-3 Methyl 5-Pyrazolone (1:3 SAPMP)	89-29-2			
11.	1 Phenyl 3 Methyl 5 Pyrazolone (PMP)	89-25-8	**5**	**95**	**100**
12.	(1-Pheneyl)-3 Methyl-5 Amino Pyrazole (5 Amio PMP)	1131-18-6			
13.	N-Phenyl Ethyl N Cyano Ethyl Aniline (PCN acid)	17601-74-0			
14.	3-Amino 5-Methyl Pyrazole (3 AMP)	31230-17-8			
15.	5 Amino 6 Methyl Benzimidazole (AMBZ)	67014-36-2			
16.	1 (4-Tolyl) Phenyl-3 Methyl 5 Pyrazole (PTPMP)	86-92-0	**0.00**		
17.	1-2 Chloro Phenyl-3-Methyl-5-Pyrazolone (OCPMP)	14580-22-4			
18.	1-3-Chloro-Phenyl-3-Methyl-5-Pyrazolone (MCPMP)	20629-90-7			
19.	2,5 Dichloro 4 Sulfo Phenyl 3 Methyl 5 Pyrazolone (DCSPMP)	84-57-1			
20.	2, 5 Dichloro-Phenyl-3-Methyl-5-Pyrazolone (DCPMP)	865303-45-3			
21.	3-Methyl-5-Pyrazolone	108-26-9			
22.	4-Nitro 2 Amino Phenol 5 Sulphonic Acid (4-NAPSA)	96-67-3			
23.	2,5 Dichloro-4-Sulpho-Aniline (2,5DC4SA)	88-50-6			
24.	Vinay-SulfoPhenyl-3-Methyl-5-Pyrazolone (VS SPMP)	108-26-9			
25.	3,5 Di-Nitro Benzoic Acid	99-34-3			
26.	Metanilic Acid	121-47-1	**0.00**	**100**	**100**
27.	Meta Amino Phenol	591-27-5			
28.	Para amino benzamide	2835-68-9			
29.	1-phenyl 3 carbethoxy 5 pyrazolone	89-33-8			
30.	BisazoBarbituric Acid	25157-64-6			
31.	2,5 Dichloro Phenol	583-78-8			
32.	3,5 Di-Amino benzoic acid	--			
33.	Di methyl Pyridone (DMP)	--			
34.	N-butyl-3-Cyno-6-hydroxy-4-Methyl-2-Pyridone (BMP)	--			
35.	N-3-methoxypropyl-3-Cyno-6-hydroxy-4-Methyl-2-Pyridone (3MMP)	--			
36.	N-ethtyl-3-Cyano-6-hydroxy-4-	--			

	methyl-2-Pyridone (EMP)				
37.	Barbituric Acid	67-52-7			
(B)	**Dyes**				
1.	Acid yellow 17	18965	**00**	**100**	**100**
2.	Acid yellow 36	13065			
3.	Acid Yellow 42	22910			
4.	Acid Yellow 49	18640			
5.	Acid Yellow 79	12220-70-1			
6.	Acid yellow 110	12220-74-5			
7.	Acid yellow 232	134687-50-6			
8.	Acid Blue 113	26360			
9.	Acid Red 119	262085			
10.	Acid Red 183	18800			
11.	Acid Red 315	12220-47-2			
12.	Acid Red 357	61951-36-8			
13.	Acid Red 362	61814-58-2			
14.	Acid Red 414	172287-09-7			
15.	Acid Violet 90	18762			
16.	Acid Brown 282	12219-65-7			
17.	Acid Brown 355	60181-77-3			
18.	Acid Orange 142	61901-39-1			
19.	Acid Orange 74	18745			
20.	Acid Orange 154	133556-24-8			
21.	Solvent Orange 58	71775-93-4			
22.	Disperse Blue CB	--			
(C)	**Pigments**				
1.	Pigment Red 41	21200	**0.00**	**100**	**100**
2.	Pigment Orange 05	12075			
3.	Pigment Orange 13	21110			
4.	Pigment Orange 34	21115			
5.	Pigment Orange 36	11780			
6.	Pigment Orange 64	12760			
7.	Pigment Yellow 83	21108			
8.	Pigment Yellow 97	11767			
9.	Pigment Yellow 110	56280			
10.	Pigment Yellow 114	21092			
11.	Pigment Yellow 138	56300			
12.	Pigment Yellow 139	56298			
13.	Pigment Yellow 150	12764			
14.	Pigment Yellow 151	13980			
15.	Pigment Yellow 152	21111			
16.	Pigment Yellow 154	11781			
17.	Pigment Yellow 155	200310			
18.	Pigment Yellow 168	13960			
19.	Pigment Yellow 174	21098			
20.	Pigment Yellow 180	21290			
21.	Pigment Yellow 181	11777			
22.	Pigment Yellow 183	18792			
23.	Pigment Yellow 191:1	18795			
24.	Pigment Red 146	12485			
25.	Pigment Red 170	12475			

26.	Pigment Red 176	12515			
27.	Pigment Red 177	65300			
28.	Pigment Red 184	12487			
29.	Pigment Red 185	12516			
30.	Pigment Red 187	12486			
31.	Pigment Red 188	12467			
32.	Pigment Red 210	12477			
33.	Pigment Red 254	56110			
34.	Pigment Red 264	561300			
35.	Pigment Red 122	73915			
		Total Production	**35**	**565**	**600**

Existing land area is 19200 m2. Proposedexpansion will be carried out in the open area of existing premises.

Industry has already developed Greenbelt in an area of 3400 m2 out of 19200m2 of project area. After expansion unit will be increasing the greenbelt area up to 6350 m2 which will be 33% of the total area.

The estimated total project cost isRs. 13.75 Crore including existing investment of Rs. 6.0 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 2.30 Crore and the Recurring cost (operation and maintenance) will be about Rs. 7.75 Crore per annum.

Total employment will be 50persons as direct &75persons indirect after expansion. Industry proposes to allocate Rs. 7.75 lakhs @1.0% of proposed expansion cost towards Corporate Social Responsibility/Corporate Environment Responsibility.

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.Pond of Neja Village is at a distance of 2.98 km in E direction.

Ambient air quality monitoring was carried out at 8 locations during October, 2018 to December, 2018 and submitted baseline data indicates that ranges of concentrations as: PM10 (61.2–67.6 µg/m3), PM2.5 (36.5–41.1 µg/m3), SO2 (12.3–14.4µg/m3) and NOx (14.1–16.3 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs from the proposed project would be 2.076 µg/m3, 0.614 µg/m3, 0.681 µg/m3, and 0.681 µg/m3with respect to SPM, SO2, NOx and NH3.The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is320.5 m3/day, of which fresh water requirement of60.5 m3/daywill be met from Bore well. 260.0 m3/day will be recycled/treated water.

Industrial effluent of 282.0 m3/day will be treated through ETP-RO-MEE-Spray dryer setup. 142m3/day RO reject will be sent to MEE followed by in-house spray dryer. 140 m3/day RO permeate and 110 m3/day MEE condensate will be recycled/reused again. Domestic wastewater of 8.0 m3/day will be disposed in soak pit/septic tank.

Power requirement after expansion will be 1500 KWincluding existing 250 KW and will be met from Madhya Gujarat Vij Company Ltd. (MGVCL). Unit proposed to install one stand by D.G set of 250 kVA capacity; which is and will be used asstand by during power failure. Stack (height 11 meters) isprovided as per CPCB norms to the DG set.

Existing unit has coal/Biofuel fired one2 TPH boiler, one LDO fired 5 Lakhs Kcal/hr. Thermic Fluid Heater, and coal/Biofuel fired one spray dryer. Additionally, coal/Biofuel fired one 5 TPH boiler, one 15 Lakhs Kcal/Hr Hot Air Generator, one LDO fired 5 Lakhs Kcal/Hr Thermic Fluid Heater, and one stand by D G Set (250 kVA) will be installed. Cyclone and bag filter with a stack of height of 21 m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm3 for the proposed utilities.

Above details in tabular form is given below.

Sl	Stack attached to	Fuel Type	Stack Height(m)	APC measures	Probable emission
Flue Gas Stacks					
➢ **Existing**					
1.	Boiler (2.0 TPH)	Coal/ Biofuel -8.0 Mt/Day	15	Cyclone	PM ≤ 150 mg/Nm^3 SO_2 ≤ 100 ppm NOx ≤ 50 ppm
2.	Thermic Fluid Heater (5 lakhs kcal/hr.)	LDO – 1.25 Kl/Day	15	--	
3.	Spray Dryer-1 (1200 Lit/hr.) (For Effluent)	Coal/ Biofuel - 6.0 Mt/Day	15	Cyclone + scrubber + submerged type gas bubbling tank	
➢ **Proposed addition after expansion**					
1.	Boiler (5.0 TPH)	Coal/ Biofuel-20.0 Mt/Day	21	Cyclone & bag filter	PM ≤ 150 mg/Nm^3 SO_2 ≤ 100 ppm NOx ≤ 50 ppm
2.	Thermic Fluid Heater (5 lakhs kcal/hr.)	LDO – 1.25 Kl/Day	21	--	
3.	Hot Air Generator (15 lakhs kcal/hr.) Products Spray Dryer	Coal/ Biofuel -8.0 Mt/Day	21	--	
4.	D G Set (250 kVA)	HSD-30 lit/hr.	11	--	

Details of Process emissions generation and its management is as below,

Sl	Stackattached to	Fuel Type	Stack Height (m)	APC measures	Probable emission
Process Gas Stacks					
➢ **Existing**					
1.	Hydrolysis vessel (2 Nos.)-Process Vent-1	--	15	Water and Alkali Scrubber	NH_3 ≤175 mg/nm^3 SO_2≤40 mg/Nm^3
➢ **Proposed Addition after expansion**					
1	Process vent of dyes intermediates- Process Vent-2	--	15	Water Scrubber	NH_3≤ 175 mg/Nm^3

2.	Reaction vessel of Multipurpose Plant-2 Sets, Process Vent-3	--	21	Alkali Scrubber	$SO_2 \leq 40$ mg/Nm^3
3.	Spray Dryer-2 (1500 Lit/hr) (For Product Recovery)	--	21	Cyclone + scrubber + submerged type gas bubbling tank	PM ≤ 45 mg/Nm^3
4.	Spray Dryer-3 (1200 Lit/hr) (For effluent)	Coal/ Biofuel - 6.0 Mt/Day	15		PM ≤ 150 mg/Nm^3 $SO_2 \leq 100$ ppm NOx ≤ 50 ppm

Details of Solid waste/Hazardous waste generation and its management is as below,

Sl	Type of Waste	Category No. as per HWM rules,2016	Quantity			Method of Disposal
			Existing	Proposed	Total	
1.	ETP sludge Spray Dryer Salt	35.3	3.33 MT/Month Nil	96.67 MT/month 155 MT/month	100 MT/month 155 MT/month	Collection, Storage, Transportation, Disposal at TSDF site.
2.	Process Iron Sludge	26.1	2 MT/month	288 MT/Month	290 MT/Month	Collection, Storage, Transportation and sold to cement manufacturer or Disposal at TSDF site.
3.	Process Gypsum Sludge	26.1	Nil	240 MT/Month	240 MT/Month	Collection, Storage, Transportation and sold to cement manufacturer or Disposal at TSDF site.
4.	Discarded Containers/ Liner/Bags	33.1	2520 Nos./Year	2480 Nos./Month 1.0 Mt/month	5000 Nos./Month 1.0 Mt/month	Collection, Storage, Decontamination, Transportation, Disposal by selling to Authorized Recycler.
5.	Used Oil	5.1	Nil	0.5 KL/Year	0.5 KL/Year	Collection, Storage, Transportation, Disposal by

						selling to Registered Reprocess
6.	Spent H_2SO_4 (70-75%)	26.3	Nil	675 KL/Month	675 KL/Month	Collection, storage and sold to actual users under Rule-9 of Haz. rules, 2016
7.	SBS (40-45%)	B(15)	Nil	145 KL/Month	145 KL/Month	Collection, storage and reuse within premises or sold to actual users under Rule-9 of Haz. rules, 2016.
8.	Liq. Ammonia (12-15%)	--	Nil	50 KL/month	50 KL/month	Collection, storage and reuse within premises or sold to actual users under Rule-9 of Haz. rules, 2016.

Public Hearing for proposed expansion project has been conducted by the Gujarat State Pollution Control Board on 30/04/2019.The main issues/suggestions raised during the public hearing were related to local employments and strict surveillance of EMS to minimize pollution impact due to proposed expansion project.

Unit has valid consent AWH-99843 issued by Gujarat State Pollution Control Board valid up to 06/03/2024.

No Litigation Pending against the proposal.

