

**Minutes of 29th Expert Appraisal Committee (Industry-2) meeting held during 12-13
October, 2017 at Ministry of Environment, Forest and Climate Change, Indira Paryavaran
Bhawan, New Delhi - 3**

Day 1: 12th October, 2017

- 1. Opening remarks by the Chairman**
- 2. Confirmation of the minutes of the 28th meeting held on 18-20 September, 2017 at N Delhi**

The EAC, having taken note that no comments were offered on the minutes of its 28th meeting held on 18-20 September, 2017 at New Delhi, confirmed the same.

- 3. Consideration of proposals**

29.3 Environmental Clearance

Agenda No.29.3.1

Proposed installation of Unit-II Grain Based Ethanol/ENA/RS/Industrial Alcohol Plant [500 KLPD (2x250 KLPD)] & Co-Generation power Plant in existing Distillery Plant at Village Mansoorwal, Tehsil Zira, Faridkot Road, District Ferozepur (Punjab) by M/s Malbros International Pvt Ltd - For reconsideration of EC

[IA/PB/IND2/30448/2006, F.No. J-11011/187/2006-IA II (I)]

29.3.1.1 The project proponent and the accredited consultant M/s J M EnviroNet Pvt Ltd, gave a detailed presentation on the salient features of the project and informed that:

- (i) The project is for installation of Unit-II Grain Based Ethanol/ENA/RS/ Industrial Alcohol Plant [500 KLPD(2x250 KLPD)] & Co-Generation power Plant [(40 MW (2x20 MW))] in Existing Distillery Plant by M/s Malbros International Pvt Ltd at Village Mansoorwal, Tehsil Zira, Faridkot Road, District Ferozepur (Punjab).
- (ii) All grain based distilleries ≥ 30 KLPD are listed at Sl.No. 5(g) (ii) of the Schedule to the EIA Notification, 2006 under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- (iii) ToR was issued by the Ministry vide letter No. J-11011/228/2015-IA II (I) dated 28th December, 2015. Public Hearing was conducted by the State Pradesh Pollution Control Board on 4th May, 2016.
- (iv) Earlier, the Ministry has issued EC vide letter No. J-11011/187/2006-IA II (I) dated 25th September, 2006 for 100 KLPD grain based distillery in favour of M/s Malbros International Pvt Ltd.
- (v) The proposed project will be installed in two phases:
 - Phase 1:- 250 KLPD Ethanol/ ENA/ RS/ Industrial alcohol Plant and 20 MW Co-generation Power Plant
 - Phase 2:- 250 KLPD Ethanol/ ENA/ RS/ Industrial alcohol Plant and 20 MW Co-generation Power Plant

(vi) Total Plant area is 14.8 ha (36.5 Acre), proposed expansion will be done in the existing plant premises. Almost 33% i.e. 4.9 ha (12.10 acre) of the total plant area has already been

developed as greenbelt/plantation. No additional land will be required for the proposed installation of Unit II.

(vii) Total cost of the project for the expansion is Rs.583 Crores. Capital cost for Environmental Protection Measures will be Rs.58 Crores and Recurring Cost will be Rs.10 Crores/annum.

(viii) The raw materials for the production will be Grains (damaged grain feed stock, nakku, Kinki, sorghum, maize, bajra, barley) (1200-1300 TPD) which will be obtained from nearby areas by road, chemicals and enzymes will be obtained from nearby market.

(ix) Proposed project will provide employment to 800 persons.

(x) It is reported that no National Parks, Wildlife Sanctuaries, Reserve Forest/ Protected Forests, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance of the project.

(xi) The number of working days will be 350 days/annum.

(xii) Ambient air quality monitoring was carried out at 8 locations during October to December, 2015 and submitted baseline data indicates that ranges of concentrations of PM10 (65.0 $\mu\text{g}/\text{m}^3$ to 88.5 $\mu\text{g}/\text{m}^3$), PM2.5 (26.5 $\mu\text{g}/\text{m}^3$ to 42.3 $\mu\text{g}/\text{m}^3$), SO₂ (5.8 $\mu\text{g}/\text{m}^3$ to 10.8 $\mu\text{g}/\text{m}^3$) and NO₂ (14.7 $\mu\text{g}/\text{m}^3$ to 23.8 $\mu\text{g}/\text{m}^3$) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.43 $\mu\text{g}/\text{m}^3$, 2.57 $\mu\text{g}/\text{m}^3$ and 2.43 $\mu\text{g}/\text{m}^3$ with respect to PM₁₀, SO₂ and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(xiii) The fresh water requirement for the proposed expansion of Grain based distillery will be 4110 m³/day, which will be met from canal water.

(xiv) Spent Wash will be taken through centrifuge decanters and thin slops from the decanter centrifuge will be partly recycled back to process (30-35 %) and partly taken to the Thin Slops Evaporation plant for concentration of remaining solids to form a syrup. This syrup will also be mixed into the wet cake coming out of centrifuge and forms part of cattle feed. Wet Cake/DWGS from decanter will be passed through steam tube bundle drier for drying into cake with 10-12% moisture (max.) to give higher shelf life. DDGS will be ideally used as cattle feed/ poultry feed/ etc. No effluent will be generated from the plant as the distillery is based on "Zero Effluent Discharge".

(xv) The total power requirement for proposed project will be 9.0 MW which will be sourced from proposed 40 MW (2 x 20 MW) Co-Generation Power Plant & 3 x 1000 kVA of D.G. set (for back up). The remaining power will be exported to the state power grid.

(xvi) Two Biomass/ Rice Husk/ Bagasse/ Paddy & Wheat straw fired boiler of 100 TPH capacity will be installed. A stack of 63 m height will be equipped with Electrostatic Precipitator (ESP) will be installed to encounter the emission from boiler stack. CO₂ generated during the fermentation process will be scrubbed, purified & collected for sale as by-product. DG Sets will have adequate height of stack as per CPCB Guidelines. Adequate measures for control of Fugitive Dust Emissions will be taken.

