Minutes of 32nd meeting of Expert Appraisal Committee (Industry-2) held during 20-22 December, 2017 at Indira Paryavaran Bhawan, Jor Bagh Road, Ministry of Environment, Forest and Climate Change, New Delhi - 3

Day 1: 20th December, 2017

32.1 Opening Remarks by the Chairman

32.2 Confirmation of the Minutes of the 31stMeeting of the EAC (Industry-2) held during 23-24 November 2017 at Indira Paryavaran Bhawan, New Delhi.

The EAC, having taken note that no comments were offered on the minutes of its 31st meeting held on 23-24 November, 2017 at New Delhi, confirmed the same.

32.3 Environmental Clearance

Agenda No.32.3.1

Synthetic Organic Chemicals (Bulk drugs/Cellulose based excipients) manufacturing unitby M/s FR Chem Pvt Ltd at Survey No. 47/1, 47/2, 47/3, 47/4, 47/5, Village Lakshmipura, Nandasan, Taluka Kadi, District Mehsana (Gujarat) - Environmental Clearance

[IA/GJ/IND2/62465/2017, J-11011/43/2017-IA-II(I)]

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

(i) The proposal is for 'Synthetic Organic Chemicals (Bulk drugs/Cellulose based excipients) manufacturing unit' by M/s FR Chem Pvt Ltd at Survey No. 47/1, 47/2, 47/3, 47/4, 47/5, Village Lakshmipura (Nandasan), Taluka Kadi, District Mehsana (Gujarat).

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 21st EAC meeting held during 27-29 March, 2017 and recommended terms of reference (ToR) for the Project. The ToR has been granted by Ministry vide letter No.J-11011/43/2017-IA.II-(I) dated 30th May, 2017.

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

(iv) Land area for the proposed project is 19,316 m^2. It is proposed to develop greenbelt in an area of 38% i.e., 7324 m^2 out of total project area.

(v) As per Form-1, there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance of the project site. Sabarmati is flowing at 27 km in the South East.

(vi) The estimated project cost is Rs.15 crores. Total capital cost earmarked for pollution control measures is Rs.38 lakhs and the recurring cost (operation and maintenance) will be about Rs.10 lakhs per annum. Total Employment will be 29 persons. It has been proposed to allocate Rs.38 lakhs @ 2.5 % towards Corporate Social Responsibility.

(vii) Ambient air quality monitoring was carried out at 6 locations during April 2017 to June 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (59- 78 µg/m^3), $PM_{2.5}$ (10 - 29 µg/m^3), SO_2 (8 - 20 µg/m^3) and NO_x (8 – 22 µg/m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.07703 µg/m^3, 0.08052 µg/m^3 and 0.05785 µg/m^3 with respect to PM_{10}, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(viii) Total water requirement for 26.05 cum/day (fresh water 17.5 cum/day + recycled water 8.55 cum/day) of which fresh water requirement of 17.5 cum/day proposed to be met from borewell.

(ix) Treated effluent 8.55 cum/day (MEE Condensate 5.0 cum/day + others 3.55 cum/day), of which, 3.55 cum/day will be reused for washing/other purposes and remnant of 5.0 cum/day will be used on land for gardening purposes within premises, thus achieving Zero Liquid discharge.

(x) Power requirement will be 400 kVA and will be met from Uttar Gujarat Vij Corporation limited (UGVCL). There are no existing DG sets. One DG set will be used as standby during power failure. Stack (height 5m) will be provided as per CPCB norms to the proposed DG sets of 75 kVA which will be used as standby during power failure.

(xi) Multi cyclone separator with a stack of height of 20 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm^3) for Proposed 1 no. of 0.3 TPH Natural Gas/Agro- briquettes fired boiler.

(xii) Details of Process emissions generation and its management

(A) Flue Gas Emissions:

S. No.	Stack attached to	Stack height from G.L.	Stack dia. at top	Expected pollutant	Expected emission	Permissible limit	Air Pollution Control Measures
1.	Steam Boiler (300 Kg/hour)	20 m	0.2 m	SPM	60-90 mg/Nm^3	150 mg/Nm^3	Multi Cyclone
				SO_2	60-80 ppm	100 ppm	
				NO_x	20-30 ppm	50 ppm	
2.	D. G. Set (75 kVA)	5 m	0.10 m	SPM	40 mg/Nm^3	150 mg/Nm^3	Not applicable, as HSD will be used as a fuel.
				SO_2	40 ppm	100 ppm	
				NO_x	20 ppm	50 ppm	

(B) Process Emissions

S. No.	Vent attached to	Stack height from G.L.	Stack dia. at top	Expected pollutant	Air Pollution Control Measures
1.	Process Vent attached to Reaction Vessel	08 m	0.1 m	Process solvent vapors	Water Scrubber

(xiii) Details of solid waste/ hazardous waste generation and its management are as under:

S. No.	Type of waste	Hazardous waste category*	Quantity per Year	Mode of storage & disposal
1.	ETP sludge	35.3	15 MT	Will be collected, stored and disposed to an authorized TSDF site.
2.	MEE residue	---	7.6 MT	Will be collected, stored and sent to an authorized TSDF site.
3.	Sludge from wet scrubber	37.1	0.02 MT	Will be collected, stored and disposed to an authorized TSDF site.
4.	Process waste/ residue	28.1	822 MT	Will be collected, stored and sent to an authorised CHWIF site or TSDF site.
5.	Spent Solvents	28.6	44 MT	Will be sent back for regeneration/ reactivation.
6.	Used oil	5.1	0.8 MT	Will be collected, stored and reused as low grade lubrication and left over quantity (if any) sold to an authorized dealer or re-processor.
7.	Discarded drum/ containers/carboys Plastic bags/ liners	33.1	4 MT	Will be collected, stored and sent to authorized recycler.

(xiv) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 13th October, 2017.

(xv) List of proposed products are as under:

S. No.	Product	Quantity (TPM)
1.	Sodium Carboxymethyl Cellulose [Na CMC]	75
2.	Calcium Carboxymethyl Cellulose [Ca CMC]	25
3.	Croscarmellose Sodium	25
4.	Hydroxypropyl Methylcellulose [HPMC]	50
5.	Cellulose Acetate	75
6.	Cellulose Xanthate	50
7.	Cellulose Nitrate	50
8.	Methyl Cellulose	50
9.	Ethyl Cellulose	50
10.	Hydroxyethyl Cellulose [HEC]	50
	Total per Month	**500 MT**

32.3.1.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project 'Synthetic Organic Chemicals (Bulk drugs/Cellulose based excipients) manufacturing unit' of production capacity 500 TPM by M/s FR Chem Pvt Ltd in a total area of 19,316 m^2 at Survey No. 47/1, 47/2, 47/3, 47/4, 47/5, Village Lakshmipura, Nandasan, Taluka Kadi, District Mehsana (Gujarat). Different products are to be used as additives/fillers for food, pharmaceuticals and cosmetic industries.

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals Industry (Bulk drugs and intermediates)' of the Schedule to the Environmental Impact

Assessment Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 30th May, 2017. Public hearing was conducted by the SPCB on 13th October, 2017.

Total estimated water requirement is 26.05 cum/day, which includes fresh water demand of 17.5 cum/day proposed to be met from borewell. The remaining of 8.55 cum/day shall be the recycled/treated effluent through the ETP of 20 cum/day capacity. Total effluent generation would be 14.55 cum/day, which includes 11.05 cum/day from different industrial operations and 3.55 cum/day from domestic sources. Out of the total industrial effluent, 7.5 cum/day shall be taken to MEE followed by treatment in the ETP, whereas3.55 cum/day shall be taken directly to the ETP for treatment.

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.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Domestic effluent of 3.5 cum/day shall preferably be disposed off to the septic tank.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows :*
    - *(i) Reactor shall be connected to chilled brine condenser system.*
    - *(ii) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
    - *(iii) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 98% recovery.*
    - *(iv) Solvents shall be stored in a separate space specified with all safety measures.*
    - *(v) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
    - *(vi) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
    - *(vii) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed 17.5 cum/day to be met from bore well. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond. Rainwater harvesting has to be implemented as per the CGWA guidelines for bulk drug industries.*

- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  (i) Metering and control of quantities of active ingredients to minimize waste.
  (ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  (iii) Use of automated filling to minimize spillage.
  (iv) Use of Close Feed system into batch reactors.
  (v) Venting equipment through vapour recovery system.
  (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- *The green belt of at least 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting held during 13th October, 2017shall be satisfactorily implemented in letter and spirit.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard. 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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *The energy sources for lighting purposes shall preferably be LED based. A minimum of 10-20% of the total power requirement for the industrial operations shall be met from non-conventional energy resources/solar supply.*

Agenda No.32.3.2

Pesticides industry and pesticide specific intermediates (excluding formulations) by M/s Sanjivani Paranteral Ltd at Plot No. K-2/1/2, Additional MIDC Mahad, Mahad, Raigad(Maharashtra) - Environmental Clearance

[IA/MH/IND2/62425/2017, IA-J-11011/40/2017-IA-II(I)]

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

(i) The proposal is for setting up pesticides manufacturing unit of product capacity 2469 TPM & by-product capacity 5837 TPM by M/s Sanjivani Paranteral Ltd at Plot No. K-2/1/2, Additional MIDC, Mahad, village Kalij, Taluka Mahad, District Raigad (Maharashtra).

(ii) All Pesticide and pesticide related intermediate manufacturing industries (except formulations) are listed at item 5(b) of the schedule to the Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at central level by Expert Appraisal Committee (EAC).

(iii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 20th EAC meeting held during 27-28 February, 2017 and recommended terms of reference (ToR) for the project. The ToR has been granted by ministry vide letter No. J-11011/40/2017-IA-II(I) dated 29th April, 2017 followed by amendment therein on 22nd June, 2017 for public hearing exemption.

(iv) Total plot area is 11975 sqm and no additional land will be used for proposed project. It is proposed to develop green belt in an area of 2262.65 sqm, thus covering 33% of the total project area. The greenbelt that will be having 5 m width all along the plot boundary.

(v) The estimated project cost is Rs.35.42 crore. Total capital cost earmarked for pollution control measures is Rs.2.85 crore and the recurring cost (operation and maintenance) will be about Rs.30.45 lakh per annum. Total Employment will be 100 persons as direct employee after commissioning. It has been proposed to allocate Rs. 88.5 lakhs @ 2.5% towards Corporate Social Responsibility.

(vi) As per Form-1, no National Park, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. However, patches of reserve forest exist within 10 km area. The nearest patches of the reserve forest are at 1.2 km at S, 1.65 km at NE and 2.4 km at E direction from the project site. Kal river is flowing at 850 meters towards the South and Savitri river is flowing at 3.5 km towards South-West.

(vii) Ambient air quality monitoring was carried out at 8 locations during March 2017 to May 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (50-94 $\mu g/m^3$), $PM_{2.5}$ (15-50 $\mu g/m^3$), SO_2 (9-35 $\mu g/m^3$) and NO_2 (14-49 $\mu g/m^3$) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.5 $\mu g/m^3$, 1 $\mu g/m^3$ and 0.3 $\mu g/m^3$ with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(viii) Total water requirement will be 728.5 cum/day of which fresh water requirement of 647.9 cum/day will be met from additional MIDC, Mahad. Treated effluent of 93.3 cum/day will be treated through evaporator and treated water will be recycled back to the plant. Plant will be based on Zero Liquid discharge system.

(ix) Power requirement for proposed project will be 2 MVA and will be met from Maharashtra State Electricity Distribution Company Limited (MSEDCL). Additionally, 2 D.G. sets of 500 kVA capacity each will be used during power failure. Stack height of 14 m will be provided to each D.G. set as per the CPCB norms.

(x) The proposed unit will have 10 TPH coal fired boiler and 15 lakh Kcal/h capacity coal/ FO fired thermopack will be installed. A multi cyclone separator followed by bag filter with a

stack of height of 39 m and 32 m each will be installed for controlling the particulate emissions for boiler and thermopack respectively (within statutory limit of 115 mg/Nm^3).

(xi) Acidic process emissions containing hydrogen chloride gas and other process emissions will be controlled by providing 3 sets of Alkali scrubbers of 1000 CFM capacity each. Each scrubber will have 3 different stages of which first two stages use water as scrubbing media and in last stage alkaline solution will be used to scrub any residual acidic gases.

(xii) Details of solid waste/ Hazardous waste generation and its management are as follow: -

Hazardous Waste				
S. No.	**Type of Hazardous Waste**	**Category of H.W.**	**Generation Quantity**	**Mode of Disposal**
1	Aromatic alcoxy compound/ process residue	29.1	218 T/month	CHWTSDF/ sale to MPCB authorized party
2	Discarded containers barrels/liners/ plastic bags/ PPE etc	33.1	339 nos./day	CHWTSDF / MPCB authorized recycler
3	Evaporator residue	37.3	330.2 T/ month	CHWTSDF/ sale to authorized party
Non Hazardous Solid Waste				
1	Ash	-	150 TPM	To registered brick manufacturers

(xiii) Public hearing is exempted for preparation of EIA/EMP vide para 7(iii), of the EIA Notification, 2006, being the project site is in notified industrial area.

(xiv) Following are proposed products and by-products:

S. No.	**Product**	**Quantity (TPM)**	**Remarks**
Group A	**Fungicide**		
1	Propiconazole	300	Sale
2	Cyproconazole	126	Sale
3	Metconazole/ Bromoketal	101	Sale
Group B	**Herbicide/Insecticide**		
4	Transfluthrin	88	Sale
Group C	**Intermediate Chemicals**		
5	2,4 Dichloracetophenone	502	Sale
6	Valerylphenone	171	Sale
7	2-Chloro (4-chlorophenixy) acetophenone)	106	Sale
8	Tri chloroacetophenone	234	Sale
9	Valeryl chloride	230	Sale
10	m-dichlorobenzene	200	Sale
11	Flurochloro acetophenone	165	Sale
12	Dinonyl diphenyl amine/ Triazole	246	Sale
	TOTAL	**2469**	
	Formulation product		
13	Cefolasporin (pharmaceutical	1.5	Sale

	formulation)		
	By products		
14	Potassium bromide solution	132	Sale to MPCB authorized vendors/ in-house use
15	Inorganic salt (NaOH)	48	Sale to MPCB authorized vendors/ in-house use
16	Poly aluminium chloride (PAC) solution	4635	Sale to MPCB authorized vendors
17	HCl solution (30%)	669	Sale to MPCB authorized vendors
18	Phosphorus acid	131	Sale to MPCB authorized vendors
19	Mono chloro benzene	4	Sale to MPCB authorized vendors
20	Aromatic alkoxy compounds	218	Sale to MPCB authorized vendors/CHWTSDF
	Total By products	**5837**	

32.3.2.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project 'Pesticides manufacturing unit' of capacity 2469 TPM by M/s Sanjivani Paranteral Limited at Plot No.K-2/1/2, Additional MIDC, Mahad, village Kalij, Taluka Mahad, District Raigad (Maharashtra).

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

The ToR for the project was granted on 29th April, 2017 followed by amendment on 22nd June, 2017 with the exemption from public hearing, as per the provisions contained in Para 7 Stage III (3) (i) (b) of the EIA Notification, 2006.

Total water requirement is estimated to be 728.5 cum/day, of which fresh water demand would be 647.9 cum/day will be met from MIDC supply. Total industrial effluent of 93.3 cum/day will be taken to MEE, followed by condensate of 80.6 cum/day to be recycled for use in cooling tower, and thus ensuring Zero Liquid discharge system. By minimizing the evaporation losses, fresh water requirement is proposed to be brought down from 647.9 cum/day to 508 cum/day after the plant gets stabilized.

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

Consent to Establish for pharmaceutical formulation unit has been obtained from the MPCB, which is presently valid up to 23rd October, 2021.

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

- *The present industrial operations relating to pharmaceutical formulation shall not be carried out within the plant premises.*

- *Total production of pesticides shall include manufacturing at least 10% of bio-pesticides.*
- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *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 Transboundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management, if any, shall be carried out as follows :*
  a) *Reactor shall be connected to chilled brine condenser system.*
  b) *Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  c) *The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 98% recovery.*
  d) *Solvents shall be stored in a separate space specified with all safety measures.*
  e) *Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  f) *Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  g) *All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed 508 cum/day proposed to be met from MIDC 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. Storm water drain shall be passed through guard pond.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  a) *Metering and control of quantities of active ingredients to minimize waste.*
  b) *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  c) *Use of automated filling to minimize spillage.*
  d) *Use of Close Feed system into batch reactors.*
  e) *Venting equipment through vapour recovery system.*
  f) *Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*

- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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.*
- *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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *The energy sources for lighting purposes shall preferably be LED based. A minimum of 10-20% of the total power requirement for the industrial operations shall be met from non-conventional energy resources/solar supply.*

Agenda No.32.3.3

Manufacturing of Pesticides/Rodenticides by M/s Ambic Organic at Survey No. 717/4, at Post Kathlal, Taluka Kathlal, District Kheda (Gujarat) - Environmental Clearance

[IA/GJ/IND2/59456/2016, J-11011/334/2014-IA II (I)]

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

(i) The proposal is for setting up Aluminium Phosphide technical (79-82%) of 150 TPM and Zinc Phosphide technical (92-95%) of 60 TPM Manufacturing unit by M/s Ambic Organic at Survey No.717/3 & 717/4, Post Kathlal, Taluka Kathlal, District Kheda (Gujarat). H_3PO_4 (56-60%) of 45 TPM will be recovered as by product.

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry 2) in its 18thmeeting held during 23-25 January, 2017 and recommended terms of reference (ToR) for the project. The ToR has been granted by Ministry vide letter dated 29th April, 2017.

(iii) All Pesticides industry and pesticide specific intermediates (excluding formulations) units producing technical grade pesticides are listed under item 5(b) of the Schedule to the Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Total plot area is 7386 m^2. It is proposed to develop green belt in an area of 2440 m^2, and thus covering 33% of the total area.

(v) The estimated project cost will be Rs.5.0 crores. Total capital cost earmarked for pollution control measures will be Rs.0.35 crores and the recurring cost (operation and maintenance) will be about Rs.30.0 lakhs per annum. Total employment including direct and

indirect will be 25 persons. It has been proposed to allocate Rs.25 lakhs of 5.0% towards Corporate Social Responsibility.

(vi) As per Form-1, there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within the 10 km of the project site.

(vii) Ambient air quality monitoring was carried out at 8 locations during January, 2017 to March, 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (59.7-69 µg/m^3), $PM_{2.5}$ (28.1-33.7 µg/m^3), SO_2 (12.6-14.6 µg/m^3) and NOx (15.8–18.1 µg/m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs from the existing project would be 0.347µg/m^3, 0.148µg/m^3,0.190 µg/$m^3$and 0.017 µg/$m^3$with respect to PM, SO_2 NOx and H_3PO_4. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(viii) Total water requirement is 13 m^3/day of which fresh water demand of 11 m^3/day will be met from bore well.

(ix) Total industrial effluent 2 m^3/day of utilities i.e. water treatment and cooling will be reused for green belt. No effluent will be discharged outside the plant premises. Domestic effluent of 1.8 m^3/day will be discharged to soak pit.

(x) Power requirement 175 kVA will be met from MGVCL. DG set with capacity of 25kVA will be added and used as standby during power failure. Stack (height 11 m) will be provided as per CPCB norms to the proposed DG sets.

(xi) Proposed unit will have 0.3 TPH LPG/Diesel fired (100 kg/day or 150 lit/day) boiler (1 no). Boiler is connected with stacks of adequate stack height.

(xii) There will be process emission from reaction vessels of aluminum phosphide and zinc phosphide for which water scrubber will be used as APCM.

(xiii) Details of solid waste/hazardous waste generation and its management are as under:

S. No.	Type of waste	Category as per HWM Rules, 2016	Quantity	Method of Disposal
1.	ETP sludge	35.3	50 kg/month	Collection, storage, transportation & disposal at TSDF site.
2.	Used Oil	5.1	0.2 kl/yr.	Collection, storage, transportation & disposal by selling to registered re-refiners.
3.	Discarded containers/ barrels/ liners	33.1	200 nos./month 2.0 MT/month	Collection, storage, transportation & disposal by selling to registered recyclers/ send for decontamination to approved facility by GPCB.

(xiv) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 9th August, 2017.

(xv) List of proposed products is as under:

S. No.	Product	Capacity (TPM)
1	Aluminum Phosphide (79 – 82%)	150

2	Zinc Phosphide (92 – 95%)	60
By Product		
1	Phosphoric Acid (56-60%)	45

32.3.3.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project 'Manufacturing of Pesticides/Rodenticides' (Aluminium Phosphide - 150 TPM, Zinc Phosphide - 60 TPM) in a total area of 7386 sqm by M/s Ambic Organic at Survey No.717/3 & 717/4, Post Kathlal, Taluka Kathlal, District Kheda (Gujarat). Phosphoric Acid (45 TPM) shall be generated/recovered as by product.

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

The ToR for the project was granted on 29th April, 2017 and public hearing was conducted by SPCB on 9th August, 2017.

Total water requirement is 13 m^3/day, of which fresh water demand of 11 m^3/day will be met from bore well.

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.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *Total fresh water requirement shall not exceed 11 cum/day proposed to be met from bore well. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *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 Transboundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*

- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  (a) Metering and control of quantities of active ingredients to minimize waste.
  (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  (c) Use of automated filling to minimize spillage.
  (d) Use of Close Feed system into batch reactors.
  (e) Venting equipment through vapour recovery system.
  (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- *The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made regarding issues raised during the public hearing/consultation meeting held on 9th August, 2017shall be satisfactorily implemented.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24X7) monitoring system for stack emissions and the effluent, shall be installed for measurement of flow/discharge and the pollutants concentration, and the emission and effluent monitoring data to be transmitted to the CPCB and SPCB server as per the directions of CPCB in this regard.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *The energy sources for lighting purposes shall preferably be LED based. A minimum of 10-20% of the total power requirement for the industrial operations shall be met from non-conventional energy resources/solar supply*

Agenda No.32.3.4

Expansion of Uran Oil & Gas Processing Plant by adding LPG bullets by M/s ONGC Ltd at ONGC, Uran Plant, Uran, Raigarh (Maharashtra) - Environmental Clearance

[IA/MH/IND2/60517/2016, J-11011/354/2016-IA II(I)]

32.3.4.1 The project proponent and their accredited consultant M/s MECON Ltd, made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for Installation 3x1500 m^3 capacity Mounded LPG Bullets at Uran Oil & Gas Processing Plant by M/s ONGC Limited and located at Tehsil Uran, District Raigad (Maharashtra).

(ii) All projects of offshore and Onshore Oil and gas listed at Sl. No. 1(b) of the schedule to the Environmental Impact Assessment (EIA) Notification, 2006 under Category 'A' appraised at Central Level.

(iii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 17th EAC meeting held during 26-29 November, 2016 and recommended Terms of Reference (ToR) for the project. The ToR has been granted by Ministry vide letter No. J-11011 / 354 / 2016-IA-II(I) dated 15th March, 2016.

(iv) Ministry had issued EC earlier vide letter No. J-11011/635/2008-IA II(I) dated 29th April, 2009 for Setting up Additional Process Facilities and Debutanisation Project at ONGC Uran Complex unit to M/s ONGC Ltd.

(v) Existing land area is 112 ha and no additional land will be used for proposed expansion. Industry has developed green belt around plant boundaries. Recently Uran has planted 2234 plants in 7400 m^3 (approx.) area at expenditure of 37 lakhs and planned for another 2234 trees in about 5600 m^3. Also developed Green grass carpet along the roads with in the plant. Over and above Two lakh trees planted on Dronagiri hill.

(vi) The estimated project cost is Rs.77.15. ONGC, Uran Plant is having separate budget for CSR and HSE department in addition to the existing investment ofRs. 77.15 crores. Total capital cost earmarked for pollution control measures for the year 17-18 is Rs 51.50 cr. The recurring cost (operation and maintenance) will be about Rs. 5.28 crores (exclusive of air pollution control costs, which have been included in operational costs) per annum.

(vii) The existing Oil & Gas Processing Plant employs 716 persons. The proposed project will be operated by the plant's existing manpower i.e. no increase in employment after expansion. It has been proposed to allocate Rs.1.19 Cr towards Corporate Social Responsibility.

(viii) As per Form-1, there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km of the project site. The sea (HTL) is ~0.36 km West of the project site.

(ix) Ambient air quality monitoring was carried out at eight locations during March-May, 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (111 - 21 µg/m^3), $PM_{2.5}$ (66 – 9 µg/m^3), SO_2 (65.7 – 10.9 µg/m^3) and NO_2 (56.2 – 12.0 µg/m^3) respectively. There shall be no process emissions from the proposed project as it is LPG Storage project. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(x) No water will be required for the proposed project on permanent basis except for construction purpose. The total make-up water requirement of the existing oil & gas processing plant is 13,377 m^3/day which is met from water supplied by Maharashtra Industrial Development Corporation (MIDC).

(xi) No effluents will be generated from the proposed LPG Storage Bullets. However, the plant has a 16800 m^3/day capacity effluent treatment plant for treating water separated out from the oil & gas mixture received from the offshore oil wells as well as other effluents. Sewage is treated in septic tanks & soak pits which are being replaced by 13 No. packaged STPs.

(xii) Power requirement will be 0.42 MW and will be met from in-house-generation. Existing unit has 3 nos. natural gas fueled gas cogeneration units (each of 20 MW electricity and 60 TPH steam. Since the proposed project envisages only storage of LPG, there shall be no process emissions from the project implementation.

(xiii) Details of Solid waste/ Hazardous waste generation and its management: The only solid wastes which will be generated from the proposed project is scrap metal generated from dismantling of existing Low Aromatics Naphtha Storage tanks to create space for the proposed mounded LPG Bullets and soil and debris generated on account of excavations for foundations. The scrap-metal has been disposed off as metal scrap. The soil & debris will be dumped in low lying areas outside the plant in consultation with local municipal authorities.

(xiv) Public hearing for the proposed project has been exempted as per provisions contained in para 7(ii) of the EIA Notification, 2006.

(xv) Certified compliance report forwarded by RO, MoEF&CC dated 21st July, 2016 has been submitted.

(xvi) List of existing products of ONGC Uran Oil & Gas Processing Plant is as follows:

S. No.	Product	Installed Capacity
1	Crude Oil	20 MTPA
2	Natural Gas	16.00 Million standard cum/day
3	Liquified Petroleum Gas (LPG)	0.625 MTPA
4	Naphtha	0.330 MTPA
5	C2-C3 (Ethane & Propane)	0.625 MTPA

32.3.4.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project 'Expansion of Uran Oil & Gas Processing Plant by adding LPG bullets' (3 x800 MT) by M/s ONGC Ltd at Uran Complex, Tehsil Uran, District Raigad (Maharashtra).

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

The ToR for the project was granted on 15th March, 2017 with the exemption of public hearing as per provisions contained in para 7(ii) of the EIA Notification, 2006.

No water will be required for the proposed project except for construction purpose. The total make-up water requirement of the existing oil & gas processing plant is 13,377 m^3/day, which is met from water supply by Maharashtra Industrial Development Corporation.

Earlier, the Ministry had issued environmental clearances as detailed under:

S.No	***Project/Activity***	***Environmental clearance***
1	Ethane Propane recovery unit of 570000 MTPA of ONGC Uran plant	14th June, 1990
2	Additional co-generation facility at Uran plant	1st December, 1995
3	Uran-Trombay Jawahar Dweep36" oil pipeline project	20th December, 2006
	Uran-Trombay 20" Gas pipeline project	2nd November, 2007
4	Setting up Additional Process Facilities and De-butanisation Project at ONGC Uran Complex unit	29th April, 2009

The monitoring report on compliance status of above EC conditions forwarded by the Regional Office at Nagpur vide their letter dated 21st July, 2016 (site inspection carried out on 19th May, 2016) was found to be more or less satisfactory. In respect of certain non-complied and partially complied conditions, the Committee desired that the project proponent should take corrective actions/measures, and submit the status report to the Regional Office for their confirmation and/or further site visit, if so required. However, in view of the proposed expansion of the project by adding LPG storage facility, minimal environmental concerns involved and the ToR issued accordingly, the EAC preferred to push the proposal for the present.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As proposed by the project proponent, Zero Liquid Discharge shall be ensured due to the proposed expansion, and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *During construction phase, air pollution and solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016.*
- *The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines and in consultation with the State Forest Department.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment and the details along with time bound action plan shall be submitted to the Ministry's Regional Office.*
- *Regular monitoring of VOC and HC in the work zone area in the plant premises should be carried out and data be submitted to Ministry's Regional Office, CPCB and State Pollution Control Board. Quarterly monitoring for fugitive emissions should be carried out as per the guidelines of CPCB and reports submitted to Ministry's Regional Office.*
- *The project proponent shall conduct a traffic density survey on the approach road to be used for transportation of LPG tankers and LPG cylinders.*
- *Necessary approvals from Chief Controller of Explosives, as applicable, shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans shall be prepared and implemented.*
- *Emergency Response Plan should be based on the guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once a month.*
- *Additional safety measures should be taken by using remote operated shut off valve, Double Block &Bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.*
- *Occupational health surveillance of worker should be done on a regular basis and records maintained as per the Factory Act.*
- *The norms/guidelines of Oil Industry Safety Directorate (OISD) for installation and design of equipments and operation of the LPG Bottling Plants shall be strictly followed. Safety audit to be carried out and report submitted to the Regional Office.*
- *No packing/loading/unloading of LPG cylinders shall be made on road/outside factory premises. Vehicles loaded/unloaded with LPG cylinders shall be parked inside the plant premises only and not on road sides.*

- *Road tankers should be equipped to the standard specified in national regulations reputable code. Vehicles should be mobilized during transfer operations and equipped to prevent untimely movement. Loading/unloading bays should be protected against impact. Fire-resistant coatings shall be provided to tanks/vessels.*
- *Sections of pipeline and storage systems that can be isolated with valves or blinds should be equipped with safety valves to protect against possible damage as liquid LPG expands with increases in temperature.*
- *High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *Water sprinkling has to be undertaken on regular basis to control the polluting particles*

Agenda No.32.3.5

Expansion of pharmaceutical Manufacturing unit by M/s Orbit Pharma Laboratories at Block No.155/1, 159 Village Dhanot, Taluka Kalol, District Gandhinagar (Gujarat) - Environmental Clearance

[IA/GJ/IND2/52823/2016, J-11011/115/2016- IA II(I)]

32.3.5.1 The project proponent and their accredited consultant, Orbit Pharma Laboratoriesand En-vision Enviro Technologies Pvt Ltd, gave a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for expansion of Pharmaceutical manufacturing unit by M/s Orbit Pharma Laboratories at Block No. 155/1, 159, Chhatral-kadi Road, Village Dhanot, Taluka Kalol, District Gandhinagar (Gujarat).

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 9th EAC meeting held during 27-28 June 2016 and recommended terms of reference (ToR) for the project. The ToR has been granted by Ministry vide letter No. J-11011/115/2016-IA II (I) dated 2nd August, 2016.

(iii) All Synthetic Organic Chemicals Industry are listed at S.N 5(f) (Located outside Notified Industrial Area) of the Schedule to the Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Existing land area is 7066 m^2 and no additional land will be acquired for proposed expansion project. It is proposed to develop green belt in an area of 2,332 m^2, thus covering 33% of the total project area.

(v) The estimated project cost is Rs.5.45 Crore. Total capital cost earmarked for pollution control measures is Rs.73.25 lakhs and the recurring cost (operation and maintenance) will be about Rs.10 lakhs per annum. Total Employment will be 100 persons as direct & 10 persons indirect after expansion. It has been proposed to allocate Rs.13.6 lakhs @ 2.5% towards Corporate Social Responsibility.

(vi) As per Form-1, there are No National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km of the project site. Gulf of Khambhat is at 138 km in the South West.

(vii) Ambient air quality monitoring was carried out at 8 locations during 1st October to 30th December 2016 and submitted baseline data indicates that ranges of concentrations of PM_{10} (62.79- 72.86 µg/m^3), $PM_{2.5}$ (30.01– 34.2 µg/m^3), SO_2 (9.26 – 13.91 µg/m^3) and NO_2 (17.78–22.43 µg/m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.01 µg/m^3, 1.72 µg/m^3 and 0.63 µg/m^3 with respect to PM_{10}, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(viii) Total fresh water requirement is 60 cum/day proposed to be from ground water using bore well and around 5 cum/day will be reused.

(ix) Total industrial effluent of 27.65 cum/day. Out of which, 10.65 cum/day dilute stream will be treated through ETP followed by single stage evaporator and condensate water will be reused, while 17 cum/day concentrate will be sent to common evaporation facility, thus ensuring Zero Liquid Discharge system.

(x) Power requirement after expansion will be 260 kVA including existing 60 kVA proposed to be met from Uttar Gujarat Vij Company Limited (UGVCL). One DG set of 100 kVA capacity will be used as stand by during power failure. Stack (height 9 m) will be provided as per CPCB norms to the proposed D.G. set of 250 kVA which will be used as standby during power failure.

(xi) Existing unit has 1 TPH of boiler and Hot Air Generator. Proposed unit will have 2 TPH Wood Waste/ Agro waste fired steam boiler and 2 lakh Kcal/h coal fired Thermopack. There will be a common stack for existing and proposed boiler.

(xii) Details of process emissions generation and its management are as under:

S.No.	Stack Attached To	Stack Height	Pollution Control System	Final Concentration
Existing				
1.	Reaction vessels	9 m	Water scrubber followed by Alkali Scrubber	HCl ≤ 20 mg/Nm^3
Proposed				
1.	Reaction vessels	9 m	Water scrubber followed by Alkali Scrubber	HCl ≤ 20 mg/Nm^3 Br_2 ≤ 2 mg/Nm^3 NH_3 ≤ 6 mg/Nm^3

(xiii) Details of solid waste/ hazardous waste generation and its management are as under:

S.No.	Waste	Category No.	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)	Method of Storage and Disposal
1.	ETP Sludge	35.3	2	13	15	Collection, storage and transport to TSDF site.
2.	Used Oil	5.1	0.025 MT/Y	0.025 MT/Y	0.05 MT/Y	Collection, storage and reuse as lubricants in the machineries within the premises only or send to authorized re-processors.
3.	Discarded Containers/	33.1	300 nos/yea	300 nos/year	600 nos/yea	Collection, storage and send to authorized recycler after

S.No.	Waste	Category No.	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)	Method of Storage and Disposal
	Barrels/ plastic		r		r	decontamination.
4.	Date Expired, discard and off specification medicines	28.4/ 28.5	What so ever to be generated	1.0	1.0	After giving proper treatment will be disposed at CHWF/TSDF
5.	Fly Ash	-	-	18	18	Collection, storage and send to brick manufacturer or send to TSDF site.
6.	Spent Catalyst	28.2	2.4	0.55	2.95	Collection, storage and transport to CHWDF site or send to re-processors.
7.	Spent Carbon	28.3	-	2.68	2.68	Collection, storage and send to incineration facility.
8.	Spent Solvent	28.6	-	407	407	Collection, storage and recover. Recovered solvent reuse.
9.	Solvent Residue	36.1	-	20.35	20.35	Collection, storage and sent for incineration
10.	Evaporator salt	-	-	5	5	Collection, storage and transport to TSDF site.