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed. Fugitive emissions shall be controlled at 99.98% with effective chillers.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*

- *No coal shall be used as fuel in the boiler.*
- *Height of the stack shall not be less than 30m.*
- *Solvent management shall be carried out as follows:*
  - *(a) Reactor shall be connected to chilled brine condenser system.*
  - *(b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - *(c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
  - *(d) Solvents shall be stored in a separate space specified with all safety measures.*
  - *(e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - *(f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  - *(g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed* 60.5 *cum/day*, proposed to be met from ground water*. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided. Brick manufacturing unit shall be set up in the premises for effective utilization of the ash.*
- *The company shall undertake waste minimization measures as below:-*
  - *(a) Metering and control of quantities of active ingredients to minimize waste.*
  - *(b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(c) Use of automated filling to minimize spillage.*
  - *(d) Use of Close Feed system into batch reactors.*
  - *(e) Venting equipment through vapour recovery system.*
  - *(f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made to the public during public consultation/hearing shall be satisfactorily implemented.*
- *As proposed Rs. 30 lakhs shall be allocated for Corporate Environment Responsibility (CER). The CER funds shall be utilized for meeting the issues suggested during public hearing. The CER plan shall be completed before commissioning of the expansion project.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*

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

Agenda No.12.3.10

Exploration, Development and Production for Oil & Gas in 21 onshore PML blocks in Upper Assam North, A & AA Basin, Sivsagar district, Assam - Environmental Clearance

[IA/AS/IND2/75479/2018 , IA-J-11011/206/2018-IA-II(I)]

The proposal was considered by the EAC (Industry-2) in its meeting held during 30-31 May, 2019 with the permission of the Chairman and has recommended to grant environmental clearance to the project with the following additional condition:-

- *Water requirement for onshore drilling is permitted to the tune of 25 M3 per day per well. PP to install Mobile ETP coupled with RO to reuse the treated water in drilling system. Size of the waste shall be equal to the Hole volume+ volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above.*

Agenda No.12.3.11

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

[IA/GJ/IND2/74678/2018 , IA-J-11011/158/2018-IA-II(I)]

The proposal was considered by the EAC (Industry-2) in its meeting held during 29-31 July, 2019 with the permission of the Chairman and has recommended to grant environmental clearance to the project with the following additional condition:-

- Water requirement for onshore drilling is permitted to the tune of 25 M3 per day per well. PP to install Mobile ETP coupled with RO to reuse the treated water in drilling system. Size of the waste shall be equal to the Hole volume+ volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above

Agenda No.12.3.12

Expansion of Coal Tar Distillation and Addition of Carbon Black Plant at Musinayakahalli, Taluk Sandur, District Ballari, Karnataka by M/s Epsilon Carbon Private Limited- Environmental Clearance
[IA/KA/IND2/105873/2017, J-11011/500/2017-IA-II(I)]

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

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

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

Details of existing and proposed products are as under:-

S. NO.	PRODUCTS	PRODUCTION CAPACITY IN TPA		
		EXISTING	ADDITIONAL	TOTAL
	COAL TAR DISTILLATION SECTION			
	Distillation capacity	300,000	200,000	500,000
1	Coal Tar Pitch	153000	102000	255000
2	Zero QI/Impregnated Pitch	6000	10000	16000
3	Carbon Black Oil (CBO)	70000	183600	253600
4	Anthracene Oil/Heavy Creosote Oil	42000	57000	99000
5	Wash Oil	25500	16000	41500
6	Naphthalene	18000	17000	35000
7	NSF	33000	0	33000
8	Phenol Oil	6000	8900	14900
9	Light Oil	6000	4000	10000
10	De-hydrated coal tar	291000	192000	483000
11	Phenolics (Phenol, Cresols (ortho, meta, para or mixture thereof), Xylenols)	0	14900	14900
12	Special Graphite/Advanced Graphite	0	50000	50000
	By- Product of Coal Tar Distillation Section			
1	Neutral Sodium Phenolate (14%)	15300	10200	25500
2	Ammonical water	90	60	150
3	Calcium Carbonate		17340	17340
	Carbon Black Unit Section			
1	Carbon Black	-	300000	300000
2	Lean Gas/ Tail Gas*	-	270000 Nm3/hr.	270000 Nm3/hr.
Captive Power Plant				

S. NO.	PRODUCTS	PRODUCTION CAPACITY IN TPA		
		EXISTING	ADDITIONAL	TOTAL
1	Captive Power Plant	-	54 MWH	54 MWH
Lean gas/Tail gas generated in Carbon Black Plant will be either sold to nearby industries or may be converted to power in Captive Power Plant				

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

The ToR for the project was granted on 27th July 2018. Public hearing was conducted by SPCB on 5th March, 2019. The project proponent has submitted a detailed reply on the issues raised during the public hearing and their response and commitment towards the same.

Existing land area is 140200 sqm, additional 533670 m2 land will be used for proposed expansion. Industry has already developed/will develop greenbelt in an area of 33% i.e. 225228 m2 out of total area of the project. The estimated project cost is Rs 900 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 20 crores and the Recurring cost (operation and maintenance) will be about Rs. 200 Lacs per annum. Total Employment will be 575 (direct & indirect) persons as direct after expansion.

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

Total fresh water requirement estimated is 8520 m^3/day, which is proposed to be met from JSW Steel water network.

Effluent of 825 cum/day will be treated through existing ETP having capacity 120 KLD and proposed ETP of 820 KLD. Domestic effluent shall be treated through existing STP of 25 KLD and proposed STP of 50 KLD. The plant will be based on Zero Liquid discharge system.

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

Detail of existing and proposed stack as following

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

S. NO.	FUEL CONSUMING EQUIPMENT	CAPACITY (UNIT)	FUEL TYPE	CONSUMPTION IN M^3/HR
7	Coal Tar Tube furnace-2	38.5 LKcal 2.5	Mixed Gas	3850
8	Naphthalene Tube Furnace-2	15 LKcal	Mixed Gas	1500
9	Boiler-2 (Stand By)	15 TPH	Coal/Mixed Gas	3200 kg/hr
10	Thermic Fluid Heater-3	20 LKcal	Mixed Gas	500
Proposed				
1	Coal Tar Tube furnace-3	38.5 LKcal	Mixed Gas	3850
2	Naphthalene Tube Furnace-3	15 LKcal	Mixed Gas	1500
3	Modified Pitch Furnace-2	10 LKcal	Mixed Gas	1000
4	Boiler-3	15 TPH	Mixed Gas	9950
5	Thermic Fluid Heater-4	20 LKcal	Mixed Gas	2000
6	Thermic Fluid Heater-5	20 LKcal	Mixed Gas	2000
7	Boiler – 4 (For CPP)	70 TPH	Tail Gas from CB Unit	115000
8	Boiler – 5 (For CPP)	90 TPH	Tail Gas from CB Unit	150000
9	Boiler – 6 (For CPP)	90 TPH	Tail Gas from CB Unit	150000
10	DG Set stand by	1000 kVA	Diesel	147 L/ hr.
11	Dryer stack - 3 No for 6 dryers	180 TPD/ 250 TPD	Tail Gas from CB Unit	12000 / Dryer
12	Flare Stack	Used only in case of CPP breakdown	Tail Gas from CB Unit	-

Ambient air quality monitoring was carried out at 8 locations during December, 2017 to February, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (49-67µg/m3), PM2.5 (24-33µg/m3), SO2 (8.6-9.5µg/m3) and NO2 (16.3-19.3µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 6.98 µg/m3, 13.44 µg/m3 and 3.06 µg/m3 with respect to PM10, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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

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

12.3.12.2: The proposal was earlier considered by the EAC in its meeting held during 29-31 July, 2019. The Committee desired to have additional information on the following:

- Revised water balance to be submitted with reduction in fresh water demand.
- Plan for Corporate Environment Responsibility.

- Action Taken Report on non complied points reflected in the certified compliance report, to be forwarded by the Regional Office of the Ministry.

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

Sl	Observations of the EAC	Reply by the PP
10.5.4.2		
1	Submit the MOU between M/s Epsilon Carbon PrivateLimited and M/s JSW Steel plant for utilizing the utilities, and also certified compliance report of M/s JSW Steel plant.	MOU JSW and ECPL for power, water, gas and AAQM Monitoring has been provided. Certified compliance report of M/s JSW Steel Plant was provided.
10.5.4.3		
1	Revised water balance to be submitted with reduction in fresh water demand.	Fresh water demand is reduced to 8520 KLD from 10020 KLD. Revised water balance is attached as Annexure 3.
2	Plan for Corporate Environment Responsibility.	Detailed plan for CER based on the public hearing issues has been provided.
3	Action Taken Report on non-complied points reflected in the certified compliance report, to be forwarded by the Regional Office of the Ministry.	Application for certified compliance report with action taken plan is submitted to RO office of MoEF&CC, Bangalore by Epsilon Carbon Pvt. Ltd. vide letter No. ECPL-EHS-2019-20-018 dated 22/08/2019.
4	Authenticated map duly signed by wildlife warden indicating distance between plant and Daroji Bear Sanctuary.	Map showing distance of plant from Doraji Bear Sanctuary from Wildlife Warden showing distance 10520 mt from ECPL was provided.

12.3.12.3 *The EAC, after detailed presentation on the reply to the observations made in the earlier EAC meet, deliberated in detail on the issues raised during the public hearing. The project proponent has made a detailed presentation on the issues raised by the public during the public hearing and action plan on the commitments made by the project proponent. The committee advised to increase the fund provision under the CER from 6 Crores as per the OM dated 1st may 2018 to Rs. 10 Crores, in order to address the issues raised during the public consultation. The project proponent also submitted an undertaking/affidavit stating the no FIR has been filed on the public; commitment to increase the CER fund to 10 crores, etc. The committee also advised to increase the green belt from 33% to 35%. The project proponent also explained that the pipeline for transportation of Crude Coal tar from JSW plant is under progress.*

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

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

- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9th November, 2012as amended time to time shall be followed.*
- *Crude coal tar shall be transported through dedicated pipeline from M/s JSW Coke oven plant to the project proponent's storage tanks.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines. Bagfilter (PTFE/pulse jet) shall be installed to control the emissions.*
- *Total fresh water requirement shall not exceed 8520 cum/day, proposed to be met from JSW Steel water network. Prior permission in this regard shall be obtained from the concerned regulatory authority before diverting the water from the quantum allotted to M/s JSWSteel.*
- *Rainwater harvesting system shall be set up in the premises and water shall be used for various industrial purpose in the unit.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided. Brick manufacturing unit shall be set up in the premises for effective utilization of the ash.*
- *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 35% 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. Green belt shall be increased with plantation of additional two rows along the existing greenbelt.*
- *All the commitments made to the public during public consultation/hearing shall be satisfactorily implemented.*
- *As committed Rs. 10 crore shall be allocated for Corporate Environment Responsibility (CER). The CER funds shall be utilized for meeting the issues suggested during public hearing. The CER plan shall be completed before commissioning of the expansion project.*

- *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. Workers shall be provided with adequate safety kits/mask for protection from carbon black/coal tar dust, if any, occur in the factory.*
- *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.*
- *A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.*
- *Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.*

Day Two: 27th September, 2019

Agenda No. 12.3.12

Proposed Development Drilling wells and Testing of Hydrocarbons in Dipling, Sarojini and Saekhati Block in Sivasagar and Dibrugarh District, Assam by M/s Ramayana Ispat Pvt Ltd- For Environmental Clearance

[IA/AS/IND2/71519/2017, IA-J-11011/564/2017-IA-II(I)]

12.3.12.1 The Project Proponent and the accredited Consultant M/s ABC Techno labs India Pvt Ltd, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed Development Drilling wells and Testing of Hydrocarbons in Dipling, Sarojini and Sapekhati Block in Sivasagar and Dibrugarh District, Assam by M/s Ramayana Ispat Pvt. Ltd.

The project proposal was considered by the Expert Appraisal Committee (EAC)-Industry 2 and recommended Standard Terms of References (ToRs) for the Project on 25th January 2018. The ToR has been issued by Ministry vide letter dated 25th January 2018.

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

Existing Block area is 28.3 sq. Km (3 Blocks). Industry will develop greenbelt in an area of 33% out of total area of the camp site. The estimated project cost is Rs 225 Crore. Total capital cost

earmarked towards environmental pollution control measures is 480 lakhs and the Recurring cost (operation and maintenance) will be about 150 lakhs per annum.

Total Employment will be 45 persons as Direct & 50 persons indirect. Industry proposes to allocate Rs 4.5 Crore @ of 2% towards Corporate Social Responsibility.

There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the block area. Diroi nadi, Buri dihing are flowing through the block area.

Ambient air quality monitoring was carried out at 13 locations during 18th December 2017 to 9th March 2018 and the baseline data indicates the ranges of concentrations as: PM10 (23.6-50.1 µg/m3), PM2.5 (13.5-24.8 µg/m3), SO2 (<5.0- 6.8 µg/m3) and NO2 (6.5-13.6 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.03 µg/m3, 0.058 µg/m3 and 0.117 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement is **25** m3/day of which fresh water requirement of **25** m3/day will be met from Tanker Supply. Effluent of **5 m3/day** quantity will be treated through **mobile ETP system**. The plant will be based on Zero Liquid discharge system (if applicable).