(xvii) Ash from the boiler will be given to the brick manufacturers.

29.3.1.2 The proposal was last considered by the EAC in its meeting held on 23-25 January, 2017, wherein the Committee sought for the following:-

- Study report on viability of production of Potable liquor vs Fuel Ethanol.
- Traffic management plan in consultation with NHAI w.r.t. raw material transportation.
- Commitment to produce fuel grade ethanol in place of Potable liquor.

In response to the above observations, parawise clarification/information provided are as below:-

- (a) Total requirement of alcohol in India - 7100 Million Litres
Availability of alcohol as on date - 4286 Million Litres
Total Shortfall – 2814 Million Litres

As such, it may be concluded that there is shortfall of 2814 Million Litres of alcohol. Further, Alcohol industry is growing at a CAGR of 10-12% per annum and with the economic growth and prosperity of the country, the disposable income per capita is growing which will directly contribute to the growth of the industry. Also, as a by-product, the project will yield DDGS (Distillers Dried Grain Solubles)/animal feed supplement because of its rich protein content and helps in nutrition of livestock.

(b) It is informed that the design crust of the NH 15 has been prepared by considering yearly traffic growth of @ 5% of commercial vehicles in future for a period of 30 years. Accordingly, impact of additional load of 179 nos. commercial vehicles shall not affect the design crust of NH-15. The same has been endorsed by the Central Works Division, PWD of the state Government (Highway Administrator of the stretch from km 163.50 to 248.00 of NH-15.

(c) As per the present Ethanol tender norms, fuel ethanol production from grain is not permissible. However, the proposed unit will produce certain quantity of SDS which shall be committed for supplies as fuel ethanol.

29.3.1.3 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Expansion of Grain based Distillery from 100 KLPD to 600 KLPD (by adding 2 units of 250 KLPD each in two phases as Unit-II) & Co-Generation power Plant of 40 MW (2x20 MW)' by M/s Malbros International Pvt Ltd in a total area of 14.8 ha at Village Mansoorwal, Tehsil Zira, Faridkot Road, District Ferozepur (Punjab).

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

The ToR for the project was granted on 28th December, 2015, and the Public hearing was conducted by the SPCB on 4th May, 2016.

Total fresh water requirement due to the proposed expansion is estimated to be 4110 KL/day, to be met from Canal water.

Consent to Operate for the existing Grain based Distillery of 100 KLPD has been obtained from the State Pollution Control Board.

Earlier, the Ministry had issued environmental clearance for Grain based distillery of 100 KLPD (Unit-I) on 25th September, 2006. The monitoring report of the Ministry's Regional Office at on compliance status of EC conditions is found to be satisfactory. In case of some of the conditions partially complied or not-complied, the action plan submitted by the project proponent has been found to be adequately addressing the same.

29.3.1.4 *The EAC, after deliberations, noted that the proposal involves expansion of grain based distillery of present capacity 100 KLPD (reported to be Unit-I) to 600 KLPD in two phases of 250 KLPD each, which is not reflected in the present proposal. The Committee further observed that the impact of the proposed expansion (for both the phases) has to be assessed for different components of the environment and reported in the EIA/EMP reports. The Committee also noted that the proposal is neither consistent nor compliant with the Terms of Reference issued for the project.*

The proposal was therefore deferred.

Agenda No.29.3.2

Proposed Expansion of Cosmeceutical, Active Pharmaceuticals, Specialty Chemicals and Biotech Products Manufacturing at Hassan (Karnataka) by M/s Kumar Organic Products Ltd - For reconsideration of EC

[A/KA/IND2/64711/2016, F.No.IA-J-11011/353/2017-IA-II(I)]

29.3.2.1 The project proponent and the accredited consultant M/s Hubert Enviro Care Systems (P) Ltd, gave a detailed presentation on the salient features of the project and informed that:

(i) The project is for expansion of Cosmeceutical, Active Pharmaceuticals, Specialty Chemicals and Biotech Products Manufacturing by M/s Kumar Organic Products Ltd at Plot No 94P, 103 & 104, Pharmaceutical SEZ, KIADB Industrial Area, Koushika Road, Koushika village, Hassan District (Karnataka).

(ii) The proposal is classified as Schedule 5 (f) of the Environmental Impact Assessment (EIA) Notification, 2006 under category 'B' and are appraised at State Level by Expert Appraisal Committee (EAC). Since KSEAC was not available the EIA doc was uploaded in MoEF&CC, New Delhi.

(iii) Earlier, the Ministry had issued EC vide letter No. SEIAA:102:IND:2008 dated 18th March 2011 for Hassan unit to M/s Kumar Organic Products Ltd.

(iv) ToR was issued by the SEIAA, Karnataka vide their letter No. SEIAA 32 IND 2016 dated 24th September, 2016. 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 KIADB Pharma SEZ industrial area.

(v) Existing land area is 25 acre (101170 sqm), and no additional land will be used for proposed expansion.