(xiv) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 13th October, 2017 at project site.

(xv) List of existing and proposed products is as follow:

S.No	Product	Existing (TPM)	Proposed (TPM)	Total (TPM)
1.	Diclofenac Sodium IP/BP	2.5	22.5	25.0
	A. 2:6 Dichloro DIphenyl N-Acetyl Chloride	0	50	50
	B. 1-(2;6-Dichloro–Phenyl)–1; 3–Dihydro–Indole–2–one	0	25	25
2.	Diclofenac Potassium	0.5	4.5	5.0
3.	Diclofenac Diethyl Amine	0.25	2.25	2.5
4.	Chlorzoxazone	0.0	3.0	3.0
5.	Fenbendazole	0.0	10.0	10.0
6.	Oxfendazole	0.0	5.0	5.0
7.	Triclobendazole	0.0	2.5	2.5
8.	Febantel	0.0	2.0	2.0
9.	Closantel Base /Sodium	0.0	5.0	5.0
10.	Gabapentine	0.0	1.0	1.0
11.	Ondensetronticl Dehydrate	0.0	2.0	2.0
Total		**3.25**	**134.75**	**138**

S.No	Product	Existing (TPM)	Proposed (TPM)	Total (TPM)
By Products				
1.	Hydrochloric Acid	0	100	100
2.	Aluminum Chloride Solution	0	70	70
3.	Dilute Acetic Acid	0	48	48
4.	Liquor Ammonia	0	6	6

32.3.5.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project 'Expansion of Pharmaceutical manufacturing unit' from present capacity of 3.25 TPM (3 products) to 138 TPM (11 products) by M/s Orbit Pharma Laboratories in a total area of 7066 sqm at Block No.155/1, 159, Chhatral-kadi Road, Village Dhanot, Taluka Kalol, District Gandhinagar (Gujarat).

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals Industry (Drugs and drug intermediates)' of the Schedule to the Environmental Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 2nd August, 2016. Public hearing was conducted by the SPCB on 13th October, 2017.

Total fresh water requirement is 60 cum/day proposed to be met from ground water. Out of the total industrial effluent of 27.65 cum/day, 10.65 cum/day (low TDS) will be treated through ETP followed by single stage evaporator, and the condensate shall be recycled for process requirement. The total reject of 17 cum/day shall be sent to common evaporation facility, and thus achieving the Zero Liquid Discharge.

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

The project is reported to be established in the year 1991 i.e. prior to issue of the EIA Notification, 1994, and as such, there is no requirement of prior EC. In support of their submission in this regard, the project proponent has submitted No Objection certificate issued by Gujarat Pollution Control Board vide letter dated 8th February, 1991.

Consent to Operate for the present of capacity 3.25 TPM has been obtained from the Gujarat PCB, which is presently valid up to 8th January, 2022.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*

- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows :*
  - *(a) Reactor shall be connected to chilled brine condenser system.*
  - *(b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - *(c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 98% recovery.*
  - *(d) Solvents shall be stored in a separate space specified with all safety measures.*
  - *(e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - *(f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  - *(g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed 60 cum/day to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  - *(i) Metering and control of quantities of active ingredients to minimize waste.*
  - *(ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(iii) Use of automated filling to minimize spillage.*
  - *(iv) Use of Close Feed system into batch reactors.*
  - *(v) Venting equipment through vapour recovery system.*
  - *(vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting held on 13th October, 2017 shall be satisfactorily implemented.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*

- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *The energy sources for lighting purposes shall preferably be LED based. A minimum of 10-20% of the total power requirement for the industrial operations shall be met from non-conventional energy resources/solar supply.*

Agenda No.32.3.6

Expansion of Man-made fibre manufacturing unit (Fully Drawn Yarn, Nylon Yarn and Mother Yarn) by M/s Shubhalakshmi Polyesters Ltd at Survey No. 179/1/2 & 4, Village Silli, Dadra &Nagar Haveli - Environmental Clearance

[IA/DN/IND2/53615/2014, J-11011/174/2014-IA II(I)]

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

(i) The proposal is for expansion of Manmade fiber (FDY, Mother Yarn & Nylon Yarn) manufacturing unit from 18000 TPA to 50000 TPA by M/s Shubhalakshmi Polyesters Limited located at Survey No. 179/1/2 & 4, Village Silli, Dadra & Nagar Haveli (UT).

(ii) All Manmade fiber (other than rayon) are listed at S.N 5(d) of the schedule to the Environmental Impact Assessment (EIA) Notification, 2006 under category 'B'. However, due to applicability of general condition the proposed project is treated as category 'A' and appraised at Central Level by Expert Appraisal Committee (EAC).

(iii) The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 20th EAC meeting held during 23-24 June, 2014 and recommended terms of reference (ToR) for the project. The ToR has been granted by Ministry vide letter No.J-11011/174/2014-IA II (I) dated 3rd November 2014 followed by amendment on 12th June, 2017.

(iv) Existing land area is 37500 m^2 and no additional land will be required for the proposed expansion. Industry is already/ will be developed greenbelt in an area of 26.9 % i.e. 10100 m^2 out of total project area.

(v) The estimated project cost is Rs.92.73 crores. Total capital cost earmarked for pollution control measures is Rs.4.5 lakhs and the recurring cost (operation and maintenance) will be about Rs.7.2 lakhs per annum. Total employment will be 132 persons as direct after expansion. Industry proposes to allocate Rs 4.64 crores @ of 5% towards Corporate Social Responsibility.

(vi) As per Form-1, D&NH Wildlife Sanctuary is located at ≈3.3 km in SSE direction. Damanganga river is flowing at ≈9 km in the WSW.

(vii) Ambient air quality monitoring was carried out at 6 locations during October 2016 to December 2016 and submitted baseline data indicates that ranges of concentrations of PM_{10} (51-80 µg/m^3), $PM_{2.5}$ (15-38 µg/m^3), SO_2 (8-22 µg/m^3) and NO_2 (10-26 µg/m^3) respectively.

Since, no fuel consuming utilities are/will be required after the proposed project, Air quality modeling is not carried out for the proposed project.

(viii) Total water requirement is 48 m^3/day. Out of which fresh water requirement of 38 m^3/day will be met from in-house Bore-well. Treated effluent of 10 m^3/day will be reused for gardening purpose.

(ix) Power requirement after expansion will be 11625 kVA including existing 8000 kVA and will be met from D&NH Power Distribution Corporation Ltd (D&NHPDCL). Existing unit has 3 DG sets of 800 kVA capacity, DG sets are/will used as standby during power failure. Stack (height 19 m) is provided as per CPCB norms to the existing 3 DG sets of 800 kVA capacity.

(x) There is/will be no requirement of any fuel consuming utilities. There is/will be no process emissions from the manufacturing activities.

(xi) ETP waste (Cat. 33.3) @ 5.0 will be disposal to TSDF site and used oil (Cat. 5.1) @ 2.0 kl/annum will be disposal by selling to registered re-refiners after proposed project

(xii) Public hearing is exempted under the provisions as per Para 7 Stage III (3) (i) (b) of the EIA Notification, 2006, as plant is located in notified Industrial Estate.

(xiii) List of existing and proposed products is as follow:

Existing Product list

S. No.	Product	Quantity (TPA)
1.	Partially Oriented Yarn	18,000
Total		**18,000**

Proposed Products and their Capacities for Expansion

S. No.	Product	Quantity (TPA)
1.	Fully Drawn Yarn	30,000
2.	Mother Yarn	1,500
3.	Nylon Yarn	500
Total		**32,000**

32.3.6.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project 'Expansion of Manmade fibre unit from 18000 TPA (Partially Oriented Yarn only) to 50000 TPA (by adding Fully Drawn Yarn, Mother Yarn & Nylon Yarn)' by M/s Shubhalakshmi Polyesters Ltd in an area of 37500 sqm at Survey No. 179/1/2 & 4, Village Silli, Dadra & Nagar Haveli (UT).

The project/activity is covered under category B of item 5(d) 'Manmade fiber (other than rayon)' of the schedule to the Environmental Impact Assessment Notification, 2006. However, due to applicability of general condition (D&NH wildlife sanctuary at ≈3.3 km in SSE direction), the project requires appraisal at central level by the sectoral EAC in the Ministry.

The Committee noted that the Ministry, vide Notification dated 4th September, 2015, had notified the Eco-sensitive Zone, spread over an area of 26.57 sq km with an extent up to 100 m from the boundary of Dadra & Nagar Haveli Wildlife Sanctuary.

The ToR for the project was granted on 3rd November 2014 followed by amendment on 12th June 2017, providing exemption from public hearing as per the provisions contained in Para 7 Stage III (3) (i) (b) of the EIA Notification, 2006.

Total water requirement is 48cum/day. Out of which, fresh water requirement of 38 cum/day is proposed to be met from bore well. Treated effluent of 10 cum/day from the ETP shall be reused for gardening purpose.

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

The project is reported to be established prior to issue of the EIA Notification, 2006, and as such, there is no requirement of prior EC in terms of the said Notification. In support of their submission in this regard, the project proponent has submitted Consent to Establish issued by Pollution Control Committee, Daman & Diu and Dadra Nagar Haveli, vide letter dated 12th March, 2004.

Consolidated Consent and Authorization (CC&A) for the present production of 18000 TPA (Partially Oriented Yarn) has been obtained from the Pollution Control Committee, Daman & Diu and Dadra Nagar Haveli, which is presently valid up to 28th February, 2018.

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

- *Consent to Establish/Operate for the project shall be obtained from the UT Pollution Control Committee as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *Total fresh water requirement shall not exceed 38 cum/day proposed to be met from in-house bore well. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *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 Transboundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  (a) Metering and control of quantities of active ingredients to minimize waste.

(b) *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
(c) *Use of automated filling to minimize spillage.*
(d) *Use of Close Feed system into batch reactors.*
(e) *Venting equipment through vapour recovery system.*
(f) *Use of high pressure hoses for equipment clearing to reduce wastewater generation.*

- *The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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.*
- *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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *The energy sources for lighting purposes shall preferably be LED based. A minimum of 10-20% of the total power requirement for the industrial operations shall be met from non-conventional energy resources/solar supply*

Agenda No.32.3.7

Installation of mounded LPG storage vessel by M/s IOCL at Pattikalan-Rampur Indane Bottling Plant, Tehsil Swar, District Rampur (Uttar Pradesh) - Environmental Clearance

[IA/UP/IND2/58272/2016, J-11011/200/2016-IA II(I)]

32.3.7.1 The project proponent and their accredited consultant M/s ABC Techno Labs India Private Ltd, Chennai made a detailed presentation on the features of the project and informed that:

(i) The proposal is for Installation of mounded LPG storage vessel (1x900 MT) at IOCL Pattikalan Plant by M/s Indian Oil Corporation Ltd at Pattikalan Rampur (Uttar Pradesh).

(ii) All products are listed at S No. 6(b) of the schedule to the Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at central level by Expert Appraisal Committee (EAC).

(iii) The project proposal was considered by the Expert Appraisal Committee (Industry -2) in its 26th EAC meeting held during 28th July, 2017 and recommended terms of references (ToR) for the project. The ToR for the project was granted on 13th December, 2016 followed by amendment therein to exempt public hearing.

(iv) The plant was established in 2001. The existing LPG plant was established after obtaining valid consent orders from PCB. Existing land area is 33.25 acres and the additional land required will be used from the existing premises of IOCL pattikalan itself for the proposed expansion. It is proposed to develop green belt in an area of 10.97 acres, thus covering 33% of total project area.

(v) The estimated project cost is Rs.2214 lakhs. Total capital cost earmarked for pollution control measures is Rs.37,50,000 and the recurring cost (operation and maintenance) will be about Rs.16,00,000 per annum. Total Employment will be 100 workers in construction phase and 20 persons in operational phase. It has been proposed to allocate 2.5% cost of their annual net profit towards Corporate Social Responsibility.

(vi) As per Form-1, there are no National Parks, Wildlife Sanctuaries, Biosphere reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km of the project site. Kosi river is flowing at 400m in the West.

(vii) Ambient air quality monitoring was carried out at Eight locations during December, 2016 to February, 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (42.6-87.9 µg/m^3), $PM_{2.5}$ (23.8-52.9 µg/m^3), SO_2 (6.3-21.4 µg/m^3) and NO_x (9.6-26.4 µg/m^3) respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(viii) Total water requirement is 3.0 cum/day proposed to be met from the premises bore well itself. Sewage generated (2.4 cum/day) will be sent to Oil & Grease tank, followed by soak pit and septic tank. This water will be reused for gardening purposes. Plant will be based on Zero Liquid discharge system.

(ix) Power requirement will be 350 KW and will be met through existing power supply from Uttarakhand Power Corporation Ltd (UPCL) is sufficient. DG sets of 500 kVA (2 nos.), 250 kVA (1 nos.) & 100 kVA (1 nos.) have been provided to supply power during power failure. Stack height will be provided as per CPCB norms to the DG sets. The proposed project is only a LPG product storage & dispatch plant. Leak detectors will be installed at strategic locations within the plant premises.

(x) 22.4 kg of municipal solid waste will be generated. This waste will be treated as per MSW management Rules. Spent oil of 540 litre/year will be generated and handed over to CPCB authorized recycler.

(xi) Public hearing for the proposed project has been exempted as the plant is located in the notified industrial area of UPSIDC.

(xii) List of existing and proposed facilities and products is as follow:

S. No	Product	Total Capacity	Status
1.	Horton Sphere	1,400 MT	Existing (1850 MT)
2.	LPG Bullets	3 x 150 MT	
3.	LPG mounded Vessel	**1 x 900 MT**	**Proposed (900 MT)**
Total capacity after expansion - 2,750 MT			

32.3.7.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project 'Installation of mounded LPG storage vessel (1x900 MT)' for additional LPG storage at IOCL Pattikalan Plantby M/s Indian Oil

Corporation Limited at Pattikalan, District Rampur (Uttar Pradesh). The existing storage facilities include Horton Sphere (1400 MT) and LPG bullets (3x150 MT).

The project/activity is covered under category B of item 6(b) 'Isolated Storage & handling of hazardous chemicals' of the Schedule to the Environmental Impact Assessment Notification, 2006. However, due to applicability of general condition (Inter-State boundarywithin 5 km), the project requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 13th December, 2016 followed by amendment therein, providing exemption from public hearing as per the provisions of Para 7 Stage III (3) (i) (b) of the EIA Notification, 2006 due to project location in notified industrial area of UPSIDC.

Total estimated water requirement is 3 cum/day, proposed to be met from the bore well within the plant premises. Total domestic effluent of 2.4 cum/day shall be treated in oil and grease tank and further in soak pit/septic tank. This water will be reused for gardening purposes.

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

The project is reported to be established in the year 2001 i.e. prior to issue of the EIA Notification, 2006, and as such, there is no requirement of prior EC of the said Notification. In support of their submission in this regard, the project proponent has submitted consent to Operate issued by Uttar Pradesh Pollution Control Board vide letter dated 16th February, 2004 for the said project.

Consent to Operate for the present capacity of 1850 MT LPG storage has been obtained from the Uttar Pradesh PCB, which is presently valid up to 31st December, 2018.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As proposed 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 Transboundary Movement) Rules, 2016 and Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *During construction phase, air pollution and the solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016.*
- *The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines and in consultation with the State Forest Department.*
- *At least 5% of the total project cost shall be allocated for Enterprise Social Commitment and the details along with time bound action plan shall be submitted to the Ministry's Regional Office.*
- *Regular monitoring of VOC and HC in the work zone area in the plant premises should be carried out and data be submitted to Ministry's Regional Office, CPCB and State Pollution Control Board. Quarterly monitoring for fugitive emissions should be carried out as per the guidelines of CPCB and reports submitted to Ministry's Regional Office.*

- *The project proponent shall conduct a traffic density survey on the approach road to be used for transportation of LPG tankers and LPG cylinders.*
- *Necessary approvals from Chief Controller of Explosives, as applicable, shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans shall be prepared and implemented.*
- *Emergency Response Plan should be based on the guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once a month.*
- *Additional safety measures should be taken by using remote operated shut off valve, Double Block &Bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.*
- *Occupational health surveillance of worker should be done on a regular basis and records maintained as per the Factory Act.*
- *The norms/guidelines of Oil Industry Safety Directorate (OISD) for installation and design of equipments and operation of the LPG Bottling Plants shall be strictly followed. Safety audit to be carried out and report submitted to the Regional Office.*
- *No packing/loading/unloading of LPG cylinders shall be made on road/outside factory premises. Vehicles loaded/unloaded with LPG cylinders shall be parked inside the plant premises only and not on road sides.*
- *Road tankers should be equipped to the standard specified in national regulations reputable code. Vehicles should be mobilized during transfer operations and equipped to prevent untimely movement. Loading/unloading bays should be protected against impact. Fire-resistant coatings shall be provided to tanks/vessels.*
- *Sections of pipeline and storage systems that can be isolated with valves or blinds should be equipped with safety valves to protect against possible damage as liquid LPG expands with increases in temperature.*
- *High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *Water sprinkling has to be undertaken on regular basis to control the polluting particles*

Agenda No.32.3.8

Setting up Pesticides Intermediates & Specialty Chemicals Manufacturing unit by M/s Pragna Pharma Pvt Ltd in existing Inorganic Chemicals Unit in District Bharuch (Gujarat) - Environmental Clearance

[IA/GJ/IND2/65008/2017, J-11011/299/2017- IA-II(I)]

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

(i) The proposal is for setting up pesticide intermediates and specialty chemicals (945.9 TPM) manufacturing unit in existing Inorganic plant (6700 TPM) of M/s Pragna Pharma Pvt Ltd at Plot No. D2/CH/224, GIDC Estate, Dahej -2, Taluka Vagra, District Bharuch (Gujarat).

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

(i) Existing unit is inorganic Chemicals Unit. Proposed land area is 9370.5 m^2. It is proposed to develop green belt in an area of 3100 m^2, thus covering 33% of total project area.

(ii) The estimated proposed project cost is Rs.8 crores. It has been proposed to allocate Rs.1 Cr towards Corporate Social Responsibility. It is reported that No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km of the project site.

(iii) Ambient air quality monitoring is carried out at 8 locations during March 1, 2017 to May 31, 2017. The dispersion of pollutants in the atmosphere is a function of several meteorological parameters viz. temperature, wind speed and direction, mixing depths, inversion level, etc. The ambient air samples were collected and analyzed for Particulate Matter (PM_{10}), Particulate Matter ($PM_{2.5}$), Sulphur Dioxide (SO_2), Oxides of Nitrogen (NOx), Ozone (O_3), Lead (Pb), Carbon Monoxide (CO), Ammonia (NH_3), Benzene (C_6H_6), Benzo (a) Pyrene (BaP), Arsenic (AS), Nickel (Ni), HC, & VOCs were monitored at site and nearby villages for identification, prediction, evaluation and assessment of potential impact on ambient air environment. The PM_{10} values at all the locations in residential/rural areas ranged between 72.5-81.20 $\mu g/m^3$ respectively in pre-monsoon season. Similarly, the values of $PM_{2.5}$ varied in the range of 40.65 - 45.99 $\mu g/m^3$. The PM_{10} and $PM_{2.5}$ concentrations at all the AAQM locations were primarily caused by local phenomena including vehicular activities and natural dust getting air borne due to manmade activities and blowing wind. The values of NO_x at all the locations in residential/rural areas were observed to be in the range of 14.06-18.36 $\mu g/m^3$. The values of SO_2 at all the locations in residential/rural areas ranged between 11.7-16.28 $\mu g/m^3$. The values of O_3 at all the locations in residential/rural areas ranged between 10.02-10.75 $\mu g/m^3$. At all the air quality monitoring locations in residential/rural areas, the values of NOx, SO_2& O_3 were observed to be within limits. The values of CO at all the locations in residential/rural areas ranged between 1.12-1.20 mg/m^3.The values of NH_3 at all the locations in residential/rural areas ranged between BDL-1.75 $\mu g/m^3$. The values of Ni at all the locations in residential/rural areas ranged between 10.05 – 10.15 ng/m^3. The values of VOCs at all the locations in residential/rural areas ranged between 0.2 – 0.9 ppm.

(iv) Total water requirement will be 271 m^3/day of which fresh water demand of 243 m^3/day will be met from GWIL Water Supply. Source of water will be met through GWIL water supply. Total water requirement will be 271 m^3/day (Fresh: 243 m^3/day + Recycled: 28 m^3/day).

(v) Treated Effluent (100 cum/Day) will be disposed to deep sea through GIDC Pipeline. Treated Effluent (28 cum/Day) will be reused in plant premises. The existing effluent (44.5 cum/Day) is sent to ETP consists of primary, secondary & tertiary treatment facilities. The final treated waste water is sent to GIDC Drain for final disposal. Additional low COD Stream (56 cum/Day) from Process, cooling tower, Boiler and washing will be treated in ETP which consists Primary, secondary & Tertiary treatment then Treated effluent will be discharged into deep sea through GIDC Pipeline. High COD/TDS stream (30 cum/Day) shall be evaporated in MEE and MEE Condensate will be recycled & reused within premises.

(vi) Total power requirement will be 1000 kVA from DGVCL; D.G.Set - 1 (500 KVA)in case of maintenance of power failure

(vii) Unit will have 5 Nos. of Boiler, 3 Nos. of THF and 1 No. of D.G.Set. Multi Cyclone Separator with Bag Filter with a stack of height of 30m, 15 m will be installed for controlling the Particulates Matter (PM), SO_2 and Nox emissions.

(viii) Details of process emissions generation and its management: There will no process gas emission.

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

CAT. NO.	HAZARDOUS WASTE	Existing Quantity	Additional Quantity	Total Quantity	Method of Disposal
33.1	Discarded Containers/Bags /liner	Bags = 167 Nos. /Month Drums = 42 Nos/Month	Bags = 4,167 Nos./Month Drums = 1,250 Nos./Month	Bags = 4,334 Nos./Year Drums = 1,292 Nos./Month	Collection, Storage, Decontamination, Transportation & Sale to registered recycler or reuse within premises.
5.1	Used Oil	0.167 Kg/Month	12.50 Kg/Month	12.50 Kg/Month	Collection, Storage, Transportation & Sale to GPCB authorized re-processor.
--	Zinc Sludge (Sludge generation during Zinc Salts production)	175 MT/Month	--	175 MT/Month	Collection, Storage, Transportation & send to TSDF Site
--	$MnSO_4$ (Sludge generation during Manganese Sulphate production)	112.5 MT/Month	-	112.5 MT/Month	Collection, Storage, Transportation and send to TSDF Site
35.3	ETP Sludge	3 MT/Month	41.67 MT/Month	44.67 MT/Month	Collection, Storage, Transportation & sent to TSDF Site
29.1	Solid Waste (Inorganic Waste)	--	45 MT/Month	45 MT/Month	Collection, Storage, Transportation and Disposal at TSDF site
--	MEE Salt	--	30 MT/Month	30 MT/Month	Collection, Storage, Transportation and Disposal at TSDF site
20.3	Distillation Residues	--	220 MT/Month	220 MT/Month	Collection, Storage, Transportation and Co-processing in Cement Industries or incineration at Common Incineration facility
29.5	Spent Catalyst	--	10 MT/Month	10 MT/Month	Collection, Storage, Transportation and send to recycler
29.6	Spent Acid	--	550 MT/Month	550 MT/Month	Collection, Storage, Transportation and Sale to end user
--	Sodium Hydro sulfide	--	170 MT/Month	170 MT/Month	Collection, Storage, Transportation and Sale to end user

-	Hydrochloric Acid	--	180 MT/Month	180 MT/Month	Collection, Storage, Transportation and Sale to end user
-	Formic Acid	--	100 MT/Month	100 MT/Month	Collection, Storage, Transportation and Sale to end user
-	Acetic Acid	--	10 MT/Month	10 MT/Month	Collection, Storage, Transportation and Sale to end user
-	Sodium Bromide Solution	--	170 MT/Month	170 MT/Month	Collection, Storage, Transportation and Sale to end user
28.1	Inorganic Salt	--	60 MT/Month	60 MT/Month	Collection, Storage, Transportation and Send to TSDF site
-	NaOH (10%)	--	60 MT/Month	60 MT/Month	Collection, Storage, Transportation and Sale to end user
-	Na_2SO_4 (25%)	--	250 MT/Month	250 MT/Month	Collection, Storage, Transportation and Sale to end user
-	HYPO	--	10 MT/Month	10 MT/Month	Collection, Storage, Transportation and Sale to end user
-	Potassium Chloride Salt	--	25 MT/Month	25 MT/Month	Collection, Storage, Transportation and Sale to end user
29.3	Date expired & Off-Specification Material	--	2 MT/Month	2 MT/Month	Collection, Storage, Transportation and sent for co-processing in cement industries or incineration in common incineration facility

(x) Public hearing is exempted under the provisions as per Para 7 Stage III (3) (i) (b) of the EIA Notification, 2006, as plant is located in notified Industrial Estate.

(xi) List of proposed products is as under:

S. No.	Product	CAS No.	Existing	Additional	Total	LD50
			(TPM)			
1	Zinc Sulphate liq.	7733-02-0	1500	--	1500	NA
2	Zinc Sulphate powder	7733-02-0	1000	--	1000	NA
3	Zinc Oxide	1314-13-2	400	--	400	Oral LD50: Aceute:7 950 mg/kg [mouse]

4	Manganese Sulphate liq.	7785-87-7	1500	--	1500	NA
5	Manganese Sulphate powder	7785-87-7	500	---	500	Oral, mouse LD50:2330 mg/kg Oral, Rat:LD50:2150 mg/Kg
6	Copper sulphate ($CUSO_4.5H_2O$)	7758-98-7	300	--	300	Oral, Acute:300 mg/kg [rat], Dermal, LD50:Acute &gt :2000 mg/kg [rat]
7	Magnesium Sulphate powder	7487-88-9	500	--	500	NA
8	Spray Drying of chemicals on job work basis	--	1000	--	1000	NA
9	2,5 DiChloro Para Phenylene Diamine	105-56-6		25.0	25.0	1750
10	2 Nitro 4 Methoxy Aniline	20103-09-7		25.0	25.0	14100
11	2,5 Dimethyl-P-Phenylenediamine	96-96-8		25.0	25.0	NA
12	2-Mercapto 5-Methoxy Benzimedazole	07-01-6393		33.3	33.3	NA
13	3-[4-chloro-5-(cyclopentyloxy)-2-fluorophenyl]-5-(propan-2-ylidene)-1,3-oxazolidin-2,4-dione. (PIK)	37052-78-1		29.2	29.2	Dermal LD50 >2000 mg/kg Oral LD50> 5000 mg/kg
14	Sodium/Potessium { 2-[2,6 Dichloro Phenyl] Amino} Phenyl} Acetate	110956-75-7		41.7	41.7	LD50 oral rat 53 mg/kg
15	2 Chlor PPD	15307-79-6		25	25	NA
16	2 –{ 2[2-{2, 6 dichloro phenyl } Amino] Phenyl Acetyl] Oxyacetic Acid	139272-67-6		41.7	41.7	NA
17	2-Chloro 1-	2689-07-8		41.7	41.7	oral

	Phenoxy Benzene					mouse : LD50 - 300 mg/kg, oral rabbit: LD50 - 3200 mg/kg, oral rat: LD50 - 980 mg/kg.
18	2,3 Xylil Anthranilic Acid	61-68-7		41.7	41.7	LD50 Oral - rat - 740 mg/kg
19	2 Chloro 5 Methyl PPD	09-03-5307		25	25	NA
20	5 Amino Ortho Toludine	95-53-4		25	25	NA
21	4-Bromo Anisole	104-92-7		25	25	LD50 Oral - mouse - 2200 mg/kg
22	2 Chloro 4 Flouro 5 Nitro Benzyl Chloride	120890-66-6		33.3	33.3	NA
23	3 Amino 4 Methoxy Acetanilide	6375-47-9		41.7	41.7	NA
24	Para Anisidine	104-94-9		41.7	41.7	Oral, mouse: LD50 = 1410 mg/kg; Oral, rabbit: LD50 = 2900 mg/kg; Oral, rat: LD50 = 1320 mg/kg;
25	Para Amino Salicylic Acid	65-49-6		41.7	41.7	Acute oral toxicity (LD50): 4000 mg/kg [Rat.].
26	Nitro to amino conversion by catalytic hydrogenation	--	--	83.3	83.3	
	Benzyl Alcohol	100-51-6				--
	P-Hydroxy Benzyl Alcohol	623-05-2				--
	P-Chloro Benzyl	873-76-7				--

	Alcohol					
	P-nitro Benzyl Alcohol	619-73-8				--
	2,4 Di Nitro Benzyl Alcohol etc.	483-66-2				--
27	Aldehyde to alcohol conversion by catalytic hydrogenation	--	--	83.3	83.3	
	P-Amino Methyl Benzoate	619-45-4				--
	5-Amino Salicylic Acid	89-57-6				--
	4-Amino 2-Chloro Aniline	615-66-7				--
	2,5 Di Amino Toluene	95-80-7				--
	Aniline etc..	62-53-3				--
28	2-Amino Ethane Thiol Hydrochloride	156-57-0		83.3	83.3	LD50 Oral - Mouse - 1,352 mg/kg
29	Dimethyl CyanoCarbodithio midiate	10191-60-3		83.3	83.3	NA
30	4-Chloro 3-ethyl-1-methyl-1H-pyrazole 5-carboxylic acid (PIC-T1)	127892-62-0		25	25	NA
31	1-[4-(4-methylphenoxy)phenyl] methanamine Hydrochloride (PIC-T2)	262862-66-8		25	25	NA
TOTAL			**6700**	**945.9**	**7645.9**	

32.3.8.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project 'Pesticide specific intermediates and specialty chemicals manufacturing unit' of total capacity of 945.9 TPM by M/s Pragna Pharma Pvt Ltd in an area of 9370.5 sqm at Plot No. D2/CH/224, GIDC Estate, Dahej -2, Taluka Vagra, District Bharuch (Gujarat). Presently the unit is engaged in manufacturing inorganic chemicals @ 6700 TPM not covered under the EIA Notification, 2006.

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

The ToR for the project was granted on 11th August, 2017 with the exemption from public hearing.

Total water requirement is estimated to be 271 cum/day, which includes regular fresh water demand of 243 cum/day to be met from GWIL Water Supply. Total water demand is proposed to be brought down from 271 to 221 cum/day by introducing MEE of larger capacity and solvent stripper. Total waste water generation is 135 cum/day, out of which recovery shall be proportionately increased from 28 cum/day to 50 cum/day, proposed to be evaporated in MEE and MEE Condensate shall be recycled/reused within plant premises. Treated effluent of 80.5 cum/day shall be disposed off to deep sea through GIDC Pipeline.

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

Consent to Operate for the presently manufactured inorganic chemicals (6700 TPM) has been obtained from the State Pollution Control Board, which is presently valid up to 31st July, 2017. The unit has applied for renewal of the same.

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

- *Total production of pesticides shall include manufacturing at least 10% of bio-pesticides.*
- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *Total effluent shall not exceed 80.5 cum/day to be discharged to deep Sea through GIDC pipeline. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management, if any, shall be carried out as follows :*
  - *(a) Reactor shall be connected to chilled brine condenser system.*
  - *(b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  - *(c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 98% recovery.*
  - *(d) Solvents shall be stored in a separate space specified with all safety measures.*
  - *(e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  - *(f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  - *h) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed 221 cum/day proposed to be met from GWIL 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. Storm water drain shall be passed through guard pond.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  (a) Metering and control of quantities of active ingredients to minimize waste.
  (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  (c) Use of automated filling to minimize spillage.
  (d) Use of Close Feed system into batch reactors.
  (e) Venting equipment through vapour recovery system.
  (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- *The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24X7) monitoring system for stack emissions and the effluent, shall be installed for measurement of flow/discharge and the pollutants concentration, and the emission and effluent monitoring data to be transmitted to the CPCB and SPCB server as per the directions of CPCB in this regard.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *The energy sources for lighting purposes shall preferably be LED based. A minimum of 10-20% of the total power requirement for the industrial operations shall be met from non-conventional energy resources/solar supply.*

Agenda No.32.3.9

Expansion of Agro-chemicals and Intermediates manufacturing unit by M/s UPL Ltd (Unit-V) at Plot No.750 & 746 at Jhagadia Notified Industrial Estate, District Bharuch (Gujarat) - Environmental Clearance

[IA/GJ/IND2/27263/2015, J-11011/80/2015-IA-II(I)]

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

(i) The proposal is for environment clearance for the project 'Expansion of Agro Chemicals and Intermediates chemicals manufacturing unit' by M/s UPL Ltd (Unit-V) located at plot No.750 & 746, Jhagadia Notified Industrial Estate, Taluka Jhagadia, District Bharuch (Gujarat).

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

(iii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 40th EAC meeting held during 18-19 May 2015 and recommended terms of reference (ToR) for the Project. The ToR has been granted by Ministry vide letter no. J-11011/80/2015-IA-II(I); dated 13th July, 2015.

(iv) Ministry has issued EC earlier as per following details to M/s UPL Ltd (Unit-5). Half yearly EC Compliance Reports submitted regularly. MoEF&CC Bhopal issued Compliance Certificate

- EC vide letter No. J-11011/42/95-IA.II(I) dated 17th May, 1996 for Caustic Chlorine Plant in favour of M/s Search Chem Industries
- EC vide letter No. J-11011/26/96-IA.II(I) dated 24th December, 1996 for Power Plant in favour of M/s Search Chem Industries
- EC vide letter No. J-11011/325/2006-IA.II(I) dated 25th July, 2007 for expansion of Agrochemicals in favour of M/s UPL Ltd.
- EC Amendment vide letter No. J-11011/325/2006-IA.II(I) dated 18th September, 2009 for Glyphosate process change
- EC Amendment vide letter No. J-11011/325/2006-IA.II(I) dated 10th June, 2011 for CS_2 process change

From MoEF&CC, RO Bhopal has visited our site on 30th August, 2016 and verified our compliances to above environmental clearances & issued compliance certificate on 28th September, 2016.