Power requirement after operation will be 4200 KVA including existing 0 KVA and will be met from DG sets. Proposed 4 X 1430 KVA DG sets DG sets are used as standby during developmental drilling activities.

Drill Cuttings will be about 200-250 m3/well (Approx.) and Waste Drilling mud generated from Water based Mud, not contaminated with oil will be about 500 m3/well (Approx.). Drill cutting will be separated from water based mud (WBM) and unusable drilling fluid will be stored in HDPE lined pit for solar drying for temporary storage. The cuttings/mud residues so stored will then be treated and disposed in accordance with CPCB regulations specified for onshore oil & gas industry.

Public hearing was conducted by Assam State Pollution Control Board on 8th August 2018 at District Charaideo (Assam). The main issues raised during the public hearing are related to indirect/direct employment, water supply.

No any litigation pending against the proposal**.**

The details of products and capacity as under: There will be as such no manufacturing activities involved so, no product generated. Following area is under the block Dipling PML for crude oil extraction:

S. No	Block name	Total (sq.km)
1	Dipling Block	10.14
2	Sarojini Block	8.72
3	Sapekhati Block	9.44

12.3.12.2 The EAC, during deliberations observed that the project involves diversion of Forest land in dipling block. Out of 4 wells, the forest land was involved in 3 wells. The project proponent has informed that the Stage -1 Forest clearance has not obtained yet. The committee

also noted that there is no integration of public hearing in the EIA report; no compliance of ToR issued by the Ministry; and the report is generic in nature. The committee desired that the EIA report should be prepared addressing the impact and mitigation measures specific to the project. Further, the committee observed that the performance of the Consultant M/s ABC Techno labs India Pvt. Ltd. was not satisfactory.

12.3.12.3 *The EAC, after deliberations, in view of the above observation, recommended to return the proposal in present form.*

Agenda No.12.3.13

Setting up of Pharma & Intermediates manufacturing unit of capacity 193 TPM at Survey No.310/1/2/3, Village Madhvas, Taluka Kalol, District Panchmahal (Gujarat) by M/s Ishanga Lifescience Pvt Ltd - For Environmental Clearance

[IA/GJ/IND2/82494/2018, IA-J-11011/320/2018-IA-II(I)]

12.3.13.1 The Project Proponent and the Consultant M/s Jyoti Om Chemical Research Centre Pvt Ltd (High Court Stay), made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Setting up of Pharma & Intermediates manufacturing unit of capacity 193 TPM by M/s Ishanga Lifescience Pvt Ltd in an area of 6378 sqm at Survey No.310/1/2/3, Village Madhvas, Taluka Kalol, District Panchmahal (Gujarat)

Standard ToR for the Project was granted on dated: 14th December, 2018. The ToR has been issued by Ministry vide letter No. IA-J-11011/320/2018-IA-II(I); dated 14th December, 2018.
The details of products and capacity asunder:

S. No.	Name of Products	Quantity (TPM)
1	5-Nitrofurfural diacetate	3
2	1 amino hydantoin	3
3	Phosphoryl choline chloride, calcium salt	7
4	Citicoline (CTS) tech	5
5	2-(4-Aminopentyl (ethyl) amino) ethanol	10
6	3-Quinuclidinone	10
7	1-Ethyl-3-(3-Dimethylaminopropyl) Carbodimide Hydrochloride	15
8	3-(1-Cyanoethyl) Benzoic Acid	15
9	1-(p-methoxy benzyl)-1,2,3,4,5,6,7,8,Octahydro isoquinaline- S-octa base	8
10	Dextrometharphin free base	8
11	Cis-2-(2,4-Dichloro phenyl)-2-(1H-1,2,4-triazol-1-yl-methyl)-1,3- dioxolan-4-yl methyl methane sulfonate Crude	10
12	cis-2-(2,4-Dichloro phenyl)-2-(1H-1,2,4-triazol-1-yl-methyl)-1,3-dioxolan-4-yl methyl methane sulfonate - Pure	8

13	Phenyl (1h pyrrole-2-yl) methanone – tricarboxylate	10
14	(-)-1-[(4-Chlorophenyl)phenyl methyl]-4-[(4-methylphenyl) sulfonyl] piperazine	6
15	p-Chloro benzhydrylpiperazine	6
16	2,3 pyrridineBenzyle carboxylate Hydrate Chloro compound	5
17	3,4-dimethoxy-2-chloro methyl pyridine	10
18	pentaprozolesulphide	10
19	Pregabalin (Racemic)	8
20	11-Piperazinyl-dibenzo(b,f) (1,4)-thiazepine hydrochloride	8
21	11-[4-[2-(2-Hydroxy ethoxy) ethyl]-1-piperazinyl] dibenzo (b, f) (1, 4) thiazepinehemifumarate	8
22	2-[(4-(3-methoxypropoxy)-3-methyl- 2-pyridinyl) methyl] thio]-1H-benzimidazole- Crude	10
23	2-[4-(3-methoxypropoxy)-3-methyl-2-pyridinyl] methyl]sulfinyl]-1H-benzimidazole - Pure	10
	Total	193

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

Total land area is 6378.0 m^2will be used for proposed new project. Industry will develop greenbelt in an area of 33 % i.e., 2110 m^2 out of total area of the project.

The estimated project cost is Rs. 11.65 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 2.20 crores and the recurring cost (operation and maintenance) will be about Rs 8.07 crores per annum. Total Employment will be 102 persons as direct. Industry proposes to allocate Rs 26 lacs@ of 2.23 % towards Corporate Environment Responsibility.

There are nonational parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. The Gomariver is flowing at a distance of 1.0 km in North- East direction.

Ambientairqualitymonitoringwascarriedoutat9locationsduringOctober 2018 to January 2019 and the baseline data indicates the ranges of concentrations as: PM10 (69.0-82.0 µg/m3), PM2.5 (39.0-49.0µg/m3), SO_2 (10.0 - 28.0µg/m3) and NO2(10.0 – 20.0µg/m3). AAQ modeling study for point source emissions indicates that the maximumincremental GLCsafterthepropos edprojectwouldbe1.82 µg/m^3, 1.411 µg/m^3 and 1.243 µg/m^3 with respect to PM_{10}, Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 222 m3/day of which fresh water requirement of 77 m3/day will be met from Ground water. Effluent of 162.0 m3/day quantity will be treated through ETP, RO and MEE and recycle back in the unit. The plant will be based on Zero Liquid discharge system.

Power requirement will be 500 KVA and will be met from Madhya Gujarat Vij Company Limited

(MGVCL). Unit will install DG sets as standby having capacity 600 KVA for using during power failure. Stack (height 9.0 m) will be provided as per CPCB norms to the proposed DG sets.

The unit will install3 TPH Boiler. Multi cyclone separator &bag filter with a stack height of 11.0 m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm^3.

Details of Solid/ hazardous waste generation and its management is as under:-

S. No.	Wastes	Category	Source of Generation	Quantity MTA	Mode of disposal
1	ETP Sludge	34.3	Effluent Treatment	7115	Collection, Storage within premises, Transportation and Disposal at TSDF site.
2	Used Oil	5.1	Maintenance & used lubricant oil generated from maintenance activities	0.400	Collection and Storage within premises & Disposal by selling to registered re-processor.
3	Discarded Containers/ Bags/Liners	33.3	Packing Materials	240	Collection, Storage and Decontamination within premises & Disposal by selling to authorized re-cycler.
4	Process Residue	28.1	Mfg. Product from-sr. no. 6, 15, 16, 17, 18, 20, 21, 22, 23	8415	Collection, Storage, Transportation and Selling to authorize recycler/ co-processing /Cement Industries.
5	Spent Carbon	28.3	Mfg. Product from-sr. no. 4, 11, 12, 13, 14, 15, 22, 23	25	Collection, Storage, transportation and send for co-processing /Cement Industries.
			ETP	24	
6	Spent catalyst	28.2	Mfg. Product from-sr. no. 4, 11, 12, 13, 14, 15, 22, 23	1650	Collection, Storage within premises, Transportation for regeneration to authorized units/ co-processing.
7	Scrubber solution	---	Mfg. Process to Scrubbers	3000	Collection, Storage and send to in house ETP for treatment.
8.	Stripper solvent	28.6	Effluent Treatment	2520	Collection, storage and send to co-processing for solvent recovery having under Rule: 9 permission.
9	MEE Salt	37.3	MEE	3600	Collection, Storage within premises, Transportation and Disposal at TSDF site.
10	Membranes	---	RO Plant	2	Collection, Storage, transportation and send for co-processing / TSDF site.
NON-HAZARDOUS WASTE					
11	Fly ash	--	From boiler fuel	90	Collection, Storage, transportation and send to Bricks/ Tiles/ Blocks

S. No.	Wastes	Category	Source of Generation	Quantity MTA	Mode of disposal
					manufacturer. MOU with Bricks manufacturer is attached as annexure-X.

Public Hearing for the proposed project has been conducted by the State Pollution Control Board on dated 4th June, 2019. The main issues raised during the public hearing are related to employment to local people and affects on agricultural land.

No litigation pending against the proposal.

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

12.3.13.2 *The EAC, after detailed presentation, noted that the project proponent has mentioned that 2.6 Lakh toward CER, whereas in the EIA and presentation before the EAC it was mentioned that 26 lakh. PP has clarified that the CER is 26 lakh. However, based on the issues raised during the public hearing, the committee advised to increase to Rs. 55 lakh and same was agreed by the project proponent. The committee also noted that the proposed product is Ozone Depleting Substance and restricted by the narcotic department:-*

12.3.13.3 *The EAC, after deliberations, insisted for additional information in respect of the following:-*

- *Revised water balance to be submitted with 10% fresh water reduction.*
- *Revise Green belt plan @ 35 % consisting 10 m green belt around the periphery of the plant as committed.*
- *The project proponent is requested to obtain concurrence of the Ozone cell of the Ministry in respect of Ozone Depleting Substance.*
- *The project proponent is requested to obtain concurrence Narcotic department.*
- *CER plan @ 55 lacs for 5 years to be submitted.*

The proposal was deferred for the above information.

Agenda No.12.3.14

Expansion of Sugar Factory, Co-generation Plant and Distillery at Kagal Shrimant Jayshingrao Ghatge Bhavan, Taluka-Kagal, District- Kolhapur, (Maharashtra) by M/s Shree Chhatrapati Shahu Sahakari Sakhar Karkhana Ltd- For Environmental Clearance

[IA/MH/IND2/30200/2015, J-11011/225/2015-IA II (I)]

The Project Proponent and the Accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd. made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for expansion of Sugar plant from 7,000 TCD to 10,000 TCD, Co-gen plant from 28 MW to 38 MW and Distillery from 60 KLPD to 90 KLPD by M/s Shree Chhatrapati Shahu Sahakari Sakhar Karkhana Ltd in an area of 140 ha

at survey no. 144/1/B, 144/2, 148-151, 153-157, 159-161, 164-172, 186, 244/B, 247/2/3,61/32, Village Kagal,Taluka Kagal, District Kolhapur, Maharashtra.

The standard ToR for the project was granted on 6th September 2018. Amendment in ToR for Public hearing exemption was granted on 6th February 2019**.**

The project/activity is covered under category B of item 5(g) 'Distilleries' and 5(j) 'Sugar industry' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at State level by the concerned SEAC/SEIAA. D. Due to applicability of general condition (interstate boundary of Karnataka within 5 km), the proposal requires appraisal at central level by the sectoral EAC in the Ministry.

Ministry has issued EC earlier vide letter no. J–11011/225/2015-IA-II, dated 28th March, 2017 for Expansion of Sugar factory from 4950 TCD to 7000 TCD , Co-gen plant from 12.5 MW to 28 MW and Distillery from 45 KLPD to 60KLPD unit to Shree Chhatrapati Shahu Sahakari Sakhar Karkhana Ltd. (SCSSSKL).
Following are the list of products:

Details of Products

Industrial unit	**Product & By-product**	**Quantity**		
		Existing (7,000 TCD)	**Expansion** (3,000 TCD)	**Total** (10,000 TCD)
Sugar Factory (MT/ Yr)	Sugar (13%)	163380	70620	234000
	Molasses (4%)	50400	21600	72000
	Bagasse (30 %)	378000	162000	540000
	Pressmud (4%)	50400	21600	72000
Co-Gen (MW)	**Product**	**Existing**	**Expansion**	**Total**
	Electricity	28	10	38
Distillery (KLPD)	**Product**	**Existing** (60 KLPD)	**Expansion** (30 KLPD)	**Total** (90 KLPD)
	Rectified Spirit (RS)/ ENA	60	30	90
	Ethanol	30	30	60
Sugar Refinery (MT/Yr.)	**Product**		Total after exp.	
	Refined Sugar	-	234000	234000

Total plot area acquired by industry is 140 Ha. Existing & proposed built-up area under sugar factory co-gen plant and distillery is 17.04 Ha. Industry has developed an area of 37 Ha. (26.43 % of total plot area) and additional green belt area of 9.2 Ha. (6.57% of total plot area) will be developed. After expansion the total green belt area would be 46.2 Ha which accounts for 33 % of total plot area.