(vi) Details of existing and proposed products are as under:

S.No	Existing		Proposed		Total (Existing + Proposed)	
	Products Name	Capacity (TPA)	Products Name	Capacity (TPA)	Products Name	Capacity (TPA)
1	Zinc Pyrithione	1200	PCMX USP	900	Zinc Pyrithione	1200
2	Copper Pyrithione	300	PCMX IP	2000	Copper Pyrithione	300
3	Caregeenan	1000	Hyaluronic Acid	6	Caregeenan	1000
4	Synovia HR	24	Pullulan	60	Synovia HR	24
5	Sytenol A	12	Koptrizon	24	Sytenol A	12
6	Ascorbyl Palmiate	40	Kopcotrizenol	4	Ascorbyl Palmiate	40
7	Triclosan	90	Kopcerene	40	Triclosan	90
8	Kopirox	36	K Firm	60	Kopirox	36
9					PCMX USP	900
10					PCMX IP	2000
11					Hyaluronic Acid	6
12					Pullulan	60
13					Koptrizon	24
14					Kopcotrizenol	4
15					Kopcerene	40

16					K Firm	60
	Total	2702	Total	3094	Total	5796

- (vii) Industry has already developed greenbelt in an area of 33% i.e., 8.25 Acres out of 25 Acre of area of the project. It will be improved further planting more number of trees.
- (viii) The estimated project cost is Rs. 25 Crores including existing investment of Rs 5 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 1.6 Crores and the Recurring cost (operation and maintenance) will be about Rs11.2 Lakhs/Annum.
- (ix) Total employment will be 103 persons as direct & 110 contract persons indirect after expansion. Industry proposes to allocate Rs 62.5 Lakhs @ of 2.5 % towards Corporate Social Responsibility.
- (x) It is reported that as per Form-1, no notified National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Yagachi River is 7.45 km in West, Hemavathi River is 14.9 km, SSE & Hemavati Reservoir is 13.26 km, SW.
- (xi) Ambient air quality monitoring was carried out at 8 locations during September - November 2016 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (42.7-58.7µg/m³), PM_{2.5} (18.4-26.3 µg/m³), SO₂ (10.2-16.6 µg/m³) and NO₂ (15.5 - 24.3 µg/m³) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.35 µg/m³, 1.92 µg/m³ and 2.19 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- (xii) The water requirement for the existing facility is 365 m³/day (fresh water 103 m³/day and treated water 262 m³/day), the additional water requirement due to the proposed expansion will be 315 m³/day, thus the total water requirement will be 680 m³/day (fresh water 324 m³/day and treated water 356 m³/day). The water requirement will be met from KIADB.
- (xiii) Existing: Treated effluent of 262 m³/day is treated through ETP&MEE plant is based on Zero Liquid discharge system. After expansion the treated effluent will be 356 m³/day will be treated through ETP, MEE & RO plant will also be based on Zero Liquid discharge system.
- (xiv) Power requirement after expansion will be 1500 kVA including existing 500 kVA and will be met from Chamundeshwari Electricity Supply Corporation Limited (CHESCOM). Existing unit has 1 DG sets of 500 kVA capacity is used during power failure, additionally No DG sets are used as standby during power failure. Stack (height 11 m AGL) will be provided as per CPCB norms to the proposed DG sets of 2x500 kVA in addition to the existing DG sets of 1x500 kVA which will be used as standby during power failure.
- (xv) Existing unit has 4 TPH Briquettes fired boiler installed. Cyclone separator with a stack of height of 40 m AGL is installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm³) and for proposed 8 TPH Briquettes fired boiler similar APC equipment will be used.
- (xvi) All reactors' vents are connected to Scrubber. The process emissions (Acid fumes) generated are scrubbed and neutralized and vent through the stacks of adequate height (Common scrubber and stacks 2 Nos, 11 m AGL). The process emission from the proposed expansion will also be treated in same way as above (with Common scrubber and stacks 2 Nos, 11 m AGL).
- (xvii) No Litigation pending against the unit.
- (xviii) Certified compliance report from RO, MoEF&CC was submitted.
- (xix) Total Municipal Solid Waste generated during the construction phase will be 15 kg/day for total 30 Nos manpower. Total Municipal Solid Waste generated during the operation phase will be 106.5 kg/day for total 213 employees of existing (63 nos) and additional (150 nos) manpower due to expansion. Hazardous wastes will be disposed as below:

Waste Category	Hazardous Waste Generated	Quantity			Method of handling
		Existing	Proposed	Total	
5.1	Used Oil (KL/M)	0.3	0.3	0.6	Collected in leak proof containers and disposed only to KSPCB registered Authorized Re-processor
28.1	Organic Residue (Kg /M)	4610	2380	6990	Collected in carboys and stored in Hazardous waste storage area and handed over to KSPCB Authorized incinerator.
33.1	MS Drums (MTA)	30	60	90	Stored in secure manner and handed over to KSPCB Authorized recycler
34.3	HDPE Used Liners (MTA)	0.2	0.4	0.6	
35.3	ETP Sludge/Chemical sludge from clarifier and evaporator (MTA)	2525.8	4124.5	6650.3	Collected in polythene bags and stored in Hazardous waste storage area. and handed over to KSPCB Authorized TSDF

29.3.2.2 The proposal was last considered by the EAC in its meeting held on 27-28 July, 2017, wherein the Committee insisted for true compliance of the EC conditions and not to take the proposal forward till the firm action plan for corrective actions, is submitted by the project proponent to the Regional Office and the same is forwarded to this Ministry after their endorsement.

29.3.2.3 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Expansion of Cosmeceutical, Active Pharmaceuticals, Specialty Chemicals and Biotech Products' from the present capacity of 2702 TPA (8 nos of products) to 5796 TPA (16 nos. Of products) by M/s Kumar Organic Products Ltd at Plot No.94P, 103 & 104, Pharmaceutical SEZ, KIADB Industrial Area, Koushika Road, village Koushika, District Hassan (Karnataka).

The project/activity is covered under category B of item 5(f) 'Synthetic Organic Chemicals Industry' of the Schedule to Environmental Impact Assessment Notification, 2006, and requires appraisal by the concerned SEAC/SEIAA in Karnataka. However, due to SEIAA not functional in the State at the time of submission of the proposal (15th May, 2017), the project was first appraised at Central Level by the sectoral Expert Appraisal Committee (EAC) in the Ministry in its meeting held on 27-28 July, 2017.

The ToR for the project was granted by SEIAA on 24th September, 2016 providing exemption from public hearing due to the project site being in notified industrial area as per the provisions of the EIA Notification, 2006.