(v) Existing land area is 886286.42 sqm and no additional land will be used for proposed expansion. Industry has already developed green belt in an area of ~16.7 % i.e 144682 sq. m out of total project area. However, project proponent has developed green belt during 2015-2017 and as per EC Compliance Report submitted to Bhopal for period Jan to June 2017 ,67.89 acres i.e. 274741.08 Sqm which is 30.9% of total plot area.

(vi) The estimated project cost is Rs.1923.68 Crore. Total capital cost earmarked for pollution control measures is Rs.69.4 crore and the recurring cost (operation and maintenance) will be about Rs.1.40 Crore per annum. Total Employment for proposed expansion will be 950 nos. persons as direct & 1020 nos. persons indirect after expansion. It has been proposed to allocate Rs.48.09 Crore @ 2.5% towards Corporate Social Responsibility.

(vii) The site is located inside notified Jhagadia industries estate. As per Form-1, there are no National Parks, Wildlife Sanctuaries, Biosphere, Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km of the project site. Kaveri river is flowing at 2.97 km in the North.

(viii) Ambient air quality monitoring was carried out at 9 (including project site) locations during 1st February 2015 to 31st May 2015 and submitted baseline data indicates that ranges of concentrations of PM_{10} (79-114 µg/m^3), $PM_{2.5}$ (42-57 µg/m^3), SO_2 (28-34 µg/m^3) and NO_x (28-35 µg/m^3) (98 percentile values) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 1.38 µg/m^3, with respect to PM10, SOx and NOx. PM-10 value at four villages are marginally

exceeding the limit due to vehicular traffic and construction activities. All other parameters are well within the National Ambient Air Quality Standards (NAAQS).

(ix) Fresh water requirement is 10,000 m^3/day and will be met from GIDC. Treated effluent of 3000 m^3/day will be discharged to the conveyance system of NCT for further disposal to deep sea.

(x) Power requirement after expansion will be 21 MWH from DGVCL & from Captive power plant @ 71 MWH including existing 6 MWH from DGVCL & 21 MWH from captive power plant. Existing unit has five (5 nos.) DG sets of 625 kVA, 750 kVA, 1250 kVA, 1000 kVA, 320 kVA capacity, additionally 1000 kVA x 6 DG sets are used as standby during power failure. Stack (height: 20 m) will be provided as per CPCB norms to the proposed DG sets of 1000 KVA in addition to the existing DG sets of625 kVA,750 kVA, 1250 kVA, 1000 kVA, 320 kVA which will be used as standby during power failure.

(xi) Boiler, DG Set, Furnace, Hot Air Generator details are given below for (1) CTE available, (2) as per existing CTO and (3) additional for proposed expansion.

(xii) M/s UPL Ltd (Unit-5) is located in Jhagadia notified GIDC industrial estate. Hence Public hearing is exempted under the provisions as per Para 7 Stage III (3) (i) (b) of the EIA notification, 2006.

(xii) From MoEF&CC, RO Bhopal has visited our site on 30th August, 2016 and verified our compliances to environmental clearances & issued compliance certificate on 28th September, 2016. We have submitted the Certificate to MoEF&CC New Delhi on 06th January, 2017.

(xiv) Following are the list of proposed products:

S. No	Product	Existing TPM	CTO Available (TPM)	Additional TPM	Total TPM	Category	Remarks
1	Mancozeb	-	4000	8333.33	11633.33	Pesticide (Fungicide)	Existing
2	Antracol	NIL		1000	1700	Pesticide (Fungicide)	Existing
3	Pendimethylene	-	400	833.33	1233.33	Pesticide	Existing
4	Glufosinate	NIL	550	1250	1700	Pesticide	Existing
5	Glyphosate	-		NIL	100	Pesticide	No Change Existing
6	CS_2 (carbon di sulfide)	-	3000	3750	6750	Intermediate Chemical	Existing
7	S Metachlor	200	NIL	1666.67	1866.67	Pesticide	New
8	Acephate	800	NIL	1666.67	2466.67	Pesticide	New
9	Acroline	NIL	NIL	666.67	666.67	Intermediate Chemical	New

10	Dimethyl Cyanoiminodithio-carbonate (CCITM)	NIL	NIL	167.67	167.67	Intermediate Chemical	New
11	Tri Ethyl Phosphite	NIL	NIL	1000	1000	Intermediate Chemical	New
12	CS_2 based Products						
12.1	Potassium Ethyl Xanthate	NIL	NIL	833.33	833.33	IntermediateChemical	New
12.2	Sodium isopropyl Xanthate						
12.3	Potassium isopropyl Xanthate						
12.4	Potassium amyl Xanthate						
12.5	1,6-Bis (N,N-dibenzyl thiocarbamyldithio) hexane (Rubber Chemicals)						
12.6	1-Methylamino-1-Methylthio - 2-Nitroethene (Pharma Intermediates)						
13	Clomazone	NIL	NIL	416.67	416.67	Pesticide	New
14	Mesotrion	NIL	NIL	416.67	416.67	Pesticide	New
15	Flonicamide (IKI220)	NIL	NIL	166.67	166.67	Pesticide	New
	H_2S based Products						
16	DMSO	NIL	NIL	1250	1250	Specialty Chemical	New
17	NaHS (40%) Solution	NIL	NIL	2500	2500	Specialty Chemical	New
18	Na_2S solution	NIL	NIL	2500	2500	Specialty Chemical	New
19	Na_2S Solid	NIL	NIL	2500	2500	Specialty Chemical	New
20	Liquid Formulation Products	NIL	NIL	4166.67	4166.67	Pesticide Formulation products	New
21	Solid Pesticide Formulation products	NIL	NIL	7083.33	7083.33	Pesticide Formulation products	New
	Here onwards there is no change in existing products						

22	Tri phenyl Phosphite	-	300-150=150*	NIL	150*	Specialty Chemical	No Change Existing
23	PCL_3 Plant (Phosphorous Tri Chloride)	-	2550	NIL	2550	Specialty Chemical	No Change Existing
24	156 TPD caustic Chlorine Plant						
	1) caustic soda lye 48% (on 100 % basis)	10500	4680	NIL	15180	Specialty Chemical	No Change Existing
	2) Chlorine Gas	8537	3972	NIL	12509		
	3) Hydrogen Gas	263	225	NIL	488		
	4) Hydrochloric Acid 30%	2625	1200	NIL	3825		
25	50 MW power plant (Electrical Power)	-	87.5MW/Hr	NIL	87.5MW/Hrs	Power	No Change Existing
26	Phosphorous	-	900	NIL	900	Specialty Chemical	No Change Existing
27	Phosphorus Acid Tri butyl phosphate (TBPO) Tri Iso butyl Phosphite (TIBP)	-	150-90=60*	NIL	60*	Specialty Chemical	No Change Existing
28	Phosphorous Penta Chloride (PCl_5)	-	200	NIL	200	Specialty Chemical	No Change Existing
29	Phenyl Di Iso Decyl Phosphite OR Tri Decyl Phosphite (TDP) OR Tris Tri Iso Decyl Phosphite (TTDP)	-	100-50=50*	NIL	50*	Specialty Chemical	No Change Existing
30	Di Phenyl	-	200-	NIL	15* OR	Specialty	No

	Methyl Phosphonate OR		185=15* OR			Chemical	Change Existing
	Tri Phenyl Phosphate (TPPA) OR						
	Bisphenol Di Phosphate (BDP)		50-46.5=3.5*		3.5*		
31	Phosphorous Oxychloride ($POCl_3$) OR	-	250-125=125* OR	NIL	125*	Specialty Chemical	No Change Existing
	Phosphorous Trichloride ($PSCl_3$)		200-100=100*		100*		
32	Fosthiazate (IKI 1145) OR	-	250 OR	NIL	250 OR	Pesticide	No Change Existing
	2,4 D technical (2,4 Di Chloro Phenoxy Acetic Acid)		125*	NIL	125*	Pesticide	
33	Dichloro Vinyl Acid Chloride (DVACL) /Acrolein/ triethylphosphite (Combine capacity)	-	300*/ 300*/ 300*	NIL	300*/ 300*/ 300*	Intermediate Chemical	No Change Existing
34	N Alkylated Xyledene OR	-	300	NIL	300	Intermediate Chemical	No Change Existing
	HRT Ketone OR		200		200		
	2 Ethyl 6 Methyl N N Aniline OR		300		300		
	MPBAL OR		300		*300*		
	UPDT (Saponified Polyacrylonitrile starch graft polymer)		300*	NIL	300*		
35	Glufosinate/Pendimethelen/S-Metalachlor/Flonicamide (IKI220)/Clomazone/Acepahate (Combine capacity)	-	6700*	NIL	6700*	Pesticide Formulation	No Change Existing
36	Tebuconazole	200	NIL	NIL	200	Pesticide	No Change
37	Aceflorofen	500	NIL	NIL	500	Pesticide	
38	Cyermetrin	500	NIL	NIL	500	Pesticide	

39	Permetrin	300	NIL	NIL	300	Pesticide Intermediates Chemical	Existing
40	$MNSO_4$ (Manganese Sulphate) Solution 31%	10000	NIL	NIL	10000		
41	Di Methyl Phosphoro Amido Thioate (DMPAT)	--	600*	NIL	600*		
	Total	**34425**	**30827**	**42167.68**	**107419**		

List of By product:

S. No.	By Product	NOC (available) (TPM)	CC&A Available (TPM)	Additional (TPM)	Total (TPM)
1	HCl solution	94.8	2732.02	440	3266.82
2	Dilute Sulphuric Acid	262.5	1655	1250	3167.5
3	Sodium sulphate (Powder) Or	-	4092	9066.75	13158.75
3.a	Sodium Sulphate Solution	-	15680	35895.67	51575.67
4	$Mn(OH)_2$ (manganese Hydroxide)	-	236	492	728.00
5	$Zn(OH)_2$ (Zinc Hydroxide)	-	39	9.75	48.75
6	NaSH solution	-	1876	16418.08	18294.08
7	Magnesium Chloride Solution	-	2070	4702.5	6772.50
8	Ammonium Acetate Or	464	NIL	3926.67	4390.67
8.a	Acetic Acid & Ammonium Sulphate or	-	NIL	4633.33	4633.33
8.b	Ammonium sulphate & Sodium Acetate (30%	-	NIL	5920.00	5920.00
9	Ammonium Chloride (Powder) Or	-	1034.25	3676.5	4710.75
9.a	Anhydrous Ammonia or	-	NIL	415.00	415.00
9.b	20 % AQ Ammonia or	-	NIL	2075.00	2075.00
9.c	$CaCl_2$ SOL or	-	NIL	4800.00	4800.00
9.d	$CaCl_2$ POWDER	-	NIL	1600.00	1600.00
10	METHYL MERCAPTANT	-	NIL	295.83	295.83
11	Sodium Bisulphite SOL	-	NIL	1276.58	1276.58
12	ETHANOL	-	NIL	37.83	37.83

13	Spent Solvent (MDC)	-	NIL	208.33	208.33
14	Sodium Hypochlorite	525	225	NIL	750
15	Ferrous Phosphorous	-	150	NIL	150
16	Calcium Silicate	-	6000	NIL	6000
17	Tri Phenyl Phosphate (TPPA)	-	66.51	NIL	66.51
18	Ammonium Sulphate Solution	-	3600	NIL	3600
19	Ammonium Sulphate Solid	-	750	NIL	750
20	Ethylene Chloride	-	44.5	NIL	44.5
21	Ammonium Hydroxide (20%)	-	116.75	NIL	116.75
22	$POCl_3$	-	400	NIL	400
23	Sodium Sulphite	-	1200	NIL	1200
24	PTSA	-	94	NIL	94
25	Acetic Acid	1185	NIL	NIL	1185
26	Ammonia solution	-	118*	--	118*
27	Ammonium Chloride	-	348*	--	348*
28	Steam	-	60	NIL	60

***As per CCA amendment no. GPCB/ANK/CCA-134(20)/ID-25335 dated on 11/04/2016**

32.3.9.2 The proposal was last considered by the EAC in its meeting held on 27-28 February, 2017, wherein the Committee recommended the proposal for grant of EC. However, in due course, the Ministry noted the following:-

(i) The proposal was applied under item 5(b) 'Pesticides industry and pesticide specific intermediates (excluding formulation)' of the Schedule to the Environment Impact Assessment Notification, 2006. However, the products series do include some of the intermediate chemicals and speciality chemicals, covered under category 5(f) of the Schedule to the EIA Notification, 2006, and also some inorganic products which do not require EC.

(ii) There was a difference in number of proposed products, as the ToR was issued for 40 products, but the EIA/EMP report was submitted for 41 products.

(iii) Total and green belt area was different in the ToR and EIA/EMP report

In view of the above discrepancies, the proposal was referred to the EAC again.

32.3.9.3 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project 'Expansion of Agro Chemicals and Intermediates manufacturing unit' by M/s UPL Ltd (Unit-V) located at plot No.750 & 746, Jhagadia Notified Industrial Estate, Taluka Jhagadia, District Bharuch (Gujarat).

The project/activities are covered under category A of item 5(b) 'Pesticides industry and pesticide specific intermediates (excluding formulation)' of the Schedule to the Environment

Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 13th July, 2015 followed by amended therein on 31st August, 2015, providing exemption from public hearing.

Fresh water requirement of 10,000 cum/day is proposed to be met from GIDC supply.

Earlier, the Ministry had issued the following environmental clearances:

- EC vide letter No. J-11011/42/95-IA.II(I) dated 17th May, 1996 for Caustic Chlorine Plant in favour of M/s Search Chem Industries
- EC vide letter No. J-11011/26/96-IA.II(I) dated 24th December, 1996 for Power Plant in favour of M/s Search Chem Industries
- EC vide letter No. J-11011/325/2006-IA.II(I) dated 25th July, 2007 for expansion of Agrochemicals in favour of M/s UPL Ltd.
- EC Amendment vide letter No.J-11011/325/2006-IA.II(I) dated 18th September, 2009 for Glyphosate process change
- EC Amendment vide letter No.J-11011/325/2006-IA.II(I) dated 10th June, 2011 for CS_2 process change

The monitoring report on compliance status of above EC conditions forwarded by the Regional Office at Bhopal vide their letter dated 28th September, 2016 was found to be satisfactory.

32.3.9.3 *The EAC, after deliberations, noted that the project has already been recommended for grant of environmental clearance in its earlier meeting held in February and April, 2017. Also, the subsequent developments but without any change in project profile and the environmental concerns, did not warrant reconsideration of the project by the Committee.*

The Committee, however, desired that in view of the discrepancies pointed out in respect of plot area, green belt area, details of products requiring environmental clearance vis-à-vis applicability of the EIA Notification, 2006, the Ministry may seek the desired inputs/clarifications from the project proponent and take a decision on grant of EC to the project.

Agenda No.32.3.10

Modification of existing Tarapur EPS and connection of additional wells to the same EPS to enhance the production by M/s Gujarat State Petroleum Corporation Ltd (GSPC) in CB-ON-2 Tarapur Block, District Anand (Gujarat) - Environmental Clearance

[IA/GJ/IND2/34224/2014; J-11011/182/2014-IA-II(I)

32.3.10.1 The project proponent and their accredited consultant M/s Kadam Environmental Consultant, made a detailed presentation on the silent features of the project and informed that:

(i) The proposal is for modification of Tarapur EPS and connection of additional wells to the same EPS to enhance oil & gas production in Block CB-ON/2 by M/s Gujarat State Petroleum Corporation Limited at Districts Kheda & Anand (Gujarat).

(ii) The case was considered for EC in the EAC meeting dated 25-26 February 2016 and the PP was directed to submit an Action Taken Report (ATR) on the non-complied points in the report issued by Regional Office of MoEF&CC. Response received from Regional office of MoEF&CC vide letter dated 19th May, 2016 was submitted to the committee and the case was reconsidered by the EAC committee on the meeting dated 27th September 2016 wherein the

committee was of the view to refer the matter to the Ministry as the case observed to be a violation. GSPC has not received any further communication from MoECC regarding the next step in this case.

(iii) All product is listed at S.N 1(b) 'Offshore oil and gas exploration, development & production' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at central level by the Expert Appraisal Committee.

(iv) The proposal was considered by the Reconstituted Expert Appraisal Committee (industry-2) in its 21st meeting held during 30-31 July and 1st August 2014 and recommended Terms of reference (ToR) for the project. The ToR has been granted by ministry vide letter No. J-11011/182/2014-IA II (I) dated 10th October 2014.

(v) Ministry has issued EC vide letter no J-11011/179/2007 IA II (I) dated 7th August, 2007 and J-11011/216/2009 IA II (I) dated 16th June, 2009 earlier for this project.

(vi) No additional land is required, as the proposed project is modification in existing EPS (area of EPS is ~ 24618 m^2) and connection of already drilled wells to the EPS. GSPC has already developed greenbelt in 33% of the existing area. As per Form-1, there are no National parks, wildlife sanctuaries, biosphere reserves, Tiger/Elephant reserves, wildlife's corridors etc. within 10 km of the project site. Sabarmati river is flowing within 10 km.

(vii) The estimated project cost is Rs.3.4 Crore. The one-time expenditure for environmental management and mitigation is estimated to be approx. Rs.5,50,000 and the recurring cost (operation and maintenance) will be about Rs.10, 35,000 per annum. Industry proposes to allocate Rs.17,00,000 @ 5% towards Corporate Social Responsibility

(viii) Ambient air quality monitoring was carried out at 8 location during summer season 2015 and submitted baseline data indicated that ranges of concentration of PM_{10}: 21.0 µg/m^3 to 75.0 µg/m^3; SO_2: 10.1 µg/m^3 to 10.7 µg/m^3; NOx: 17.5 µg/m^3 to 18.3 µg/m^3; HC: 867 µg/m^3 to 1019 µg/m^3; NMHC: 73.0 µg/Nm^3 to 104 µg/Nm^3; VOC: < 1 ppm. AAQ modeling study for point source emission indicates that the maximum incremental GLCs after the proposed project would be 0.18 µg/m^3, 23.2 µg/m^3 and 0.18 µg/m^3 for SO_2, NOx and particulate matter respectively. These GLC's are expected to occur at a distance of 100 m from the source towards the South-South East direction. The resultant Concentration are within NAAQS.

(ix) Total water requirement is 9 cum/day, GSPC has planned to meet the requirement of water from either water well bore or tanker water Supply. Effluent generated of 50 cum/day will be treated at EPS and will be sent to CETP.

(x) Power at Tarapur EPS is being sourced from Madhya Gujarat Vij Company Limited (MGVCL) Motive 80 HP & Light 25 kVA. For emergency supply, DG set of 63.5 kVA has been provided at site. Stack (height 10 m) is already provided as per CPCB Norms.

(xi) Detail of solid waste/hazardous waste generation and its management:

Waste/used oil- 10 lit/year, oily cotton waste- 360 kg/year and solid waste 730 kg/year. The used oil shall be sent to an authorize recyclers.

(xii) Public hearings for the proposed project has been conducted by state pollution control Board for Kheda district on 30th October, 2015 in the Land of Gram Panchayat, Near Vastana Milk Udhyog Mandli, Village Vastana, Taluka Matar, District Kheda and on 8th September, 2015

at Project site of M/s Gujarat State Petroleum Corporation Limited, Survey No. 497, Village Milrampura, Taluka Tarapur, District Anand.

(xiii) Certified compliance report issued by RO, MOEF&CC vide letter E-252/2009 (ENV)/413 dated 10th September, 2015 and reissued based on action taken report on 19th May, 2016 vide letter no. 5-252/2009 (ENV)/ 505.

(xiv) List of existing and proposed products is as follow:

Details	Production capacity (m^3/day)		
	Existing	Additional	Total
Crude Oil	10	202	212
Natural Gas	10800	59550	70350

32.3.10.2 The case was earlier considered by the EAC in its meeting held during 25-26 February, 2016. The project proponent was asked to submit the Action Taken Report on non-complied points in the monitoring report forwarded by the Regional Office of MoEF&CC. After response from the Regional office, the proposal was again considered by the EAC in its meeting held on 27th September 2016, wherein the committee was of the view to refer the matter to the Ministry as the case observed to be a violation.

32.3.10.3 During deliberations, the EAC noted that the Ministry had earlier accorded environmental clearances for exploratory drilling of 9 wells and development of 9 more wells in Tarapur CB-ON/02 Block, with the details as under: -

(a) Environmental clearance dated 7th August, 2007 for exploratory drilling of oil and gas in CB-ON/02 under NELP-II in Tarapur Block in Districts Anand and Kheda in Gujrat by M/s Gujarat State Petroleum Corporation Ltd.

(b) Environmental clearance dated 16th June, 2009 for proposed drilling of 9 wells and development operation in Tarapur CB-ON/02 block, development of new EPS (early Production facility) and connection to EPS on discovery and hook up of 3 existing wells to EPS in Districts Anand and Kheda in Gujarat by M/s Gujarat State Petroleum Corporation Ltd.

In the above context, the Committee was of the view that the environmental clearance for modification of EPS facility was already granted and as such, the present proposal should have been limited to grant of EC for oil & gas development/production from 12 wells along with auxiliary facilities and utilities.

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

The ToR for the project was granted on 10th October 2014. Public hearing was conducted by SPCB on 30th October, 2015 at Kheda and 8th September, 2015 at Anand.

Total water requirement of 9 cum/day proposed to be met from either bore well or tanker water Supply.

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

The monitoring report on compliance status of EC conditions was earlier forwarded by the Regional Office at Bhopal vide their letter dated 10th September, 2015. Based on the action taken report, the Regional Office has forwarded the updated status on compliance status vide letter dated 19th May, 2016, which was found to be satisfactory.

32.3.10.4 *The EAC, after deliberations, recommended the project 'Oil & Gas Development/Production from 12 Wells' in CB-ON-2 Tarapur Block, District Anand (Gujarat) for grant of environmental clearance, subject to compliance of terms and conditions as under: -*

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *Total effluent after treatment shall not exceed 50 cum/day to be discharged to the CETP. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *During construction phase, air pollution and the solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016.*
- *The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines and in consultation with the State Forest Department.*
- *At least 5% of the total project cost shall be allocated for Enterprise Social Commitment and the details along with time bound action plan shall be submitted to the Ministry's Regional Office.*
- *Regular monitoring of VOC and HC in the work zone area in the plant premises should be carried out and data be submitted to Ministry's Regional Office, CPCB and State Pollution Control Board. Quarterly monitoring for fugitive emissions should be carried out as per the guidelines of CPCB and reports submitted to Ministry's Regional Office.*
- *The project proponent shall conduct a traffic density survey on the approach road to be used for transportation of LPG tankers and LPG cylinders.*
- *Necessary approvals from Chief Controller of Explosives, as applicable, shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans shall be prepared and implemented.*
- *Emergency Response Plan should be based on the guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once a month.*
- *Additional safety measures should be taken by using remote operated shut off valve, Double Block &Bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.*
- *Occupational health surveillance of worker should be done on a regular basis and records maintained as per the Factory Act.*
- *The norms/guidelines of Oil Industry Safety Directorate (OISD) for installation and design of equipments and operation of the LPG Bottling Plants shall be strictly followed. Safety audit to be carried out and report submitted to the Regional Office.*
- *No packing/loading/unloading of LPG cylinders shall be made on road/outside factory premises. Vehicles loaded/unloaded with LPG cylinders shall be parked inside the plant premises only and not on road sides.*

- *Road tankers should be equipped to the standard specified in national regulations reputable code. Vehicles should be mobilized during transfer operations and equipped to prevent untimely movement. Loading/unloading bays should be protected against impact. Fire-resistant coatings shall be provided to tanks/vessels.*
- *Sections of pipeline and storage systems that can be isolated with valves or blinds should be equipped with safety valves to protect against possible damage as liquid LPG expands with increases in temperature.*
- *High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *Water sprinkling has to be undertaken on regular basis to control the polluting particles.*

Agenda No.32.3.11

Expansion of Sugar manufacturing unit and Co-generation unit by M/s Krantiagrani Dr. G.D. Bapu Lad Sahakari Sakhar Karkhana Ltd at PO/Village Kundal, Taluka Palus, District Sangli (Maharashtra) - Reconsideration of Environmental Clearance

[IA/MH/IND2/68043/2017; J-11011/233/2017-IA-II (I)]

32.3.11.1 The project proponent M/s Krantiagrani Dr. G. D. Bapu Lad Sahakari Sakhar Karkhana Ltd and their accredited consultant Vasantdada Sugar Institute, made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for crushing capacity enhancement of Sugar unit from 5,000 to 8,500 TCD and Cogeneration unit from 19.7 MW to 36.0 MW by M/s Krantiagrani Dr. G. D. Bapu Lad Sahakari Sakhar Karkhana Ltd. at Village Kundal, Taluka Palus, District Sangli (Maharashtra)

(ii) All Cogeneration (Thermal Power) and sugar industry are listed at S.No.1 (d) & 5 (j) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'B' but general conditions are applied to the project hence appraised at Central Level by Expert Appraisal Committee (EAC).

(iii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 24th EAC meeting held during 14-16 June, 2017 and recommended Terms of Reference (ToR) for the Project. The ToR has been issued by Ministry vide letter No. J-11011/233/2017-IA II(I) dated 8th August 2017 with exemption of public hearing.

(iv) Ministry has issued EC earlier vide letter No. J-11011/222/2012-IA II (I); dated 22nd March 2016 for expansion of sugar plant 2500 TCD to 5000 TCD and cogeneration plant from 13 MW to 19.7 MW unit to M/s Krantiagrani Dr G D Bapu Lad Sahakari Sakhar Karkhana Ltd

(v) Existing land area is 126.5 acres and no additional land will be used for proposed expansion. Industry has already developed greenbelt in an area of 33 % i.e., 41.2 acres. The estimated project cost is Rs.150 crores including existing investment of Rs.66.38 crores. Total capital cost earmarked for pollution control measures is Rs.3.45 Cr. and the recurring cost (operation and maintenance) will be about Rs.0.45 Cr. per annum. Total Employment will be 40 persons as direct & 70-80 persons indirect after expansion. Industry proposes to allocate Rs. 754 Lakh @ 5/2.5 % towards Corporate Social Responsibility.

(vi) As per Form-1 Yashwantrao Chavan Sagreshwar wild life sanctuary national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Yerala river towards NE and Krishna river is flowing towards SW direction at 4 km & 7 km respectively.

(vii) Ambient air quality monitoring was carried out at 09 locations during March 2016 to May 2016 and submitted baseline data indicates that ranges of concentrations of PM_{10} (49 – 79 $\mu g/m^3$), $PM_{2.5}$ (19 – 48 $\mu g/m^3$), SO_2 (11 – 29 $\mu g/m^3$) and NO_2 (14 - 33$\mu g/m^3$) CO (0.5 – 1.9 mg/m^3) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.75 $\mu g/m^3$, 2.46$\mu g/m^3$ with respect to PM10 and SOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(viii) Total water requirement is 284 m^3/day (during season) & 1449 m^3/day (during off season) of which fresh water requirement of 284 m^3/day and will be met from Krishna river.

(ix) Treated effluent of 850 m^3/day will be treated through Effluent Treatment Plant will be based on Zero Liquid discharge system.

(x) Power requirement after expansion will be 10.29 MW including existing 9.70 MW and will be met from own existing cogeneration unit. Existing unit has 2 DG sets of 320 kVA capacity each, additionally 1010 kVA capacity DG sets are used as standby during power failure. Stack height (3m) as per CPCB norms which will be used as standby during power failure.

(xi) Existing unit has two of 35 TPH & one of 50 TPH which will be scraped and new bagasse fired boiler of 70 TPH & 130 TPH will be installed. Wet scrubber for existing boiler is installed & electro static precipitator with a stack of height of 60.0 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm^3) for Proposed 70 TPH & 130 TPH bagasse fired boilers respectively along with a stack height of 75m.

(xii) Details of Process emissions generation: Minor bagasse particle due to handling of bagasse and dust due to transportation of material and it will be controlled by storage/handling of bagasse in closed yard & construction of tar roads in factory premises.

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

S.No	Waste	Quantity/annum	Treatment	Disposal	Remark
1	Sugar ETP sludge	80 TPA	Disposal into land/soil	Sold to member farmer/own plot	Organic
2	Ash	Total ash: 7513 TPA	Disposal into land/soil	Used as a soil enriching material or sold to brick manufacturers.	Organic + Inorganic
3	Spent oil from DG and process	13 to 14 KL/A	Spent oil is burnt in boiler	Spent oil is burnt in boiler	Oily

(xv) Certified compliance report submitted by RO, MoEF&CC dated 20th March, 2017 & 11th November, 2017 are submitted to the Ministry.

(xvi) List of existing and proposed products is as under:

Existing Product		
S. No	**Product**	**Quantity(TPA)**
A.	**Sugar Unit**	
1.	White Sugar	1,12,500
2.	Bagasse	2,47,500
3.	Molasses	36,000
4.	Press Mud	36,000
B.	**Cogeneration Unit**	
1.	Power: During season During off season	19.7 MW 7.8 MW
Proposed Products and their Capacities		
S. No	**Product**	**Quantity(TPA)**
A.	**Sugar Unit**	
1.	White Sugar	1,91,340
2.	Bagasse	4,28,400
3.	Molasses	61,200
4.	Press Mud	61,200
B.	**Cogeneration Unit**	
1.	Power: During season During off season	36 MW 12 MW

32.3.11.2 The proposal was last considered by the EAC in its meeting held on 12-13 October, 2017, wherein it was deferred for inputs and clarifications in respect of the following:-

- Endorsement of the Action Plan submitted by the project proponent, by the Regional Office, Nagpur to firm up compliance of the conditions stipulated in the EC dated 22nd March, 2016 for expansion of sugar unit from 2500 to 5000 TCD vis-à-vis their earlier observations.
- As observed by the Regional Office in the said monitoring report, Sugar production has been more than that approved vide consent issued by SPCB under the Air/Water Act during last 3-4 years.

32.3.11.3 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Expansion of sugar manufacturing unit from 5,000 to 8,500 TCD and co-generation unit from 19.7 to 36 MW' by M/s Krantiagrani Dr. G.D. Bapu Lad Sahakari Sakhar Karkhana Ltd in a total area of 126.5 acre at PO/Village Kundal, Taluka Palus, District Sangli (Maharashtra).

The project/activity is covered under category B of item 5(j) 'Sugar Industry' and item 1(d) 'Thermal Power Plant' of the Schedule to Environmental Impact Assessment Notification, 2006, and requires appraisal at the State level by the SEAC/SEIAA in the State. However, due to applicability of general conditions (within 5 km of Y R Chavan Sagareshwar Wildlife Sanctuary), the project was appraised at Central Level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The Committee noted that the Ministry, vide order dated 15th May, 2017, had notified the Eco-Sensitive Zone for Y R Chavan Sagreshwar Wildlife Sanctuary (spread over an area of 3.68 sq km), extending up to 100 m from the boundary of the Sanctuary.

The ToR for the project was granted on 8th August, 2017 with public hearing exemption, since the last public hearing was conducted within 3 years while submitting the proposal for EC for earlier expansion project (from 2500 to 5000 TCD) with co-generation plant from 13 to 19.7 MW.

Fresh water requirement of 284 cum/day (during season) and 1449 cum/day during off-season is to be met from Krishna river. Necessary permission in this regard has been obtained from the State Irrigation Department.

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

Earlier, the Ministry had issued environmental clearance on 22nd March, 2016 for enhancement of sugar production from 2500 to 5000 TCD and cogeneration plant from 13 to 19.7 MW. The monitoring report on compliance status of EC conditions forwarded by the Regional Office at Nagpur vide their letter dated 20th March, 2017 was earlier not found to be satisfactory, especially in terms of the specific conditions relating to bag filter, ZLD, uploading of six monthly compliance report, etc. For the conditions partially complied or not-complied, the action plan was submitted to the Regional Office by the project proponent on 11th April, 2017.

The Regional Office has examined the action taken report submitted by the project proponent against each of their observations and forwarded their comments vide letter dated 6th November, 2017. It has been concluded that '*It is observed that PA has taken necessary action towards the compliance of the observations made by the Regional Office vide letter dated 20th March, 2017'.*

Consent to Operate for the present industrial operations (sugar unit of 5000 TCD and cogeneration plant of 19.7 MW) has been obtained from the State Pollution Control Board, which is presently valid up to 31st July, 2018.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Total fresh water requirement shall not exceed 284 cum/day (during season) and 1449 cum/day during off-season proposed to be met from Krishna river. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in the ETP and then through RO system.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.*

- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  (a) Metering and control of quantities of active ingredients to minimize waste.
  (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  (c) Use of automated filling to minimize spillage.
  (d) Use of Close Feed system into batch reactors.
  (e) Venting equipment through vapour recovery system.
  (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- *The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24X7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*
- *There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *The energy sources for lighting purposes shall preferably be LED based. A minimum of 10-20% of the total power requirement for the industrial operations shall be met from non-conventional energy resources/solar supply*

Agenda No.32.3.12

Phenol Formaldehyde Resin, Melamine Formaldehyde Resin & Urea Formaldehyde Resin manufacturing unit by M/s NN Polymers at Survey No.1458, Village Panshina, Taluka Limbdi, District Surendranagar (Gujarat) - Environmental Clearance

[IA/GJ/IND2 /60441/2016, J-11011/337/2016-IA II(I)]

32.3.12.1 The project proponent and their accredited consultant M/s T.R. Associates (Ahmedabad) made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for setting up Melamine Formaldehyde Resin, Phenol Formaldehyde Resin, Urea Formaldehyde Resin as well as Laminated Sheets manufacturing unit by M/s NN Polymers at Survey No.1458, Village Panshina, Taluka Limbdi, District Surendranagar (Gujarat)

(ii) All Synthetic Organic Chemicals Industry projects, located outside the notified industrial area/estate are listed under item 5(f) of the schedule to the Environmental Impact Assessment (EIA) notification under Category 'A' and are appraised at Central level by the Expert Appraisal Committee (EAC).

(iii) The project proposal was considered by the expert appraisal committee (Industry 2) in its 17th EAC meeting held during 26-29 December 2016 and recommended terms of reference (ToR) for the project. The ToR has been granted by Ministry vide letter No.J-11011/337/2016-IA. II (I) dated 29th April, 2017.

(iv) Total plot area is 17705 m^2. It is proposed to develop greenbelt in an area of 6915 m^2, thus covering 39.1% of total project area.