The estimated cost for expansion project is Rs.110 Crores. Existing investment is 350.86 Cr. Total capital cost earmarked towards environmental pollution control measures under expansion is Rs. 19.45 Crores and the Recurring cost (operation and maintenance) will be about Rs. 5.10 Crores per annum. Total Employment would be 200 persons as direct as well as indirect after expansion of project. Industry proposes to allocate Rs.2.75 Crores @ of 2.5 % towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. Inter-state boundary from project site is 3.86 Km which lies within 5 km distance. River Dudhganga is flowing at a distance of 3 Km in West to East direction.

Ambient air quality monitoring was carried out at 8 locations during December 2018 – February 2019 and submitted baseline data indicates that ranges of concentrations of PM_{10} (52.00 –80.50 $\mu g/m^3$), $PM_{2.5}$ (16.30 – 42.70 $\mu g/m^3$), SO_2 (13.00 – 31.40 $\mu g/m^3$) and NO_x (19.00 – 45.60 $\mu g/m^3$) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the expansion project would be 10.3 $\mu g/m^3$ PM_{10} (towards North West side), 2.95 $\mu g/m^3$ $PM_{2.5}$ (towards North West side), 5.12 SO_2 $\mu g/m^3$ (towards North West side) and 3.03 NO_x $\mu g/m^3$ (towards North West side). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement in Sugar Factory & Co-gen plant after expansion of project will be 5148 CMD. This water will be used for industrial purpose -5055 CMD, 73 CMD for domestic purpose and 20 CMD of gardening. Out of total water requirement of 5148 CMD, 5055 CMD will be cane condensate to be recycled, 66 CMD will be recycled treated water from STP and remaining 27 CMD will fresh water from Dudhganga river.

Total water requirement in Distillery unit after expansion will be 930 CMD. Out of this, 599 CMD will be MEE condensate water, 324 CMD will be fresh water and 7 CMD will be treated water from STP. For industrial purpose 921 CMD water will be used and 9 CMD water will be used for domestic purpose.

The permission for lifting of fresh water is granted to SCSSSKL by Irrigation Department; Govt. of Maharashtra from the Dudhganga River.

From existing sugar factory & co-gen plant operations, trade effluent to the tune of 628 CMD is generated which is 89.7 lit per MT of cane crushed against the CREP norm of 200 Lit/MT. Subsequent to implementation of expansion, total effluent generated from sugar factory and co-gen plant activities would be to the tune of 867 CMD. Same shall be forwarded to the existing ETP in the SCSSSKL premises which shall be duly upgraded. The ETP unites comprises of namely Screen chamber & Oil & Grease trap, Anaerobic Lagoon – I, Anaerobic Lagoon – II, Primary Clarifier, Aeration Tank – I, Secondary Clarifier - I, Aeration Tank – II, Secondary Clarifier– II, Treated water Sump, Sludge Drying Beds , Dual Media Filter, Activated Carbon Filter, Treated water Tank. The treated effluent shall be used for gardening and on shareholders farmland of 60 acres.

The effluent generated from 90 KLPD distillery would be in the form of raw spent wash to the tune of 667 M3/Day. Here, raw spent wash shall be treated in bio-methanation plant followed by concentration in Multiple (Five) Effect Evaporator (MEE). Concentrated spent wash to the tune of 287 M3/Day (3.2 KL/KL of alcohol against norm of 8 KL/KL of alcohol) shall be used for bio-composting using press mud and filler material.

Power requirement to the tune of 9.8 MW after expansion of project will be procured from own Co-gen Plant. 4 DG sets of capacity 500 KVA (2 No.s) and 300 KVA (2 No.s) has already been installed under existing project. DG sets will be used as standby during power failure. Stack of height 6 M ARL is provided as per CPCB norms to the DG sets.

Under expansion unit one boiler of capacity 40 TPH will be installed. Biogas to the tune of 1000 M3/Hr and Bagasse to the tune 15 MT/Hr will be used as fuel for the same. Electrostatic

Precipitator (ESP) along with stack of 40 M height will be installed to the same for controlling the particulate emission.

The CO2 generation shall take place in fermenters of the distillery. CO2 to the tune of 75 MT/Day shall be released from 90 KLPD distillery plant. CO2 shall be bottled and supplied to manufacturers of beverages.

Details of Solid waste/ hazardous waste generation and its management is as under:-

No.	Solid Waste	Existing	After Expansion	Disposal
1	Boiler ash	1393.2 MT/M	1717.2 MT/M	Partially mixed in composting process & rest is given to brick manufacturers free of cost.
2	ETP Sludge	3.0 MT/M	5.0 MT/M	Used as manure in own farm
3	Fermentation Residues	30 MT/M	45.0 MT/M	Mixed in composting process

No.	Hazardous Waste	Quantity (MT/ M)		Disposal
		Existing	After Expansion	
1	5.1- Used Oil	0.45	0.5	Burnt in own boiler as fuel

Public hearing for expansion project is exempted since earlier public hearing for earlier expansion project (Sugar Factory from 4950 to 7000 TCD, Co-gen from 12.5 MW to 28 MW & Molasses based Distillery unit from 45 KLPD up to 60 KLPD.) was conducted on 08.11.2016 and EC was granted on 28.03.2017.

No any major issues were raised during the public hearing.

The EC compliance has been inspected and certified by the Regional Officer; MoEFCC, Nagpur during his visit on 07.02.2019 and certification report dated 22.03.2019 was forwarded by the Regional Office to MoEFCC Nagpur.

There is one Court Case (Crim.Misc.Appln.No.1117) filed by MPCB on 30.12.2016 against the SCSSSKL Industry for increased number of days for distillery operation beyond those stipulated in EC order bearing No. J-11011/39/2001-IA II (I) dated 11.12.2001 and MPCB Consent to Operate order dated 19.01.2015, resulting in to increased production quantity. However, this matter of more number of days for distillery operations in the year 2016 was discussed in 18th EAC meeting of the MoEFCC held on 24.01.2017 and EC granted to the Industry (EC for Sugar factory 7000 TCD, Co-gen plant 28 MW and Distillery 60 KLPD-). An Affidavit w.r.t. same was also submitted for not repeating such an incidence / activity any time in the future. The Regional Officer; MoEFCC, Nagpur has also inspected compliance of this incidence during his visit of 07.02.2019 and has recorded the relevant facts in his report dated 22.03.2019 submitted to MoEFCC; New Delhi.

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

Earlier, the Ministry had issued EC vide letter dated 28th March, 2017 for Expansion of Sugar factory from 4950 TCD to 7000 TCD , Co-gen plant from 12.5 MW to 28 MW and Distillery from

45 KLPD to 60KLPD in favour of M/s Shree Chhatrapati Shahu Sahakari Sakhar Karkhana Ltd. The monitoring report on compliance status of EC conditions has been forwarded by the Regional Office at Nagpur vide their letter dated 22nd March, 2019. The Certified compliance report was found to be satisfactory.

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

12.3.14.3 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to outcome of the Court case (*Crim.Misc.Appln.No.1117*) and compliance of terms and conditions as under:-*

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board as required.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Coal shall not be used as fuel in boiler.*
- *Total fresh water requirement shall not exceed 27 cum/day proposed to be met from* Dudhganga river*. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *No composting shall be carried out from next season i.e. October, 2020.*
- *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.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  - *(i) Metering and control of quantities of active ingredients to minimize waste.*
  - *(ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(iii) Use of automated filling to minimize spillage.*
  - *(iv) Use of Close Feed system into batch reactors.*
  - *(v) Venting equipment through vapour recovery system.*
  - *(vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.*
- *As proposed, an amount of 2.75 Crs shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*

- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*
- *CO_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*

Agenda No.12.3.15

Modernization of fertilizer plant at Spic nagar, Mullakadu village, Thoothukudi Taluka, Tutikorin District, Tamil nadu,Thoothukkudi (Tamil Nadu) by M/S Southern Petrochemical Industries Corporation Limited - For Environmental Clearance

[IA/TN/IND2/106298/2019, J-11011/171/2007-IA-II(I)]

12.3.15.1 The project proponent and their accredited consultant made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for modernization cum expansion of fertilizer manufacturing unit by M/s Southern Petrochemical Industries Corporation Limited in an area of 471100 sqm at SPIC Nagar, Post Office Muthiahpuram, Taluka Tuticorin, District Tuticorin (Tamil Nadu).

The project/activity is covered under category A of item 5 (a) 'Chemical fertilizers' of the schedule to the EIA Notification, 2006 and requires appraisal/approval at central level in the Ministry.

Ministry had issued EC earlier vide F. No. J-11011/171/2007 IA-II (I)) dated 05th March 2008 to the existing project "Expansion of urea and DAP" at Southern Petrochemical fertilizer complex in favour of M/s. Southern Petrochemical Industries corporation Limited.

The details of products and capacity as under:

S. No	Product	Existing	Proposed	Total
Total	Urea (neem coated)	620400 MTPA	138800MTPA	759200 MTPA

Existing land area is 471100m^2. The proposed modernization will be carried out within the existing land. There is no additional land required for this modernization project. Industry has already developed greenbelt in28.44 % of the area and will develop greenbelt in an area of 33 % i.e., 157591 m^2 out of total area of the project.

The estimated project cost is Rs 364 crores including existing investment of Rs 440.78 crores. Total capital cost (including Existing) earmarked towards environmental pollution control measures is Rs 18.2 Crores and the Recurring cost (operation and maintenance) will be about Rs 2.7 Crores per annum.

Total Employment will be 415 persons and there is no additional manpower required after the modernization. Industry proposes to allocate Rs.9.1 Crore @ of 2.5 % towards Corporate Social Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Tamirabarani is flowing at a distance of 20 Km in south direction.

Total water requirement is 15178 m3/day of which fresh water requirement of 15178 m3/day will be met from Tamilnadu Water supply and Drainage Board. There is no additional water requirement for this modernization project.

Effluent of 2160 KL per day will be treated through Existing Effluent Treatment Plant. There is no change in effluent generation after the modernization. Presently About 1344 KL per day of the treated effluent is reused in M/s.Greenstar Fertilizers Limited, 96 KLD is used for green belt development and about 720 KLD will be disposed through Marine outfall system. After the proposed modernization about 1455 KLD of treated effluent will be reused in M/s.Greenstar Fertilizers Limited, 105 KLD will be used for gardening and about 600 KLD will be disposed through marine out fall system.

Power requirement for the existing and proposed modernization will be 17000 KVA and will be met from Tamilnadu Generation and Distribution Corporation and 18.4 MW Captive power plant. It is proposed to Install 25 MW HRSG unit.

Existing unit has 1 x 1100 KVA, 2 X 830 KVA and 1 X 500 KVA DG sets of capacity, DG sets are used as standby during power failure. Stack height will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 2 X 90 TPH and 1 X 120 TPH furnace oil fired boiler. After Modernization only 120 TPH boiler will be in operation using natural gas as fuel. Two numbers of 90 TPH capacity Furnace oil fired boilers will be stopped after modernization. Stack has been provided for controlling the particulate emissions within the norms.

The Urea Prilling tower is based on forced draft system. Prilling tower has been provided with cyclone and scrubbing arrangements with water in dust chamber. The scrubbed liquor is sent to the urea recovery system. Continuous online emission monitoring system has been provided.

About 250 Kg/day of lime sludge will be generated in Effluent treatment plant is re used in M/s. Greenstar Fertilizers Limited. There is no change in the Solid waste generation after the modernization.

The following Hazardous waste will be generated .There is no change in the generation quantity after the modernization .Details of the existing Hazardous waste streams and management.

About 30 KL/Annum of used oil will be generated which will be disposed to authorised recyclers. About 5 MT/Annum of waste or residue containing oil will be generated which will be reused or recycled to authorised recyclers. About 23.8 MT of spent catalyst containing Co-MOX will be generated once in 28 years ,about 92.2 MT of spent catalyst containing ZN- CU will be generated once in 9 years ,about 19.5 MT of spent catalyst containing ZN – O will be generated once in 13 years ,about 25.2 MT of spent catalyst containing nickel will be generated once in 10 years from Methantor and 25.2 MT of spent catalyst containing Nickel will be generated once in 3 years from Primary and secondary reformer ,about 122.6 MT of spent catalyst containing iron will be generated once in 15 years and about 98.6 MT of spent catalyst containing CU-promoted iron will be generated once in 11 years from Ammonia plant Generated Hazardous spent catalyst will be sent to authorised recyclers or TSDF facility .

Copy of the certified compliance report vide F.no.EP/12.1/882/TN/1342 dated 31.07.2019 for the existing environmental clearance has been submitted.