Present fresh water requirement is 103 KL/day, which would be increased to 324 KL/day after the proposed expansion to be met from KIADB 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 last Consent to Operate (for manufacture of Thione of 240 TPA or Kopirox of 36 TPA) was obtained from the State Pollution Control Board of Karnataka, which is presently valid up to 30th June, 2018.

Earlier, the environmental clearance for the production capacity of 2702 TPA was issued by SEIAA, Karnataka on 18th March, 2011. The monitoring report on compliance status of EC conditions forwarded by the Ministry's Regional Office at Bangalore vide their letter dated 14th June, 2017, read with further clarification dated 31st July, 2017, is found to be satisfactory.

In response to the above observations of the Committee, the submissions and the clarifications provided by the project proponent were examined and found to be in order.

29.3.2.4 *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.*
- *The effluent discharge from the premises shall conform to the standards prescribed under the Environment (Protection) Rules, 1986.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows :*
 - a) *Reactor shall be connected to chilled brine condenser system.*
 - b) *Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
 - c) *The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
 - d) *Solvents shall be stored in a separate space specified with all safety measures.*
 - e) *Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
 - f) *Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
 - g) *All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed 324 cum/day to be met from KIADB 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 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.
- Raw material storage should not exceed 3 days at any point of time

Agenda No.29.3.3

Setting up pesticide chemical production facilities of Capacity 22750 MT/Annum at Plot No.C-393 to 396, GIDC Estate, Taluka Vagra, Sayakha, District Bharuch (Gujarat) by M/s Gharda Chemicals Ltd - For reconsideration of EC

[IA/GJ/IND2/64577/2015, F.No. J-11011/09/2016-IA II (I)]

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

- (i) The proposal is for setting up of pesticide chemical production facilities (Capacity 22750 MT/Annum) by M/s Gharda Chemicals Ltd at Plot No.C-393 to 396, GIDC-Estate, Taluka Vagra, Sayakha, District Bharuch (Gujarat).
- (ii) All projects are listed at S.N.5 (b) of the Schedule to the EIA Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- (iii) ToR was issued by the Ministry vide letter No. J-11011/09/2016-IA II (I) dated 29th April, 2016. Public Hearing was conducted by the State Pollution Control Board on 26th April, 2017.
- (iv) The list of proposed products are as under:

S.N.	Name of Product	Total Production MT/Annum	CAS No.	End Use
1	Para dichloride benzene (PDCB)	6000	106-46-7	Pesticide Intermediate
2	O- Phenylenediamine (OPDA)	1000	95-54-5	Pesticide Intermediate

3	Amino Ethyl Carbazole (AEC)	150	132-32-1	Intermediate for pigment
4	Chloranil	150	118-75-2	Intermediate for pigment
5	Meta Phenoxy Benzaldehyde (MPB) alcohol	100	13826-35-2	Specialty chemical
6	Poly Ether Ketone (PEK) OR Poly Ether Ketone Ketone (PEKK) OR Polybenzimidazole (ABPBI)	500	PEK :- 27380-27-4 PEKK :- 74970-25-5 ABPBI :- 25928-81-8	Speciality Polymer
7	Poly Ether Imide (PEI)	5000	61128-46-9	Speciality Polymer
8	Hexaconazole	300	79983-71-4	Fungicide
9	Propiconazole	500	60207-90-1	Fungicide
10	Dicamba	5000	1918-00-9	Herbicide
11	Profenofos	1000	41198-08-7	Insecticide
12	Bifenthrin	200	82657-04-3	Pyrethroid
13	Lambda Cyhalothrin	100	91465-08-6	Pyrethroid
14	Thiamethoxam	500	153719-23-4	Insecticide
15	Diafenthiuron	500	80060-09-9	Insecticide
16	Metalaxyl	1000	57837-19-1	Fungicide
17	Buprofezin	250	69327-76-0	Insecticide
18	Carbendazim	500	10605-21-7	Insecticide
	TOTAL	22750		

- (v) Existing land area is 75433.56 sqm and no additional land will be used.
- (vi) Greenbelt will be developed in an area of 33.13% i.e. 24989 sqm out of 75433.56 sqm of area of the project.
- (vii) The estimated project cost is Rs.320 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs.50.75 Crore and the Recurring cost (operation and maintenance) will be about Rs.1 Crore per annum.
- (viii) Total employment will be 200 nos. persons as direct & 500 nos. persons indirect after expansion. Industry proposes to allocate Rs 8 Crore @ of 2.5 % towards Corporate Social Responsibility.
- (ix) It is reported that as per Form-1, no National Parks, Wildlife Sanctuaries, Biosphere, Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc lies within 10 km distance. Bhukhi River is flowing at a distance of 0.79 km in SEE direction.
- (x) Ambient air quality monitoring was carried out at 11(including project site) locations during March 2016 to May 2016 and submitted baseline data indicates that ranges of concentrations of PM10 (79-95 µg/m³), PM2.5 (16-44 µg/m³), SO₂ (13-29 µg/m³) and NO₂ (15-26 µg/m³) (98th percentile values) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.65 µg/m³, --µg/m³ and -- µg/m³ with respect to PM10, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- (xi) Total water requirement is 2360 m³/day of which fresh water requirement of 1765 m³/day and will be met from GIDC.
- (xii) Treated effluent of 854 m³/day will be treated through ETP.
- (xiii) Power requirement after expansion will be 4000 kVA from DGVCL/Torrent Energy Ltd. or from Captive power plant @ 3 MWH. Existing 1150 kVA x 2 DG sets are used as standby during power failure. Stack (height 30 m) will be provided as per CPCB norms to the proposed DG sets of 1150 kVA which will be used as standby during power failure.