(v) The estimated project cost is Rs.8.5 crores out of which resin plant cost will be Rs.1.1 crore. Total capital cost earmarked for pollution control measures is Rs.75 lakhs and the recurring cost (operation and maintenance) will be about Rs.18 lakhs per annum. Total employment will be 65 persons as a direct. It has been proposed to allocate Rs. 21.3 lakhs @ 2.5% towards Corporate Social Responsibility.

(vi) As per Form-1, there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km of the project site. Bhogavo river is flowing at 2.2 km in the SW and Narmada canal is flowing at 1.2 km in the South.

(vii) Ambient air quality monitoring was carried out at 8 locations during December 2016 to February 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (61.25 to 84.12 µg/m^3), $PM_{2.5}$ (25.26 to 35.13 µg/m^3), SO_2 (9.81 to 24.12 µg/m^3) and NO_2 (16.25 to 30.90 µg/m^3) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.0 µg/m^3, 0.3 µg/m^3 and 2.0 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).

(viii) Total water requirement is 66 m^3/day, of which fresh water requirement would be 51 m^3/day to be met from Bore well. Waste water of 15.7 m^3/day will be treated through Effluent Treatment Plant (having Evaporator followed by Condenser), thus ensuring Zero Liquid Discharge.

(ix) Power requirement of proposed project will be 350 kVA and will be met from Paschim Gujarat Vij Company Limited (PGVCL). D. G. Set of 350 kVA will be used as standby during power failure. Stack (height 6 m) will be provided as per CPCB norms to the proposed D.G. sets.

(x) Briquettes/Agro-Waste fired 4 TPH Steam Boiler and 10 Lakh Kcal/h Thermic Fluid Heater will be installed. Cyclone Separator followed by Bag Filter with a stack height of 30 m will be installed to control the particulate Emissions within the statutory limit of 150mg/Nm^3.

(xi) Details of process emissions generation and its management are as under:

S. No.	Vent attached to	Vent Height	Expected Pollutant	APC System	Quality of Pollutant
1	Dryer	11 m	Methanol	Condenser	As per GPCB Norms

(xii) Details of solid waste/hazardous waste generation and its management are as under:

S. No.	Description	Category	Quantity	Mode of Disposal
1	ETP Sludge & Evaporation Residue	35.3	45MT/Annum	Collection, storage and disposal at approved TSDF Site
2	Used/Spent Oil	5.1	0.08MT/Annum	Collection, storage and used within premises as a lubricant/ sold to registered recycler.
3	Discarded Plastic Bags/Barrels	33.1	12 MT/Annum	Collection, storage & sold to authorized vendor
4	Edge Cutting Waste	23.1	9MT/Annum	Collection, storage and disposal at CHWIF Site
5	Spent Carbon	36.2	9.6 MT/Annum	Collection, storage and disposal at CHWIF Site

(xiii) Public hearing for the proposed project has been conducted by the State Pollution Control Board on 7th November, 2017.

(xiv) List of proposed products is as under:

S. No.	Product	Quantity
1	Melamine Formaldehyde Resin	300 MT/Month
2	Phenol Formaldehyde Resin	300 MT/Month
3	Urea Formaldehyde Resin	300 MT/Month
4	Laminated Sheets	1,50,000 Nos./Month

32.3.12.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project 'Melamine Formaldehyde, Phenol Formaldehyde and Urea Formaldehyde Resin manufacturing unit' of total capacity of 900 TPM by M/s N N Polymers in a total area of 17705 sqm at Survey No. 1458, Village Panshina, Taluka Limbdi, District Surendranagar (Gujarat)

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

The ToR for the project was granted on 29th April, 2017. Public hearing was conducted by the SPCB on 7th November, 2017.

Total water requirement is 66 m^3/day, of which fresh water demand of 51 m^3/day is proposed to be met from bore well. After discussions, the project proponent agreed to bring down the fresh water requirement from 51 cum/day to 47 cum/day by utilising treated sewage for gardening. The project proponent has applied to Central Ground Water Board on 23rd December, 2016 for

permission to draw 51 cum/day of ground water. Waste water of 15.7 m^3/day will be treated in Effluent Treatment Plant, thus ensuring Zero Liquid Discharge.

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

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Total fresh water requirement shall not exceed 47 cum/day proposed to be met from bore* well*. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  - *(a) Metering and control of quantities of active ingredients to minimize waste.*
  - *(b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  - *(c) Use of automated filling to minimize spillage.*
  - *(d) Use of Close Feed system into batch reactors.*
  - *(e) Venting equipment through vapour recovery system.*
  - *(f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made regarding issues raised during the public hearing/consultation meeting held on 7th November,* 2017 *shall be satisfactorily implemented.*

- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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.*
- *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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *The energy sources for lighting purposes shall preferably be LED based. A minimum of 10-20% of the total power requirement for the industrial operations shall be met from non-conventional energy resources/solar supply*

Agenda No.32.3.13

Expansion of Sugar Unit & Co-generation Power Plant by M/s Nandi Sahakari Sakkare Karkhane Niyamit at Sy. No. 90, 92, Krishnailagar, Hosur Post, Taluk & District Vijayapur (Karnataka) - Environmental Clearance

[IA/KA/IND2/71136/2017, J-11011/110/2017-IA.II (I)]

32.3.13.1 The project proponent and their accredited Consultant M/s Ultra-Tech (Environmental Consultancy & Laboratory) made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for Expansion of Sugar Unit from 6500 TCD to 14000 TCD & Co-Generation Power Plant from 18.14 MW to 62.14 MW in existing Distillery of 50 KLPD by M/s Nandi Sahakari Sakkare Karkhane Niyamit at Sy. No 90, 92, Krishnanagar, Hosur post, Taluk & District Vijayapur (Karnataka).

(ii) All Molasses based distilleries are listed at S.No.5(g) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC) and all the sugar industry and Co-generation listed under 5(j) and 1(d) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'B' and are appraised at State Level by Expert Impact Appraisal Authority (SEIAA). The proposed project was earlier appraised at SEIAA. The State authority after discussion opined that the proposed expansion requires environmental clearance from the MoEF&CC, Government of India and hence, applied.

(iii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 24th EAC meeting held during 15th June 2017 and recommended Terms of Reference (ToR) for the Project. The ToR has been granted by Ministry vide letter no. J-11011/110/2017-IA. II-(I) dated 19th July 2017.

(iv) Ministry has issued EC earlier vide letter no. J-11011/644/2007-IA-II(I) dated 2nd September 2008 for expansion of production capacity of sugar unit from 3500 TCD to 6500

TCD and Installation of new 50 KLPD distillery at Sy. No 90, 92, Krishnanagar, Hosur post, Taluk & District Vijayapur (Karnataka) to M/s Nandi Sahakari Sakkare Karkhane Niyamit.

(v) Existing land area is 240 acres and no additional land will be used for proposed expansion. Industry has already developed greenbelt area more than 33 % i.e., 84 acres out of 240 acres of area of the project. As per Form-1, there are no national Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km of the project site. Krishna river is flowing at 1.5 km in the East.

(vi) The estimated project cost is Rs 35,500 lakhs, the existing investment of Rs.104. 2 crores. Total capital cost earmarked for pollution control measures is Rs.500 lakhs and the recurring cost (operation and maintenance) will be about Rs.75 lakhs per annum.

(vii) The existing manpower in the industry is 697 (Sugar Co-gen and Distillery), 627 persons all alone for Sugar Co-Gen. The additional direct man power to the industry after expansion will be 150 & there will be more than 2,000 persons indirect after expansion. It has been proposed to allocate Rs.1780.0 lakhs @ 5% towards Corporate Social Responsibility.

(viii) Ambient air quality monitoring was carried out at 8 locations during 15th December 2016 to 15th March 2017 and submitted baseline data indicates that ranges of concentrations of PM10, SO_2 and NO_2 are in respectable Limits. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.48 µg/m^3, 0.38 µg/m^3 and 0.38 µg/m^3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(ix) Total water requirement is estimated to be 11200 cum/day of which fresh water of 1400 cum/day is proposed to be met from Krishna river. Permission has been obtained from Karnataka Nigam Ltd – Biligi for lifting water from Krishna river. Treated effluent of 1473 cum/day will be treated through Effluent Treatment Plant of capacity 1500 cum/day, based on Zero Liquid discharge system.

(x) Power requirement after expansion will be 16 MW including existing 6 MW and will be met from in-house Power generation, the surplus power of 46.14 MW produced will be exported to the public power grid. Existing unit has 2 numbers of DG sets of capacity 1250 kVA (Sugar and Co-gen) & 500 kVA for (Distillery), additionally 1250 kVA DG sets are used as standby during power failure. Stack (height 8 m & 7 m) is provided as per CPCB norms is for existing DG sets, additional 8 m height stack is proposed for the new DG sets which will be used as standby during power failure.

(xi) Existing 105 TPH boiler and proposed 240 TPH boiler in co-gen sugar unit. During crushing season and during off season, the boiler is operated on bagasse, 24 TPH boiler of distillery unit will be operated on mixed fuel consisting of bio-mass, coal and CSW. ESP and Bag filter, Stack of height of 65 m is installed for Co-Gen sugar unit, and stack of 77m AGL is provided for Distillery unit for controlling the Particulate emissions (within statutory limit of 115 mg/Nm^3).

(xii) Details of Process emissions generation. and its management is as follows:

S. No.	Air pollution source	Fuel consumption	Stack height	APC measure	Emission
1	Existing 105 TPH boiler, (co-gen sugar unit) During season and	Bagasse: 1050T/d	65 m, AGL	ESP	SPM, SO2 and NOx

	Off season				
	Additional 240 TPH boiler (co-gen sugar unit) During season and Off season	Bagasse: 2400T/d	77 m, AGL	ESP	SPM, SO2 and NOx
	24 TPH boiler, (Distillery unit)	Coal and CSW	60 m, AGL	ESP	SPM, SO2 and NOx
2	Existing D.G. sets: • 1250 kVA (Sugar Co-gen) • 500 kVA (Distillery) Proposed D.G. sets: • 1250 kVA	Diesel, 150 kg/h 67 kg/h 150 kg/h	8 m, ARL 7 ARL Proposed: 8 m, ARL	Acoustic enclosure	SPM, SO2 and NOx

(xiii) Details of solid waste/ hazardous waste generation and its management is as follows:

Parameters	Bagasse	Press mud	Molasses	Boiler Ash	Lime sludge
Moister content %	50	75	20	-	50
% of cane	30	4	4.5	2.0	-
Quantity, T/d	4200	560	630	69	0.6
Storage	Closed yard	Prepared yard	Steel Storage Tanks with water cooling arrangement	Prepared yard	Prepared yard
Utilization	As fuel in boiler	As manure preparation or as soil nutrients	As raw material in distillery	Cane growers use as manure.	In road preparation or as soil nutrients

(xiv) Public hearing for the proposed expansion project was been conducted by SPCB on 7th October 2017.

(xv) The Certified compliance report issued by RO, MoEF & CC is enclosed as an annexure of the EIA report.

(xvi) List of existing and proposed products is as follows:

S. No.	Item	Units	Quantity		Storage facility	Transportation
			Before	After Expansion		
1	Raw Material					
	Sugarcane	T/d	6500	14000	Cane yard	Lorry, tractors & bullock carts
2	Consumable chemicals					
	Lime	T/d	13	28	Go-down	Lorry

	Sulphur	T/d	3.2	7	Go-down	
	Caustic Soda Flakes	T/d	0.25	0.5	Go-down	Lorry
	Sodium Hydro Sulphate	T/d	0.02	0.04	50 kg Carboys	Lorry
	Bleaching Power	T/d	0.008	0.018	Go-down	Lorry
	Boiler chemicals	Kg/d	0.008	0.018	Go-down	Lorry
3	Oil, grease and oil coolant	Kl/month	14	28	200 kg drums	Lorry
4	Product, Sugar	T/d	780	1680	Go-down, 50 kg bags	Lorry
5	By products					
	Bagasse, 50% moisture	T/d	1950	4200	Yard	Belt conveyor
	Press mud, 75 % moisture	T/d	260	560	Yard	Tractors
	Molasses, 20 % moisture	T/d	292.5	630	M.S. tank	Lorry tanker

32.3.13.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the expansion project of integrated sugar & distillery plant involving increase in sugar manufacturing from 6500 TCD to 14000 TCD & Co-Generation Power Plant from 18.14 MW to 62.14 MW by M/s Nandi Sahakari Sakkare Karkhane Niyamit, in a total area of 240 acres at Sy. No 90, 92, Krishnanagar, Hosur post, Taluk & District Vijayapur (Karnataka). Presently, the unit is engaged in manufacturing sugar (6500 TCD) and distillery of 45 KLPD.

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

The ToR for the project was granted on 19th July 2017. Public hearing was conducted by the SPCB on 7th October, 2017.

Total water requirement is estimated to be 11200 cum/day, of which fresh water of 1400 cum/day is proposed to be met from Krishna river. Permission has been obtained from Karnataka Nigam Ltd - Biligi for withdrawing water from the river Krishna. Total industrial effluent of 1473 cum/day will be treated in Effluent Treatment Plant, thus ensuring Zero Liquid Discharge.

Earlier, the Ministry had granted EC vide letter dated 2nd September 2008 followed by amendment on 18th November, 2014, for expansion of sugar unit from 3500 TCD to 6500 TCD and installation of 50 KLPD distillery at Sy. No.90, 92, Krishnanagar, Hosur post, Taluk & District Vijayapur (Karnataka) by M/s Nandi Sahakari Sakkare Karkhane Niyamit. The monitoring report on compliance status of existing EC conditions, was forwarded by the Ministry's Regional Office at Bangalore vide letter dated 8th May, 2017 (site visit carried out 18th April, 2017).

Consent to Operate for the existing products/utilities (Sugar unit and 50 KLPD distillery) has been obtained from the Karnataka PCB, which is presently valid up to 30th June, 2021.

32.3.13.3 *The EAC, after deliberations, noted that the issues relating to water balance and traffic management plan were not addressed properly, and more details were required for actual impact assessment and to arrive at adequacy of the EMP. The Committee insisted for the same, more as a matter of compliance of the conditions stipulated in the ToR in this regard. The proposal was, therefore, deferred.*

21st December, 2017 (Day 2)

Agenda No.32.3.14

Expansion of Pesticide Manufacturing unit by M/s Intech Pharma Pvt Ltdat Khasra No. 143 in village BiratiyaKalan, Tehsil Raipur, District Pali (Rajasthan) - Environmental Clearance

[IA/RJ/IND2/66960/2016, J-11011/327/2016-IA-II(I)]

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

(i) The proposal is for environmental clearance to the project Expansion of Pesticide Manufacturing Plant by M/s Intech Organics Limited (Erstwhile known as Intech Pharma Pvt Ltd) at Khasra No. 143, Village Biratiya Kalan, Tehsil Raipur, District Pali (Rajasthan).

(ii) All Pesticide and pesticides intermediates products are listed at S.N. 5(b) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 14th Expert Appraisal Committee (Industry-2) meeting held during 26-27 October, 2016 and 21st Expert Appraisal Committee (Industry-2) meeting held on 27-29 March, 2017, and recommended Terms of References for the Project. The ToR was issued by Ministry vide letter dated 15thJune, 2017 for production capacity of 4000 TPA to 59914 TPA followed by amendment to the ToR was granted vide letter dated 11thSeptember, 2017 for production of from 4000 MTPA to 63414 MTPA.

(iv) Existing unit formulating Methyl Bromide (98%). Thus EC was not applicable, Expansion is for manufacture of some technical grade pesticide chemicals and formulations, hence EC is applicable. Consent to Establishment and Consent to Operate granted by RSPCB.

(v) Existing land area is 42907 sqm, additional land required is 64258.81 m^2 land. Hence, total land of 107165.81 m^2 will be used for the proposed expansion. It is proposed to develop green belt in an area 35365 m^2, and thus covering 33% of total project area. The estimated project cost is Rs 27 Crores. Total capital cost earmarked for pollution control measures is Rs 3.82 Crores and the recurring cost (operation and maintenance) will be about Rs 35.50 lakhs per annum. Total Employment will be for 230 persons as direct & 200 persons indirect after expansion. It has been proposed to allocate 2.5 % towards Corporate Social Responsibility.

(vi) There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Lilri river is flowing at 5.5 km in the NW.

(vii) Ambient air quality monitoring was carried out at 8 locations during Oct 2016 to Dec 2016, and supplemented the existing baseline data (Oct, 2016 to Dec, 2016) collection with additional one-month monitoring (1st May to 31st May, 2017) and the baseline data indicates the ranges of concentrations as: PM_{10} (61-85 µg/m^3), $PM_{2.5}$ (27-34 µg/m^3), SO_2 (6.9-8.3 µg/m^3) and NO_2 (12.3 to 16.3 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 5.58 µg/m^3, 1.30 µg/m^3 and 3.89 µg/m3 with respect to PM_{10}, Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(viii) Total water requirement is 221.46 m^3/day of which fresh water requirement of 102.14 m^3/day will be met from surface water.

(ix) Wastewater will be segregated into two streams as High TDS / COD (HTDS) and Low TDS / COD (LTDS). The HTDS Effluent stream generated from process will be collected in equalization tank and thereafter sent to neutralization, settling and solvent stripper will be sent to Multi Effect Evaporator (MEE). The distillate water will be treated in ETP along with LTDS effluent. The concentrate will be sent to ATFD for drying. The dried salt will be sent to approved TSDF for final disposal. The ETP treated effluent will be passed through RO for recovery of water for recycling. The RO reject will be send to MEE. No process effluent will be discharged outside the plant premises. There is provision of stripper for recovery of solvent (VOC) from HTDS effluent before MEE. The inorganic hazardous residues will be sent to TSDF. The other source of wastewater generation will be domestic Sewage of 16 KL/day; which will be treated in STP. Treated water from STP will be used for greenbelt development, Thus, ensuring Zero Liquid Discharge.

(x) Power requirement after expansion will be 3800 kVA and will be met from Rajasthan Rajya Vidyut Vitran Nigam. Existing unit has 1 DG sets of 400 kVA capacity, additionally 2 nos 500 kVA /1X1000 kVA. DG sets are used as standby during power failure. Stack (6 m above building height) will be provided as per CPCB norms to the proposed DG sets of additionally 2 nos 500 kVA /1X1000 kVA in addition to the existing DG sets of 400 kVA which will be used as standby during power failure.

(xi) 3 boilers of 4 TPH will be installed. Multi cyclone separator/ bag filter with a stack of height of 30 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm^3) for Proposed Boilers.

(xii) Details of Process emissions generation for the proposed project and its management are as under:

S.No	**Stack Attached**	**Stack Height (m)**	**Stack Dia**	**Flow in Nm^3/h; /Temp in ^0C**	**Pollutants Concentration in mg/Nm^3**	**Remarks**
1	Boilers (3Nos each of 4 TPH capacity; Briquette/ LDO fired)	30 (Three Stacks)	700 mm (At Top)	7800/ 115	SPM<150 SO_2<50 NOx < 150	(Separate stacks for each boiler of 4TPH)
2	Process Stack Alkaline Scrubbers	10	0.3	~940/37	PM < 20 HBr< 05	Common stack for all alkaline scrubbers

3	Process Stack Water Scrubbers	30	0.3	~940/65	PM < 20 P_2O_5 (as H_3PO_4) < 10	Common stack for all acidic scrubbers

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

S. No	Type of Waste	Existing Qty /Annum	Proposed Qty/ annum	Total Qty/ Annum	Remarks
1	Used or Spent oil (cat. 5.1)	50 Ltrs or 0.05 KL	2 KL	2.05 KL	Sold to authorized processor.
2	Wastes or residue containing oil (Cat 5.2)	720 Kg/0.72 T	2 T	2.72 T	Sold to authorized processor.
4	Sludge containing residual pesticides (Cat. 29.2)	-	600 T	600 T	To TSDF site
7	Spent Acids (Cat. 29.6)	-	8500 T	8500 T	Sold to authorized processor.
8	Empty containers / barrels / liners contaminated with hazardous chemicals. / wastes (Cat. 33.1)	-	800 T	800 T	sold to authorized recyclers.
9	Contaminated Cotton rags or other cleaning materials (cat. 33.2)	-	10 T	10 T	To TSDF site
10	Chemical Sludge from Waste Water Treatment (cat. 35.3)	-	500 T	500 T	To TSDF site
11	Date expired and off-specifications pesticides (cat. 29.3)	-	50 T	50 T	To TSDF Site

(xiv) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 17th October, 2017.

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

Product	Existing (TPA)	Proposed (TPA)	Total (TPA)	Remarks
Methyl Bromide Formulation	4000 (98% MB-Formulation)	10,200	14,200	10,000 (Technical)+4200 (98% formulation)
Chloropicrin	0	10000	10000	-
Aluminum Phosphide	0	17,857	17,857	10,000 (Technical)+7857 (56% formulation)
Zinc Phosphide	0	17,857	17,857	10,000 (Technical)+7857 (56% formulation)
N-PROPYL BROMIDE	0	500	500	
ISO PROPYL BROMIDE	0	500	500	
VINYL BROMIDE	0	500	500	

2-CYNO 4-BROMOMETHYLBI-PHENYL	0	500	500	
TRIMETHYL SUIFOXONIUM BROMIDE	0	500	500	
ETHYLENE BROMIDE	0	500	500	
R&D	0	500	500	
BY PRODUCT				
H_3PO_4 (55-60%)	0	1656	1656	-
Sulphuric Acid (50%-55 %)	0	7160	7160	-
Sodium Bromide (15%-20%)	0	1500	1500	-
Caustic Solution 10%	0	7296	7296	-
HYDRO BROMIC ACID	0	617	617	

32.3.14.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Expansion of Pesticide Manufacturing Plant' from 4000 MTPA (formulation only) to 63414 MTPA (Formulation -19914 MTPA and Technical - 43500 MTPA) by M/s Intech Organics Limited (Erstwhile known as M/s Intech Pharma Pvt Ltd) in a total area of 107165.81 sqm at Khasra No.143, Village Biratiya Kalan, Tehsil Raipur, District Pali (Rajasthan).

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

The ToR for the project was granted on 15th June 2017 (for expansion from 4000 TPA to 59914 TPA), and amended on 11th September 2017 allowing further expansion up to 63414 TPA. Public hearing was conducted by the SPCB on 17th October, 2017.

Total estimated water requirement is 221.46 cum/day, which includes fresh water demand of 102.14 cum/day proposed to be met from surface water. Necessary permission in this regard was obtained from Water Resources Department, Jodhpur dated 4th October, 2017.

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

The unit is reported to be presently engaged in formulation of Methyl Bromide (98%) of capacity 4000 TPA, and thus not requiring prior EC under the EIA Notification, 2006. Consent to Operate for the same and one more pesticide namely, Chloropicrin has been obtained from Rajasthan PCB, which is presently valid up to 31st January, 2022. Further, although the unit has obtained Consent to Operate for 'Chloropicrin', yet the same has been mentioned as the proposed product seeking EC, which in itself defeats the intent of prior EC. The Committee desired that the Ministry may take a view on this specific issue to firm up the present industrial operations.

The ToR for the project and its amendment was granted in favour of M/s Intech Pharma Pvt Ltd. However, the EIA/EMP report was submitted in the name of M/s Intech Organics Limited and the presentation for environmental clearance was also made on behalf of M/s Intech Organics Limited. The project proponent informed that above change was duly communicated to the Ministry in time.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management, if any, shall be carried out as follows :*
  a) *Reactor shall be connected to chilled brine condenser system.*
  b) *Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
  c) *The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 98% recovery.*
  d) *Solvents shall be stored in a separate space specified with all safety measures.*
  e) *Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
  f) *Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
  g) *All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed* 102.14 *cum/day proposed to be met from surface water. 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. Storm water drain shall be passed through guard pond.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  a) *Metering and control of quantities of active ingredients to minimize waste.*
  b) *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
  c) *Use of automated filling to minimize spillage.*
  d) *Use of Close Feed system into batch reactors.*
  e) *Venting equipment through vapour recovery system.*
  f) *Use of high pressure hoses for equipment clearing to reduce wastewater generation.*

- *The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting held on* 17th October, 2017*shall be satisfactorily implemented.*
- *At least 5% of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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.*
- *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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions. Raw material storage should not exceed 15 days at any point of time.*
- *The energy sources for lighting purposes shall preferably be LED based. A minimum of 10-20% of the total power requirement for the industrial operations shall be met from non-conventional energy resources/solar supply.*

Agenda No.32.3.15

Bulk Drugs and Intermediates Manufacturing Unit by M/s Shree Kartikeya Kameshwari Industries at Plot No. E-12, Chincholi MIDC, Taluka Mohol, District Solapur (Maharashtra) - Reconsideration of Environmental Clearance

[IA/MH/IND2/50510/2016, J-11011/96/2016- IA II(I)]

32.3.15.1 The project proponent and their accredited consultant M/s Equinox Environments (I) Pvt Ltd, Kolhapur gave a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for setting up Bulk Drugs Manufacturing Plant by M/s Sree Kartikeya Kameshwari Industries (SKKI) at Plot No. E-12, Chincholi MIDC, Taluka, Mohol, District Solapur (Maharashtra).

(ii) All Synthetic Organic Chemicals Industry are listed at S.N. 5(f) of Schedule to the EIA Notification, 2006. As the project is located at 2.4 km from the boundary of Great Indian Bustard Sanctuary, the project is considered under Category 'A' and appraised at Central Level by Expert Appraisal Committee.

(iii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 8th meeting held during 26-27 May 2016 and recommended Terms of Reference (ToR) for the project. The ToR has been granted by Ministry vide letter dated 15th July, 2016.

(iv) The land area available for the project is 2.4 ha. It is proposed to develop green belt in an area of 0.88 ha out of total area of the project. The estimated project cost is Rs.5.28 crores. Total capital cost earmarked for pollution control measures for proposed project shall be Rs.230 lakhs and the recurring cost (operation and maintenance) will be about Rs.45 lakhs per annum.

(v) Total Employment will be for 100 persons as 50 skilled & 50 unskilled in proposed unit. It has been proposed to allocate Rs.27.12 lakhs @ 5.1% capital investment towards Corporate Social Responsibility. Great Indian Bustard (GIB) Sanctuary is located at 2.4 km from the project site. Sina river is flowing at 6 km in the South-west.

(vi) Ambient air quality monitoring was carried out at 7 locations during October 2016 to December 2016 and the baseline data indicates the ranges of concentrations as: PM_{10} (41.9 to 71.2 $\mu g/m^3$), $PM_{2.5}$ (12.3 to 20.2 $\mu g/m^3$), SO_2 (10.1 to 20.9 $\mu g/m^3$) and NOx (12 to 26.1$\mu g/m^3$). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.22 $\mu g/m^3$ with respect to PM_{10} and 0.434 $\mu g/m^3$ with respect to $PM_{2.5}$ and 55.7 $\mu g/m^3$ with respect to SOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(vii) Total water requirement in proposed project will be 208.68 m^3/day, out of which fresh water requirement shall be 120.3 m^3/day and remaining 88.38 is recycled water from treated water from ETP, distilled water from process and treated STP water. The fresh water requirement will be met from MIDC water Supply Scheme.

(viii) Effluent of 61.57 m^3/day comprising of Stream - I effluent of 49.57 CMD and Stream-II of 12 CMD. Effluent generated from proposed activities would be segregated in two different streams, viz. Stream – I (High COD & High TDS) and Stream – II (Low COD & Low TDS). The details with respect to effluents considered under Stream – I and Stream – II are as follows –

The Stream I effluent generated would be to the tune of 49.57 m^3/day. Same comprise of effluent from manufacturing operations viz. process effluent and washing. This effluent will be treated in an ETP comprising of Screen Chamber, OG Removal Tank, Equalization Tank, Flash Mixer, flocculator, Tube Settler, Holding Tank followed by Triple Effect Evaporator (TEE) and Agitated Thin Film Dryer (ATFD). The condensate from TEE to the tune of 48 cum/day would be forwarded to Stream II for treatment. Further salts from TEE would be forwarded to authorized reprocessor.

The Stream II effluents generated would be to the tune of 12 cum/day, MEE condensate from Stream I of 48 cum/day. Stream II effluent shall be contributed by DM back wash, boiler blow down, and cooling blow down. The same will be treated Screen Chamber, OG Removal Tank, Equalization Tank, Flash Mixer, Flocculator, Primary Tube Settler (PTS), MBBR Tank, Secondary Tube Settler (STS), Holding Tank, Sand and Carbon Filters and R.O. Unit & Sludge drying bed. The treated water from stream II of 42 M3 / Day would be recycled back for cooling make up. The RO reject 18 M3 / Day will be sent to MEE in Stream-I treatment thereby achieving Zero Liquid Discharge (ZLD).

(ix) Power requirement after proposed project will be -0.6 MW and will be met from Maharashtra State Electricity Board (MSEB). D.G.Sets 2 Nos. of 250 KVA each would be used only during power failure. Stack height of 3 M above roof would be provided to DG set as per CPCB norm.

(x) Details of Fuels for Boilers, TFH & DG Sets are as under:

S. No.	Description	Specifications		
		Steam Boiler	TFH	D.G. Sets (2 Nos.)

S. No.	Description	Specifications		
		Steam Boiler	**TFH**	**D.G. Sets (2 Nos.)**
1.	Capacity	5 TPH	8 lakh Kcal/h	250 kVA
2.	Fuel	Coal (Imported; low ash & sulphur)	Coal (Imported; low ash & sulphur)	HSD
3.	Fuel Quantity	30 TPD	5 TPD	60 Ltr. /h
4.	Calorific value of fuel	4300 Kcal/Kg	4300 Kcal/Kg	10,500 Kcal/Kg
5.	Ash content (%) of fuel	6-8%	6-8%	0.01%
6.	Sulphur content (%) of fuel	0.1-0.2%	0.1-0.2%	1%
7.	Material of construction	M.S.	M.S.	M.S.
8.	Shape	Round	Round	Round
9.	Height (AGL)	30 M	18 M	3 M
10.	Nature of pollutants likely to be present in the stack gases	PM_{10}, $PM_{2.5}$, SO_2, NOx	PM_{10}, $PM_{2.5}$, SO_2, NOx	SO_2
11.	Air Pollution Control Equipment	MDC followed by Bag Filter	MDC followed by Bag Filter	--

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

S. No.	Scrubber Connected to Reactor	Process Emission	Dia. of Column	Ht of Column	Packing Material used in Scrubber	Mode of regeneration of the packing material	Scrubbing Media	Disposal of Scrubbed Media
1.	Column 1	Nitric Acid	400 mm	21.5 M	Ceramic saddles	Water Wash	Water	Sale
2.	Column 2							
3.	Column 3							

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

S.No	Type of Waste	Quantity	Disposal
Solid Wastes			
1.	Boiler Ash	2 MT/Day	Sold to brick manufacturers for secondary use
2.	Scrap Material	60 MT /Y	By Sale as scrap
3.	Office Paper waste	1 MT/Y	
4.	Woven Sack Bag (HDFE)	0.50 MT/Y	
5.	Drums	450 Nos. /Y	
Hazardous Wastes			
1.	Cat.: 20.3 Distillation Residue	0.6 MT/M	CHWTSDF
2.	Cat.: 28.1; Process Residue (Un-reacted) & Waste	2.0 MT/Day	
3.	Cat.: 34.3; ETP Sludge	0.1 MT/ Day	
4.	Cat.:34.3; Salts generated from MEE	1.0 MT/Day	Sold to authorised reprocessor

(xiii) Public hearing is exempted as per para 7(i) III stage (3) (i) (b) of EIA Notification, 2006 for preparation of EIA/EMP Report, being site is located in the Notified industrial area.

(xiv) List of proposed products to be manufactured are as under:

S.No.	Product	Quantity (TPM)	Uses
1	Methyl 2- (4-(4-chlorobutanoyl phenyl)-2-methylpropanoate	15.01	Used in anti-allergic drugs
2	Nicotinic Acid Methyl Ester/Ethyl Ester	14.85	Used in Anti-allergic drugs
3	Pyridine-3-Carboxyamide (Niacin Amide)	105	Used as Vitamin B3, Cattle feed, and in Cosmetics
4	3-Pyridine Carboxylic Acid (NIACIN)	230.4	Used as Vitamin B3, Cattle Feed, in Cosmetics
5	4-Pyridine Carboxylic Acid (ISONIACIN)	15.36	Used in Anti-allergic drugs
6	2,3 Lutidine & 3,5 Lutidine	15	Used in Anti-ulcer drugs
	Total	**395.62**	

32.3.15.2 The proposal was last considered by the EAC in its meeting held during 28-29 August, 2017. During deliberations, the Committee noted that the project proponent has already taken up construction activities covering an area of nearly 5000 sqm against the total envisaged area of 9000 sqm with approval of the Maharashtra Industrial Development Corporation, and pursuant to the agreement dated 20th October, 2010 between the MIDC and the project proponent. As per the said agreement, the project proponent was required to submit the specification, plans, elevations, sections and details of the factory building within 60 months from the date or date of possession, whichever is earlier.

The Committee, after deliberations on the limited issue of construction already undertaken at the project site, decided for a status report in this regard from the Regional Office of this Ministry at Nagpur. The same was required to ascertain the violation of the EIA Notification, 2006, if any, for further consideration of the project.

In response to the above observations, site inspection was carried out by the Regional Office at Nagpur on 2nd November, 2017. The site inspection report has been forwarded by their letter dated 16th November, 2017. It has been informed that the MIDC has issued building completion certificate on 27th April, 2017 and certified that construction of built up area 5717.78 sqm has already been completed. However, no production activity was observed during site inspection. It was noted that only civil construction was initiated. Also, no equipment such as reactor, centrifuge, dryer, etc were seen at the project site.

32.3.15.3 *During deliberations, the EAC noted that the project related construction activities were already taken up, and completed covering an area of 5717.78 sqm. The proposal, thus, involves violation of the EIA Notification, 2006 and may not be the jurisdiction of the sectoral EAC for appraisal. The EAC, decided that the Ministry may take action on its observations for further action into the matter. The proposal, was therefore, deferred.*

Agenda No.32.3.16

Expansion of sterile Bluk Drug and intermediate manufacturing unit by M/s Auronext Pharma Ltdat Plot No. A 1128, RIICO Industrial area Phase III, Village Bhiwadi, Tehsil Tijara, District Alwar (Rajasthan) - Reconsideration of Environmental Clearance

[IA/RJ/IND2/34909/2014, (J-11011/284/2014-IA-II(I]

32.3.16.1 The project proponent and their accredited Consultant M/s Enkay Enviro Services Pvt.Ltd. made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for expansion of sterile Bulk Drug and its intermediate manufacturing unit- 46.2 TPA, Filling of Dry Powder Vials 30 Million & Lyophilized Vials 6 Million located at Plot no. A 1128, RIICO Industrial area Phase III, Village - Bhiwadi, Tehsil, Tijara, District- Alwar, Rajasthan by M/s Auronext Pharma Pvt Ltd**.**

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 26th EAC meeting held during 29-30 October 2014 and recommended Terms of Reference (ToR) for the Project. The ToR has been granted by Ministry vide letter No. J-11011/284/2014-IA II (I) dated 06.01.2015.