There is no Litigation Pending against the proposal

Existing land area is 471100 sqm. The proposed modernization will be carried out within the existing land. There is no additional land required for this modernization project. Industry has already developed greenbelt inc28.44 % of the area and will develop greenbelt in an area of 33 % i.e., 157591 m2 out of total area of the project. The estimated project cost is Rs 364 crores including existing investment of Rs.440.78 crores. Total capital cost (including Existing) earmarked towards environmental pollution control measures is Rs 18.2 Crores and the Recurring cost (operation and maintenance) will be about Rs 2.7 Crores per annum. Total Employment will be 415 persons and there is no additional manpower required after the modernization .Industry proposes to allocate Rs. 9.1 Crore @ of 2.5 % towards Corporate Social Responsibility.

Total water requirement is 15178 m3/day of which fresh water requirement of 15178 m3/day will be met from Tamilnadu Water supply and Drainage Board. There is no additional water requirement for this modernization project. Effluent of 2160 KL per day will be treated through Existing Effluent Treatment Plant. There is no change in effluent generation after the modernization. Presently About 1344 KL per day of the treated effluent is reused in M/s.Greenstar Fertilizers Limited, 96 KLD is used for green belt development and about 720 KLD will be disposed through Marine outfall system. After the proposed modernization about 1455 KLD of treated effluent will be reused in M/s.Greenstar Fertilizers Limited, 105 KLD will be used for gardening and about 600 KLD will be disposed through marine out fall system.

Power requirement for the existing and proposed modernization will be 17000 KVA and will be met from Tamilnadu Generation and Distribution Corporation and 18.4 MW Captive power plant. It is proposed to Install 25 MW HRSG unit.

Existing unit has 1 x 1100 kVA, 2 X 830 kVA and 1 X 500 kVA DG sets of capacity, DG sets are used as standby during power failure. Stack height will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 2 X 90 TPH and 1 X 120 TPH furnace oil fired boiler. After Modernization only 120 TPH boiler will be in operation using natural gas as fuel. Two numbers of 90 TPH capacity Furnace oil fired boilers will be stopped after modernization. Stack has been provided for controlling the particulate emissions within the norms.

Earlier, the Ministry had issued EC vide letter dated 5th March 2008 for Expansion of urea and DAP in favour of M/s. Southern Petrochemical Industries corporation Limited. The monitoring

report on compliance status of EC conditions has been forwarded by the Regional Office at Chennai vide their letter dated 31st July, 2019. The Certified compliance report was found to be satisfactory.

The project proponent has informed that all the pollutants namely SO2, Nox and Particulate matter will be decreased and the unit will achieve Zero Liquid discharge within five years.

Consent to operate for the present industrial operations issued by the Gujarat PCB vide letter dated 25th June, 2019 is valid up to 31st March, 2020.

12.3.15.3: The EAC, after detailed presentation noted that the proposal has been submitted for grant of environmental clearance under para 7(ii) of EIA Notification, 2006; there is no increase in the total pollution load; the increase in the production will be by virtue of the change in the change in raw material only. The committee desired to allocate at least 10 Crores in place of 9.1 Crores towards CER and the same was agreed by the project proponent. The project proponent also agreed to increase the greenbelt development area from 33% to 35% of total project area.

12.3.15.4 *The EAC, after deliberations, recommended the project for grant of environmental clearance under para 7(ii) providing exemption from public hearing and preparation of EIA report, subject to compliance of terms and conditions as under:-*

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *No additional effluent shall be generated under the proposed modernization project. Treated effluent of 600 cum/day shall be discharged through existing marine outfall system after conforming the statutory standards.*
- *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.*
- *The gaseous emissions (SO2, NOx, NH3 and HC) and particulate matter from various process units shall conform to the norms prescribed by the CPCB/SPCB from time to time. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Stack emissions shall be monitored regularly.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines. Fugitive emissions shall be controlled at 99.5% with effective chillers.*
- *Existing fresh water requirement is 15178 cum/day, which is met through* Tamilnadu Water supply and Drainage Board*. No additional water shall be required for the proposed modernization.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Natural gas shall be used as fuel in all the boilers.*
- *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.*

- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash & dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
  - *(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 35% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *As committed, Rs. 10 Crores shall be allocated towards Corporate Environment Responsibility (CER). Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *Safety and visual reality training shall be provided to employees.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*
- *Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.*

Agenda No. 12.3.16

Addition of New Product and Change in Production Capacity At Existing Resin Manufacturing Unit Of at Survey No.: 196/1, Plot No.: 103 to 108, Mahalaxmi Industrial Estate, Village Iyava, Taluka Sanand, District Ahmedabad (Gujarat) by M/s RB Polymers Limited – For Environmental Clearance reg

[IA/GJ/IND2/110754/2018, No.IA-J-11011/275/2018-IA-II(I)]

12.3.16.1 The project proponent and the accredited consultant M/s TR Associates (Ahmedabad) made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for expansion of resin manufacturing unit by M/s R B Polymers Ltd in an area of 10,407 sqm at Survey No. 196/1, Plot No. 103 to 108, Mahalaxmi Industrial Estate, Village Iyava, Taluka Sanand & District Ahmedabad (Gujarat)

The standard ToR for the project was granted on 30th October, 2018.

Proposed Product and their Capacities

Sr. No.	Name of Product	Quantity (MT/Month)		
		Existing	Proposed	Total after Expansion
1	Phenol Formaldehyde Resin	60	325	385
2	Melamine Formaldehyde Resin	14	81	95
3	Urea Formaldehyde Resin	00	550	550

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

Existing land area is 10,407 m^2, No additional land will be used for proposed expansion. Industry has already develop greenbelt in an area of 33 % i.e. 3,453.21 m^2 out of 10,407 m^2 total area of the project.

The estimated project cost is Rs. 35 Lakhs including existing investment of Rs. 515 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 15 Lakhs and the recurring cost (operation and maintenance) will be about Rs. 4.7 Lakhs per annum. Total employment will be 44 persons as a direct employment after expansion. Industry proposes to allocate Rs. 35,000 @ of 1% towards Corporate Environment Responsibility.

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

Ambient air quality monitoring was carried out at 8locations during October 2018 to December 2018 and baseline data indicates the ranges of concentrations as: PM_{10} (59.98 to 88.1 µg/m^3), $PM_{2.5}$ (28.99 to 51.02 µg/m^3), SO_2 (6.14 to 24.67 µg/m^3) and NO_2(16.31 to 43.67 µg/m^3) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.7 µg/m^3,0.15 µg/m^3 and 0.65 µg/m^3 with respect to PM_{10}, SO_2 and NO_2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 30m^3/day,of which fresh water requirement of 27.3 m^3/day will be met from Borewell.

Effluent of 6.2m^3/day quantity will be treated through Effluent Treatment Plant. The plant will be based on Zero Liquid Discharge system. Domestic effluent of 2.7m^3/day which is treated in the Sewage Treatment Plant (STP).

Power requirement after expansion will be 350KVA including existing 275 kVA and will be met from Uttar Gujarat Vij Company Limited (UGVCL). Existing unit has 1 nos. D. G. Set of250 KVA capacity is used as standby during power failure. No additional D.G. set will be installed after expansion. Stack (height6 m) is provided as per CPCB norms to the Existing D.G. set.

Existing unit has 4 TPH Steam boiler &15 Lakh KCal/Hour Thermic Fluid Heater White coal/ Saw dust/ Wood/ Lignite-fired Steam Boiler. No additional Boiler will be required for expansion. Separate Cyclone Separator followed by Bag Filter and Scrubber with a stack height of 30 m will be installed for controlling the Particulate Emissions within the statutory limit of 150mg/Nm^3 for the proposed Boiler.

There will be no process gas emission from manufacturing process.

Details of solid waste/hazardous waste generation and its management are given below:

Sr. No.	Description	Category	Quantity (MT/ Month)	Mode of Disposal
1	ETP Sludge + Evaporation residue	35.3	22	Collection, storage and Disposal at TSDF Site
2	Used Oil	5.1	0.07	Collection, storage and used within premises as a lubricant / sold to registered recycler.
3	Discarded Plastic bags / Barrels	33.1	0.6	Collection, storage & sell to authorized vendor

Public hearing for the proposed project has been conducted by the State Pollution Control Board on 29/06/2019.The main issues raised during the Public Hearing are related to local employment and their health.

Certified compliance report for the existing project is not applicable as existing unit is operating prior the EIA Notification, 2006 and no prior environmental clearance was required for the same and operating with CTO since 1995.

No litigation is pending against the said proposal.

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

12.3.16.2 The EAC, after detailed presentation observed that the PP has proposed for achieving the ZLD; earlier operations were carried since 1995 for which the provisions of EIA Notification, 2006 was not applicable; there is a presence of schedule-1 Species such as pea cock and conservation plan was prepared by the PP with an amount of Rs. 75,000/-

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

- *The project proponent shall implement the conservation plan for peacocks in consultation with state Forest department with an amount of Rs. 75,000 allocated for the same.*
- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21stJuly, 2010 and amended from time to time shall be followed. Fugitive emissions shall be controlled at 99.98% with effective chillers.*

- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *Briquettes shall be used as boiler fuel. No Coal shall be used as fuel.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows:*
  - *(o) Reactor shall be connected to chilled brine condenser system.*
  - *(p) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - *(q) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
  - *(r) Solvents shall be stored in a separate space specified with all safety measures.*
  - *(s) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - *(t) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  - *(u) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed 27.3 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
  - *(s) Metering and control of quantities of active ingredients to minimize waste.*
  - *(t) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(u) Use of automated filling to minimize spillage.*
  - *(v) Use of Close Feed system into batch reactors.*
  - *(w) Venting equipment through vapour recovery system.*
  - *(x) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made to the public during public consultation/hearing shall be satisfactorily implemented.*
- *At least 2% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*

- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*

Agenda No. 12.3.17

Expansion of Bulk Drugs, Active Pharmaceutical Ingredients & its Intermediates manufactured by at Aaraji No. 588 Village- Ladana, patwar mandal- Basani kala Tehsil- Mavali Dist. Udaipur (Rajasthan) M/s US Amino Private Limited - For Environmental Clearance
[IA/RJ/IND2/106376/2017, IA-J-11011/542/2017-IA-II(I)]

12.3.17.1 The Project Proponent and the accredited Consultant M/S Wolkem India Limited, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project Expansion of Bulk Drugs, Active Pharmaceutical Ingredients & its Intermediates at Ararji No. 588, Near Village- Ladana, Patwar mandal-Basani Kala, Tehsil- Mavali, District: Udaipur (Rajasthan) by M/s US Amino Private Limited. The proposed project is covered under item 5(f) of the schedule to the EIA Notification, 2006 under category "A" projects/activities.

The project proposal was considered by the Expert Appraisal Committee(Industry-2) and standard Terms of References (ToRs) was provided for the Project. The ToR has been issued by Ministry Vide letter no.No.IA-J-11 011/542/2017 -IA-11(1)dated 26 Dec 2017(In case of ECProposal).

Rajasthan State Pollution Control Board had issued the Consent to Operate vide letter No. file no. : F(Tech)/Udaipur(Mavli)/2561(1)/2015-2016/1808-1809.

Proposed products are give below:

S.No.	Product	Existing Capacity (TPA)	Proposed Capacity (TPA)	Total Capacity (TPA)
A	**Existing Products**			
1	Carnitine Tratrote	60.00	-	60.0
2	Cystine	12.00	-	12.0
3	L-Lysine HCL	240.00	-	240.0
4	N-Acetyl L Cystine	60.00	-	60.0
B	Proposed Products			
1	Methotrexate	-	6.0	6.0

2	Rosuvastatin Calcium	-	2.4	2.4
3	Telmisartan	-	12.0	12.0
4	Sucralfate	-	6.0	6.0
5	Arteemether	-	6.0	6.0
6	Areteether	-	6.0	6.0

Existing land area is 4,129.00 Sq.m. Industry has already developed greenbelt in an area of 3,017Sq.m. i.e.73.1%ofthetotalplotarea and proposed area is 2017Sq.m. (48.84 %).

The estimated proposed expansion project cost is Rs.85 Lacs. Total capital cost earmarked towards environmental pollution Control measures is Rs.50,000 and the Recurring cost (operation and Maintenance) will be about Rs.1,30,000 per annum.

Total Employment will be 12 persons existing and 8 persons proposed after Expansion. Industry proposes to allocate Rs.7,50,000 @ 8.8 % towardsCorporate Social Responsibility.