(xiv) Details of stacks are as under:

Stack No.	Stack Attached to	Stack Height (m)	Fuel used & rate of consumption	Parameter	Concentration in Outlet flue Gas	Air Pollution Control System
1	Boiler (10 TPH)	30	Coal- 1500 kg/h	Particulate Matter SO ₂ NO _x	150 mg/Nm ³ 100 ppm 50 ppm	Electrostatic Precipitator + Water scrubber
2	Boiler (10 TPH)	30	Coal- 1500 kg/h			Electrostatic Precipitator + Water scrubber
3	Boiler (10 TPH)	30	Coal- 1500 kg/h			Electrostatic Precipitator + Water scrubber
4	Hot oil unit (5 lac kCal/h)	30	HSD-45 L/h			-----
5	Hot oil unit (5 lac kCal/h)	30	HSD-45 L/h			-----
6	Coal Fired Boiler (30 TPH)	30	Coal- 4500 kg/h. (3MW Power Plant)	Particulate Matter SO ₂ NO _x	100 mg/Nm ³ 100 ppm 50 ppm	Electrostatic Precipitator + Water scrubber
7	D.G.Set 1150 kVA	30	HSD -300 L/h	Particulate Matter SO ₂ NO _x	150 mg/Nm ³ 100 ppm 50 ppm	-----
8	D.G.Set 1150 kVA	30	HSD - 300 L/h	Particulate Matter SO ₂ NO _x	150 mg/Nm ³ 100 ppm 50 ppm	-----

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

Stack No.	Stack Attached to	Stack Height (m)	Parameter	Permissible Limits	Air Pollution Control System
1	Chloranil	20	HCl Cl ₂ SO ₂	20 mg /Nm ³ 09 mg /Nm ³ 40 mg /Nm ³	Caustic scrubber, Ventury scrubber
2	PDCB	20	HCl Cl ₂	20 mg /Nm ³ 09 mg /Nm ³	Caustic scrubber, Ventury scrubber
3	Hexaconazole	20	HCl Cl ₂ SO ₂	20 mg /Nm ³ 09 mg /Nm ³ 40 mg /Nm ³	Caustic scrubber, Ventury scrubber
4	Dicamba	20	Methyl Chloride	Sent to Co-incineration	
5	Profenophos	20	HBr Br ₂ HCl Cl ₂	30 mg/Nm ³ 2 mg /Nm ³ 20 mg /Nm ³ 09 mg /Nm ³	Caustic scrubber, Ventury scrubber
6	Lambda Cyhalothrin	20	HCl Cl ₂ SO ₂	20 mg /Nm ³ 09 mg /Nm ³ 40 mg /Nm ³	Caustic scrubber, Ventury scrubber
7	Difenthiuron	20	HBr Br ₂	30 mg /Nm ³ 2 mg /Nm ³	Caustic scrubber, Ventury scrubber

			HCl Cl ₂	20 mg /Nm ³ 09 mg /Nm ³	
8	Metalaxyl	20	HCl Cl ₂ SO ₂	20 mg /Nm ³ 09 mg /Nm ³ 40 mg /Nm ³	Caustic scrubber, Ventury scrubber
9	Incinerator	30	PM with pesticide compound NH ₃ Cl ₂ CH ₃ Cl HBr P ₂ O ₅	20 mg /Nm ³ 30 mg /Nm ³ 05 mg /Nm ³ 20 mg /Nm ³ 05 mg /Nm ³ 10 mg /Nm ³	Caustic scrubber

(xvi) Details of solid/ hazardous waste generation & management are as under:

S.No.	Type of Waste	Category as per 2016 (As Per Schedule)	Generation MTPA	Mode of treatment and Mode of disposal
1	Lube oil	5.1	24.0 MT	Collection storage, Transportation, disposal by incineration or sell to registered Recycler
2	Oil waste	5.2	16.0 MT	Collection storage, Transportation, disposal by incineration or sell to registered Recycler
3	Distillation Residue	20.3	6075 MT	Collection, Storage, transportation, sent to CHWIF for incineration OR Collection, Storage, transportation & selling to co-processing
4	Spent Solvent	20.2	25.0 MT	Collection storage, Transportation, disposal by incineration or sell to registered Refiner
5	ETP Sludge + MEE salt	35.3	3500 MT + 6935 MT	Solid waste disposal to TSDF site
6	Oily Waste from ETP	35.4	24 MT	Collection, Storage, transportation, sent to CHWIF for incineration
7	Spent Catalyst	29.5	1.2MT	Collection, Storage, Transportation, disposal to TSDF OR Sell to registered Recycler
8	Spent Carbon	36.2	103 MT	Collection, Storage, transportation, sent to CHWIF for incineration OR Collection, Storage, transportation & selling for co-processing
9	Discarded containers/barrels/ liners (a) Drums (b) Carboys (c) Glass bottles	33.1	20000 No.	Collection storage, Decontamination & detoxification and sell to GPCB approved end-user
	(d) Non recyclable		60 MT	Collection, Storage,

	Plastic waste			Transportation, disposal to TSDf
	(e) Gunny bags / Plastic liners		12.0 MT	
	(f) Glass wool /Insulation waste		12 MT	
	(g) Used Contaminated PPEs		1.0 MT	
	(h) Liners		2.0 MT	
10	Ash from Power Plant	--	6000 MT	Collection, Storage and sale to brick manufacturers and cement manufacturers to the best possible extent and balance shall be sent for landfilling at TSDf site.
11	Process waste	29.1	250 MT	Collection, Storage, Transportation, sent to CHWIF for incineration
12	Ash from Incinerator	37.2	900MT	Collection, Storage, Transportation, disposal to TSDf
13	Calcium Chloride (35%)	--	24219	Collection, Storage, and sale to actual users
14	Ortho dichloro benzene (ODCB)	--	1998	Collection, Storage, and sale to actual users
15	Trichloro benzene (TCB)	--	312	Collection, Storage, and sale to actual users
16	Calcium Sulfate (92%)	--	9840	Collection, Storage, and sale to actual users
17	Sodium Bisulphite solution (NaHSO ₃) solution (20-25%)	B23	5004	Collection, Storage, and sale to actual users
18	Aluminium Chloride Solution (~22-25%)	B10	4690	Collection, Storage, and sale to actual users
19	Potassium Chloride Solution (~18%)	--	5000	Collection, Storage, and sale to actual users
20	Spent Sulfuric Acid (85%)	B15	19095	Collection, Storage, and sale to actual users
21	15% Ammonia Solution	A10	162	Collection, Storage, and sale to actual users

29.3.3.2 The proposal was last considered by the EAC in its meeting held on 5-7 July, 2017, wherein the Committee noted that water balance chart is not adequate w.r.t. fresh water requirement. The project proponent were asked to rework on the waste water management and submit the revised water balance chart.