(iii) All Synthetic organic chemicals industry (dyes & dye intermediates; sterile bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates) are listed at S.N. 5 (f) of schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC)

(iv) Ministry has issued EC earlier Vide letter no. dated) J-11012/69/95-IA.II (I) dated 22/05/1996 unit to M/s. Dee Pharma. Application has been submitted to MOEF&CC on 24/02/2016 for transfer of EC in favour of Auronext Pharma Pvt Ltd 24/02/2016.

(v) Existing land area is 10112Sq.m. No additional land will be used for proposed expansion. Industry has already developed greenbelt in an area of 3337 Sqm, thus covering an area of 33% of the total project area.

(vi) The estimated project cost is Rs.101.51Crore including existing investment of Rs.61.51crores. Total capital cost earmarked for pollution control measures is Rs.259.0 lakhs and recurring cost (operation and maintenance) will be about 14.25 lakhs/annum. Total Employment will be 400 persons as direct & 30 persons indirect after expansion. It has been proposed to allocate Rs198 lakhs @ 5/2.5 % towards Corporate Social Responsibility.

(vii) As per Form-1, there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km of the project site. Indauri Nala is flowing at 5.66 km in the NE.

(viii) Ambient air quality monitoring was carried out at 6 locations during December 2014 to February 2015 and submitted baseline data indicates that ranges of concentrations of PM_{10} (51.9-90.4 µg/m^3), $PM_{2.5}$ (26.5-53.6 µg/m^3), SO_2 (5.1-9.7 µg/m^3) and NO_2 (18.9-35.6 µg/m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 0.6µg/m^3, 21µg/m^3 and 11.7µg/m^3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(ix) Total water requirement is 205 cum/day of which fresh water requirement of 100 cum/day and will be met from RIICO and ground water supply. Permission from RIICO and CGWA to be obtained. Total effluent generation will be 105 cum/day, out of which industrial effluent generation will be 80 cum/day and treated through ETP and thus achieving Zero Liquid Discharge.

(x) Power requirement after expansion will be 2500 kVA including existing 1525kVA and will be met from JVVNL. Existing unit has 2 DG sets of 500kVA capacity, additionally four D.G. set of 500 kVA or two of 1000 kVA or two of 500 kVA & one of 1000 kVA are used as standby during failure. Stack (height) will be provided as per CPCB norms to the proposed DG sets in addition to the existing sets which will be used as standby during power failure.

(xi) Existing unit has 2 TPH natural gas fired boiler. Wet scrubber with stack of height of 33 m will be installed for controlling the particulate (within statutory limit of 115 mg/Nm3) for Proposed 4 TPH oil fired (now planned to replace proposed Oil fired boiler with natural gas.) boiler respectively.

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

S. No.	Stack Attached to	Stack Height (m)	Pollutants Emitted	Air Pollution Control Measures Attached
Existing				
1	Boiler	33	-	-
2	DG set (500 x2 Nos)	10	PM, SOx,NOx,HC	-
Proposed				
2	Boiler	33	PM,SOx,NOx	Wet Scrubber
3	D.G.Set (500x4 Nos)	10	PM, SOx,NOx,HC	-

(xiii) ETP sludge, spent catalyst will be sent to UCCI. Spent oil, spent solvent and used batteries are sent to authorize recyclers. Organic waste and solvent distillation residue will be sent to Cement Industries. Used oil will be sent to SPCB authorized Recyclers/re-processor.

(xv) Details of Solid waste/ Hazardous waste generation and its management.

S. No.	Hazardous waste Description	Category as per HWMR rules	Qty generated /Annum	Unit	Method of disposal
1.	ETP sludge (Chemical sludge)	34.3	5	Ton	It will be sent to UCCI at Udaipur for proper treatment and disposal.
2.	Spent Oil & Used oil	5.1 & 5.2	1000	Lit	It will be disposed through authorized recyclers.
3.	Process residue and waste	28.1	1	Ton	It will be disposed in-house in process effluent treatment plant (Mixed with process effluent)
4.	Spent catalyst/carbon	28.2	3.6	Ton	It will be sent to UCCI at Udaipur for proper treatment and disposal.
5.	Off specification products/raw material	28.3	0.2	Ton	It will be sent to UCCI at Udaipur for proper treatment and disposal.
6.	Expiry drugs/medicines	28.4	0.25	Ton	It will be disposed in-house in process effluent treatment plant (Mixed with process effluent)
7.	Spent solvent	-	1500	Ton	It will be disposed/sale through authorized agency

S. No.	Hazardous waste Description	Category as per HWMR rules	Qty generated /Annum	Unit	Method of disposal
8.	Liner/Packing Material /glass vials	-	2	Ton	It will be sent to UCCI at Udaipur /for Inceneration for Proper treatment
9.	Lead Batteries waste	-	2	Ton	It will be disposed/sale through authorized agency
10	Electronic ,computer items	-	1	Ton	It will be disposed/sale through authorized agency
11	CFL/Led etc waste	-	1	Ton	It will be disposed/sale through authorized agency

(xiv) MOEF&CC Regional Office, Central Region Lucknow vide letter F No IV/ENV/R/IND-156/913/2016/1453 dated 04/03/2016 has certified the compliance report of the existing unit of Dee Parma Ltd

(xv) Public hearing was exempted by MOEF&CC vide letter No. J-11011/284/2014-IA II (I) dated 13th April ,2017

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

Existing product list

S. No.	Product	Quantity (TPA)
1	Ampiciline Sodium Sterite	38.40
2	Filling of Vials	30.00 Million Nos per annum

Products after expansion and their Capacities

S. No.	Product	Quantity (Kg/Year)
1a	Meropenem Trihydrate Sterile	24000
1b	Sodium Carbonate Sterile	4000
1(1a+1b)	Meropenem for injection (Sterile blend of Meropenem & Sodium Carboante)	28000
2a	Imipenem Monohydrate Sterile	7000
2b	Cilastatin Sodium Sterile	7200
2c	Sodium Bicarbonate Sterile	1000
2 (2a+2b+2c)	Imipenem & Cilastatin for Injection (Sterile Blend of Imipenem, Cilastatin Sodium & Sodium Bicrbonate)	15200
3.	Doripenem Monohydrate Sterile	3000
4.	Lyophiliz vials of Ertapenem for Injection	6 Million Vials
5.	Filling of vials of dry powder injection (Formulation)	30 Millions Vials

32.3.16.2 The proposal was earlier considered by the EAC in its meeting held during 23-25 January, 2017, and recommended for grant of environmental clearance with certain conditions. Subsequent to recommendations of the Committee, the Ministry, however, desired to have further clarification on the following:-

(a) Earlier Ministry had issued Environmental clearance vide letter no. 1012/69/1995-IAII(I) dated 22.05.1996 to M/s Dee Pharma. The project proponent has not carried out transfer of existing EC from M/s Dee Pharma to M/s Auronext Pharma Ltd.

(b) PP has applied under item 5 (f) i.e. Synthetic Organic chemicals of the schedule of EIA Notification, 2006, there are products for which EC is not required.

(c) ToR was granted on 6th January, 2015 with public hearing. However, EIA report was submitted on dated 22nd August, 2016 without conducted public hearing with the statement that site is located within industrial area. ToR amendment letter for exemption from public hearing was issued on dated 13th April, 2017 i.e. after the submission of EIA report.

(d) In the ToR letter it is mentioned that proposal is for expansion of drug formulation products however in the EIA report it is mentioned that proposal is for expansion of sterile bulk drug & its intermediated manufacturing unit- 46.2 TPA, filling of dry powder vials 30 Million and Lyophilised vials 6 million.

(e) PP has submitted the copy of certified compliance report issued by the Regional Office, MoEF&CC, Lucknow vide letter no. 1453 dated 4.03.2016, same is not discussed by the EAC.

(f) Ministry had given an additional ToR i.e. Permission from the State Forest Department regarding the impact of the proposed plant on the surrounding reserve forests. However, PP submitted the EIA report without compliance of ToR with the statement this additional ToR is not applicable.

(g) As per the EIA report, Furnace Oil fired boiler of capacity 4 TPH will be used. However, PP vide letter dated 28th December, 2016 submitted that they have planned to change the boiler fuel from Furnace Oil to Natural gas.

32.3.16.3 During deliberation EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Sterile Bulk Drug and intermediates manufacturing unit by M/s Auronext Pharma Ltd in a total area of 10112 sqm at Plot no. A 1128, RIICO Industrial area Phase III, Village Bhiwadi, Tehsil Tijara, District Alwar (Rajasthan).

The project proponent has applied for EC to the Ministry considering the project covered under category A of item 5(f) 'Synthetic Organic Chemicals Industry' of the Schedule to the Environment Impact Assessment Notification, 2006, for its appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 6th January, 2015 followed by amendment on 13th April, 2017 with exemption of public hearing.

32.3.16.4 *The EAC, after deliberations, observed that the project doesn't involve any synthesis, but formulation and packaging only. The Committee further noted that neither the existing products nor the proposed ones are covered under the ambit of the EIA Notification, 2006 (Bulk drugs and intermediates), and thus may not be requiring prior environmental clearance.*

The Committee also desired that based on its recommendations, the Ministry may take a considered view on the subject matter, if so required, to arrive at a logical conclusion.

Agenda No.32.3.17

Expansion-cum-modernization of sugar from 4800 to 8000 TCD along with co-generation from 22 MW to 45 MW and distillery from 30 KLPD to 95 KLPD by M/s Sar Senapati Santaji Ghorpade Sugar Factory Ltd at Village Dhamane & Belewadi Kalamma, Taluka Kagal, District Kolhapur (Maharashtra) - Reconsideration of Environmental Clearance

[IA/MH/IND2/69827/2017, IA-J-11011/45/2017-IA-II(I)]

32.3.17.1 The project proponent and the accredited consultant M/s SMS Envocare Limited made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for Expansion cum modernization of sugar from 4800 to 8000 TCD along with cogeneration expansion from 22 MW to 45 MW and distillery from 30 KLPD to 95 KLPD and located at G. No. 284, 285, 287, 288, 281 (P), 280 (P), & 283 (P) of village Dhamane & 449, 454, 456, 457, 458, 460, 462, 464, 465 (P), 466, 467, 469, 470, 471 village Belewadi Kalamma, Taluka Kagal, District Kolhapur, Maharashtra.

(ii) All Molasses based distillery are listed at S.N.5 (g) (i) of Schedule of Environment Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iii) The project proposal was considered by the Expert Appraisal Committee (Industry- 2) in its 20th EAC meeting held during 27th February, 2017 and recommended Terms of Reference (ToR) for the Project. The ToR has been granted by Ministry vide letter dated 26th May, 2017.

(iv) Ministry had earlier issued EC earlier vide letter No. J-11011/268/2012- IA II (I) dated 24th December, 2014 for Distillery (30 KLPD), Cogeneration power plant (22MW) and Sugar 3500TCD unit to Sar Senapati Santaji Ghorpade Sugar Factory Ltd.

(v) Existing land area is 85 acres, 15 acres land will be used for proposed expansion. Industry has developed green belt in an area of 27 acres and additionally 1-2 acres will be developed out of 85 acres of area of the project. There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wild life Corridors etc. within 10 km from the project site. Chikotra river is flowing at 1.16 km in the West.

(vi) The estimated project cost is Rs.176.79 Cr. Total capital cost earmarked for pollution control measures is Rs.19.0 cr. and the recurring cost (operation and maintenance) will be about Rs.36.8 lakh per annum. Total Employment will be for 80-100 persons as direct & 80-100 persons indirect after expansion. It has been proposed to allocate Rs.3.0 Cr. @ 2.5 % towards Corporate Social Responsibility.

(vii) Ambient air quality monitoring was carried out at ten locations during March 2017 to May 2017 and the baseline data indicates the ranges of concentrations as: PM_{10} (40.3 to 71.7µg/m^3), $PM_{2.5}$ (17.2 to 49.2µg/m^3), SO_2(4.8 to 19.2 µg/m^3) and NO_2(13.9 to 29.2µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.05 µg/m^3, 5.33 µg/m^3 and 2.28 µg/m^3 with respect to PM_{10}, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(viii) Total water requirement is 1918 CMD, of water which fresh water requirement of 870 CMD will be met from Chikotra project water supply. Effluent of process condensate will be treated through Condensate Polishing Unit and thus achieving Zero Liquid Discharge.

(ix) Power requirement after expansion will be 2595 kWh including existing 2500 kwh and will be met from in-house 20 TPH Boiler.

(x) Existing unit has 120 TPH Bagasse, 10 TPH Coal and spent wash fired boiler and proposed 120 TPH Bagasse, 20 TPH Coal and spent wash fired boiler will be installed. ESP with a stack of height of 85 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm^3)

(xi) The process emissions likely to be generated for manufacturing of ENA/ TA will be from various process like CO_2, VOC, and alcohol vapor VOC, alcohol Vapor and Odor. Spent wash from evaporation would be in a closed tank and directly send to the incineration in boiler. No bio-methanization will be adopted. Fermentation unit will be provided with proper cover to avoid the spread of odor and regular steaming of all fermentation equipment's; temperature will be kept under control during fermentation to avoid inactivation/killing of yeast; staling of fermented wash would also be avoided.

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

S. No.	Type of waste	Quantity		Disposal
		Existing	Proposed	
1.	Press mud	192 TPD	320 TPD	Press mud will be sold to the farmer as manure.
2.	Yeast sludge	3 TPD	6.5 TPD	Sludge (Yeast and ETP) will be dried and used as fertilizer or it will be incinerated along with spent wash in the boiler.
3.	ETP sludge	0.025 TPD	0.04 TPD	
4.	Ash	From Spent wash: 9-10 From Coal: 7.5 TPD Bagasse ash: 20-22 TPD	From Spent wash: 20 TPD From Coal: 16.5 TPD Bagasse ash: 20-22 TPD	Coal ash and bagasse ash (partly) will be send to brick manufacturer, bagasse ash will be sold to farmer as manure.
5.	Domestic	Negligible	Negligible	Local waste collection system
6.	Spent oil	Negligible	Negligible	Authorized recycler

(xiii) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 23thAugust, 2017.

(xiv) Certified compliance report from Regional Office Nagpur issued vide letter dated 20th November, 2017 is submitted.

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

Product	Existing	Total Proposed
Cane crushing	4800 TCD	8000 TCD
Sugar	600 TPD (12.05 % cane)	1000
Bagasse	1368 TPD	2280 TPD
Molasses(4.0% on cane)	192	320 TPD
Press mud(4 % on cane)	192 TPD	320 TPD

Power generation	22 MW	45 MW
Pure Rectified Spirit/ Impure Spirit/ENA (One at a time)	30.0 KLPD	95 KLPD

32.3.17.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for 'Expansion and Modernization of Sugar Unit from 4800 to 8000 TCD, Cogeneration power plant from 22 MW to 45 MW and Molasses based Distillery unit from 30 KLPD to 95 KLPD' by M/s Sar Senapati Santaji Ghorpade Sugar Factory Ltd in the existing total land area of 85 acres at G. No. 284, 285, 287, 288, 281 (P), 280 (P), & 283 (P) of Village Dhamane & 449, 454, 456, 457, 458, 460, 462, 464, 465 (P), 466, 467, 469, 470, 471 of Village Belewadi Kalamma, Taluka Kagal, District Kolhapur (Maharashtra).

The project/activity is covered under category A of item 5(g) 'Distillery', 5 (j) 'Sugar Industry' & 1(d) 'Thermal Power Plants' of the Schedule to Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 26thMay, 2017, and the public hearing was conducted by the SPCB on 23thAugust, 2017.

The total water requirement is estimated as 1918 cum/day, of which fresh water demand of 870 cum/day is proposed to be from Chikotra project water supply. Remaining shall be fulfilled through recycled/treated water. However, there was no clarity in the water balance for the individual units and integrated plant as well. Also, there was no justification for higher fresh water demand, especially in respect of distillery. The water balance and the related details need complete revision to arrive at the norms for fresh water requirement vis-à-vis the generation of alcohol (6 kl of fresh water per kl of alcohol). The details in respect of effluent generation and disposal were also found lacking in the proposal.

Earlier, the Ministry had issued environmental clearance on 24th December, 2014 for setting up 'Distillery (30 KLPD), Cogeneration power plant (22MW) and Sugar (3500TCD)' manufacturing unit. The monitoring report on compliance status of EC conditions (site visit carried on 3rd November, 2017) forwarded by the Ministry's Regional Office at Nagpur, vide letter dated 20.11.2017 was found to be satisfactory.

Consent to Operate for the existing 'Sugar Unit (4800 TCD) & CPP of 22 MW' and for Distillery unit of 30 KLPD has been obtained from the State Pollution Control Board, with their validity up to 31st July, 2018 & 31st August, 2018.

32.3.17.3 *The EAC, after deliberations, insisted for revised details in respect of water requirement, waste water generation and disposal, to examine the proposal in complete perspective. The Committee also asked for the public hearing details to be tabulated along with their response on each of the issued raised during public hearing.*

The proposal was, therefore, not taken forward for want of relevant details on the above lines.

Agenda No.32.3.18

Expansion of Resin manufacturing unit by M/s Century Plyboards at S.F Nos.176B/4, 181, 182/1, 182/2, in Village Chinna Obulapuram, Taluka Gummidipoondi, District Thiruvallur (Tamil Nadu) - Environmental Clearance

[IA/TN/IND2/27626/2015, J-11011/125/2015-IA-II(I)]

32.3.18.1 The project proponent and their accredited consultant M/s ABC Techno Labs India Private Limited, Chennai made a detailed presentation on the salient on the salient features of the project and informed that:

(i) The proposal is for expansion of Resin Manufacturing Unit from 100 TPM to 1700 TPM by M/s Century Plyboards at S.F nos. 176B/4, 181, 182/1, 182/2, etc at Village Chinna Obulapuram, Taluka Gummidipoondi, District Thiruvallur (Tamil Nadu).

(ii) The proposal is classified as Schedule 5(f) of the Environment Impact Assessment (EIA) Notification, 2006 under Category 'A' and are appraised at Central Level by Sectoral Expert Appraisal Committee (EAC) in the Ministry.

(iii) The project proposal was considered by the Expert Appraisal Committee (Industry II) in its 42nd EAC meeting held during 17thJune, 2015 and recommended the Terms of References (ToR) for the project. ToR was granted by the Ministry vide Letter dated 29.07.2015.

(iv) The plant was established in 1988. The existing plant was established after obtaining valid consent orders from TNPCB.

(v) Existing land area is 16.39 acres and for the proposed expansion the additional land (6 acres-approx.) required has been purchased adjacent to the site and will be used for setting storage facilities & landscaping. It is proposed to develop greenbelt in an area of 7.4 acres, and thus covering 33% of the total project area.

(vi) The estimated project cost is Rs.5500 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs.85, 00,000 and the recurring cost (operation and maintenance) will be about Rs.24, 05,000 per annum. Total Employment will be for 100 workers in construction phase and 1550 persons in operational phase. It has been proposed to allocate 2.5% cost of their annual net profit to towards Corporate Social Responsibility.

(vii) Pulicat Lake Bird sanctuary is located within 10 km distance from the project site. NBWL clearance for the same is under process (FP/TN/IND/1579/2017). The application was cleared by PCCF and now presently pending with state Board for Wildlife (SBWL). Pulicat Lake is at a distance of 6.4 km in the North East direction.

(viii) Ambient air quality monitoring was carried out during April 2015 to June 2015 and the baseline data indicates the ranges of concentrations as: PM_{10} (42.1 – 58.5 µg/m^3), $PM_{2.5}$ (18.5 – 28.3 µg/m^3), SO_2 (6.5 – 10.3 µg/m^3) and NO_x (10.4 – 16.8 µg/m^3). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(ix) Total water requirement is 80 m^3/day and will be met from bore well. Ground water clearance for the same is obtained. Total domestic effluent of 48 cum/day will be treated through STP of adequate capacity. Treated water will be used for landscaping, thus ensuring Zero Liquid Discharge.

(x) Power requirement will be 6000 kVA including existing 1975 kVA proposed to be met through existing power supply from TANGEDCO. Existing unit has DG sets of 125kVA (5 No's) &180kVA (2 No's) during expansion 125kVA DG sets (2 No's) will be removed and additional DG set with capacity of 600kVA (4 No's), 365kVA (1 No), 200kVA (1 No), 250 kVA (1 No) & 180 kVA (1 No) will be provided to supply power during power failure. Stack height will be provided as per CPCB norms to the DG sets.

(xi) Currently three nos. of TFH are used in the process stream. For the expansion, one combined Hot air generator of capacity 75Lkcal (equivalent to 8.7 MW) and Thermic Fluid

Heater 55 LKcal (equivalent to 6.4MW) will be installed. Bag filters and multi cyclones will be provided to control emissions prior to discharge Process emissions generation and its management.

(xii) There will be no emission from the Reaction Kettle processes. Vapours generated from the reactors will be condensed & recycled completely for resin manufacturing. The rate of recovery of is around 99.9 %. Further the effluent is completely reused in the process and the plant operates on a ZLD process.

(xiii) The entire generation of solid waste from the process is used as fuel for Thermic Fluid Heater. 0.4 TPM of MSW will be generated. This waste will be Disposed through Local body. 0.1 TPM of spent oil will be generated. It will be handed over to CPCB authorized hazardous waste recycler. 0.6 TPM of residue from the vessel washing collection tank will be generated. It will be sent to TSDF facility authorized by Tamil Nadu Pollution Control Board (TNPCB).

(xiv) Public Hearing for the proposed expansion project has been conducted by the Tamil Nadu Pollution Control Board on 21st February, 2017.

(xv) The list existing and proposed facilities and products are as under:

S.No	Product	Existing (TPM)	Additional (TPM)	Total (TPM)
Wood products				
1	Plywood & veneer	1500	3700	5200
2	Pre-laminated boards (PB & MDF)	--	3500	3500
3	Plain particle boards	--	3500	3500
Resins				
1	Combined resin production	100(PF, UMF, MUF MF & UF)*	1600(PF, UMF, MUF MF & UF)*	1700

** PF – Phenol Formaldehyde, UMF – Urea Melamine Formaldehyde, MUF – Melamine Urea Formaldehyde, UF – Urea Formaldehyde, MF – Melamine Formaldehyde*

32.3.18.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for 'Expansion of Resin Manufacturing Unit' from 100 TPM to 1700 TPM by M/s Century Plyboards (I) Ltd in a total area of 22.39 ha at S.F nos. 176B/4, 181, 182/1, 182/2, etc at Village Chinna Obulapuram, Taluka Gummidipoondi, District Thiruvallur (Tamil Nadu).

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

The ToR for the project was granted on 29th July, 2015, and the public hearing was conducted by the SPCB on 21st February, 2017.

Total water requirement was earlier estimated as 80 cum/day, but now proposed to be brought down to 65 cum/day to be met from bore well. It was informed that the required permission from the State Ground & Surface Water Resource Data Centre under the CGWA has been obtained. However, no records/document in this regard was made available. Total domestic effluent of 48

cum/day will be treated through STP of adequate capacity. Treated water will be used for landscaping, thus ensuring Zero Liquid Discharge.

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

The project proponent has submitted application for obtaining clearance from the wildlife angle with State Forest Department vide letter dated 31st March, 2017.

The project is reported to be established in the year 1988 i.e. prior to issue of the EIA Notification, 1994, and as such, there is no requirement of prior EC. In support of their submission in this regard, the project proponent has submitted Consent order dated 5th May, 1988 issued by SPCB.

Consent to Operate for the existing resin manufacturing Unit (100 TPM) has been obtained from the State Pollution Control Board vide letter dated 6th May, 2017, which is presently valid up to 31st March, 2019.

32.3.18.3 *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 implies that Wildlife Clearance shall be granted to the project and that their proposals for Wildlife Clearance will be considered by the respective authorities on their merits and decision taken.*
- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Total fresh water requirement shall not exceed* 65 cum*/day to be met from* bore well*. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  (a) Metering and control of quantities of active ingredients to minimize waste.
  (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.

(c) Use of automated filling to minimize spillage.
(d) Use of Close Feed system into batch reactors.
(e) Venting equipment through vapour recovery system.
(f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

- *The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitments made regarding issues raised during the public hearing/consultation meeting held* 21st February, 2017 *shall be satisfactorily implemented.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24X7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*
- *There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.*
- *Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions. Raw material storage should not exceed 6 days at any point of time.*
- *The energy sources for lighting purposes shall preferably be LED based. A minimum of 10-20% of the total power requirement for the industrial operations shall be met from non-conventional energy resources/solar supply.*

Agenda No.32.3.19

Expansion and modification of pharmaceutical unit by M/s Hikal Limited at Plot No.82/A, 83-P, 83-P1 & 72, KIADB Industrial Area, Jigani, AnekalTaluk, Bangalore Urban (Karnataka) - Environmental clearance

[IA/KA/IND2/60368/2016, J- 11011/374/2016-IA.II(I)]

32.3.19.1 The project proponent and the accredited consultant M/s En-vision Enviro Technologies Pvt Ltd, gave a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for environmental clearance to the project 'Expansion and Modification of Pharmaceutical unit' (1388TPA to 4827.3TPA) at Plot No, 82/A, 83-P, 83-P1 & 72, KIADB Industrial Area, Jigani, AnekalTaluk, Bangalore Urban (Karnataka) by M/s Hikal Limited.

(ii) All Synthetic Organic Chemicals Industry are listed at S.N 5(f) of Schedule to the Environment Impact Assessment (EIA) Notification, 2006. Due to the applicability of General

condition (project site located within 5 km of Banneraghatta National park), the proposal is considered under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 18thmeeting held during 23 - 25 January 2017 and recommended Terms of References (ToRs) for the Project. The ToR has been granted by Ministry vide letter dated 28th March, 2016.

(iv) The existing land area is 72,155 m^2, no additional land will be acquired for proposed expansion project. It is proposed to develop greenbelt in an area of 24130.92 m^2, thus covering 34% of the total project area. Banneraghatta National Park is located at 4.8 km from the Project site.

(v) The estimated project cost is Rs.80 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs.8 crores and the recurring cost (operation and maintenance) will be about Rs.75 Lakhs per annum.Total Employment will be for 700 persons as direct & indirect after expansion. It has been proposed to allocate 2.5 % towards Corporate Social Responsibility.

(vi) Ambient air quality monitoring was carried out at 8 locations during April 2017 to June 2017 and the baseline data indicates the ranges of concentrations as PM_{10} (70.6- 94.6 µg/m^3), $PM_{2.5}$ (22.20– 35.16 µg/m^3), SO_2 (5.25 – 20.4 µg/m^3) and NO_2 (17.30–31.45 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion of the project would be 1.01 µg/m^3, 1.72 µg/m^3 and 0.63 µg/m^3 with respect to PM_{10}, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(vii) Total water consumption including fresh and treated water through ETP is 1158 KLD and around 419 KLD shall be reused for cooling tower makeup water, 138 KLD towards boiler feed, and will be met from KIADB supply.

(viii) Total industrial High TDS effluent of 95 KLD and Low TDS effluent of 355 KLD shall be treated through ETP consisting of 2 stage RO followed by ATFD and MEE and thus, ensuring Zero Liquid Discharge.

(ix) Power requirement after expansion will be 4000 kVA including existing and will be met from BESSCOM. DG set of 1500 kVA, 750 kVA, 275 kVA, 1750 kVA, capacity shall be used as stand by during power failure. Stack will be provided as per CPCB norms to the proposed D.G. set of 2000 kVA which will be used as standby during power failure.

(x) Existing unit has 1 No. of 2.8TPH of boiler, 2 X 6.3 TPH boiler, 2 lakh Kcal TFH, process emission from the all the reactors, 14 ton/h boiler, the proposed process emission from 8 no's of reactors.

(xi) Details of process emissions generation and its management are as under:

Chimney No	**Chimney attached to**	**Constituents to be controlled in the emission**	**Tolerance limits mg/Nm^3**	**Air pollution Control equipment to be installed**
	Existing Air pollution Sources and control equipment's			
1	2.8 TPH Boiler	SO2	-	30.5 m AGL

2	6.3 TPH Boiler	SO_2	-	38 m AGL
3	6.3 TPH Boiler & 2 lakh K. Cal Thermic Fluid Heater	SO_2	-	Common chimney of 38 m AGL
4	Process emissions from all the reactors- 7 Nos.	Acid Mist SO_2	35 -	Individual chimneys of 38 m AGL
5	DG Set - 750 kVA	SO_2	-	C16 m AC with Acoustic Enclosures
6	DG Set - 1500 kVA	SO_2	-	30 m AGL with Acoustic Enclosures
7	DG Set - 275 kVA	SO_2	-	6 m ARL with Acoustic Enclosures
8	Boiler-14 MT/h (Briquette fired)	SO_2	-	35 in AGL with ESP

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

Solid waste

S. No	**Type of waste**	**Quantity**			**Method of handling/disposal**
		Existing	**Proposed**	**Total**	
1	General office waste	8TPA	8TPA	16 TPA	Shall be stored in accordance to KSPCB Guidelines and disposed to authorized scrap dealers
2	Non-contaminated carboys & glasses	5000 Nos /A 1.0 MT/A	7000 Nos/A 1.0 MT/A	12000 Nos/A 2 MT/A	
3	Wood Packings	24 TPA	40 TPA	64 TPA	
4	Sludge from STP	7.2 TPA	5.8 TPA	13 TPA	
5	Non contaminated plastic waste	20 MT/A	25 TPA	45 TPA	
6	Aprons –Cloth waste	0.5 TPA	1.0 TPA	1.5 TPA	
7	Glass wears	0.5 TPA	2.0 TPA	2.5 TPA	
8	Briquette Boiler Ash	2592 TPA	------	2592 TPA	Shall be stored in accordance to KSPCB guidelines and disposed to Bricks & Compost manufacturers

Hazardous waste

S. No.	**Type**	**Category**	**Quantity /Year**		**Total**	**Method of Disposal**
			Existing	**Proposed**		
1	Used oil	5.1	2KL/A	4KL/A	6KL/A	Shall be collected in a leak proof containers & disposed only to KSPCB registered authorized re-processors provided the oil meets the standards as per schedule-5 part A of the rules

2	Oil soaked cotton waste Oil filters	5.2	0.2MT/A 30Nos /A	0.4MT/A 60Nos /A	0.6MT/A 90Nos /A	Shall be store in a secured manner & handed over to KSPCB authorized incinerators / co-processing in cement kiln
3	Spent carbon, fly flow mixtures & Carbon soot	28.2	72.5MT/A	145 MT/A	217.5 MT/A	shall be store in a secured manner & handed over to KSPCB authorized incinerators / co-processing in cement kiln
4	Spent solvent & Mixed solvents from process	28.5	241MT/A	6527 MT/A	6768 MT/A	Shall be store in a secured manner and reprocessed back using environmental sound technology / KSPCB authorized recyclers / End users.
5	Discarded containers	33.3	11.7 MT/A	54.4 Nos /A	62.1 MT/A	Shall be store in a secured manner and handed over to KSPCB authorized recyclers after wash only

(xiii) Public Hearing for the proposed project was being the project located in notified industrial area.

(xiv) Earlier environmental clearance was obtained from SEIAA vide letter no. SEIAA 14 IND 2007 dated 18th June 2008 and the certified compliance report from Regional Office Bangalore has been submitted (date of site visit 30th March, 2017).

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

S. No	Product	Existing (TPA)	Proposed (TPA)	Total (TPA)
1	GABAPENTIN	700	1300	2000
2	BURPROPION HCL	50	25	75
3	CINNARIZENE	5	15	20
4	ONDANSETRON HCL	1	--	1
5	ACEBUTALOL - HCL	15	--	15
6	P- BENZOXY ANILINE HCL	40	--	40
7	ONDANSETRON API	1	--	1
8	OXYPENTIFYLLINE	5	70	75
9	TRIPOLIDINE - HCL	4	--	4
10	GEMFIBROZIL	300	(- 120)	180
11	DECOQUINATE	75	200	275
12	LEVETIRACETAM	10	--	10
13	VERAPAMIL	20	--	20
14	VALPROIC ACID	50	--	50
15	SODIUM VALPROATE	50	--	50
16	DI-VALPROEX SODIUM	20	--	20
17	MAGNESIUM VALPROATE	20	--	10

18	TOPIRAMATE	20	--	20
19	T-LUCINE	12		12
20	FLUNARAZINE	--	12	12
21	VENLAFLAXINE HCl	--	40	40
22	NEOTAME	--	50	50
23	PIRACETAM	--	650	650
24	ETIRACETAM FRESH	--	500	500
25	ETIRACETAM RACEMIC	--	150	150
26	TPCA.HCL	--	10	10
27	CMMDT	--	10	10
28	TRI-FLUROMETHYL CINNAMIC ACID	--	10	10
29	MEMANTINE HCl	--	10	10
30	PIPERAZINENITRO HCl	--	50	50
31	SEVELAMER CARBONATE	--	100	100
32	COLESEVALAM HYDROCHLORIDE	--	100	100
33	PREGABLIN	--	100	100
34	SITAGLIPTIN	--	10	10
35	VILDAGLIPTIN	--	10	10
36	LACOSAMIDE	--	20	20
37	VALOCYCLOVIR HYDROCHLORIDE	--	50	50
38	OLMESARTAN	--	10	10
39	DONEPEZIL HYDROCHLORIDE DIHYDRATE	--	2	2
40	QUETIAPINE FUMURATE	--	40	40
41	PRASUGREL (TPPO)	--	10	10
42	BUTRAPHANOL	--	0.3	0.3
43	METHIMAZOLE	--	5	5

By -Products

S. No.	By Product	Quantity (TPA)	Disposal
1	Spent Potassium carbonate	54.5	Sale
2	Palladium Carbon catalyst	4.6	Returned to the supplier
3	Raney Nickle Catalyst	28.8	Returned to supplier
4	Aqueous Ammonia	1389.31	Sale
5	Sodium sulphate	8.7	TSDF/ sale
6	Sodium bicarbonate	7.4	TSDF/ sale
7	NaCl Salts from Gabapentine	3572.0	TSDF/ sale
8	Gaba lactum	1557.1	Internal consumption
	Total Generation	6622.4	
1	Recovered solvents	68406.3	Internal consumption/ Sale
	Total Generation	75028.7	

32.3.19. During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion and modification of Pharmaceutical unit from 1388 TPA (19 No. of products) to 4827.3 TPA (43 No. of products) by M/s Hikal Limited in a total area of 72,155 sqm at Plot No, 82/A, 83-P, 83-P1 & 72, KIADB Industrial Area, Jigani, Anekal Taluk, Bangalore Urban (Karnataka).