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

Ambient air quality monitoring was carried out at **8** locations during 1st January 2018 To31stMarch 2018 and the baseline data indicates the ranges of concentrations as:PM1061.10 - 71.62 μg/M^3), PM2.5 (34.40 to 39.35μg/m^3), SO2 (8.07 – 10.84 μg/m3) and NO2 (17.11 – 24.77μg/m3). AAQ modelling study for point source emissions indicates that themaximum incremental GLCs after the proposed project would be 7.8 μg/m3, 3.7Mg/m3 and 5.6μg/m3 with respect to PM10, SOxandNOx. The resultant Concentrations are within the National Ambient Air Quality Standards(NAAQS).(In case of EC Proposal)

Total water requirement is 8.0 KLD of which freshwater requirement of 8.0 m^3/day will be met from out sources. Effluent of 3.7 KLD quantities will be treated through ETP. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 60 kVA including existing 90 KVA (Total 150 kVA) will be met from Ajmer Vidyut Vitran Nigam (AVVNL). Existing unit has 1 no. of DG sets of 62.5 KVA capacity, Stack (Height12 m.) will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 600 KCAL/hr boiler. No additional boiler shall be installed. Multi cyclone separator/ bag filter with a stack of height of 15 m will be installed for controlling the particulate emissions within the statutory Limit of 115 mg/Nm3 for the proposed boilers..

Details of Process emissions generation and its management.

Details of Solid waste/ Hazardous waste generation and its management are as under:-

Sr. No	**Hazardous Waste**	**Quantity**	**Disposal methods**
1	Used Oil	600 Lit/annum	Collection, Storage, Transportation & Disposal by selling to Registered Re-processors / reuse as lubricant
2	ETP Sludge	9.0 MT/Annum	Collection, Storage, Transportation & send to TSDF.
3	Discarded Barrels	10 Nos./Annum	Recycle for authorized agencies.

Sr. No	Hazardous Waste	Quantity	Disposal methods
	contaminated with hazardous wastes/chemicals		Recycle to the supplier Re-used for storing the same material
4.	Process Residue	0.6MT/annum	Collection, Storage, and send to TSDF
5.	Rice husk briquettes Ash	45.6MT/annum	Collection, Storage, Transportation, Sale to brick manufacturer

Public Hearing for the proposed project has been conducted by the StatePollution Control Board on dated 25.03.2019at 11:30 AM at LokSeva Kendra, Nagar PalikaFatehnagarSanwar. Udaipur.

12.3.17.2 The Committee, during deliberation observed that the existing products i.e. synthetic organic chemicals (Carnitine Tratrote, Cystine, L-Lysine and N-Acetyl L Cystine HCL) are being manufactured since last two years i.e from 2016 onwards and are covered under item 5(f) of the EIA Notification, 2006 and requires prior environmental clearance. However, the project proponent claims that the existing products covered under inorganic chemical category and does not require prior EC.

12.3.17.3 *The EAC, after deliberations suggested to the project proponent to establish facts that existing products does not covered under the purview of the EIA Notification, 2006. Therefore, the EAC has not taken forward on the proposal*

The proposal was therefore deferred.

Agenda No. 12.3.18

Indian Oil Technology Development And Deployment Centre at IMT, HSIIDC,Sector-67, Faridabad (Haryana) by M/s Research and development centre Indian Oil Corporation Faridabad - For Environmental Clearance

[IA/HR/IND2/71701/2017, IA-J-11011/578/2017-IA-II(I)]

12.3.18.1 The Project Proponent and the accredited Consultant M/s. Engineers India Limited made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the proposed project of Indian Oil Technology Development & Deployment Center (R&D-II) at Industrial Model Township, HSIIDC, Sector- 67, Faridabad. The project/activity is covered under category A of items 5(c) “Petroleum Refining Industry & Petrochemical Complexes” of Schedule of Environmental Impact Assessment (EIA) Notification 2006 and requires appraised at Central Level by Expert Appraisal Committee (EAC)

Standard TOR was issued vide letter no. IA-J-11011/578/2017-IA-II(I) dated 22/03/2018 for the proposed project.

The proposed major units/technology is envisaged in R&D-II Project:

Sl.	Name of the Unit	Capacity
1	Max Olefin Pilot Plant	10 kg/h
2	Liquid Product Fractionation Unit	10 kg (Batch)

3	Multipurpose Advanced Coker Pilot Plant	10 kg/h
4	Multipurpose Fixed bed Pilot Plant w/o Sulphur	3 kg/h
5	Multipurpose Fixed bed Hydro-processing Pilot Plant	5 kg/h
6	Multipurpose Cat Cracking Pilot Plant	10 kg/h
7	Multipurpose GTX Pilot Plant	5 NM3/h
8	Integrated Coker Pilot Plant	10 kg/h
9	Rotary Calciner	20 kg/h
10	Bulk Process Plant	8000 kg
11	DRA - Slurrying	600 Kl
12	Solvent Purification Plant	1000 L
13	PPD Reactor - 250 L	2 Kl
14	Semi commercial Nano-dispersion Production Facility	1000 TPA
15	Bimodal Ethylene Polymerization Plant	500 kg
16	Ethylene Oligomerization Pilot Plant	500 L
17	ZN Catalyst Pilot Plant	100 Kg
18	Polyisoprene Reactor	1000 Kg
19	DRA - Kneader Reactor	200 MT
20	PAO Reactor - 500 L	10 Kl
21	Magnesium Precursor Plant	100 Kg
22	Solvent Distillation Plant	1000 L
23	PPD Reactor - 1000 L	2 Kl
24	Gasification Plant	2 T/Day feed
25	Solar Hydrogen Plant	95 Nm3/h
26	Solar Photovoltaic Pilot Plant	1 MW peak
27	MWCNT Plant	50 TPA
28	Gas Pipeline Test Loop	1 Km
29	Catalyst Plant	50 Kg Batch

The proposed project is a green field project. The total land area of the project is 59.32 acres and the same is acquired from Haryana State Industrial and Infrastructure Development Corporation (HSIIDC).Proponent will develop greenbelt in an area of 33 % i.e. 19.7 acres out of 59.32 acres of the total project area.

The estimated project cost is Rs. 2281.94 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 0.64 Crores and the recurring cost (operation and maintenance) will be about Rs 0.24 Crores per annum.

Direct employment will be 300 persons during operation & indirect employment for 500 persons during construction phase. IOCL proposes to allocate Rs 11.4 crores towards Corporate Environment Responsibility (CER).

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance from the project site. Yamuna river is present 10.5 km from the project site.

Ambient air quality monitoring was carried out at 6 locations during January to March 2019 and submitted baseline data indicates that ranges of concentrations of PM10 (59-78 µg/m3), PM2.5 (23-34 µg/m3), SO2 (13-18 µg/m3) and NO2 (15-23 µg/m3) respectively. There will be no stacks envisaged in the pilot plants. Hence, air quality modeling is not carried out for the proposed project.

Total fresh water requirement will be 300 m^3/day which will be met from supply of HSIIDC and reuse of harvested rain water.

ETP treated waste water, estimated at about 75 m3/day will be recycled. The treated water shall be re-used in the campus and zero liquid discharge concept to be followed. Process waste water generation will be treated in a combined ETP/STP facility and recycled.

Power requirement for the proposed project will be 12 MW and sourced from Dakshin Haryana Bijli Vitran Nigam (DHBVN). During Operation phase, 6.5 MW power is also envisaged from Solar PV & Fuel Cell installations inside R&D Campus. 4 MW power generation facilities will be used as backup.

Total SOx emission from the proposed project shall be 0.3 kg/h (intermittently). Most of the process units will run by Natural Gas.

The combined Sewage Treatment Plant/Effluent Treatment Plant will produce solid dry cake, which will be used as manure within the facility or disposed off locally. A TSDF agreement with locally approved agency will also be put in place. The solid & hazardous waste will be managed as per CPCB guidelines.

Public Hearing was exempted as the proposed project comes under Notified Industrial Area vide MoEFCC circular no. J-11011/321/2016-IA.II(I) dated 27/04/2018.

There is no litigation pending against the proposal.

The expenditure towards CER for the project would be 0.5 % of the project cost as committed by the project proponent.

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

12.3.18.2 The EAC, after detailed presentation on the proposal observed the following:

- The instant proposal is for carrying out R&D activities and pilot plants without any commercial intention
- The question was raised whether the instant proposal covered under item 4(a) of the schedule to the EIA Notification, 2006 as claimed by the project proponent.
- If the project covered under the item 4(a) of the schedule to the EIA Notification, 2006, how it can be exempted for the public consultation as per the OM vide J-11011/321/2016-IA.II(I) dated 27/04/2018 in light of the NGT Directions that the projects/activities covered under certain items including that under item 4(a), even it is located in the notified industrial area, the exemption for public consultation is not applicable.
- The committee also noted that the proposal involves about 2,00,000 Sq.m of builtup area for the proposed R&D facilities.
- The funds allocated for CER shall be as per the guidelines given in the OM dated 1st May 2018. Since the estimated project cost is Rs. 2281.94 Crores, the CER shall be 22 Crores.

12.3.18.3 The project proponent has clarified on the above observations during the meeting and submitted written clarification on the observations. It was informed that the proposal is only for R&D facility and Pilot plant without an intention to the commercial scale of operations; the proposal will be covered under item 5(c) of schedule to the notification therefore the exception

from public consultation is applicable as per the OM dated 27/04/2018; the proposal involves about 1,98,000 Sq.m of the built up area. The PP also agreed for the CER as per the guidelines issued vide OM dated 1st May, 2018

12.3.18.4 In response the submission of the project proponent, the committee also opined that the proposed project activities covered under the item 5(c) of schedule to the EIA Notification, 2006 and also covered under item 8(b) - Area Development Projects/activities of the schedule to the EIA Notification, 2006. Therefore the committee recommended for prescribing the standard environmental conditions related to the item 8(b) projects/activities in addition to the item 5(c) projects/activities.

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- *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* 300 *cum/day to be met from HSIDC. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *The secondary hazardous pollutants, waste water or effluent which is being discharged from respective laboratory or pilot facilities need to be neutralized.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *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 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.*
- *Fund provision of Rs. 22 Crs shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during R&D and pilot operations 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.*
- *The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.*
- *The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.*
- *The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.*
- *Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.*
- *A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.*
- *Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.*
- *Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.*

- *All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.*
- *The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.*
- *The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.*
- *For indoor air quality the ventilation provisions as per National Building Code of India.*
- *The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.*
- *Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.*
- *The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.*
- *At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.*
- *Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.*
- *Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.*
- *Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.*
- *Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.*
- *The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.*
- *Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.*
- *No sewage or untreated effluent water would be discharged through storm water drains.*
- *The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall*

be conducted. Necessary measures should be made to mitigate the odour problem from STP.

- *Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.*
- *Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.*
- *Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.*
- *Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.*
- *Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.*
- *Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.*
- *Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.*
- *Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.*
- *Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter within the premises which will include area for segregation and composting. The inert waste from project will be sent to dumping site through an authorized vendor.*
- *Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.*
- *Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended*

as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

- *Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.*
- *Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.*
- *Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.*
- *Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.*
- *The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.*
- *A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.*

Agenda No.12.3.19

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

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

12.3.19.1 The Project Proponent and the accredited Consultant M/s Eco Chem Sales & Services (ECSS) - Surat, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for expansion of Pesticides from 900 TPA to 7140 TPA (48nos of products) manufacturing unit by M/s HPM Chemicals and Fertilizers Limited in an area of 30500 sqm located at SP-9B, 9C, 9D, 9D1 and H1-39(O), RIICO Industrial Area, Khushkhera, Taluka Tijara, District Alwar (Rajasthan). The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level.

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

Ministry had issued EC earlier vide letter no. J-11011/459/2009-IA-II(I); dated 4th February 2010 to the existing project Proposed Pesticide Unitinfavour of M/s. Hindustan Pulverising Mills.

The details of products and capacity as under:

Table 1: List of Products

#	Product Details	Existing (TPA)	Proposed (TPA)	Total quantity (TPA)
1.	Acetamiprid Tech	60	240	300
2.	Imidacloprid			
3.	Thiacloprid			
4.	Thiamethoxam			
5.	Novaluron (Insecticide Pgr)	10	100	110
6.	LamdaCyhalothrin	30	170	200
7.	Bifenthrin			
8.	Chlorpyrifos	150	850	1000
9.	Acephate			
10.	Profenofos			
11.	Fipronil	120	80	200
12.	Buprofezin			
13.	Cartap Hydrochloride			
14.	Azoxystrobin	50	100	150
15.	Emamectin Benzoate			
16.	Spinosad			
17.	Validamycine			
18.	Hexaconazole	50	300	350
19.	Tricyclazole			
20.	Propiconazole			
21.	Tebuconazole			
22.	Difenoconazole			
23.	Ipconazole			
24.	Paclobutrazol			
25.	Thiophanate-Methyl	20	20	40
26.	Metalaxyl			
27.	Imazethapyr	20	20	40
28.	Metsulfuron-Methyl	35	65	100
29.	Sulfosulfuron			
30.	Chlorimuron-Ethyl			
31.	Pyrazosulfuron			
32.	Bensulfuron-Methyl			
33.	Clodinafop-Propargyl	5	95	100
34.	Butachlor	100	900	1000
35.	Pretilachlor			
36.	Glyphosate	250	750	1000
37.	Oxyfluorfen			
38.	Atrazine			
39.	Metribuzin			
ADDITION OF NEWPRODUCTS				
40.	Diafenthiuron	0	100	100
41.	Pendimethalin	0	100	100
42.	Cypermethrin	0	1200	1200
43.	Alpha Cypermethrin			
44.	Permethrin			
45.	Deltamethrin	0	100	100

#	Product Details	Existing (TPA)	Proposed (TPA)	Total quantity (TPA)
46.	Cypermethricacidchloride (CMAC)	0	850	850
47.	CloquintocetMexyl Technical (Safner)	0	100	100
48.	Myclobutanil	0	100	100
TOTAL		900	6240	7140

Table 2: List of By Products

#	By Products	Exiting	Proposed	Total
		TPA		
1.	Sodium Sulphite - 20 %	370.92	877.28 + 5652.5 = 6529.78	6900.70
2.	Hydrochloric Acid - 30 %	71.38	56.036	187.40
3.	Ammonium Acetate – 98%	126.00	714.00	840.00
	Total	568.30	7299.82	7928.10

Existing land area is 20000 m^{2-}. Additional 10500 m^2land will be required for proposed expansion. Industry has already developed greenbelt in an area of 33.18 % *i.e.*10118.56m^2 out of total area of the project. Additionally planted 956.98 m^2 and will plant 2149.62 m^2 outside plant area.