In response to the above observations, parawise clarification/information provided are as below:-

- Fresh water consumption will be reduced from 1765 KLD to 1160 KLD due to the RO permeate (595 KLD) reused in process.
- Industrial waste water generation shall decrease from 1700 KLD to 854 KLD.

29.3.3.3 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Setting up Agro-chemicals (pesticides) and organic chemicals manufacturing unit' of total capacity 22750 TPA (17250 TPA of Agro-chemicals and 5500 TPA of Organic chemicals) by M/s Gharda Chemicals Ltd in a total area of 75433.56 sqm at Plot No.C-393 to 396, GIDC-Estate, Taluka Vagra, Sayakha, District Bharuch (Gujarat).

The project/activity is covered under category A of item 5(b) 'Pesticides industry and pesticide specific intermediates (excluding formulations)' and 5(f) 'Synthetic Organic chemical 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, 2016. Public hearing was conducted by the SPCB on 26th April, 2017.

Fresh water requirement would be 1160 m³/day out of the total water requirement estimated as 2360 m³/day, which shall be met from GIDC 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.

In response to the above observations of the Committee, the submissions and the clarifications provided by the project proponent were examined and found to be in order.

29.3.3.4 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.*
- *The effluent discharge from the premises shall conform to the standards prescribed under the Environment (Protection) Rules, 1986.*
- *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. Sulphur content for the coal to be used in the boiler should not exceed 0.5%. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows :*
 - (a) *Reactor shall be connected to chilled brine condenser system.*
 - (b) *Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
 - (c) *The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
 - (d) *Solvents shall be stored in a separate space specified with all safety measures.*

- (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
- (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
- (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- Total fresh water requirement shall not exceed 1160 cum/day to be met from GIDC 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.
- All the commitment made regarding issues raised during the Public Hearing/ consultation meeting held on 26th April, 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. The 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.
- Raw material storage should not exceed 3 days at any point of time.
- Continuous online (24X7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

Agenda 29.3.4

Synthetic Organics and Chemical Fertilizers Manufacturing Unit at Village Wahegaon, Taluka Paithan, District Aurangabad (Maharashtra) by M/s Rama Pulp and Papers Ltd - For reconsideration of EC

[IA/MH/IND2/27965/2012, F.No. J-11011/255/2012-IA II (I)]

29.3.4.1 The project proponent and the accredited consultant M/s SD Engineering Services Pvt Ltd, Aurangabad gave a detailed presentation on the silent features of the project and informed that:

- (i) The proposal is for Synthetic Organics and Chemical Fertilizers Manufacturing Unit by M/s Rama Pulp and Papers Ltd at Gut No. 324, Village Wahegaon, Taluka Paithan, District Aurangabad (Maharashtra).
- (ii) All two categories Chemical Fertilizers and Synthetic Organic Chemicals Industry are listed at S.N 5(a) & 5 (f) of the Schedule to the Environment Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- (iii) ToR was issued by the Ministry vide letter No. J-11011/255/2012-IA II (I) dated 1st March 2013. Public Hearing was conducted by the State Pollution Control Board dated on 20th January, 2015.
- (iv) Total proposed land area is 8.89 ha.
- (v) Details of proposed products are as under:

S. No.	Product	Quantity MT/Day	Quantity MT/month
1.	Linear Alkyl Benzene Sulphonic Acid (LABSA)	50	1500
2.	Single Super Phosphate (SSP)	400	12000

- (vi) Industry will develop greenbelt in an area of 33% i.e., 2.83 ha out of 8.89 ha of area of the project.
- (vii) The estimated project cost is Rs.3400 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs.37 Lakhs and the Recurring cost (operation and maintenance) will be about Rs. 10 Lakhs per annum.
- (viii) Total employment will be 40 persons. Industry proposes to allocate Rs. 85 Lac @ of 5/2.5 % towards Corporate Social Responsibility.
- (ix) It is reported that Nathsagar Dam lies within 3 km distance. River water body Godavari is flowing at a distance of 8.5 km in South direction.
- (x) Ambient air quality monitoring was carried out at 6 locations during February, 2013 to May, 2013 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (55 µg/m³- 29.5 µg/m³), PM_{2.5} (30.5µg/m³-24.5µg/m³), SO₂ (18 µg/m³-8.5 µg/m³) and NO_x (22µg/m³- 11.5 µg/m³) respectively.
- (xi) Total water requirement is 97 m³/day of which fresh water requirement of 97 m³/day and will be met from Irrigation Department.
- (xii) There is no effluent generation from process. The effluent from scrubber will be reused in process.
- (xiii) Power requirement will be 1000 kVA will be met from Maharashtra State Power Distribution Corporation Limited (MSPDCL). DG set are not proposed for this project.
- (xiv) There is no proposed boiler for this project.
- (xv) Process air emission could be hydrogen fluoride & particulate matter. Cyclone, Bag filter and four stage scrubbers shall be used to control Air Pollution.
- (xvi) No litigation is pending

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

S. No.	Hazardous waste generated	Quantity	Disposal
1.	Waste Oil	100 LPM	Sale to authorized recycler / CHWTSDF
2.	Discarded containers/ barrels/liners used for hazardous waste/ chemicals	1080 Nos./annum	Sale to authorized recycler
3.	Scrubber Waste (Sludge)	5 MT/day	Sale to CHWTSDF

29.3.4.2 The proposal was last considered by the EAC in its meeting held on 5-7 July, 2017, wherein the Committee asked for Fluoride management plan and hazardous material handling plan especially for Sulphuric acid transportation.