The project/activity is covered under Category B of item 5(f) 'Synthetic Organic Chemicals Industry' of the Schedule to the Environment Impact Assessment Notification, 2006. However, due to applicability of general condition (within 5 km of Banneraghatta National park), the project requires appraisal at central level by the sectoral EAC in the Ministry.

The SEIAA vide letter dated 28th April, 2017 has informed the project proponent that the project attracts the general condition, as it is located at a distance of 4.8 km from the Banneraghatta National park and rejected for consideration at SEAC/SEIAA level.

The ToR for the project was granted on 28th March, 2016, exempting public hearing as per Section 7(i), III. Stage (3), Para (i)(b) of EIA Notification, 2006.

The total water requirement is 1891 cum/day, of which fresh water requirement of 1158 cum/day will be met from KIADB supply. It is informed that permission has been obtained in this regard from the concerned regulatory authority. Total industrial High TDS effluent of 95 cum/day and Low TDS effluent of 355 cum/day shall be treated in the ETP, thus ensuring Zero Liquid Discharge.

The project proponent has submitted application for obtaining clearance from the wildlife angle with State Forest Department vide letter dated 11th April, 2017.

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

Earlier, SEIAA had issued environmental clearance on 18th June, 2008 for the present industrial operations of production capacity 1388 TPA. The monitoring report on compliance status of EC conditions (site visit carried on 30th March, 2017) forwarded by the Ministry's Regional Office at Bangalore, vide letter dated 5th May, 2017 was found to be satisfactory.

Consent to Operate has been obtained from the State Pollution Control Board vide letter dated 25thMay, 2015, which is presently valid up to 30th June, 2021.

32.3.19.3 *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 implies that Wildlife Clearance shall be granted to the project and that their proposals for Wildlife Clearance will be considered by the respective authorities on their merits and decision taken.*
- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*

- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Total fresh water requirement shall not exceed* 1158 cum*/day, to be met from* KIADB water supply*. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams, as applicable. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP and then passed through RO system.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *The company shall undertake waste minimization measures as below:-*
  (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 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *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.*
- *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.*
- *The energy sources for lighting purposes shall preferably be LED based. A minimum of 10-20% of the total power requirement for the industrial operations shall be met from non-conventional energy resources/solar supply.*

32.4 Terms of Reference

Agenda No.32.4.1

Offshore Oil & Gas development/drilling and production from 8 wells in Western Offshore Block MB/OSDF/B80/2016 in Mumbai Offshore by M/s Hindustan Oil Exploration Company Ltd - Terms of Reference

[IA/MH/IND2/70980/2017, IA-J-11011/543/2017-IA-II(I)]

32.4.1.1 The project proponent made a detailed presentation on the proposal and informed that:

(i) The proposal is for terms of reference for 'Offshore Oil & Gas drilling/development and production from 8 wells' in Western Offshore Block MB/OSDF/B80/2016 by M/s Hindustan Oil Exploration Company Ltd in Mumbai City (Maharashtra). The activity will be carried out in B-80 Field, located off the west coast of India in the Arabian Sea, at a distance of about 110 km from Mumbai City. It lies to the South of Mukta field MB/OSDF/B80/2016.

(ii) All offshore and onshore oil and gas exploration, development and production Oil & gas transportation pipeline are listed at S.N 1(b) and 6 (a) of Schedule to the Environment Impact Assessment (EIA)Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iii) The proposed project involves re-entry and completion and hook-up of existing 3 wells B80-1, B80-2 and B80-4ST and drilling of 6 new development wells and connect them to the proposed production platform (Mobile Offshore Production Unit – MOPU) and evacuating the oil and gas through existing subsea pipeline of ONGC in the offshore Block B-80 of Heera-Panna-Bassein.

(iv) Drilling is a temporary activity which will continue for about 45-60 days for each well in the block. The rigs are self-contained for all routine jobs. The initial part of the well or top hole will be drilled and then lined with metal casing, which is cemented in place. The drilling will be continued with a smaller bit to create a hole of smaller diameter, which will then be cased and cemented with metal casing. The operation will be continued in this way till the reservoir is reached. Once the drilling operations are completed the Jack-up rig will be demobilised from the Block.

(v) No land is required for the project as this is an offshore project. The estimated capital cost of the project is Rs.280 crores. Total capital cost earmarked for pollution control measures is Rs. 50 lakhs. Total Employment will be 20 persons as direct & 75 persons indirect during the project and 15 persons as direct and 30 persons indirect during production phase.

(vi) The project location didn't involve any National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc.

(vii) Total water requirement is ~69.15 m^3/day of which fresh water requirement of 14.m^3/day. Water will be procured from town through supply vessels or produced on board from a desalination plant.

(viii) The drill cuttings cut by the drill bit, will be removed from the fluid by the shale shakers (vibrating screens) and centrifuges of the Rig and transferred to the cuttings containment area. Once the drilling fluid / mud have been cleaned, it will be returned to the fluid tank and pumped down the drill string again.

(ix) General wastes, scrap metal and wood will be segregated and brought back to the shore for appropriate disposal. Waste lubricants and hydraulic oils generated from the equipment onboard will be brought back to the shore in a drum and disposed off to authorized waste recyclers. Sewage treatment plant designed to meet the MARPOL regulation exist in every drilling rig.

(x) Diesel Generator (3 to 6) of total 5000 HP/3750KW, 4 DG sets will be working during operation while other 2 DG sets will be kept standby. Total Fuel Consumption per day would be 6 to 9 KL depending upon the power requirement.

32.4.1.2 During deliberations, the EAC noted that the proposal is for terms of reference to the project 'Offshore oil & gas drilling/development and production from 8 wells' in Western Offshore Block MB/OSDF/B80/2016 of Heera Panna Bassein in Arabian Sea promoted by M/s Hindustan Oil Exploration Company Ltd.

32.4.1.3 *The EAC, after deliberations, recommended the project for grant of terms of reference for preparation of EIA/EMP reports to enable consideration of the proposal for environmental clearance. The scope of the work/study shall include the standard ToR specified/notified applicable for such project/activity. Public consultation is exempted as the proposed activities would be taken up offshore.*

Agenda No.32.4.2

Onshore Oil & Gas production facility [Group Gathering Station (GGS-IV)] by M/s ONGC Ltd at Gamij, Kheda (Gujarat) - Terms of Reference

[IA/GJ/IND2/68104/2017, IA-J-11011/454/2017-IA-II(I)]

32.4.2.1 The project proponent made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for terms of reference for Onshore Oil & Gas production facility [Group Gathering Station (GGS-IV)] at Gamij by M/s ONGC and located at Kheda (Gujarat).

(ii) All Offshore and Onshore Oil & Gas Exploration, Development & Production are listed at S.N. 1(b) of Schedule to the Environment Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iii) Existing land area acquired is 74,648 sqm. The estimated project cost is Rs.27.91 Crores. There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km of the project site. Vatrak is flowing at 10 km in the West.

(iv) Total fresh water requirement is 5 m^3/day and shall be met from bore well. Power requirement will be 72,000 Kwh/month and will be met from State Electricity Board., additionally 125 kVA DG set shall be kept as standby during power failure. Stack will be provided as per CPCB norms to the proposed DG set.

(v) Gaseous emissions from DG sets, bath heaters, heater treaters and flare stack are disposed of through elevated stacks of appropriate heights. Ambient air/stack quality monitoring shall be done on quarterly basis by the NABL/SPCB approved third party.

(vi) Oil soaked cotton waste shall be stored at designated place and disposed of through TSDF, in accordance to the conditions prescribed by GPCB. Spent oil, containers of POL/chemicals shall be stored at designated place and disposed of through recyclers, in accordance to the conditions prescribed by GPCB. Oily sludge generated from bottom of storage tanks will be transported to authorized TSDF site. Waste oil and contaminated soil shall be subjected to bioremediation through consortium of bacteria in association of M/s. OTBL to restore the site back to the normal.

32.4.2.2 During deliberations, the EAC noted that the project involves establishment of Group Gathering Station (GGS-IV) at Gamij, District Kheda (Gujarat) to facilitate oil & gas production from the developed wells in the allocated Block, and then to transport through pipelines. The said project/activity may be considered under category A of item 1(b) of the schedule to the EIA Notification, 2006, and thus requiring prior EC.

32.4.2.3 *The EAC, after deliberations, recommended the project 'Onshore Oil & Gas production Facility-Group Gathering Station (GGS-IV)' for grant of ToR for preparation of EIA/EMP reports, to enable consideration of the proposal for environmental clearance. The ToR shall include the standard ToR as specified/notified applicable for such projects/activities, and the additional terms and conditions as under:*

- *ESR plan for 5 years @2.5% of the project cost in consultation with the stakeholders to be submitted.*
- *Layout plan earmarking space for development of green belt of 5-10 m width along the periphery of GGS, ensuring 33% of the project area to be developed as green area with native species plantation.*
- *Compliance report for the existing environmental clearance, if any, duly certified by the concerned Regional Office of the Ministry to be submitted.*

Agenda No.32.4.3

Onshore gas production from existing 100 MMSCFD to 350 MMSCFD and expansion of oil production facilities to produce up to 300,000 BOPD from RJ-ON-90/1 Block, Barmer (Rajasthan) by M/s Cairn India Limited - Terms of Reference

[IA/RJ/IND2/70668/2017, IA-J-11011/532/2017-IA-II(I)]

32.4.3.1 The project proponent and their accredited consultant M/s ERM India Private Limited made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for terms of reference for Onshore gas production from existing 100 MMSCFD to 350 MMSCFD and expansion of oil production facilities to produce up to 300,000 bopd from RJ-ON-90/1 block, Barmer (Rajasthan).

(ii) All Offshore and onshore oil and gas exploration, development and production are listed at S.N. 1(b)of Schedule to the Environment Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iii) Ministry had issued EC earlier vide letter No. J-11011/80/2013-IA II (I); dated 11th August 2014 for Augmentation of hydrocarbon Production (2 lakh bopd to 3 lakh bopd) in RJ-ON-90/01 Block to M/s Cairn India Ltd located in districts Barmer and Jalore, Rajasthan.

(iv) No additional land to be acquired in Rajasthan for this expansion project. However around 30 hectares of additional land in few parcels proposed for midstream operations in Gujarat. Industry already developed greenbelt around 33% of total area in upstream

(Rajasthan) covering 76 ha of area and around 25% of the area in midstream (Gujarat) covering 49 ha

(v) The estimated project cost is Rs.12000 crores excluding existing investment of Rs. 47356 crores. Total capital cost earmarked for pollution control measures is Rs.600 crores and the recurring cost (operation and maintenance) will be about Rs.100 crores per annum. Total employment will be around 2000 persons as direct & 1000 persons indirect after expansion. It has been proposed to allocate Rs.300 crores in seven years period towards Corporate Social Responsibility.

(vi) There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wild life Corridors etc. within 10 km of the project site. The Block falls in the catchment of Luni River Basin and has a regional slope in NE-SW direction.

(vii) In Rajasthan, additional water requirement is 16,500 m^3/day (i.e., total 85,000 m^3/day abstraction, considering already CGWA abstraction permission obtained for 53,500 m^3/day and CGWA application under consideration for 15,000 KLD). The entire water abstraction is met from deep saline ground water and no fresh water will be abstracted.

(viii) Produced water will be treated to remove oil and specific ions using nano filter membranes. The treated produced water will be injected back to the reservoir as injection water to maintain reservoir pressure. Reject water from the membranes will be disposed to the deep dump wells > 1000 m depth. The plant will be based on Zero Liquid Discharge system.

(ix) Associated gas and natural gas will be used to produce power using gas engine generators. Rajasthan state grid power will be used to source any additional demand. Diesel generators will be used only for back-up power generators.

(x) Existing unit has permission to install up to ten 10 nos of boilers of 115 TPH capacity. Additional four boilers of 115 TPH capacity is proposed. All the existing and proposed boilers would be operated through natural gas as fuel, low NOx burners and 30 m stack height.

(xi) Natural gas will be used as fuel for the stationed sources combustion such as boilers, heaters, gas engine generators and compressors. The excess associated gas or LP header gas will be flared using an elevated flare of minimum 30 m height. Diesel generators would be used only during the construction phase and as emergency generators for power back-up during the operation phase. There would be no cold venting intentionally from the operational activities.

(xii) Waste shall be segregated at the source of generation and will be stored in the designated area protected from weather conditions. All recyclable hazardous waste shall be sold to the authorized recyclers. Non-recyclable hazardous waste, which has a value of “Alternate fuel and raw material”, shall be disposed to the cement industries towards co-processing such as oily rags, oily contaminated materials, filters, filter media etc. Any non-recyclable hazardous and non-hazardous material, which is not suitable for co-processing in the cement industries, will be disposed in the captive secured landfill at MPT.

(xiii) Proposed expansion details are mentioned below:

- Gas Terminal and associated facilities augmentation: The gas production augmentation is being planned to produce from existing 100 MMSCFD to 350 MMSCFD along with condensate processing unit. The new projects will cover the following facilities:

- Augmentation of Raageshwari Gas Terminal (RGT) from existing 100 MMSCFD to 300 MMSCFD and 50,000 barrels of condensate. Including processing of 50,000 barrels of condensate, CNG / LPG process, storage and transport
- Development of satellite gas fields (standalone well pads) to produce and process up to 50 MMSCFD.
- Setting up of CNG/LPG fuel filling stations up to 50 no's in and around Rajasthan.

Oil Terminal and associated facilities augmentation: The augmentation and new projects will cover the following facilities:

- De-bottlenecking at Mangala Processing terminals for achieving better three phase separation including augmentation of produced water treatment system, injection water treatment system, power fluid handling system, utilities system with additional boilers/waste heat recovery system.
- Additional processing train in northern field of capacity 510,000 barrels of fluid per day (bfpd) to handle increased water cut, i.e., total 1,903,000 bfpd processing capacity in RJ block (considering permission already obtained in northern field for 1,053,000 bfpd and 340,000 bfpd in southern field)
- Setting up of total twenty (20) numbers of quick processing facilities (three phase separation) of the well fluids at various fields such as Mangala, Bhagyam and Aishwariya. The separated produced water will be injected back to the reservoir of that field. The associated gas will be used for captive power generation within the field or otherwise sent to MPT or RGT. The separated crude oil will be sent to MPT for further processing & export and or direct export to the refineries through trucks. Associated gas facilities from RJ fields will be expanded up to 250 MMSCFD from existing already permission available of 65 MMSCFD (i.e. additional associated gas of 185 MMSCFD). This will reduce the associated gas flaring i.e. wastage of gas will be minimised.
- Augmentation and laying of new oil infield pipelines connecting well pads and terminals of various fields within RJ Block.
- New produced water treatment system package including management of effluents to handle up to 500,000 barrels of per day.
- Enclosed ground flare system at well pads.
- A SP (Alkaline – 2000 MT per day; Surfactant – 300 MT per day and Polymer – 300 MT per day) flooding across various fields within RJ Block. Permission to manage, store and handle hazardous ASP chemicals as per the manufacture, storage and import of hazardous chemicals (MSIHC) and applicable Rules.
- Midstream Development: The gas evacuation projects will cover the following facilities:
- Laying of new 30 inch natural gas pipeline of 700 km from Barmer, Rajasthan to Bhogat, Gujarat to evacuate capacity up to 500 MMSCFD of natural gas
- Laying of new 8/10 inch gas pipeline of 100 km from RDG to MPT to evacuate condensate
- Laying of new 6/8 inch gas pipeline of 100 km from RDG to AGI – 5 for stabilised condensate transportation
- Laying of new 12 inch pipeline at various locations to connect processed crude from satellite fields to main export pipeline.

32.4.3.2 During deliberations, the EAC noted that the proposal is for terms of reference to the project, which involves expansion of onshore gas production from 100 to 350 MMSCFD and also expansion of oil production facilities to produce up to 300,000 bopd from RJ-ON-90/1 Block in District Barmer (Rajasthan). With the existing EC dated 11th August, 2014 granted by the Ministry, the project proponent could not establish the link/rationale of the project for its expansion from 100 to 350 MMSSCFD, and thus questioning admissibility of the proposed

expansion and the requirement of EC for the same. The Committee also raised concerns over the requirement of prior EC to the oil production facilities mentioned separately in the proposal.

32.4.3.3 *The EAC, after deliberations, asked the project proponent to restructure the proposal vis-a-vis the items listed in the schedule to the EIA Notification, 2006 and the earlier ECs, and to submit revised Form-I accordingly. The proposal was, therefore, not recommended.*

32.5 Any Other

Agenda No.32.5.1

Food Colours and Lake Colours Manufacturing Plant of M/s Arjun Food Colourant Mfg Pvt Ltd at District Raigad, (Maharashtra) - Amendment in ToR

[IA/MH/IND2/64409/2017, IA-J-11011/216/2017-IA-II(I)]

32.5.1.1 The proposal is for amendment in ToR granted by the Ministry vide letter dated 11th August, 2017 to M/s Arjun Food Colourant Mfg Pvt Ltd for the project 'Food Colours and Lake Colours Manufacturing Plant' at District Raigad (Maharashtra).

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

<table>
<tr><th>S. No.</th><th>Para of FORM-I</th><th>Details as per the ToR /Form-I</th><th>To be revised/ read as</th><th>Justification / reasons</th></tr>
<tr><td>1</td><td>Point No. 1 in Brief Summary,

Point No. xii of 25.4.3 at MOM of 25th EAC meeting</td><td>Food Colours- 9.5 MT/D

<table>
<tr><th>S. No</th><th>Product</th><th>Quantity (Kg/ Batch)</th></tr>
<tr><td>1</td><td>Ponceau 4R</td><td>2020</td></tr>
<tr><td>2</td><td>Sunset Yellow FCF</td><td>2300</td></tr>
<tr><td>3</td><td>Tartrazine</td><td>1800</td></tr>
<tr><td>4</td><td>Green Solvent Green</td><td>2000</td></tr>
<tr><td>5.</td><td>Red</td><td></td></tr>
<tr><td></td><td>a. Pigment Red 57 (Red 6)</td><td>1100</td></tr>
<tr><td></td><td>b. Red 7</td><td>400</td></tr>
<tr><td></td><td>c. Solvent Red 43(Red 21)</td><td>900</td></tr>
</table></td><td>Food Colours- 9.5 MT/D

<table>
<tr><th>S.No.</th><th>Product</th><th>Quantity (Kg/ Batch)</th></tr>
<tr><td>1</td><td>Ponceau 4R</td><td>2020</td></tr>
<tr><td>2.</td><td>Sunset Yellow FCF</td><td>2300</td></tr>
<tr><td>3.</td><td>Tartrazine</td><td>1800</td></tr>
<tr><td>4.</td><td>Green Solvent Green 7(Green 8)</td><td>2000</td></tr>
<tr><td>5.</td><td>Red</td><td></td></tr>
<tr><td></td><td>a. Pigment Red 57 (Red 6)</td><td>1100</td></tr>
<tr><td></td><td>b. Red 7</td><td>400</td></tr>
<tr><td></td><td>c. Solvent Red 43(Red 21)</td><td>900</td></tr>
<tr><td></td><td>d. Acid Phloxine</td><td>770</td></tr>
</table></td><td>3 New Products in Food Colour to be taken without any change in production Capacity of Plant Products in Food Colors shall be so manufactured that at any given instance production shall not exceed 9.5 MT/Day Daily Max. 4 Products Each from Food & Lake shall be Manufactured.</td></tr>
</table>

			d. Acid Phloxine B (Red 27)	770	
			e. Acid Red 92(Red 28)	480	
			f. Acid Red 33(Red 33)	1350	
		6	• Violet Acid Violet 49 (Violet 2)	1470	
		7.	• Yellow C.I.Solvent Yellow 172 (Yellow172)	2250	
		2.Lake Colours: 2.5 MT/Day **3.Intermediates: 7 MT/Day** **Plant Capacity: 19 MT/D**			B (Red 27)		**2.Lake Colours: 2.5 MT/Day** **3. Intermediates: 7 MT/Day** **Plant Capacity : 19 MT/D**	
			e. Acid Red 92(Red 28)	480	
			f. Acid Red 33 (Red 33)	1350	
			6	• Violet Acid Violet 49 (Violet 2) (Violet 2)	1470	
			7	•Yellow C.I. Solvent Yellow 172 (Yellow172)	2250	
			8	***Chocolate Brown HT***	***1750***	
			9	***Quinoline Yellow***	***1000***	
			10	***Allura Red***	***2550***	
2	Point 2.2 in FORM-I, Para no. Vii of 25.4.3 at MOM of 25th EAC meeting	Water Consumption - 375 m^3/ Day		Water Consumption - 379 m^3/ Day		Due to addition of three new products in food colour range, there is increase in consumption of water
3	Point No. 7.2 in FORM-I, Para no. Viii of 25.4.3 at MOM of 25th EAC meeting	Effluent Generation -172 m^3/ Day		Effluent Generation - 179 m^3/ Day		Due to addition of three new products in food colour range products
4	Point 5.1	Boiler - 3TPH		Boiler- 4 TPH		Increase in

	Para no. ix of 25.4.3 at MOM of 25th EAC meeting			capacity to sustain the requirement of steam.
5	Point 4.10 Para no. x of 25.4.3 at MOM of 25th EAC meeting	Ash generation- 1.5 MT/Day	Ash Generation - 2.6 MT/D	Due to increased capacity of boiler from 3 to 4 TPH

32.5.1.3 During deliberations, the Committee noted that the said ToR dated 11th August, 2017, neither mentions about the product details nor the utilities. Also, there is nothing mentioned in the ToR respect of water consumption and/or the effluent generation for which amendment has been sought. As such, there seems no rationale for amending the said ToR as proposed by the project proponent.

32.5.1.4 *The Committee however, after deliberations, noted that product details and other salient features of the project, now proposed for amendment, actually should have been a part of the ToR. Considering the same, the Committee recommended for grant of revised ToR rather than amending the existing ToR on the above lines.*

Agenda No.32.5.2

Expansion of Sugar Factory from 5000 TCD to 7500 TCD (increase by 2500 TCD) and 30 MW co-gen plant of M/s Deshbhakt Ratnappa Kumbhar Panchganga Sahakari Sakhar Karkhana Ltd (D.B.R.K. Panchganga S.S.K. Ltd) leased unit of Shree Renuka Sugars Ltd, Ganganagar, Ichalkaranji, Taluka Hathkanangale, District Kolhapur (Maharashtra) - Amendment in ToR

[IA/MH/IND2/62894/2017, IA-J-11011/116/2017-IAII(I)]

32.5.2.1 The proposal is for amendment in ToR granted by the Ministry vide letter dated 30th August, 2017 to M/s Deshbhakt Ratnappa Kumbhar Panchganga Sahakari Sakhar Karkhana Ltd (D.B.R.K. Panchganga S.S.K. Ltd), leased unit of Shree Renuka Sugars Ltd, for the project 'Expansion of Sugar Factory from 5000 TCD to 7500 TCD and 30 MW Co-generation Plant' of Ganganagar, Ichalkaranji, Taluka Hathkanangale, District Kolhapur (Maharashtra).

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

- The ToR was issued for expansion of sugar factory from 5000 TCD to 7500 TCD and 30 MW Co-gen plant, whereas the project proponent decided to go for expansion of sugar factory from 5000 TCD to 10,000 TCD instead of 5000 TCD to 7500 TCD due to ample cane availability in the command area. The project proponent has applied for sugar factory expansion only and not for co-gen plant.

- As per the ToR obtained, the details of the products presently manufactured and after the proposed expansion were reported to be as under:-

Product & By-product	Existing (5000 TCD)	Expansion (2500 TCD)	Total (7500 TCD)
Sugar and Cogeneration Unit			
Sugar (MT/D)	650	325	975
Molasses(MT/D)	225	115	340
Bagasse (MT/D)	1500	750	2250
Press Mud (MT/D)	200	100	300
Electricity(MW)	30	--	30

The details of the products presently manufactured and after the proposed revised expansion are reported to be as under:-

Product & By-product	Existing (5000 TCD)	Expansion (5000 TCD)	Total (10000 TCD)
Sugar and Cogeneration Unit			
Sugar (MT/D)	650	650	1300
Molasses(MT/D)	225	225	450
Bagasse (MT/D)	1500	1500	3000
Press Mud (MT/D)	200	200	400
Electricity(MW)	30	--	30

- As per the ToR obtained, the total estimated cost of the project was Rs. 15.91 crores which would be revised as Rs.80.90 Crores.
- D.B.R.K. Panchganga S.S.K. Ltd is an agro-based industry. Effluent generated from sugar factory is treated in ETP. Further, the treated effluent is used for gardening in own premises. Here, the type of soil identified on site and in study area is loamy and the loading rate is 110 to 170 m^3/ha/day as per MoEF&CC Notification dated 14th January, 2016. Considering loading rate of 140 m^3/h/day, the area required for discharge of treated effluent is 6.35 ha. The existing green belt area is 8.91 ha. In addition to this, excess treated water if any could also be given to nearby farmers for irrigation as per their demand on land area of 28.25 ha. Hence, the implementation of ZLD for sugar factory will not be applicable.

32.5.2.3 *The Committee, after deliberations, noted that the instant proposal for amendment in the ToR is due to the proposed increase in sugar production from 7500 TCD to 10,000 TCD. The proposal in fact, involves expansion of the sugar manufacturing plant and does not qualify for amendment. The proposal was, therefore, not recommended and the project proponent was asked to apply afresh for the proposed expansion of sugar production.*

Agenda No.32.5.3

Expansion of manufacturing of organic pigments (Copper Phthalo Cyanine Blue, Alpha Blue/CPC Blue, Mono Chloro CPC) by M/s A-one Phthalo Colors Pvt Ltd at Plot No. 808/A-1/3, Phase-III, GIDC Estate, Vapi, District Valsad (Gujarat) - Amendment in ToR

[IA/GJ/IND2/58335/2016, J-11011/332/2016-IA II (I)]

32.5.3.1 The proposal is for amendment in ToR granted by the Ministry vide letter dated 14th February, 2017 to M/s A-one Phthalo Colors Pvt Ltd for the project 'Expansion of manufacturing

of organic pigments' (Copper Phthalo Cyanine Blue, Alpha Blue/CPC Blue, Mono Chloro CPC) at Plot No. 808/A-1/3, Phase-III, GIDC Estate, Vapi, District Valsad (Gujarat).

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

S. No.	Para of ToR	Details as per the ToR	To be revised/read as	Justification/reasons
1	A-(iii)	PP shall go for incineration in place of CETP.	PP shall continue to discharge existing load of effluent to CETP.	Incineration system is applicable when the liquid is having calorific value more than 2500 Kcal/liter. The unit is not increasing the effluent quantity and discharging the treated effluent to CETP. So, this point is not applicable. It should be removed.
2	A-(IV)	ZLD shall be followed as the project is located in Vapi, which is a Critically Polluted Area.	Vapi is removed from critically polluted area hence, unit will maintain existing discharge to CETP.	The ZLD system will cost the unit Rs. 9 to 10 Crore. The proposed investment for expansion is Rs. 1.09 Crore only. It is practically not possible to invest Rs. 10 Crore for ZLD system. However the unit would like to propose to achieve discharge norms of CETP due to under performance of CETP. The unit is not increasing hydraulic load of CETP. Other units located in this area are given discharge permission for their expansion projects. In some cases increase in effluent quantity is also allowed. Now, Vapi is removed from critically polluted area.
3	A-(V)	It was recommended that 'ToRs' along with Public Consultation should be considered for preparation of EIA/EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues	The unit is located in the notified area. So, public consultation is exempted.	The unit is located in the notified area. So, public consultation is exempted.

		emerged and response to the issues shall be incorporated in the EIA report.		

32.5.3.3 *The Committee, after deliberations, recommended the proposed amendments in the ToR dated 14th February, 2017 on the above lines, with all other terms and conditions remaining the same.*

Agenda No.32.5.4

Ammonium Nitrate manufacturing unit capacity by setting up a 1140 MTPD (3,76,200 MTPY) Ammonium Nitrate Solution manufacturing complex by M/s Deepak Fertilizers& Petrochemicals Corporation Limited at village Bagdia, Chaukimata, Rangiagarh, Tehsil Paradeep, District Jagatsinghpur (Orissa) - Amendment in ToR

[IA/OR/IND2/63052/2017, IA-J-11011/141/2017-IA-II(I)]

32.5.4.1 The proposal is for amendment in ToR granted by the Ministry vide letter dated 10th July, 2017 to M/s Deepak Fertilizers & Petrochemicals Corporation Limited for Ammonium Nitrate manufacturing unit capacity by setting up a 1140 MTPD Ammonium Nitrate Solution manufacturing complex at village Bagdia, Chaukimata, Rangiagarh, Tehsil Paradeep, District Jagatsinghpur (Orissa).

32.5.4.2 The present proposal is for amendment in the ToR dated 10th July 2017, with the details as under:

S.No	Para of ToR issued by MoEF&CC	Details as per the ToR	To be revised/ read as	Justification/Reasons
1	Change in Name	**Request for Change in Name** **Earlier Name:** M/s DEEPAK FERTILIZERS& PETROCHEMICALS CORPORATION LIMITED	**Proposed Name:** M/s Smartchem Technologies Limited (STL)	• As a part of business restructuring, the proposed project is transferred to 100% subsidiary of M/S Deepak Fertilizers & Petrochemicals Corporation Limited (DFPCL) in the name of M/s Smartchem Technologies Limited (STL) • The Request for change of name was made to MOEF&CC on July 2017 which is still awaited. All necessary document along with Board resolutions from both the companies and Memorandum of Article of Association already submitted.

2	Point 4	Weak Nitric Acid plant- 900 TPD. Ammonium Nitrate Solution plant -1140 TPD. Technical Ammonium Nitrate Prilling plant - 1000 TPD. and in Ammonia production - 380 TPD	Weak Nitric Acid plant- 900 TPD. Ammonium Nitrate Solution plant - 1140 TPD. Technical Ammonium Nitrate Prilling plant - 1000 TPD and in Ammonia production - 500 TPD	• 380 MTPD ammonia plant and balance through imports. • As per Licenser evaluation thepropose 380 MTPD plant can be upgraded to 500 MTPD Ammonia plant. Warranting amendment in TOR • This increase in capacity will result decrease in imports.

32.5.4.3 *The project proponent informed the Committee that they were not willing to pursue the proposal and decided to withdraw the same. The proposal was, therefore, declared null and void.*

Agenda No.32.5.5

Bulk Drug and Bulk Drug Intermediates and speciality chemicals manufacturing unit of M/s Anupam Rasayan India Ltd (Unit-6) at Plot No.2423, 2425 GIDC Estate, Sachin, Tehsil Choryasi, District Surat (Gujarat) - Amendment in ToR

[IA/GJ/IND2/65026/2017, IA-J-11011/272/2017-IA-II(I)]

32.5.5.1 The proposal is for amendment in the ToR dated 7th August, 2017 granted by the Ministry to M/s Anupam Rarayan India Ltd (Unit-6) for the project 'Bulk Drugs and Drug Intermediates and speciality chemicals manufacturing unit' at Plot No.2423, 2425 GIDC Estate, Sachin, Tehsil Choryasi, District Surat (Gujarat).