The estimated project cost is Rs.27.8916 crores including existing investment of Rs4.6716 crores.Total capital cost earmarked towards environmental pollution control measures is Rs.522 Lakhs and the recurring cost (operation and maintenance) will be about Rs.44.20 Lakhs per annum.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc within 10 km distance from the project site. River Sahibi flows at a distance of 1.5 Km in North direction.

Ambient air quality monitoring was carried out at 8 Nos. locations during October 2017 to December 2017and the baseline data indicates the ranges of concentrations as: PM_{10} (72.1 - 91.7 µg/m^3), $PM_{2.5}$ (36.0 – 52.8 µg/m^3), SO_2 (9.0 – 15.2 µg/m^3) and NO_2 (14.5 – 22.8 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.21µg/m^3, 0.41µg/m^3 and 0.14 µg/m^3 with respect to PM_{10}, Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards. (NAAQS).

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

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

Power requirement will be increased from 650 kVA to 1850 kVA proposed to be met from Jaipur Vidyut Vitran Nigam Limited (JVVNL). Existing unit has one DG set of 62 kVA capacity,

additionally DG sets of capacity 125 kVA (02 nos), 160 kVA (1 nos) and 750 kVA (1 nos) will be used as standby during power failure. Stack (height7.5 m)will be provided as per CPCB norms to the proposed DG sets.

Existing unit has two wood/coal fired boilers of 1 TPH capacity each. One mere Wood or Coal or Rice Husk fired boiler of 10 TPH capacity will be installed. Electrostatic Precipitator (ESP) with a stack of height of 35 m will be installed to control the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

Details of Process emissions generation and its management:

#	Vent attached to	Product	Height (m)	Diameter (mm)	Pollutants	Permissible Limit (mg/Nm^3)	APC control device
EXISTING							
1.	2 Vents of Insecticides Plant	Lambda-Cyhalothrin Bifenthrin	12	100	HCl,SO_2	HCl <20 SO_2<40	Water scrubber followed by Caustic scrubber
2.	2 Vents of Insecticides Plant	Acetamiprid Fipronil	12	100	HCl	HCl <20	
3.	Bactericides Plant vents	No emission from process product manufactured under this Category					
4.	1 vent of Fungicides Plant	Metalaxyl	12	100	HCl	HCl <20	Water scrubber followed by Caustic scrubber
5.	Intermediates Plant vents	No Production					
6.	2 vent of Herbicides Plant	Butachlor Pretilachlor	12	100	HCl,SO_2	HCl <20	Water scrubber followed by Caustic scrubber
PROPOSED							
1.	Additional 1 vent of Insecticides Plant	Permethrin	12	100	HCl	HCl <20	Water scrubber followed by Caustic scrubber
2.	Bactericides Plant vents	No emission from process product manufactured under this Category					
3.	Fungicides Plant vents	Same as existing					
4.	1 vent of Intermediates Plant	Cypermethric Acid Chloride	12	100	HCl,SO_2	HCl <20 SO_2<40	Water scrubber followed by Caustic

							scrubber
5.	Herbicides Plant vents	Same as existing					

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

#	Name	Category	Quantity			Management/ Disposal
	Hazardous Waste		**Existing**	**Proposed**	**Total**	
1.	MEE Salt	37.3	0.00 TPA	2588.00 TPA	2588.00 TPA	Collection, storage, transportation, disposal at TSDF-Udaipur.
2.	ETP sludge	34.3	4.50 TPA	422.55 TPA	427.05 TPA	
3.	Ash from incinerator	36.2	3.00 TPA	20.44 TPA	23.44 TPA	
4.	Process Waste /Residue	29.1	88.75 TPA	1378.55 TPA	1467.3 TPA	For Incineration
5.	Used Oil	5.1	0.22 KLPA	0.60 KLPA	0.82 KLPA	Collection, storage, transportation, disposal by selling to registered re-processors
6.	Discarded Containers	33.1	1200 Nos./Annum	8000 Nos./Annum	9200 Nos./Annum	Collection, storage, decontamination and recycle or sold to scrap operators
7.	Fly ash from boiler	Solid Waste	51.84 TPA	518.40 TPA	570.24 TPA	Send to Agarwal Ready Mix Private Limited.
8.	E- Waste	--	0.20 TPA	0.50 TPA	0.70 TPA	Send to E-Waste Collection Agency
9.	Spent Sulphuric Acid	B – 15	0.00	250.00 TPA	250.00 TPA	Sold to Party
10.	Spent HCL	B – 15	0.00	4225.00 TPA	4225.00TPA	Sold to Party

Public Hearing: The expansion project falls in the notified industrial area of RIIICO notified in the year 1994 vide gazette notification no. 4/6/Udyog/1/90 dtd. 26th August 1994. As per Office Memorandum No. J-11011/321/2016-IA.II(I) dtd 27th April 2018; the public consultation is exempted for this project.

The Status of compliance of earlier EC was obtained from Regional Office Lucknow vide Letter No. IV/ENV/R/IND-124/791/2010/599 dated 28/01/2019.

No any Litigation Pending against the proposed expansion project.

12.3.19.2 The proposal was earlier considered by the EAC in its meeting held on 6-8 May, 2019 wherein the EAC noted that for the existing pesticides production @ 900 TPA, environmental clearance was granted by the Ministry vide letter dated 4th February, 2010 in the name of M/s Hindustan Pulverizing Mills. Whereas, the present proposal involving expansion of pesticides from 900 TPA to 7140 TPA, has been submitted by M/s HPM Chemicals and Fertilizers Ltd. In

such a case, the Committee questioned admissibility of the proposal, and insisted for first transfer of the EC in the name of M/s HPM Chemicals and Fertilizers Ltd.

In response to the observation of the EAC, the project proponent has informed that they have submitted proposal for transfer of EC from M/s Hindustan Pulverizing Mills to M/s HPM Chemicals and Fertilizers Ltd.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc within 10 km distance from the project site. River Sahibi flows at a distance of 1.5 Km in North direction.

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

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

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

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

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

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

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

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

- *Total fresh water requirement shall not exceed* 512.64 cum/day*, proposed to be met from RIICO water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*

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

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

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

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

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

  (dd) *Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *At least 1% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*

Agenda No.12.3.20

Exploration in onshore Kangra-Mandi PEL Block in Mandi and Kangra District (Himachal Pradesh) by M/s Oil and Natural Gas Corporation - Environmental Clearance

[IA/HP/IND2/72539/2018, IA-J-11011/44/2018-IA-II(I)]

12.3.20.1 The Project Proponent and the accredited Consultant ABC Technolabs India Pvt Ltd, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project Exploration in onshore Kangra-Mandi PEL Block in Mandi and Kangra District, Himachal Pradesh by M/s Oil and Natural Gas Corporation Limited (ONGC).

Standard Terms of References (ToRs) for the Project has been issued by Ministry vide letter No.IA- J-11011/44/2018-IA-II(I); dated 22ndMarch 2018

All Offshore and onshore oil and gas exploration, development & productions are listed at S.N. 1(b)of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Expert Appraisal Committee (EAC)-Industry 2, MoEF&CC.

Existing Block area is 1828 sq. Km. Land requirement will be 1.5 Hectares for each well in the proposed project.

The estimated project cost is Rs 215 Crore. Total capital cost earmarked towards environmental pollution control measures is 15 Crores and the Recurring cost (operation and maintenance) will be about 0.4 Crores per annum.

About 30-40 persons will be working in shifts at site. There is a possibility that local people will be hired on temporary basis, for miscellaneous work. Industry proposes to allocate Rs 1.61 Crore @ 0.75 % towards Corporate Environment Responsibility.

There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the block area. Beas Riveris flowing through the block area.

Ambient air quality monitoring was carried out at 8 locations during 1st October 2018 to 31st December 2018 and the baseline data indicates the ranges of concentrations as: PM_{10} (23-53 µg/m^3), PM2.5 (13-28 µg/m^3), SO2 (5.0-8.3 µg/m^3) and NO_X (7.6-17.1µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.0024 µg/m^3, 0.0015 µg/m^3 and 0.0042 µg/m^3 with respect to PM_{10}, SO_2andNO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement is 20m3/day of which fresh water requirement of 20m3/day will be met from Tanker Supply.

Effluent of 6m^3/day quantity will be treated through mobile ETP system. Domestic effluent of 2m^3/day will be disposed through septic tank and soak pit.

Power requirement during operation will be met through 3 X 1250 KVA DG Sets. Proposed 1 X 1250 KVA DG sets will be used as standby during drilling activities.

No Process emissions generation.

Drill Cuttings will be about 150-450 m3/well (Approx.) shall be generated at site per well. This shall be stored in well-designed HDPE line pit at site and after drying by solar evaporation shall be covered with top layer of soil.

Public Hearing for the proposed project has been conducted by the Himachal Pradesh State Pollution Control Boardon 14.06.2019 at Village Bheri, Gram Panchyat Office at SajaoPiplu, Tehsil Dharmapur, Distt. Mandi (HP) at 11.00 Hours and on 15.06.2019 at Village KothiSansaiPanchyat Office, Tehsil Baijnath, District Kangra (HP).The main issues raised during the public hearing are related to indirect/direct employment, water supply and CSR issues.

Since it is new project, certified compliance report is not applicable.

No litigation pending against the proposal.

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

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.*
- *As proposed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land. Mobile ETP along with RO plant shall be installed to treat the waste water.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16thNovember, 2009 for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, CH_4, HC, Non-methane HC etc.*
- *During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.*
- *The project proponent also to ensure trapping/storing of the CO_2 generated, if any, during the process and handling.*
- *Approach road shall be made pucca to minimize generation of suspended dust.*
- *The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.*
- *Total fresh water requirement shall not exceed 25 cum/day. Prior permission shall be obtained from the concerned regulatory authority.*
- *Water requirement for onshore drilling is permitted to the tune of 25 cum/day per well. PP to install Mobile ETP coupled with RO to reuse the treated water in drilling system. Size of the waste shall be equal to the Hole volume+ volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above*

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

Agenda No.12.3.21

Proposed Acrylics/ Oxo Alcohol Project, Creation of necessary facility for origination of Koyali – Ahmednagar – Sholapur pipeline (KAHSPL) & installation of Tank Truck Loading facility (TTL) for linear Alkyl Benzene and laying of 9 Piggable, dedicated hydrocarbon service cross country pipelines (Including LPG supply and return) between refinery and Dumad in the existing Right of Way (ROW) AT Village Dumad, Taluk Vadodara District Vadodara (Gujarat) by M/s Indian Oil Corporation Limited- Environmental Clearance

[IA/GJ/IND2/109376/2017, J-11011/370/2016-IA-II(I)]

12.3.21.1 The project proponent and the accredited Consultant M/s Hubert Enviro Care Systems Private Limited, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for proposed Acrylics/ Oxo Alcohol Project, Creation of necessary facility for origination of Koyali - Ahmednagar - Sholapur pipeline (KAHSPL) & installation of Tank Truck Loading facility (TTL) for linear Alkyl Benzene and laying of 9 Piggable, dedicated hydrocarbon service cross country pipelines (Including LPG supply and return) between refinery and Dumad in the existing Right of Way (ROW) at Dumad by M/s Indian Oil Corporation Limited, Gujarat Refinery (JR).

The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 18thEAC (Industry-2) meeting held during 23rd – 25th Jan 2017 and recommended Terms of References (ToRs) for the Project. The ToR has been issued by Ministry vide letter No.J-11011/370/2016-IA.II(I); dated 22nd March, 2017. and ToR amended on 2nd Jan 2018.