29.3.4.3 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Synthetic Organic chemical and Chemical Fertilizers Manufacturing' (LABSA-50 TPD and Single Super Phosphate-400 TPD) by M/s Rama Pulp and Papers Ltd in a total area of 8.89 ha at Gut No.324, Village Wahegaon, Taluka Paithan, District Aurangabad (Maharashtra).

The project/activity is covered under category B of item 5(a) 'Chemical fertilizers' and category A of item 5(f) 'Synthetic organic chemicals industry' of the Schedule to 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 1st March 2013 and Public hearing was conducted by the SPCB on 20th January, 2015. The proposal was first submitted on 3rd July, 2015 and scheduled for consideration on 19th January, 2016. The project proponent, however, did not attend the meeting. Meanwhile the project was delisted on 5th March, 2016. The proposal for EC was re-submitted on 26th April, 2017. Base line air quality data was collected during February-May, 2013.

Total fresh water requirement of 93 m³/day will be met from 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. Issues raised during the public hearing have been duly addressed by the project proponent.

In response to the above observations of the Committee, the submissions and the clarifications provided by the project proponent were examined and found to be in order.

29.3.4.4 *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.*
- *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Solvent management shall be carried out as follows :*
 - (a) Reactor shall be connected to chilled brine condenser system.*
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
 - (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
 - (d) Solvents shall be stored in a separate space specified with all safety measures.*
 - (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
 - (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed 93 cum/day to be met from the State Irrigation Department. 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.*
- *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 commitment made regarding issues raised during the Public Hearing/consultation meeting held on 20th January, 2015 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. The item-wise details along with time bound action plan in this regard 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.
- Raw material storage should not exceed 3 days at any point of time.
- Continuous online (24X7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

Agenda No.29.3.5

Setting up 90 KLPD molasses based distillery at Sr. No.164 to 170 & 85, Village Bedkihal, Tehsil Chikkodi, District Belgaum (Karnataka) by M/s Venkateshwara Power Project Ltd - For reconsideration of EC

[IA/KA/IND2/66134/2016, F.No. J-11011/179/2016- IA II(I)]

29.3.5.1 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 Setting up 90 KLPD molasses based distillery by M/s Venkateshwara Power Project Ltd located at Survey No. 85 & 164 to 170, Village Bedkihal, Tehsil Chikkodi, District Belgaum (Karnataka).
- (ii) All molasses based distillery are listed at S.N. 5 (g) (i) of the Schedule to the EIA Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- (iii) ToR was issued by the Ministry vide letter No.J-11011/179/2016-IA II(I) dated 23rd September, 2016. Public Hearing was conducted by the State Pollution Control Board on 5th May, 2017.
- (iv) The proposed products are:
 - Rectified spirit(RS) :90 KLPD Or
Extra Neutral Alcohol (ENA): 90 KLPD Or
Anhydrous Alcohol (only Fuel grade):90 KLPD
 - Impure Spirit: 6.25 KLPD
(One at a time)
 - CO₂ gas: 71 MT and captured 50 MT
- (v) Land area is 28206.59 sqm.
- (vi) Industry will develop greenbelt in an area of 33% i.e. 9307.77 sqm (33%) out of 28206.59 sqm of area of the project.
- (vii) The estimated project cost is Rs.103.73 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs.223 lakhs and the Recurring cost (operation and maintenance) will be about Rs. 36 Lakh per annum.
- (viii) Total employment will be 70-100 persons as direct & 80-100 persons indirect. Industry proposes to allocate Rs. 2.5 Crore @ of 2.5 % towards Corporate Social Responsibility.
- (ix) It is reported that as per Form-1, no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc lies within 10 km distance. Doodhganga River and Vedganga River is flowing at a distance a distance of 4.5 and 3.87 km in North and West direction.

(x) Ambient air quality monitoring was carried out at ten locations during October, 2016 to December, 2016 and submitted baseline data indicates that ranges of concentrations of PM₁₀(47.8 to 89.2 µg/m³), PM_{2.5} (25.00 to 45.0 µg/m³), SO₂ (4.0 to 10.1 µg/m³) and NO₂ (4.8 to 18.5 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.73 µg/m³, 22.3 µg/m³ and 8.84 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(xi) Total water requirement is 1527 m³/day of which fresh water requirement of 639 m³/day and will be met from Sadalga Barrage on Doodhganga River.

(xii) Treated effluent of process condensate will be treated through Condensate Polishing Unit Plant will be based on Zero Liquid discharge system.

(xiii) Power requirement will be 2595 kWh and will be met from in-house 30 TPH Boiler. Proposed unit will have 2 Nos. DG sets of 250 kVA capacities are used as standby during power failure. Stack (8-10 m) will be provided as per CPCB norms to the proposed DG sets of 2 x 250 kVA which will be used as standby during power failure.

(xiv) Proposed unit has 30 TPH Coal and spent wash fired boiler will be installed. ESP with a stack of height of 62 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm³).

(xv) The process emissions likely to be generated for manufacturing of ENA/ TA will be from various process like CO₂, VOC, and alcohol vapor VOC, alcohol Vapor and Odor. Bottling plant for CO₂ recovery will be provided. The whole process will be carried out in closed condition so as to avoid any chances of VOC emissions. Spent wash from evaporation would be in a closed tank and directly sent for incineration in boiler. No bio-methanation 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.