32.5.5.2 The amendment has been sought for change in product mix from 68 no. of products envisaged earlier to 84 proposed now, without any change in total production capacity of 650 TPM and also no increase in pollution load. The revised details of products are as under:

S.No	Product	CAS No.	Capacity (TPM)
Acetylated Compounds			
1	2,4-Dichloro Acetophenone	2234-16-4	200
2	2,5-Dichloro Acetophenone	2476-37-1	
3	4-Fluoro Acetophenone	403-42-9	
4	2,4-Dichloro-5-Fluoro Acetophenone	704-10-9	
5	2,4-Dichloro Phenacyl Bromide	2631-72-3	
6	2,4-Dichloro Phenacyl Chloride	4252-78-2	
7	2,4-Dichlorobutero Phenone	66353-47-7	
Phenoxy Compounds / Diphenyl Ether Compounds			
8	2 -Chloro-4-(4-Chloro Phenoxy) Phenacyl Bromide	112110-16-4	200

9	2-Chloro-4-(4-Chlorophenoxy) Acetophenone / 4-Acetyl-3,4'-Dichloro Diphenyl Ether	119851-28-4	
10	3- Chloro-4-(2-Bromo Ethyl-4-Methyl-1,3-dioxolane-2-yl)-4-Chloro Diphenyl Ether	873012-43-2	
11	4-(2-Bromomethyl -4-propyl-1,3-dioxolane-2-yl)-1,3-Dichlorobenzene	60207-89-8	
Benzoic Acid / Ester Compounds			
12	5-Methyl-2,3-Pyridine Dicarboxylic Acid	112110-16-4	100
13	3,4,5-Tri Methoxy Benzoic acid	118-41-2	
14	3,4,5-Tri Methoxy Toluene	6443-69-2	
15	1-(4-methoxyphenyl)-3-(4-tert-butylphenyl)propane-1,3-dione	87075-14-7	
16	2-Ethylhexyl-2-Cyano-3,3-diphenyl-2-Propionate	6197-30-4	
17	2-Ethylhexyl(2E)-3-(4-methoxyphenyl)prop-2-enoate	5466-77-3	
18	2-Ethylhexyl-2-Hydroxybenzoate	118-60-5	
19	**2 – Amino 3-Chloro Benzoic Acid Methyl Ester**	**77820-58-7**	
20	**2- Nitro-5-Chloro-4-Methyl Benzoic Acid Iso Propyl Ester**	**1204518-43-3**	
21	**N-(2-Hydroxypropyl)-2-Picolylamine**	**68892-16-0**	
Advanced Specialty / Pharma Products			
22	**Ortho Phenylene Diamine**	**95-54-5**	150
23	**Meta Phenylene Diamine**	**108-45-2**	
24	**Para Phenylene Diamine**	**106-50-3**	
25	**Resorcinol / 1,3 Benzenediol / Meta Di Hydroxy Benzene**	**108-46-3**	
26	**Meta Amino Phenol**	**591-27-5**	
27	**2,4-Difluoro Aniline**	**367-25-9**	
28	**2,4- Difluoro Nitrobenzene**	**446-35-5**	
29	**2,6- Difluoro Aniline**	**5509-65-9**	
30	**1,2-Di Fluoro Benzene**	**367-11-3**	
31	**2-Amino Benzotrifluoride**	**88-17-5**	
32	**3 – Amino Benzotrifluoride**	**98-16-8**	
33	**4 – Amino Benzotrifluoride**	**455-14-1**	
34	**3,4-Difluoro Benzonitrile**	**64248-62-0**	
35	4-[[4,6-bis[[4-(2-ethylhexoxy-oxomethyl]phenyl]amine]-1,3,5-triazin-2-yl]amino]benzoic acid -2-ethylhexyl ester	88122-99-0	
36	4, 4'-[[6-[[(1, 1-dimethylethyl)amino]carbonyl]phenyl]amino]-1, 3, 5-triazine-2, 4-diyl]diimino]bis-bis(2-ethyhexyl)benzoate.	154702-15-5	
37	2-(2, 4-dihydroxyphenyl)-4, 6-bis (2, 4-dimethylphenyl)-1, 3, 5-triazine.	1668-53-7	
38	4-n-Butyl Resorcinol	18979-61-8	
39	4-n-Hexyl Resorcinol	136-77-6	
40	Propanedionic 2,2'-(1,4-phenylenedimethylidyne)bis -1,1',3,3'-tetraethyl Ester	6337-43-5	

41	2,4-dihydroxy Benzophenone	131-56-6	
42	2-Hydroxyl-4-methoxyBenzophenone	131-57-7	
43	2-Hydroxyl-4-(Octyl)Benzophenone	1843-05-6	
44	2-Hydroxy-3,3,5-trimethyl Cyclohexyl Ester Benzoic Acid	118-56-9	
45	4H-3,1-Benzoxazin-4-one,2,2'-(1,4-phenylene)bis-	18600-59-4	
46	2-(4,6-diphenyl-1,3,5-triazin-2-yl)-5-(hexyloxy)phenol	147315-50-2	
47	2-Hydroxy-4-Methoxy Benzophenone -5-Sulphonic acid	4065-45-6	
48	Benzoic acid -4-[[(methylphenylamino)methylene]amino] Ethyl Ester	57834-33-0	
49	2-(5-chloro-2H-benzotriazol-2-yl)-6- (1,1-dimethylethyl)-4-Methyl Phenol	3896-11-5	
50	2-(2H-benzotriazol-2-yl)-4-(1,1-dimethylethyl)-6-(1-methylpropyl)phenol	36437-37-3	
51	2-(2H-benzotriazole-2-yl)-4,6 bis(1-methyl-1-Phenylethyl)phenol	70321-86-7	
52	2-(2H-benzotriazol-2-yl)-4,6-bis (1,1-dimethylethyl)phenol	3846-71-7	
53	2-(2H-benzotriazole-2-yl)-4-methyl phenol	2440-22-4	
54	2-(5-chloro-2H-benzotriazol-2-yl)-4,6-bis (1,1-dimethylethyl)phenol	3864-99-1	
55	2-(2H-benzotriazol-2-yl)-4-(1,1-dimethylethyl)-phenol	3147-76-0	
56	2,2'-methylene bis [6-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol	103597-45-1	
57	2-(2H-Benzotriazol-2-yl)-4-(1,1,3,3-tetramethybutyl)-Phenol	3147-75-9	
58	2- Acetyl phenothiazine	66311-94-3	
59	2- Chlorophenothiazine	92-39-7	
60	2- Trifluoromethyl Phenothiazine	92-30-8	
61	2-Methoxy Phenothiazine	1771-18-2	
62	2- Mercaptomethyl Phenothiazine	7643-08-5	
63	Chlorpromazine Hydrochloride	50-53-3	
64	Bupropion Base & Bupropion Hydrochloride	34911-55-2	
65	2-(6-Methoxy napthalen-2-yl) Propionic Acid	22204-53-1	
66	Citalopram Hydrobromide	59729-33-8	
67	Cyclobenzaprine Hydrochloride	303-53-7	
68	Cyproheptadine Hydrochloride	129-03-3	
69	Tamoxifen Citrate	10540-29-1	
70	Doxepin Hydrochloride	1668-19-5	
71	Doxylamine Succinate	469-21-6	
72	Imatinib Mesylate	152459-95-5	
73	Etoricoxib	202409-33-4	
74	Dothiepin (Dosulepin) Hydrochloride	113-53-1	
75	Flupentixol Dihydrochloride	2413-38-9	
76	Ketamine Hydrochloride	6740-88-1	
77	Losartan Potassium	114798-26-4	
78	Teneligliptin Hydrobromide Hydrate	760937-92-6	

79	Olmesartan Medoxomil	144689-24-7	
80	Keto Loratadine	79794-75-5	
81	Tedizolid Phosphate	856866-72-3	
82	Enzalutamide	915087-33-1	
83	Empagliflozin	864070-44-0	
84	Dapagliflodin	461432-26-8	
Total Production of All Groups (1 to 4)		**650**	

32.5.5.3 *The Committee, after deliberations, recommended the proposed amendments in the ToR dated 7th August, 2017 in respect of change in product mix on the above lines, with all other terms and conditions remaining the same.*

Agenda No.32.5.6

Expansion of Bulk Drugs and Intermediates Manufacturing Unit (From 363.22 TPM to 505.47 TPM) of M/s Piramal Enterprises Ltdat Sy.No.71, 77, 78, 79A to 80A, 81A & 82A, Digwal Village, Kohir Mandal, District Medak (Telangana) - Extension of validity of ToR

[IA/TG/IND2/67530/2014, J-11011/213/2014-IA II (I)]

32.5.6.1 The proposal is for extension of validity of the ToR granted by the Ministry vide letter dated 21st October, 2014 to M/s Piramal Enterprises Ltd for their expansion project of Bulk Drugs and Intermediates Manufacturing Unit from 363.22 TPM to 505.47 TPM at Sy.No.71, 77, 78, 79A to 80A, 81A & 82A, Digwal Village, Kohir Mandal, District Medak (Telangana).

32.5.6.2 The EAC was informed that the request for extension of validity of ToR was submitted in August, 2017 i.e. well before expiry of its initial validity of 3 years. The Committee noted that the proposal doesn't involve any technical intervention, and should have been taken up by the Ministry without referring to the Committee.

The EAC, however, recommended extension of validity of the ToR for a period of one year i.e. up to 21st October, 2018.

Day 3: 22nd December, 2017

Agenda No.32.5.7

Exploratory drilling of one well by M/s ONGC in Kangra Mandi PEL Block, District Mandi (Himachal Pradesh) - Amendment in ToR

[IA/HP/IND2/58264/2016, J-11011/302/2016-IA II(I)]

32.5.7.1 The proposal is for amendment in the ToR dated 28th February, 2017 granted by the Ministry to M/s ONGC Ltd for their project 'Exploratory drilling of one well' in Kangra Mandi PEL Block, District Mandi (Himachal Pradesh).

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

<table>
<tr><th>S. No.</th><th>Para of ToR</th><th>Details as per the ToR</th><th>To be revised/ read as</th><th>Justification/ Reason</th></tr>
<tr><td>1.</td><td>2 (i)</td><td>The project involves exploratory drilling of one well in Kangra-Mandi PEL Block, District Mandi, Himachal Pradesh by M/s ONGC, Coordinates of one well is as follows.

<table><tr><td>Well Name</td><td>Latitude</td><td>Longitude</td></tr><tr><td>B-MKI - 1</td><td>31050”36 .80</td><td>76046”20. 70</td></tr></table></td><td>The project involves exploratory drilling of three well in Kangra-Mandi PEL Block, District Mandi (Himachal Pradesh) by M/s ONGC, coordinates of one well is as follows.

<table><tr><td>Well Name</td><td>Latitude</td><td>Longitude</td></tr><tr><td>B-MKI-1</td><td>$31^0$50”1 4.79N</td><td>$76^0$47”1.1 0 E</td></tr></table></td><td>The existing location of B-MKI-1 falls in the flank of fault closure and requires directional well (with high inclination of >60^O). To mitigate any future challenges during drilling, coring & logging the site is not considered any further in thrust fold belt area. The drill site is a vertical location.</td></tr>
</table>

32.5.7.3 *The EAC, after deliberations, noted that the proposal for amendment is due to change of well coordinates for which the ToR was issued, and also addition of one new well. The proposal, as such, doesn't qualify for amendment but to be applied afresh for the revised scope of work. The proposal was, therefore, not recommended by the Committee.*

Agenda No.32.5.8

Expansion of Speciality Chemicals & Bulk Drug manufacturing plant in existing unit of M/s Chaitanya Life Science Pvt Ltd at Plot No.769/3/C, Jhagadia Industrial Estate, Jhagadia, District Bharuch (Gujarat) - Amendment in ToR

[IA/GJ/IND2/65618/2017, IA-J-11011/338/2017-IA-II(I)]

32.5.8.1 The proposal is for amendment in the ToR dated 28th July, 2017 granted by the Ministry to M/s Chaitanya Life Science Pvt Ltd for their expansion project 'Bulk Drugs and speciality chemicals manufacturing unit' at Plot No.769/3/C, Jhagadia Industrial Estate, Jhagadia, District Bharuch (Gujarat).

32.5.8.2 The project proponent has requested for amendment in the Standard ToR, with the details as under:

S.No	Para of ToR	Details as per the ToR	To be revised	Justification/ Reasons
2	**Specific ToR Condition**	Detailed effluent treatment scheme	Mode of disposal of treated effluent confirming the	Our treated effluent quality is not suitable for recycle/ reuse in

	No. 5	including segregation of effluent streams for units adopting "Zero Liquid Discharge".	GPCB marine discharge norms will be disposed off to New NCT Pipeline, Jhagadia leads to marine discharge.	manufacturing products as we are manufacturing the human health products, so in this case we are not able to recycle/reuse treated effluent in Process. But since we have obtained membership of M/s Narmada Clean Tech (of Government of Gujarat), New Pipeline of Jhagadia which leads to deep sea disposal at 9.5 km from shore and having marine discharge norms. This marine discharge pipeline project is NCT Project which is government undertaking project of GIDC, worth of Rs.180 Crores.

32.5.8.3 *The EAC, after deliberations, recommended for amendment in the standard ToR as proposed by the project proponent and explained above.*

Agenda No.32.5.9

Adhesives (Chemical) manufacturing unit for captive consumption by M/s Hindustan Adhesives Limited at village Bhadreshwar, Tehsil Mundra District Kutch (Gujarat) - Amendment in ToR

[IA/GJ/IND2/64169/2017, IA-J-11011/205/2017-IA-II(I)]

32.5.9.1 The proposal is for amendment in the ToR dated 10th July 2017 granted by the Ministry to M/s Hindustan Adhesives Ltd for their project Adhesives (Chemical) manufacturing unit for captive consumption at village Bhadreshwar, Tehsil Mundra District Kutch (Gujarat).

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

S.No.	Para of ToR	Details as per the ToR	To be revised/ read as	Justification/reasons
1	Page no 1 of ToR letter, Point no 2.0, first line	Total land area is 2000 m^2 of which green belt will be developed in 30% area (600 m^2).	Total land area is 6000 m^2 of which green belt will be developed in 30% area (1800 m^2).	Inadvertently in Form-I total land area was mentioned as 2000 m^2 however actual land area is 6000 m^2. The same was circulated and presented during presentation before the committee.

2	Page no 1 of ToR letter, Point no 2.0, second line	The estimated project cost is Rs. 2 crore	The estimated project cost is Rs. 8 crores	We apologize that we had wrongly mentioned the project cost as RS. 2 crores. We had wrongly calculated the project cost as Rs. 2 crores whereas it is Rs. 8 crores. Revised Form I with updated project cost have been submitted on online portal.
3	-	Not incorporated in ToR letter	Baseline data collection from March - May 2017 and additional 15 days baseline data collection for month of June (upto 15th June 2017)	During the 23rd EAC meeting (Industry-II) held on 04.05.2017 it was agreed by the committee that Baseline data shall be collected from March-May, 2017 and the committee also suggested for baseline data collection for month of June (upto 15 June). However, this was not included in the ToR letter.

32.5.9.3 *The EAC, after deliberations, noted that there are substantial changes proposed in respect of land area, green belt and the project cost, which are not mentioned in the Form-1, submitted by the project proponent. The Committee opined that the proposed changes may not qualify for amendment in the ToR, and asked the project proponent to revise the Form-1 and to submit the proposal afresh.*

Agenda No.32.5.10

Manufacturing of Pigment Green-7 (Copper Phathalocyanine Green) with installed capacity of 3 MT/Month by M/s Krima Sil Pvt Ltd at Plot No.3613, GIDC Estate, Behind Telephone Exchange Ankleshwar, District Bharuch (Gujarat) –Amendment in ToR

[IA/GJ/IND2/65369/2017, IA-J-11011/322/2017-IA-II(I)

32.5.10.1 The proposal is for amendment in the ToR dated 23rd August, 2017 granted by the Ministry to M/s Krima Sil Pvt Ltd for their project of Pigment Green-7 (Copper Phathalocyanine Green) with installed capacity of 3 MT/Month at Plot No.3613, GIDC Estate, Behind Telephone Exchange Ankleshwar, District Bharuch (Gujarat).

32.5.10.2 The project proponent has requested for correction in the ToR, with the details as under:-

S.No	Para of ToR	Details as per the ToR	To be revised/ read as	Justification/ reasons
1.	Subject	Manufacturing of Pigment Green 7	Manufacturing of with installed capacity from	In terms of reference only existing quantity

		(Copper Phthalocynine Green) with installed capacity of 3 MT/Month at District Bharuch (Gujarat) of M/s Krima Sil Pvt Ltd	3 MT/month to 150 MT/Month at District Bharuch (Gujarat) of M/s Krima Sil Pvt Ltd	i.e. (3 MT/Month) of product manufacturing is provided, but not the total quantity after expansion i.e. (3 TPM to 150 TPM).
	Para 1	This is to reference to your online proposal No. IA/GJ/IND2/65369/2017 dated 14th June, 2017 for grant of Terms of Reference (ToR) for manufacturing of Pigment Green-7 (Copper Phthalocynine Green) with installed capacity of 3 MT/Month at Plot No. 3613, GIDC Estate, Behind Telephone Exchange, Ankleshwar, District Bharuch (Gujarat) by M/s KrimaSil Pvt Ltd. As per the provision of EIA notification, 2006. The project has been submitted along with the project document including Form-1, draft ToRs and Pre-feasibility Report.	This is to reference to your online proposal No. IA/GJ/IND2/65369/2017 dated 14th June, 2017 for grant of Terms of Reference (ToR) for manufacturing of Pigment Green-7 (Copper Phthalocyanine Green) with installed capacity from 3 TPM to 150 TPM. Moreover, Poly Aluminium Chloride and Aluminium Chloride Hexahydrate are by-products and their production capacities will be 750 TPM and 268 TPM respectively. Hence after expansion, sum of total production capacity of product and by-products will be 1168 TPM) at Plot No. 3613, GIDC Estate, Behind Telephone Exchange, Ankleshwar, District Bharuch, (Gujarat) by M/s KrimaSil Pvt Ltd.	In terms of reference only existing quantity i.e. (3 TPM) of product manufacturing is provided. But not mentioned the total quantity after expansion. As per the provision of EIA notification, 2006. The project has been submitted along with the project document including Form-1, draft ToRs and Pre-feasibility Report.

S.No.	Product	Existing (TPM)	Proposed (TPM)	Total (TPM)
1.	Pigment Green-7 (Copper Phthalocyanine Green)	3	147	150
2.	Poly Aluminium Chloride	---	750	750
3.	Aluminium Chloride Hexahydrate	---	268	268
			Total	**1168**

32.5.10.3 *The EAC, after deliberations, noted that the proposed amendments in ToR are based on factual information submitted by the project proponent in respect of production capacity before and after expansion. The committee recommended the proposed amendments in the ToR on the above lines.*

Agenda No.32.5.11

Expansion of Bulk Drug Intermediate manufacturing unit by M/s R L Finechem Private Limited at Plot No.165 to 182 APIIC, IDA Village Thumukunta, Mandal Hindupur, District Anantapur (Andhra Pradesh) - Amendment in ToR

[J-11011/180/2016-IA II (I), IA/AP/IND2/57002/2016]

32.5.11.1 The proposal is for amendment in the ToR dated 23rd September, 2016 granted by the Ministry to M/s R L Finechem for their expansion project 'Bulk Drugs Intermediatess manufacturing unit' at Plot No.165 to 182 APIIC, IDA Village Thumukunta, Mandal Hindupur, District Anantapur (Andhra Pradesh).

32.5.11.2 *The Committee, after deliberations, noted that the instant proposal for amendment in the ToR is due to the proposed increase in production from 45 TPM to 48.6 TPM only. The proposal in fact, involves expansion of the bulk drug intermediates manufacturing and does not qualify for amendment. The proposal was, therefore, rejected.*

Agenda No.32.5.12

Manufacturing of pesticides and its intermediates by M/s PI Industries Limited (Unit II) at Plot No. SPM-29, Sterling SEZ & Infrastructure Ltd at Post Office Sarod, Taluka Jambusar, District Bharuch (Gujarat) - Amendment in ToR

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

32.5.12.1 The proposal is for further amendment in the ToR dated 29th April, 2017, read with first amendment dated 22nd June, 2017, granted by the Ministry to M/s PI Industries Limited (Unit II) for their project 'Manufacturing of pesticides and its intermediates' at Plot No. SPM-29, Sterling SEZ & Infrastructure Ltd at Post Office Sarod, Taluka Jambusar, District Bharuch (Gujarat).

32.5.12.2 The amendment has been sought for adding one product namely, Phosgene ($COCl_2$) in the product list under the sub group 'Fine chemicals'. The number of products in the sub group will thus be increased from the present of 13 to 14 without any change in production capacity of 7500 TPA. Further, neither there would be any change in total production capacity of 44240 TPA of the unit, nor increase in any pollution load.

32.5.12.3 *The EAC, after deliberations, recommended for amendment in ToR dated 29th April, 2017, as proposed by the project proponent, with all other terms and conditions stipulated therein remaining the same. Accordingly, the project would now involve one more item 'Phosgene' under the category of fine Chemicals, without any change in production capacity.*

Agenda No.32.5.13

Expansion for manufacturing various other synthetic organic chemicals (pharmaceutical bulk drugs & intermediates) with total production capacity of 287.77 TPM by M/s Intas Pharmaceuticals Ltd at Survey No. 44/B, Village Naldhari, Siludi Valia Road, Taluka Valia, District Bharuch (Gujarat) - Amendment in ToR

[IA/GJ/IND2/62457/2017, IA-J-11011/41/2017-IA-II(I)]

32.5.13.1 The proposal is for amendment in the ToR dated 31st May 2017, granted by the Ministry to M/s Intas Pharmaceuticals Ltd for their expansion project of manufacturing of

synthetic organic chemicals (pharmaceutical bulk drugs & intermediate) with total production capacity of 277.77 TPM at Plot No. 44/B, Village Naldhari, Suludi Valia Road, Taluka Valia in District Bharuch (Gujarat).

32.5.13.2 The amendment has been sought in respect of change in project area from 28567 sqm (mentioned in the ToR) to 61,666 sqm and the survey/plot no. It has been informed that neither there will be increase in production capacity nor any increase in pollution load.

32.5.13.3 *The Committee, after deliberations, noted that there being substantial increase in the project area (nearly double), the proposal may not qualify for amendment. Instead, the project proponent needs to apply afresh. The proposal was, therefore, not recommended by the EAC.*

Agenda No.32.5.14

Grain based Distillery (2x45 KLPD), Cogeneration Power Plant (2x3 MW) and IMFL/IMIL bottling (2x800 day) by M/s Starlight Energy Pvt Ltd at Survey Nos.244, 249 to 251, 253 to 262, 295 to 298, 300 to 302, 314, 317, 319, 322, 327, 331, 334, 337, 339, 340 in Village Goud Sargiguda, Taluka Junagarh, District Kalahandi (Odisha) – Amendment and Extension of validity in ToR

[IA/OR/IND2/69696/2014, J-11011/298/2014 IA II (I)]

32.5.14.1 The proposal is for amendment and extension of the validity of the ToR dated 23rd January, 2015, granted by the Ministry to M/s Starlight Energy Pvt Ltd for their project of Grain based Distillery (2x45 KLPD), Cogeneration Power Plant (2x3 MW) and IMFL/IMIL bottling (2x800 day) at Survey Nos.244, 249 to 251, 253 to 262, 295 to 298, 300 to 302, 314, 317, 319, 322, 327, 331, 334, 337, 339, 340 in Village Goud Sargiguda, Taluka Junagarh, District Kalahandi (Odisha).

32.5.14.2 The present proposal is for amendment in the ToR w.r.t. change of land area from "SABIK" to "HAL system" due to change in the Government policy and seeking extension of validity of the ToR. The revised details for amendment in the ToR, are as follow:

Page No	Para no in ToR	In Line no in TOR	Mentioned as	To be added/ replaced as
1		2-4	Survey no. 244, 249 to 251, 253 to 262, 295 to 298, 300 to 302, 314, 317, 319, 322, 327, 331, 334, 337, 339, 340	Survey no. 212, 248, 252, 263; 278, 280, 374, 376, 377, 385, 386, 389, 390, 394, 418, 419, 420, 450, 313, 383, 378, 388, 384, 232, 281, 413, 414, 416, 377/1362, 377/1363, 393, 230, 231, 179, 426, 427, 433, 352, 375, 408, 157, 361, 371, 380, 392, 159, 160, 161/1354, 425, 223, 224, 155, 360, 357, 428, 415, 244, 249, 250, 251, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 295, 296, 297, 298, 300, 301, 302, 314, 317, 319, 322, 327, 331, 334, 337, 339, 340, 342, 347, 348, 329, 315, 318, 349, 350, 323, 316, 351, 293, 294, 324, 325, 326, 343, 354, 297/1360, 343/1361, 330, 335, 338, 353, 243, 341, 328, 332, 336, 321, 299, 134, 409, 406/1494, 233, 241, &
	1	5-6		
4	3	3-4		

				2439/1348 at Village Goud Sargiguda, Post Mathura, District Kalahandi, Odisha

32.5.14.3 *The EAC, after deliberations, noted that the proposed amendment in the change of survey number from "SABIK" to "HAL system" is due to present policy of the State Government, and does not qualify for amendment. Thus, the proposal for amendment in ToR to that extent, was rejected.*

Further, the EAC was informed that the request for extension of validity of ToR was submitted on 30th October, 2017 i.e. well before expiry of its initial validity of 3 years. The Committee noted that the proposal doesn't involve any technical intervention, and should have been taken up by the Ministry without referring to the Committee. The EAC, however, recommended extension of the validity of ToR for a period of one year i.e. up to 23rd January, 2019.

Agenda No.32.5.15

Development drilling of 31 wells and establishment of Early Production System by M/s ONGC Ltd at Nagayalanka in the Onland NELP-V Block KG-ONN-2003/1 (Andhra Pradesh) - Amendment in ToR

[IA/AP/IND/26062/2014, J-11011/410/2014-IA II (I)]

32.5.15.1 The proposal is for amendment in the ToR dated 31st March 2015 for the project 'Development drilling of 31 wells and establishment of Early Production System' at Nagayalanka in the Onland NELP-V Block KG-ONN-2003/1 (Andhra Pradesh) promoted by M/s ONGC Ltd.

32.5.15.2 The project proponent informed that the Director General of Hydrocarbons has accorded approval to the Field Development Plan for an area of 54.66 sq km out of the total area of 339.5 sq km envisaged earlier, due to technical reasons. That has resulted substantial reduction in scope of the project from development drilling of 31 wells to now 3 wells only in an area of 54.66 sq km in the same Oil & Gas Block (On land NELP-V Block KG-ONN-2003/1) at Nagayalanka in Andhra Pradesh.

32.5.15.3 *The EAC, after deliberations, recommended for amendment in ToR dated 31st March, 2015 as proposed by the project proponent, with all other terms and conditions stipulated therein remaining the same. Accordingly, the project would now involve development drilling of 3 wells and establishment of EPS (one no.) at Nagayalanka in the Onland NELP-V Block KG-ONN-2003/1 (Andhra Pradesh).*

Agenda No.32.5.16

Development drilling of 4 wells in Borholla ML Block, District Jorhat and development drilling of 8 wells in Nambar ML area, East Lakhibari ML area, Khoraghat ML and Khorghat extension ML area in District Golaghat (Assam) by M/s ONGC Ltd - Extension of validity of ToR

[IA/AS/IND/69965/2014, J-11011/49/2014- IA II (I)]

32.5.16.1 The proposal is for extension of validity of the ToR dated 18th December, 2014 for the project 'Development drilling of 4 wells' in Borholla ML Block, District Jorhat and 'Development

drilling of 8 wells' in Nambar ML area, East Lakhibari ML area, Khoraghat ML and Khorghat extension ML area in District Golaghat (Assam).

32.5.16.2 The EAC was informed that the request for extension of validity of ToR was submitted in 5th October, 2017 i.e. well before expiry of its initial validity of 3 years. The Committee noted that the proposal doesn't involve any technical intervention, and should have been taken up by the Ministry without referring to the Committee.

32.5.16.3 *The EAC, after deliberations, recommended for extension of validity of the ToR for a period of one year i.e. up to 18th December, 2018.*

Agenda No.32.5.17

Exploratory/appraisal wells (4 nos) by M/s ONGC Ltd in existing NELP Block AA-ONN-2001/2 (Mizoram) - Amendment in ToR

[IA/MZ/IND/24370/2014, J-11011/305/2014 IA II (I)]

32.5.17.1 The proposal is for amendment in the ToR dated 6th January, 2015 granted by the Ministry to M/s ONGC Ltd for their project 'Exploratory/appraisal wells (4 nos)' in existing NELP Block AA-ONN-2001/2 (Mizoram). Amendment has been sought due to dropping of two wells, BRBAA in District Mamit and AZAA in District Kolasib due to different reasons. The scope of the project would now involve exploratory/appraisal drilling of two wells, HOAC & HOAD both in District Kolasib (Mizoram).

32.5.17.2 *The EAC, after deliberations, recommended for amendment in the ToR dated 6th January, 2015 as proposed by the project proponent, with all other terms and conditions remaining the same. The scope of the project is now revised to exploratory/appraisal drilling of two wells, HOAC & HOAD both in District Kolasib (Mizoram).*

Agenda No.32.5.18

Expansion of speciality chemicals & Agrochemical Intermediates manufacturing plant of M/s Anupam Rasayan India Ltd (Unit-4) at Plot No.907/3 & 907/4, Jhagadia Industrial Estate, Jhagadia, District Bharuch (Gujarat) - Amendment in ToR

[IA/GJ/IND2/64151/2017, IA-J-11011/202/2017-IA-II(I)]

32.5.18.1 The proposal is for amendment in the ToR dated 10th July, 2017, granted by the Ministry to M/s Anupam Rasayan India Ltd (Unit-4) for their expansion project speciality chemicals & Agrochemical Intermediates manufacturing plant at Plot No.907/3 & 907/4, Jhagadia Industrial Estate, Jhagadia, District Bharuch (Gujarat).

32.5.18.2 The present proposal is for amendment in the said ToR w.r.t. specific condition regarding Zero Discharge Scheme, mentioned in ToR dated 10th July, 2017. It is informed by the project proponent that treated effluent quality is not suitable for recycle/reuse in manufacturing products as they are exporting these products to European Companies such as Syngenta, BAS Fand Bayer having very much stringent quality norms, so in this case they are not able to recycle/reuse treated effluent in Process. But since they have obtained membership (and discharging at present) of M/s Narmada Clean Tech. (of Government of Gujarat), New Pipeline of Jhagadia which leads to deep sea disposal at 9.5 km from shore and having marine discharge norms.

It is also requested by the project proponent to amend the product list given in the ToR letter, nos. of products to add in product list but production capacity will not increase and no. of By-products and their capacity will increase. Water Pollution and Air Pollution will remain same. List of revised products is as under:

S.No	Product	CAS No.	Existing (TPM)	Additional (TPM)	Total (TPM)
1.1	1,4 Dioxane	123-91-1	1000	0	1000
1.2	2- Methyl 1,3 Dioxolane	497-26-7			
2.0	**CHLORO / FLUORO / AMINO BENZENE COMPOUNDS**				
2.1	Chloro Benzene (MCB)	108-90-7	2500	0	2500
2.2	Para Di Chloro Benzene (PDCB)	106-46-7			
2.3	Ortho Di Chloro Benzene (ODCB)	95-50-1			
2.4	**1- Amino 2,4,6 Trichloro Benzene/ 2,4,6 Tri Chloro Aniline**	**634-93-5**	**0**		
2.5	**2,6 Di Chloro Benzoxazole**	**3621-82-7**	**0**		
2.6	**2,3,4,5,6 Penta Chloro Pyridine**	**2176-62-7**	**0**		
2.7	**3,7 Di Chloro 8- Methyl Quinoline**	**84086-96-4**	**0**		
2.8	**Ortho Phenylene Diamine**	**95-54-5**	**0**		
2.9	**Meta Phenylene Diamine**	**108-45-2**	**0**		
2.10	**Para Phenylene Diamine**	**106-50-3**	**0**		
2.11	**2,4-Difluoro Aniline**	**367-25-9**	**0**		
2.12	**2,6- Difluoro Aniline**	**5509-65-9**	**0**		
2.13	**1,2-Di Fluoro Benzene**	**367-11-3**	**0**		
2.14	**2-Amino Benzotrifluoride**	**88-17-5**	**0**		
2.15	**3 – Amino Benzotrifluoride**	**98-16-8**	**0**		
2.16	**4 – Amino Benzotrifluoride**	**455-14-1**	**0**		
2.17	**3,4-Difluoro Benzonitrile**	**64248-62-0**	**0**		
3.0	**SPECIALTY PHENOL COMPOUNDS**				
3.1	Para Chloro Phenol (PCP)	106-48-9	500	0	500
3.2	Ortho Chloro Phenol (OCP)	95-57-8			
3.3	2,4 Di Chloro Phenol	120-83-2			
3.4	2,6 Di Chloro Phenol	87-65-0			
3.5	**4- Bromo 2,5 Di Chloro Phenol**	**1940-42-7**	**0**		
3.6	**Resorcinol / 1,3 Benzenediol / Meta Di Hydroxy Benzene**	**108-46-3**	**0**		
3.7	**Meta Amino Phenol**	**591-27-5**	**0**		
4.0	**Meta Di Chloro Benzene (MDCB)**	541-73-1	400	0	400
5.0	**NITRO COMPOUNDS**				
5.1	Nitro Benzene	98-95-3	800	0	800
5.2	Meta Di Nitro Benzene (MDNB)	99-65-0			

5.3	**2,4 Di Chloro 3,5 Dinitro Benzotrifluoride**	**29091-09-6**	**0**		
5.4	**2,3,4 Tri Chloro Nitro Benzene**	**17700-09-3**	**0**		
5.5	**4- Nitro Ortho Xylene**	**99-51-4**	**0**		
5.6	**2,4- Difluoro Nitrobenzene**	**446-35-5**	**0**		
6.0	**Calcium Chloride**	10043-52-4	1800	0	1800
7.0	**AMINO BENZOIC ACID / ESTERS**				
7.1	3-Amino-4-Methyl Benzoic Acid Methyl Ester	18595-18-1	500	0	500
7.2	3-Amino 4-Methyl Benzoic Acid Isopropyl Ester (AMBI)	21447-47-2			
7.3	3-Amino 4-Methyl Benzoic Acid(2' -Chloro Ethyl Ester) (AMBC)	2458-12-0			
7.4	5-Amino-2-Methyl Benzene Sulphonic Acid Phenyl Ester	1089339-15-0			
7.5	Benzene Sulphonic Acid 3-Amino Phenyl Ester	13653-12-4			
7.6	2-Cyano-3,4,5,6-Tetrachloro Benzoic Acid Methyl Ester	10276-78-2			
7.7	Benzene Sulphonic Acid 2-Methyl-5-Nitrophenyl Ester	85896-03-5			
7.8	4- Amino Benzoic Acid Methyl Ester	619-45-4			
7.9	3,5 Di Amino 4- Chloro Benzoic Acid Iso Butyl Ester	32961-44-7			
7.10	**3,4,5 Tri Methoxy Benzoic Acid**	**118-41-2**	**0**		
7.11	**1- Methyl 3,4,5 Tri Methoxy Benzene / 3,4,5 Tri Methoxy Toluene**	**6443-69-2**	**0**		
7.12	**5- Methyl 2,3 Pyridine Di Carboxyllic Acid**	**53636-65-0**	**0**		
7.13	**3,4,5 Tri Methoxy Benzaldehyde**	**86-81-7**	**0**		
7.14	**2 – Amino 3-Chloro Benzoic Acid Methyl Ester**	**77820-58-7**	**0**		
7.15	**2- Nitro-5-Chloro-4-Methyl Benzoic Acid Iso Propyl Ester**	**1204518-43-3**	**0**		
7.16	**N-(2-Hydroxypropyl)-2-Picolylamir**	**68892-16-0**	**0**		
Total			**7500**	**0**	**7500**

32.5.18.3 *The Committee, after deliberations and in view of significant changes in the scope of work, recommended for grant of revised ToR rather than amending the existing ToR on the above lines.*

Agenda No.32.5.19

Bulk Drug Manufacturing Unit by M/s Apothecon Pharmaceuticals Pvt Ltd at Plot no. 1138/A, 1138/B, 1134, 1135, Padra Jambusar Highway, PO. Dabhasa, Taluka Padra, District Vadodara (Gujarat) - Extension of Validity of Environmental Clearance

[IA/GJ/IND2/67734/2010, J-11011/690/2008-IA-II(I)]

32.5.19.1 The proposal is for extension of validity of the EC dated 23rd December, 2010, granted by the Ministry to M/s Apothecon Pharmaceuticals Pvt Ltd for the project for setting up bulk drug manufacturing unit at Plot no.1138/A, 1138/B, 1134, 1135, Padra Jambusar Highway, PO Dabhasa, Taluka Padra, District Vadodara (Gujarat).

32.5.19.2 The initial validity of the EC for a period of 5 years got extended up to 22nd December, 2017 in view of this Ministry's Notification dated 29th April, 2015. Now the project proponent has sought extension of validity for a further period of 3 years to complete the project within the validity period. One of the major reasons for the same is reported to be non-mobilisation of the project finance in time.