The project/activity is covered under category A of item 4 (a) 'Petroleum refining industry' and 5(c) 'Petrochemical Complexes' of the schedule to the Environmental Impact Assessment Notification, 2006 and requires appraisal/approval at Central level in the Ministry.

Ministry had issued EC earlier vide letter dated 30th April 2001 to the existing project for Petroleum product storage and Dispatch facilities at ASOJ Dumad and product pipelines from Gujarat Refinery in favor of M/s Indian Oil Corporation Limited. Amendment in EC obtained vide 20th July 2017.

Existing land area is 17,56,336 m^2. No additional land will be required for proposed expansion. Expansion will be carried out within the existing facility. Green belt will be developed in 33% i.e. 17,56,336 sqm of the total area of the project.

The estimated project cost is Rs.4746 crores including existing investment of Rs.192 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.85.185 and the recurring cost (operation and maintenance) will be about Rs.5.79 Crores per annum.

Total Employment will be 252 persons as direct & 595 persons as indirect after expansion. Rs.11.385 crores is allocated as per CER notification as 0.25% of project cost.

There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km distance from the project site. Viswamitri River flows at a distance of 0.01 m in East direction.

Ambient air quality monitoring was carried out at eight locations during November 2017 to January 2018 and the baseline data indicates the ranges of concentrations as: PM10 (48.2 -

92.4µg/m3), PM2.5 (15.3 - 51.8µg/m3), SO_2 (7.4-17.4µg/m3) and NO_2 (14.4- 44.9µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.108µg/m3,4.19 µg/m3and 7.65µg/m3 with respect to PM10, Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards(NAAQS).

Total water requirement is 13632 m^3/day including fresh water requirement of 8952 m^3/day, proposed to be met from existing French wells at Head works of Gujarat refinery in Mahi River.

Effluent of 125 KLPH quantity will be treated through190KLPH Combined ETP and 150 KLPH oil waste Separator. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 29 MW proposed to be met from Gujarat State Power Distribution Corporation Limited (GSPDCL). Existing unit has5 DG sets. One more DG set of capacity 1500 kVA will be used as standby during power failure. Stack of 12 m height will be provided as per CPCB norms.

Details of hazardous waste generation and its management is as under:-

S. No	List of Items	Waste Category	Existing		Proposed	Remarks/ Disposal Method
			LPG Terminal	White Oil Terminal	Oxo/ Acrylics, KAhSPL& TTL	
1	Tank Bottom Sludge (TPA)	3.3	0.5	40	3	Sent to Authorized Vendors. CHWIF Site
2	Spend Oil (KLPA)	5.1	1.98	0.15	0.15	Sent to Authorized Vendors.
3	Discarded Drums/ Container	33.3	0.5 MTPM	400 Nos./Year	--	Collection storage and decontamination within Facility
4	Paints and Coating	21.1	0.14 Ton/Month	--	--	Sent to Authorized Vendors. (M/s. Recycling Solutions Pvt. Ltd. (RSPL), Panoli
5	Total Salt from ZLD MEE (TPD)	35.3	--	--	4.05	The net sludge production is 4 T/d (moisture content 70%) and net Salt production is 2 T/d (moisture content 10%). Sludge shall be largely composed of Calcium Carbonate and Magnesium Hydroxide and a small amount of settled suspended solids and Copper Hydroxide. The moisture content ranges between70% to 75%. Salts shall majorly consist of Sodium and Potassium

						Salts of Sulphates, Chlorides and Nitrates. The moisture content ranges between10% to 15%. Sent to Authorized Vendors.
6	ETP Sludge	35.3	--	--	0.8	Disposal as per GPCB/ CPCB norms
7	Spent Catalyst	1.6	--	--	50	Disposal as per GPCB/ CPCB norms
8	Oxidation Catalyst	1.6	--	--	140 MT/ 5 Yrs	Disposal as per GPCB/ CPCB norms
9	CCU Catalyst	1.6	--	--	4.8KL/ 3 Yrs	Disposal as per GPCB/ CPCB norms

Public hearing was conducted by the State Pollution Control Board on 31st January, 2019. The main issues raised during the public hearing are related to safety of public and impact on agriculture due to Industry.

Certified compliance report submitted by RO, MoEF&CC was obtained vide File No 5-8/2001(ENV)/776 Dated 08/10/2018 based on the site visit done by RO, MOEF&CC on 25-06-2018.

No Litigation Pending against the proposal.

The details of products and capacity as under:

S. No	Product Details	Storage Tank Capacity (KL)		
		Existing	Proposed	Total
1	LPG	8351.64	0	8351.64
2	HSD	43095	120000	163095
3	MS	11824	75000	86824
4	ATF	0	30000	30000
5	PCK	0	20000	20000
6	SKO	14190	10000	24190
7	Ethanol	281	0	281
8	LMW	0	15000	15000
9	HMW	0	5000	5000
10	DHPP-A	4730	0	4730
11	Bio Diesel	74	0	74
12	Fresh Water	0	24000	24000
13	Service Water	0	6000	6000
14	N-Butanol	0	1025	1025
15	I-Butanol	0	232	232
16	Acrylic Acid	0	1583	1583
17	Butyl Acrylate	0	3617	3617
18	Propylene	0	1410	1410
	Total	**82545.6**	**312867**	**395412.64**

Cross Country Pipelines Proposed

S. No	Product Details	From	To
1	ATF	Koyali	Dumad
2	PCK		
3	Fresh Water		
4	LMW		
5	HMW		
6	n- Butanol		
7	Iso Butanol		
8	Propylene		
9	Raw Water		

The monitoring report on compliance status of EC conditions has been forwarded by the Ministry's Regional Office at Nagpur vide letter dated 8th October, 2018. The Committee found the certified compliance report to be satisfactory.

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

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

- *Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board as required.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *The National Emission Standards for Petroleum Oil Refinery issued by the Ministry vide G.S.R. 186(E) dated 18th March, 2008 and G.S.R.595(E) dated 21st August, 2009 as amended from time to time, shall be followed.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed with different stacks to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stacks of adequate height as per CPCB/SPCB guidelines.*
- *Total fresh water requirement shall not exceed* 8952 *cum/day to be met from* existing French 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 to be done through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.*

- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Regular VOC monitoring to be done at vulnerable points.*
- *The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.*
- *Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.*
- *Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.*
- *The company shall undertake waste minimization measures as below:-*
  (a) Metering and control of quantities of active ingredients to minimize waste.
  (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  (c) Use of automated filling to minimize spillage.
  (d) Use of Close Feed system into batch reactors.
  (e) Venting equipment through vapour recovery system.
  (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- *The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *The fund provision for Corporate Environment Responsibility (CER) shall be provided as per the guidelines issued by the Ministry dated 1st may 2018 and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*

12.4 Any Other

Agenda No.12.4.1

Expansion of Bulk Drugs unit at Sy. No.: 168, 170/A, 170/AA, 173/1 & 173/1A, Village Anantharam, Mandal Gummadidala, District Sangareddy District (Telangana) by M/s Clininvent Research Private Limited - Amendment in Environmental Clearance - reg.

[IA/TG/IND2/63270/2011, J-11011/191/2009-IA II(I)]

12.4.1.1 The proposal is for extension of validity of environmental clearance granted vide letter dated 6th July, 2011 for the project 'Expansion of Bulk Drugs unit at Sy. No.: 168, 170/A, 170/AA, 173/1 & 173/1A, Anantharam (V), Gummadidala (M), Sangareddy District (formerly Jinnaram (M), Medak District, (Telangana) in favour of M/s Teckbond Laboratories Pvt. Ltd, which was further transferred to M/s Clininvent Research Private Limited vide Ministry's letter dated 6th April, 2018.

The project proponent has informed that due to financial constraints the project could not be completed and requested for extension of the validity of the said project for a period of three years. It was informed that the proponent can able to execute the project within the extended period.

12.4.1.2 *The EAC, after detailed deliberations, recommended for extension of validity of the EC dated 6th July, 2011 for a period of three years, i.e. till 6th July, 2021, to complete the work as per scope of the project.*

Agenda No. 12.4.2

Proposed Capacity Expansion from 7.5 MTPA to 8.0 MTPA along with Distillate Yield Improvement Project (DYIP) and Installation of Feed Preparation Unit (FPU) at District Medinipur, Haldia Refinery (West Bengal) - Amendment in environmental clearance

[IA/WB/IND2/112746/2019 , J-11011/299/2013-IAII (I)]

12.4.2.1 The proposal is for amendment in the environmental clearance granted by the Ministry vide letter dated 4th March, 2016 to the project for capacity expansion from 7.5 MTPA to 8.0 MTPA along with Distillate Yield Improvement Project (DYIP) and Installation of Feed Preparation Unit (FPU) in the premises of Haldia Refinery at District Medinipur (West Bengal) in favour of M/s Indian Oil Corporation Ltd.

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

S. No.	Para of EC issued by MoEF& CC	Details as per the EC	To be revised	Justification/reasons.
1	EC file no. J-11011/299/ 2013-A II (I)	EC has been granted for revamp of Crude processing capacity from 7.5 MTPA to 8.0 MTPA. As per the EC, existing VDU-I capacity will be augmented from 1.5 MTPA to 1.7 MTPA.	Existing VDU-II will be augmented from 2.4 to 2.6 MPTA in place of existing VDU-I to achieve equal incremental capacity in order have Crude processing capacity 8 MTPA.	1. Detail engineering study done in both Vacuum distillation units VDU-I and VDU-II. 2. After detail engineering study, it is revealed that augmentation of existing VDU-IIis technically feasible to achieve Crude processing capacity of 8.0 MTPA and augmentation of existing VDU-I is not feasible. 3. Crude processing capacity of Haldia Refinery will remain 8.0 MTPA as mentioned in

				EC. 4. There will be no change in pollution load. 5. There will be no change in Product mix. 6. There will be no change in all other EC conditions.

12.4.2.3 During deliberation the Committee noted that the proposed amendment is for augmentation of VDU-II in place of VDU-I. During meeting the project proponent has informed that the proposed changes will not increase the pollution load and the crude processing capacity of Haldia Refinery will remain same.

The Committee also noted that Para 7 (ii) (b) of Ministry's Notification dated 23rd November, 2016 states that

'any change in configuration of the plant from the environmental clearance conditions during execution of the project after detailed engineering shall be exempt from the requirement of environmental clearance, if there is no change in production and pollution load. The project proponent shall inform the Ministry of Environment, Forest and Climate Change/ State Level Environment Impact Assessment Authority and the concerned State Pollution Control Board.'

12.4.2.4 *The EAC, after detailed deliberation found that there is no requirement of amendment in EC as the proposal is covered under Para 7 (ii) (b) of Ministry's Notification dated 23rd November, 2016. However, as requested by the project proponent, ministry may issue the formal amendment letter.*

Agenda No. 12.4.3

Capacity expansion of Gujarat Refinery with BS-VI Auto Fuel Production by M/s Indian Oil Corporation Ltd at Vadodara (Gujarat) – Amendment in ToR.

[IA-J-11011/93/2018-IA-II(I); IA/GJ/IND2/73416/2018]

12.4.3.1 The proposal is for amendment in the Terms of Reference granted by the Ministry vide letter 14th April, 2018 and thereafter amendment for Public hearing waiver dated 1st April, 2019 for the project capacity expansion of Gujarat Refinery from 13.7 to 18 MMTPA with 100% BS-VI Auto Fuel Production located at Jawaharnagar, District Vadodara (Gujarat) promoted by M/s Indian Oil Corporation Ltd.

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

Process Units	Capacity (MMTPA)	
	Previous TOR Data	Proposed TOR data
AVU	15.0	15.0
SR LPGTU	0.2	0.2
INDMAX	2.45	2.7
KHDS	0.7	0.7
INDMAX GDS	0.65	0.65
CCRU	1.6	1.6
ISOM	0.925	0.925
NHT/NSU	2.4	2.4
PP	0.420	0.420
SRU	300 TPD	400 TPD
Revamp of FCC- GHDS	Quality revamp envisaged	Not envisaged now
CR LPG Treater	0.8	1.073
PRU	0.495	0.580
ARU	300 TPH	350 TPH
SWS	330 TPH	330 TPH

12.4.3.3 *The EAC, after deliberations, recommended the amendment in ToR as proposed by the project proponent. All other conditions mentioned in ToR dated 14th April, 2018 shall remain unchanged.*

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

S. No.	Name and Address	Designation
1.	Dr. J. P. Gupta	Chairman
2.	Shri R K Singh	Member
3.	Dr. Y.V. Rami Reddy	Member
4.	Dr TudiIndrasen Reddy	Member
5.	Dr J S Sharma	Member
6.	Shri Dinabandhu Gouda	Member
7.	Dr T K Joshi	Member
8.	Dr Ajay Gairola	Member
9.	Shri SC Mann	Member
10.	Ms. Saloni Goyel	Member
11.	Shri Sanjay Bist	Member
12.	Shri Sharath Kumar Pallerla	Member Secretary

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