32.5.19.3 *The Committee, after deliberations, noted that the request for extending validity of the EC was made before its expiry and as such, the proposal is in conformity with this Ministry's Notification dated 29th April, 2015 & 16th September, 2016 in this regard. The Committee agreed for extending validity of the EC dated 23rd December, 2010 for a period of 3 years i.e. up to 23rd December, 2020.*

Agenda No.32.5.20

Expansion of 40 KLPD to 100 KLPD Rectified Spirit and ENA Distillery Unit by M/s Sir Shadilal distillery and Chemical Works at Mansurpur, Khatauli, Muzaffarnagar (Uttar Pradesh) - Amendment in Environmental Clearance

[IA/UP/IND2/68053/2006, J-11011/436/2005-IA-II(I)]

32.5.20.1 The proposal is for amendment in environment clearance dated 3rd April, 2006 granted by the Ministry in favour of M/s Sir Shadilal distillery and Chemical Works for the project 'Expansion of 40 KLPD to 100 KLPD Rectified Spirit and ENA Distillery Unit' by at Mansurpur, Khatauli, Muzaffarnagar (UP).

32.5.20.2 The EC included one of the conditions regarding operation of the distillery restricted to 270 days in a year and not to operate during rainy season. Now the proposal has been submitted for amendment in the said EC effecting increase in working/operation days from 270 to 365 per year. In support of the proposal, the project proponent informed the Committee about the directions of CPCB vide their letter dated 16th June, 2017, allowing the distilleries with covered bio-composting yard to operate throughout the year.

During deliberations, the project proponent informed that they have covered bio-composting yard with proven technology, which gives flexibility to operate during rains without affecting composting process in any way. The company can now operate throughout the year and thus applied for amendment in environment clearance.

32.5.20.3 *Based on the submissions made by the project proponent, the EAC recommended for the proposed amendment in the said EC, with the details as under-*

'The number of the working days of the distillery shall now be 365 days per year in place of 270 days mentioned in the earlier EC.'

The remaining terms and conditions stipulated in the EC dated 3rd April, 2006 shall remain unchanged.

The Committee further observed that validity of the EC dated 3rd April, 2006 has already been expired. As such, the above recommendations shall be subject to a decision by the Ministry regarding admissibility of such proposals after expiry of the validity of EC.

Agenda No.32.5.21

Manufacturing of 15,000 KLPA of alcohol (30 KLPD of industrial alcohol, 20 KLPD of ENA extra neutral alcohol and 10 KLPD of power alcohol) by M/s K.M. Sugar Mills Ltd at Motinagar, District Faizabad (UP) - Amendment in Environmental Clearance

[IA/UP/IND2/70146/1996, J-11012/110/94 -IA II (I)]

32.5.21.1 The project for setting up 15,000 KLPA of alcohol (30 KLPD of industrial alcohol, 20 KLPD of ENA extra neutral alcohol and 10 KLPD of power alcohol) manufacturing unit by M/s K.M. Sugar Mills Ltd at at Motinagar, District Faizabad (Uttar Pradesh) was granted environmental clearance by the Ministry on 18th March, 1996.

32.5.21.2 Now the proposal has been submitted for amendment in the said EC effecting increase in working/operation days from 270 to 365 per year. In support of the proposal, the project proponent informed the Committee about the directions of CPCB vide their letter dated 16th June, 2017, allowing the distilleries with covered bio-composting yard to operate throughout the year.

During deliberations, the project proponent informed that they have covered bio-composting yard with proven technology, which gives flexibility to operate during rains without affecting composting process in any way. The company can now operate throughout the year and thus applied for amendment in environment clearance.

32.5.21.3 *The EAC, after deliberations, noted that the said EC does not find mention of working/operation days, and as such, there is no rationale for amending the EC in this regard.*

The Committee further observed that validity of the EC dated 18th March, 1996 has already been expired. As such, the amendments in the EC, if any, shall be subject to a decision by the Ministry regarding admissibility of such proposals after expiry of the validity of EC.

Agenda No.32.5.22

Chemical Fertilizer Manufacturing Unit and Co-generation Power Plant (10 MW) by M/s Archean Chemical Industries Pvt Ltd at Greater Rann of Kachchh, Near Hajipir, Taluka Bhuj, District Kachchh (Gujarat) - Amendment in Environmental clearance

[IA/GJ/IND/2841/2010, J-11011/149/2010-IA II(I)]

32.5.22.1 The proposal is for amendment in the environmental clearance dated 2nd September, 2011, granted by the Ministry to M/s Archean Chemical Industries Pvt Ltd for Chemical Fertilizer Manufacturing Unit and Co-generation Power Plant (10 MW) at Greater Rann of Kachchh, Near Hajipir, Taluka Bhuj, District Kachchh (Gujarat).

32.5.22.2 The amendment has been sought in respect of increase in production capacity of one of the products, liquid Bromine from 12500 to 32000 TPA, mainly due to market demand, with more details as under:-

S. No.	Para of EC	Details as per the EC	To be revised / read as	Justification / reasons
1	Page No. 1, Para no. 2: Table of Products and quantities manufactured, Sr. No. 2 – Liquid Bromine	Liquid Bromine production quantity = 12500 MTPA with General condition no. B ii on Page no. 5 of EC dated 2nd September, 2011 reads as: "*No further expansions or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project from those submitted to this Ministry for Clearance, a fresh proposal shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any*."	M/s Archean Chemical Industries Pvt. Ltd. proposes to increase the production of Liquid Bromine from 12500 MTPA (existing) to 32500 MTPA (Total after expansion). Waiver is sought from General condition no. B ii of EC for Bromine production / expansion and deletion of Bromine as the product does not require Environmental Clearance as per the EIA Notification dated 14th September, 2006 as amended till date	a) The activity of Bromine (an inorganic chemical) manufacturing & thus expansion thereof is not covered in the EIA Notification dated 14th September, 2006, as amended till date. b) Storage capacity of Bromine is not exceeding the approved capacity of 300 MT as per EIA report based on which EC was granted. The Storage of Bromine is not an isolated storage as per MSIHC Rules, 2000. **Note**: There is no expansion in manufacturing of Chemical Fertilizer Manufacturing Unit / plant of Sulphate of Potash (SOP), Co-Generation Power Plant (CPP), Green Bromine and Epsomite

32.5.22.3 *The Committee, after deliberations, noted that the product in question (Liquid Bromine) is not attracting the provisions of the EIA Notification, 2006, and thus not requiring the environmental clearance. As such, the proposal for amendment was considered as infructuous, requiring no further action.*

Agenda No.32.5.23

Pesticides & Chemicals (750 MTPM) Manufacturing Unit by M/s Shivalik Rasayan Limited at Plot No. D-2/CH/41/A, Dahej-II, Industrial Estate, Village Vadadala Tehsil Vagra, District Bharuch (Gujarat) - Amendment in Environmental clearance

[IA/GJ/IND2/70610/2014, J-11011/556/2011-IA II(I)]

32.5.23.1 The proposal is for amendment in the environmental clearance dated 27th August, 2014, granted by the Ministry to M/s Shivalik Rasayan Ltd for Pesticides & Chemicals (750 MTPM) Manufacturing Unit located at Plot No. D-2/CH/41/A, Dahej-II, Industrial Estate, Village Vadadala Tehsil Vagra, District Bharuch (Gujarat).

32.5.23.2 The project proponent now proposes change in product mix with change in category from 5(b) to 5(f) i.e. Active Pharma Ingredients (API's) and Intermediates of proposed capacity 1500 MTPA after assessing the potential viability aspects on the same location. The details of the proposed amendments are as under:

<table>
<tr><th>S. No.</th><th>Para of EC</th><th>Details as per the EC</th><th>To be revised/read as</th><th>Justification/ Reasons</th></tr>
<tr>
<td>1.</td>
<td>Para 2.0</td>
<td>The Ministry of Environment and Forests has examined the application. It is noted that proposal is for setting up of Pesticides &Allied Agro Chemical Products Manufacturing Unit (750 TPM) at Plot No.D-2/CH/41/A at Dahej-II, Industrial Estate, Village Vadadala, Tehsil Vagra, District Bhartuch, Gujarat. Total plot area is 50,000 m^2. Total cost of project is Rs. 60.0 Crore. Sea coast is 8 Km away from the project site. There is no national park / wildlife sanctuary / reserve forest within 10 Km distance. Plant will be operated for 330 days. Maximum any four products will be manufactured at a time with total manufacturing capacity of 750 MTPM.
Following products will be manufactured:
<table>
<tr><th>S. No.</th><th>Products</th><th>Quantity (TPM)</th></tr>
</table>
</td>
<td>It is noted that Proposal is for setting up of Active Pharma Ingredients (API's) and Intermediates Manufacturing Unit (125 MTPM i.e. 1500 MTPA) at Plot No.D-2/CH/41/A at PCPIR, Dahej-II, Industrial Estate, Village Vadadala, Tehsil Vagra, District Bhartuch, Gujarat. Total plot area is 50,000 m^2. Total cost of project is Rs. 110.0 Crore. Maximum any Ten Products will be manufactured at a time on campaign basis with total manufacturing capacity of 125 MTPM i.e. 1500.00 MT/Annum.
Following products will be manufactured:
<table>
<tr><th>S. No.</th><th>Product</th><th>Quantity (TPA)</th></tr>
<tr><td colspan="3">Production Stage – I</td></tr>
<tr><td>1.</td><td>Busulfan</td><td>0.50</td></tr>
<tr><td>2.</td><td>Azacitidine</td><td>0.50</td></tr>
<tr><td>3.</td><td>Bortezomib</td><td>0.30</td></tr>
<tr><td>4.</td><td>Melphalan</td><td>0.30</td></tr>
<tr><td>5.</td><td>Pomalidomide</td><td>0.50</td></tr>
<tr><td>6.</td><td>Bendamustin</td><td>0.50</td></tr>
</table>
</td>
<td>Project proponent proposes to diversify from Pesticides & Chemicals to Bulk Drugs i.e. manufacture of Active Pharma Ingredients (API's) and Intermediates (1500 MTPA).
First 15 Nos. of products shall be manufacture in Phase - I and rest of the items shall be produced in Phase – II as per the facility establish.Industry proposes to manufacture either final Drug or Drug intermediates with the given capacities.
At present India is dependent on China in respect of Pharma API. The Import of API from China is to the tune of 75-80%. When we consider Pharma intermediates, then dependency increases to 90-95 %. The Govt. of India is planning Pharmaceutical Parks to increase the</td>
</tr>
</table>

		1.	Dimethoate Technical	150		eHCl		manufacturing of API and Intermediates.
		2.	Acephate Technical	300	**7.**	Pemetrexed Di Na (PMD)	0.30	
		3.	Hexaconazole Technical	350	**8.**	Anastrozole	0.20	
		4.	Glyphosphate Technical	150	**9.**	Paclitaxel	0.50	
		5.	Chlorpyriphos Technical	150	**10.**	Letrozole	0.30	
		6.	Melathion Technical	350	**11.**	Cabazitaxel	0.20	
		7.	Tebuconazole Technical	250	**12.**	Oxaliplatin	0.30	
		8.	Pendimthalin Technical	150	**13.**	Cisplatin	0.30	
		9.	Fipronel Technical	250	**14.**	Carboplatin	0.30	
		10.	Imidaclorid Technical	150	**15.**	Docetaxel	0.50	
		11.	Acetamitrid Technical	150	**Production**		**5.50**	
		Total		**750 TPM (Any four be manufactured at time)**	**Production Stage – II**			
		By-Products			**16.**	Imatinibmesylate	5.00	
		1.	NaHS (Sodium Hydrogen Sulphide)	75	**17.**	Enzalutamide	1.00	
		2.	Acetic Acid	150	**18.**	ErlotinibHCl	10.00	
					19.	Palbociclib	10.00	
					20.	Ibrutinib	5.70	
					21.	Lenalidomide	1.00	
					22.	Dimethyl fumarate	25.00	
					23.	Pirfenidone	5.00	
					24.	FingolimodHCl	0.50	
					25.	Terifluonamide	0.50	
					26.	Sitagliptin	75.00	
					27.	Vildagliptin	90.00	
					28.	Teneligliptin	75.00	
					29.	Saxagliptin	75.00	
					30.	Dofetilide	0.90	
					31.	Azilsartankamedoxamil	10.00	
					32.	EletriptanHCl	0.50	
					33.	Methylphenidate HCl	5.00	
					34.	DexmethylphenidateHCl	5.00	
					35.	Dasatinib	5.00	
					36.	Gefitinib	5.00	
					37.	Abiraterone Acetate	5.00	
					38.	Clopidogrel Bisulfate	25.00	
					39.	Montelukast Sodium	75.00	
					40.	DarunavirEthanolate	75.00	
					41.	Sofosbuvir	14.00	
					42.	Atazanavir Sulfate	50.00	

43.	Prasugrel Hydrochloride	60.00			
44.	Linezolid	50.00			
45.	Canagliflozin Hemihydrate	50.00			
46.	Tenofovirdisoproxilfumarate	100.00			
47.	Sunitinib malate	5.00			
48.	Decitabine	1.00			
49.	Gemcitabine HCl	2.00			
50.	Temozolomide	2.00			
51.	Bicalutamide	2.00			
52.	Capecitabine	100.00			
53.	Cytarabine	0.40			
54.	Acebrophylline	10.00			
55.	Cloferabine	1.00			
56.	Cyclophosphamide	2.00			
57.	Emtricitabine	100.00			
58.	Elvitegravir	100.00			
59.	Cobicistat	100.00			
60.	Ambroxol hydrochloride	100.00			
61.	SorafenibTosylate	3.00			
62.	IrinotecanHCl Trihydrate	2.00			
63.	Praziquantel	50.00			
Production		**1494.50**			
Total Production (Stage – I & II)		**1500.00**			
By-Products					
1.	Triethylamine Hydrochloride	4.00			
2.	Diisopropylethylamine Hydrochloride	59.09			
3.	Chloroethanol	18.90			
4.	Hydrobromic Acid - Succinamide	1.21			
5.	a,a,a,a,-Tetramethyl-5-(methyl)-1,3-benzenedi-	0.25			

				acetonitrile	
			6.	L- isomer of paclitaxel	0.05
			7.	Dicyclohexyl Urea	0.17
			8.	Potassium Chloride	2.74
			9.	Hydroxybenzo triazole	7.80
			10.	Triethylamine HCl Salt	15.00
			11.	Sodium Tartrate	12.00
			12.	Azahypoxanthine& 5-aminoimidazole-4-carboxamide	2.50
			13.	Phthalic acid & Imidazole	46.66
			14.	4-Methylbenzenesulfonic Acid	269.47
			15.	Bromro Ethane	918.70
			16.	Tin oxide	13.32
			17.	n-methyl benzyl amine	1.56
			18.	Ammonia Benzoate	24.00
			19.	Trimethylsilane	201.39
			20.	Tin salt	199.99
			21.	Distilled Sulfonic Acid	136.39
			22.	Potasium Phosphate	353.56
			23.	Aluminium Chloride Solution	333.83
			24.	4-Nitrophenol	30.26
			25.	Methanethiol	38.00
			26.	N,N-Diisopropylethylamine	434.84
			27.	Potassium Hydroxide	200.00
			28.	Potassium Carbonate	200.00
2.	Para 3.0	Multicyclone followed by bag filter along with adequate stack height will	**Mechanical dust collectors/ Multi-cyclone separator** along with adequate stack height will		Management of stack emission, process emission will be carried

		be provided to coal fired boiler and thermic fluid heater to control particulate emissions. Scrubber will be provided to the process vents to control process emissions viz. HCl, Cl_2, P_2O_5, NH_3, CH_3Cl, HBr and NH_3. In order to control odour, outlet of process vents should be passed through activated charcoal bed column to complete deodorize the outlet gas. Total fresh water requirement from GIDC water supply will be 150 m^3/day. Industrial effluent generation will be 76 m^3/day. Effluent will be segregated into High COD, High TDS and low COD/TDS effluent streams. High TDS effluent should be treated through stripper followed by Multiple Effect Evaporator (MEE). Low COD/TDS effluent will be treated in effluent treatment plant (ETP) and treated effluent will be discharged to the GIDC effluent after conforming the norms prescribed by GPCB. Treated effluent will be passed through guard pond. Online pH meter, flow meter and TOC analyzer will be installed. ETP sludge and inorganic waste will be sent to treatment storage disposal facility (TSDF) for hazardous waste. Waste oil/spent oil will be sold to registered recyclers/re-processors. Fly ash will be sent to brick manufacturers/cement	be provided to coal fired boilers (4.0 TPH x 02 Nos.) to control particulate emissions. **Packed column scrubbers** will be provided to the process vents to control process emissions as per Process requirement. **Total fresh water requirement from GIDC water supply will be 150.0 m^3/day. Industrial effluent generation will be 47.0 m^3/day. Effluent will be segregated into High COD, High TDS and low COD/TDS effluent streams. High TDS effluent should be treated through stripper followed by Multiple Effect Evaporator (MEE). Low COD/TDS effluent will be treated in effluent treatment plant (ETP) followed by RO and Effluent stream RO Reject shall also be treated through MEE. MEE condensate shall be sent to CETP.** STP is proposed for domestic waste water treatment.	out adequately by keeping regular monitoring. Water requirement will be reduced by adopting recycle/reuse principal.

		industry. DG set (2 x 500 KVA) will be installed as standby power arrangement.		
3.	Para 5.0	All units producing technical grade pesticides are listed at S.N. 5(b) under category 'A' and appraised at Central level.	Proposed Unit producing Active Pharma Ingredients (API's) and Intermediates is listed at S.N. 5(f) under category 'B'.Since the existing approval under S.N. 5(b)of category 'A' is accorded by this EAC, therefore any amendment in EC can be done by this committee only.	The existing industrial plot is in Petroleum, Chemical and Petro-chemical Investment Region (PCPIR) at Dahej II Industrial Estate, Tehsil Vagra, District Bharuch (Gujarat). EC to develop PCPIR by GIDC has been granted by MoEF& CC vide Letter No. F. No. 21-49/2010-IA-III Dated 14th September 2017.
A. SPECIFIC CONDITIONS:				
5.	Para (ii)	Multi cyclone followed by bag filter along with adequate stack height shall be provided to coal fired boiler and thermic fluid heater to control particulate emissions.	**Multi cyclone followed by mechanical dust collectors** along with adequate stack height shall be provided to coal fired boiler to control particulate emissions.	It will be complied strictly.
6.	Para (iii)	Two stage water scrubber followed by alkali scrubber shall be provided to process vent to control HCl, Cl_2, P_2O_5, NH_3, CH_3Cl, HBr emissions. Two stage water scrubber shall be provided to process vent to control NH_3 emissions. The scrubbed water should be sent to ETP for further treatment. Efficiency of scrubber shall be monitored regularly and maintained properly. Scrubbers vent shall be provided with on-line detection and alarm system to indicate higher than permissible value of controlled parameters. At no time, the emission levels shall go beyond the prescribed standards. The system should be interlocked with the pollution control equipments so that in case of any increase in pollutants beyond	Two stage water scrubbers (**Packed column**) followed by alkali scrubber shall be provided to process vent to control Acid mist/ VOCs emissions. **The scrubbed water shall be sent to ETP followed by RO for further treatment.**	**Packed column Scrubbers along with stack height of 3 m ARL for each is proposed to control the emission from Process section as per requirement.**

		permissible limits, plant should be automatically stopped.		
8.	Para (xv)	Industrial effluent generation should not exceed 76 m^3/day. Effluent should be segregated into High COD, High TDS and low COD/TDS effluent streams. High TDS effluent should be treated through stripper followed by MEE. Low COD/TDS effluent should be treated in ETP and treated effluent shall be discharged to the GIDC effluent after conforming the norms prescribed by GPCB. Water quality of treated effluent should meet the norms prescribed by CPCB/SPCB.	Industrial effluent generation should not exceed **47 m^3/day**. Effluent should be segregated into High COD, High TDS and low COD/TDS effluent streams. High TDS effluent should be treated through stripper followed by MEE. **Low COD/TDS effluent should be treated in ETP followed by RO and Effluent stream RO Reject shall also be treated through MEE. MEE condensate shall be sent to CETP.** Domestic Effluent shall be treated in STP. Water quality of treated effluent should meet the norms prescribed by CPCB/SPCB.	▪ Domestic Effluent shall be treated in proposed STP. Treated water (12.0 KLD) shall be reused in Green belt. ▪ Effluent generated from Stream I of high strength waste water i.e. Process and Equipment Washing (23.0 KLD) shall be subjected to MEE. Effluent stream RO Reject (24.0 KLD) shall also be treated through MEE. MEE condensate shall be sent to CETP. ▪ Effluent generated from Stream II of low strength waste water Cooling, Boiler Scrubber and polishing plant (50.0 KLD) shall be treated in ETP followed by RO. RO permeate shall be reused in Utility purpose.
10.	Para (xix)	The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from GPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire fighting facilities in case of emergency. Membership of TSDF for hazardous waste disposal shall be obtained.	The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the **Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016** for management of Hazardous wastes and prior permission from GPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire fighting facilities in case of emergency. Membership of TSDF for hazardous waste disposal shall be obtained.	The hazardous wastes generated during the process of manufacturing of different APIs & intermediates will be stored at hazardous waste storage area and the hazardous wastes shall be dealt as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

32.5.23.3 During deliberations, the EAC noted that the proposal involves change in scope of work, mainly in respect of product series i.e. from manufacturing pesticides & agro-chemicals (8250 TPA) envisaged earlier to now setting up APIs & Intermediates unit of 1500 TPA. In terms of the EIA Notification, 2006, the proposal amounts to change in categorization from category A of item 5(b) to category B of item 5(f).

The Committee further noted that there would be no additional impact on air, water and waste generation scenario due to proposed changes in product series, and thus no increase in pollution load.

32.5.23.4 *The Committee, after deliberations, although agreed in-principle to the proposal, but desired that the Ministry may take a view on admissibility of the proposal in view of change in product series and categorization vis-à-vis the provisions of the EIA Notification, 2006.*

Agenda No.32.5.24

Bulk Drugs and Fine Chemicals Manufacturing Unit of M/s Horster Biotek Pvt Ltd. at Khasra No. 259, Plot No.1, 2, Village Sukhliya, Tehsil Sanwer Road, District Indore (Madhya Pradesh) - Amendment in Environmental clearance

[IA/MP/IND2/70877/2014, J-11011/404/2012- IA II (I)]

32.5.24.1 The proposal is for amendment in the environmental clearance dated 24th September 2014, granted by the Ministry to M/s Horster Biotek Pvt Ltd for Bulk Drugs and Fine Chemicals Manufacturing Unit located at Khasra No. 259, Plot No.1, 2, Village Sukhliya, Tehsil Sanwer Road, District Indore (Madhya Pradesh).

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

S. No.	Para of EC	Details as per EC	To be Revised/read as	Justification/Reason
1	Point 6 on page no. 2	The proposal was considered by the Expert Appraisal Committee (Industry) in its meetings held during 5th -6th March, 2013 and 28th 30th **May 2013** respectively.	The proposal was considered by the Expert Appraisal Committee (Industry) in its meetings held during 5th -6th March, 2013 and 28th 30th **May 2014** respectively.	Typographical error in the year of 19th EAC meeting date.
2	Specific Conditions No. ix on page No. 3	Total fresh water requirement from ground water source shall not exceed 4.815 m3/day and prior permission shall be obtained from the CGWA/SGWA	Total fresh water requirement from ground water source shall not exceed 4.815 m3/day.	Considering water requirement very less the permission from CGWA/SGWA is not required as is not water scare area.

3	Specific Conditions No. x on page No. 3	Industrial Waste water generation shall not exceed **0.04 m^3/day.** Trade effluent shall be segregated into high COD/TDS and Low COD/TDS effluent streams. **High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier)**. Low TDS effluent stream shall be treated in ETP. Condensate and recover water will be recycled and reused within the factory premises. Zero effluent discharge shall be adopted and no effluent will be discharged outside the premises.	Industrial Waste water generation shall not exceed **1.6 m^3/day.** Trade effluent shall be segregated into high COD/TDS and Low COD/TDS effluent streams. **High COD/TDS effluent waste will be sent to nearest common incineration and/or MEE facility for treatment and disposal.** Low TDS effluent stream shall be treated in ETP. Condensate and recover water will be recycled and reused within the factory premises. Zero effluent discharge shall be adopted and no effluent will be discharged outside the premises.	Typographical error in the quantity of waste water generation quantity. Correction required is already mentioned in point no. 3 of EC on page no. 2.
4	Specific Conditions No. xix on page No. 4	At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Responsibility based on PH issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at **Bangalore.**	At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Responsibility based on PH issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at **Bhopal**.	Typographical error in name of the Ministry's Regional Office as project site is located in Madhya Pradesh.
5	Specific Conditions No. xx on page No. 4	As Proposed green belt over 33% of the total project area shall be developed within plant premises with at least **10 meter wide green belt on all sides along the periphery of the project.**	As proposed green belt over 33% of the total project area shall be developed within plant premises with at least **10 meter wide green belt on all sides along the periphery of the project where as possible.**	Please note that considering land area i.e. 1118.02 sq. m. of project site, 10 meter wide greenbelt on all periphery could not be possible.
6	General Conditions No. xiv on page No. 5	As Proposed the company shall earmark Rs. **6.8 Crore and Rs. 19.22 Lakh** towards capital cost and recurring cost per annum……	As Proposed the company shall earmark **Rs. 50 Lakh and Rs. 7 Lakh** towards capital cost and recurring cost per annum……	Typographical error in the capital cost and recurring cost.

7	General Conditions No. xvii on page No. 6	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the **Haryana** Pollution Control Board as prescribe under the Environment (Protection) Rule 1986, ……	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the **Madhya Pradesh** Pollution Control Board as prescribe under the Environment (Protection) Rule 1986, …..	Typographical error in the name of the State Pollution Control Board. Project site is located in Madhya Pradesh.

32.5.24.3 *The Committee, after deliberations, recommended the proposed amendments in the environmental clearance dated 24th September, 2014 on the above lines, with all other terms and conditions stipulated therein remaining the same.*

Agenda No.32.5.25

Bulk Drugs & Drug Intermediates manufacturing facility by M/s BSG Chemicals and Pharmaceuticals Pvt Ltd at Survey Nos. 3,4,5,9 to 14 in village Donivanilakshmipuram, Mandal Nakkapalli, District Visakhapatnam (Andhra Pradesh) - Amendment in Environmental Clearance

[IA/AP/IND2/54184/2016, J-11011/156/2016- IA II(I)]

32.5.25.1 The proposal is for amendment in the environmental clearance dated 13th November, 2017, granted by the Ministry to M/s BSG Chemicals and Pharmaceuticals Pvt Ltd for the project 'Bulk Drugs & Drug Intermediates manufacturing facility' at Survey Nos. 3,4,5,9 to 14 in village Donivanilakshmipuram, Mandal Nakkapalli, District Visakhapatnam (Andhra Pradesh).

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

S. No.	Para of EC	Details as per the EC	To be revised/read as	Justification/reasons
1	6	Total water requirement is 121.5 cum/day, of which fresh water requirement of 65 cum/day will be met from rain water harvesting.	Total water requirement is 121.5 cum/day, of which fresh water requirement of 65 cum/day shall be met through rain water harvesting. During the lean period, water demand shall be met from private suppliers.	During our presentation to the committee we submitted our proposal to garner rain water for utilization based on the water availability and land availability. Based on the rainfall data there will be lean for rain water availability from December to April. We requested the Committee to grant permission to procure water from private sources during this period. This was considered in meeting, but it was not mentioned in the minutes. As per the ToR condition B
2	12 (g)	Total fresh water requirement shall not exceed 65 cum/day to be met from rain water	Total fresh water requirement shall not exceed 65 cum/day, to be met through rain water harvesting. During the lean period, water demand shall be	

		harvesting. No ground water shall be extracted.	met from private suppliers. In any case, there shall be no ground water withdrawal.	(ii), only restriction given is not to extract groundwater as the sites proximity to sea. We kindly request to give us an amendment keeping in view of the practical difficulties in getting rain water for all the months.

32.5.25.3 *The Committee, after deliberations, recommended the proposed amendments in the environmental clearance dated 13th November, 2017 on the above lines, with all other terms and conditions stipulated therein remaining the same.*

Agenda No.32.5.26

Expansion of Pesticides industry and pesticide specific intermediates (excluding formulations) by M/s Bayer Vapi Pvt Ltd from 17562 MTA to 26572 MTA at Plot No.306/3, Phase II, GIDC Estate, District Valsad (Gujarat) - Amendment in Environmental Clearance

[IA/GJ/IND2/33091/2015, J-11011/300/2015- IA II(I)]

32.5.26.1 The proposal is for amendment in the environmental clearance dated 28th March 2017, granted by the Ministry in favour of M/s Bayer Vapi Pvt Ltd to their project for expansion of pesticides industry and pesticide specific intermediates (excluding formulations) from 17562 MTA to 26572 MTA at Plot No. 306/3, Phase II, GIDC Estate, District Valsad (Gujarat).

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

S. No.	Para of EC	Details as per the EC	To be revised/ read as	Justification/ reasons
1	Point 2	Total plot area is 29.4 ha, out of which green belt will be developed in the area of 10.6 ha (36%)	Total Plot area is 34.8 ha, out of which green belt will be developed in the area of 10.6 ha (36%).	Amendment required in EC letter is as per table no 5.1 Page no.266 of the EIA report.
2	Point 8	Existing unit has 4x10 TPH boiler with 45 m stack height	Existing unit has 4x10 TPH boiler with 30 m stack height	Amendment required in EC letter is as per table no 2.12 Page no.159 of the EIA report
3	Point 9	ETP sludge distillation residue, ash from incineration will be disposed of to TSDF. Process residue will be sent from common incineration. Used/ spent oil will be sent from common incineration. Used/	ETP Sludge, waste left after evaporation, ash from incineration, waste insulation, brick/refractory will be disposed to authorized TSDF. Distillation residue, oil and grease	Amendment required in EC letter is as per table no 2.17 Page no.172 to 175 of the EIA report

		spent oil will be sold to authorize Recyclers/ Processors. Discarded containers/ bag will be sent to the authorized re-processor.	skimming residue, spent solvent, expired and off specification pesticide, spent resin, after filter cloth, oil filter, used oil, spent carbon, solid waste from surface preparation, process waste, waste from contaminants/clean up of spills, used PPE, flue gas cleaning gas residue will be incinerated in own/CHWIF/CO-processing. Used oil, Spent solvent, discarded container/barrels/liners, spent catalyst, in organic acid will be sold to registered recyclers/ actual users/recovery unit/ authorized vendor.	
4	Specific Condition Point III	Acid Scrubber shall be provided to process vent to control process emissions viz. NH_3 and HC	To be deleted as there is no process emissions	Amendment required in EC letter is as per table no 2.14 Page no.161 & 162 of the EIA report
5	Specific condition XV	The company shall obtain authorization for collection, storage and disposal of hazardous waste (management, handling and trans boundary movement rules 2008 and amended as on date for management of Hazardous waste and prior permission from MPCB shall be obtained for disposal of Solid/hazardous waste in the TSDF.	The company shall obtain authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans boundary Movement) Rules, 2008 and amended as on date, for management of hazardous wastes and prior permission from GPCB shall be obtained for disposal of solid/hazardous waste in TSDF.	The project is located in Vapi Notified Estate Gujarat. Hence jurisdiction of MPCB mentioned is required to be changed to GPCB.
6	Specific condition XXIII	The unit shall adhere to zero liquid discharge (ZLD).	The treated effluent discharge shall not increase from the present, and the unit shall ensure no discharge due to the	In view of the treated effluent discharge quantity mentioned in

			proposed expansion.	point Xi of Special condition, The condition Xxiii required to be deleted being contradictory. Amendment required as per table 2.10 and Page no 148 of the EIA report.
7	General Condition VI	The company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use to same water for process activities of the project to conserve fresh water	The unit realizes the importance of rainwater harvesting however rain water harvesting is not taken up in plant area. This is because possibility of hazardous dust (in spite of all possible precautions) gets mixed with rainwater and enter the ground water. The ground water will get contaminated. The site does not withdraw ground water. The water table in Vapi region is quite high due to average rainfall 2500 mm/year. In view of the above factors, the site has not carried out rain water harvesting.	Amendment required as per Section 5.4.6 at page no 268 of the EIA Report. Advice from committee members in view of the concerns are highly appreciated.

32.5.26.3 *The Committee, after deliberations, recommended the proposed amendments in the environmental clearance dated 28th March, 2017 on the above lines, with all other terms and conditions stipulated therein remaining the same.*

Agenda No.32.5.27

Distillery unit of 45 KLD by M/s Cane Agro Energy Agro (India) Ltd at Raigaon, District Sangli (Maharashtra) - Amendment in Environmental Clearance

[IA/MH/IND2/71210/2004, J-11011/101/2003-IA-II(I)]

32.5.27.1 The proposal is for amendment in the environmental clearance dated 11th March, 2004, granted by the Ministry to M/s Dongarai Sagareshwar Shetakari Sahakari Sahakar Karkhana Ltd, Kadepur for their project 'Distillery unit of 45 KLD' at Raigaon, District Sangli

(Maharashtra). The said EC was transferred in the name of the M/s Cane Agro Energy Agro (India) Ltd vide Ministry's letter dated 23rd May, 2014.

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

S. No	Para of	Details as per the EC	To be revised as	Justification/ reasons
A	**Specific Condition No.**			
1	(iii)	The unit shall not operate for more than 270 days in a year as per the CPCB guideline	The unit shall operate for 365 days in a year.	Due to change in technology for disposal of Spent wash
2	(iv) & (v)	**Bio-composting with press mud** shall be practiced for utilization of spent wash Land and other requirements for treatment of spent wash with press mud shall be as per CPCB guidelines. **The company shall earmark a separate area of 25 acres for bio-composting and storage of press mud and finished products.** Spent wash storage shall not be more than 30 days. The company shall monitor the soil & ground water quality in the compost and project area on a regular basis and submit half- yearly reports to SPCB and the Ministry.	After bio methanation, treated spent wash shall be followed by **MEE, ATFD and Drum dryer. The dried spent wash powder** (96%-98 %TS) will be sold as Potash fertilizer. Condensate will be treated in condensate polishing unit. Treated condensate water will be recycled/reused for process and cooling towers. **Hence, distillery will be operated for**	The advantage of ZLD is that the fresh water requirement of the Industry reduces by at least 50% to 90% plus. Also as there is no practical discharge of waste water from the Industry, the Surface water pools and rivers, ground water pools are protected from contamination. With the present impending danger of scarcity of good water in our nation, ZLD is a beneficial.

32.5.27.3 *The Committee, after deliberations, recommended the proposed amendments in the environmental clearance dated 11th March, 2004 on the above lines, with all other terms and conditions stipulated therein remaining the same.*

*****

Members of the EAC (Industry-2) present during 32nd meeting held on 20-22 December, 2017 at MoEF&CC, New Delhi

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