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

S. No.	Waste	Quantity (In TPD)	Treatment	Disposal
1.	Yeast sludge	28.5 TPD	Drying	Used as manure
2.	Ash	Coal ash: 22-24 TPD Spent wash ash: 29-30 TPD	Stored in silos	Spent wash ash is potash rich ash and can be use directly use as manure. Ash will be store in the ash silos, Coal ash will be separately collected in the ash silos and sent to brick manufacturer.
3.	Domestic waste	25-30 kg/d	Storage	Local waste collection system
4.	Oil from DG	Negligible	Storage	To authorized dealer or mixed with coal and burnt in the boiler.
5.	Discarded drums and containers	Negligible	-	Will be sold to authorized Recyclers

29.3.5.2 The proposal was last considered by the EAC in its meeting held on 28-29 August, 2017, wherein the Committee suggested the project proponent to apply for the environmental clearance to the integrated project in terms of the provisions of the EIA Notification, 2006, covering all the activities namely, sugar manufacturing, Cogeneration power plant and the now proposed distillery. The proposal needs to be revised also in respect of the discrepancies reported.

29.3.5.3 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Setting up 90 KLPD Molasses based Distillery' by M/s Venkateshwara Power Project Ltd in a total area of 28206.59 sqm at Survey No.85 & 164 to 170, Village Bedkihal, Tehsil Chikkodi, District Belgaum (Karnataka).

The project/activity is covered under category A of item 5(g) 'Distillery' of the Schedule to 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 23rd September, 2016. Public hearing was conducted by the SPCB on 5th May, 2017.

Out of the total water requirement of 1527 m³/day, fresh water requirement of 639 m³/day shall be met from Sadalga Barrage on Doodhganga River. A fresh agreement dated 26th April, 2017 has been signed in this regard between the State Government (MI Division, Belgaum) and the project proponent.

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

Consent to Operate for the present industrial operations of sugar cane crushing of 3500 TCD and co-generation plant of 30 MW, has been obtained from Karnataka SPCB, which is presently valid up to 30th June, 2021.

Earlier, the Ministry had issued environmental clearance for expansion of co-generation power plant from 15 MW to 30 MW vide letter dated 9th September, 2010. The monitoring report on compliance status of EC conditions forwarded by the Ministry's Regional Office at Bangalore vide their letter dated 11th July, 2017 is found to be satisfactory.

In response to the observations of the Committee in its last meeting, the submissions and the clarifications provided by the project proponent were examined and found to be in order.

29.3.5.4 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to the 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. Sulphur content should not exceed in the coal for use in coal fired boilers to control particulate emissions within permissible limits. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Total fresh water requirement shall not exceed 639 cum/day, and will be met from Sadalga Barrage on Doodhganga River. Prior permission shall be obtained from the concerned regulatory authority in this regard.*

- 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 commitment made regarding issues raised during the Public Hearing/ consultation meeting held on 5th May, 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. The item-wise details along with time bound action plan in this regard shall be prepared and submitted to the Ministry's Regional Office.
- For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- Continuous online (24X7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

Agenda No.29.3.6

Bulk Drugs & Drug Intermediates manufacturing facility at Survey Nos.3,4,5,9 to 14 in village Donivanilakshmipuram, Nakkapalli (M), District Visakhapatnam (Andhra Pradesh) by M/s BSG Chemicals and Pharmaceuticals Private Ltd - For Environmental Clearance

[IA/AP/IND2/54184/2016; F.No. J-11011/156/2016- IA II(I)]

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

- (i) The proposal is for Bulk Drugs & Drug Intermediates manufacturing facility by M/s BSG Chemicals and Pharmaceuticals Private Ltd at Survey Nos.3,4,5,9 to 14 in village Donivanilakshmiapuram, Nakkapalli (M), District Visakhapatnam (Andhra Pradesh).
- (ii) All products are listed at S.No.5 (f) of the Schedule to the Environment Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- (iii) ToR was issued by the Ministry vide letter No.J- 11011/156/2016-IA II(I) dated 2nd August 2016. Public Hearing was conducted by the State Pollution Control Board on 30th May, 2017.
- (iv) Existing land area is 70.4 acres.
- (v) Proposed products and their capacities are as under:

S.No	Product Name	Production Capacity (TPM)	Product Description Drug/Intermediate/Multipurpose chemicals
Bulk Drugs			
1	Losatran potassium	2.4	Drug
2	Fluconazole	3.0	Drug
3	Ketorolactromethamine	3.0	Drug
4	Ondansetron Hydrochloride dihydrate	3.0	Drug
5	Atrovastatin Calcium	4.5	Drug
6	Olanzapine	2.4	Drug
7	Linezolid	1.5	Drug
8	Sumatriptan	0.6	Drug
9	Quetiapine Fumarate	3.0	Drug
10	Dronedrone HCL	3.0	Drug
Total Bulk Drugs		26.4 TPM	
Drug Intermediates			
1	CIS (+) Hydroxylactum	10.0	Drug Intermediate
2	Pramipexole Hydro chloride Intermediate	4.5	Drug Intermediate
Total Drug Intermediates		14.5 TPM	
Multipurpose Chemicals			
1	Sodium Methoxide	9.0	Chemical
Total Multi-Purpose Chemicals		9.0 TPM	
Custom Synthesis products & R&D products			
1	Drugs and Intermediates in pilot scale	0.1 TPM	
Total		50.0 TPM	

- (vi) Industry will develop greenbelt in an area of 40% i.e., 28.16 acres out of 70.4 acres of area of the project.
- (vii) The estimated project cost is Rs.15.6 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.2.7 crores and the recurring cost (operation and maintenance) will be about Rs. 88 lakhs per annum.
- (viii) Total employment will be 100 persons as direct & 50 persons indirect for the proposed project. Industry proposes to allocate Rs. 52 lakhs @ of 5/2.5 % towards Corporate Social Responsibility.
- (ix) It is reported that as per Form-I, there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Rain fed water tank is located at a distance of 0.5 km in South East direction from the site.

(x) Ambient air quality monitoring was carried out at 8 locations during October 2016 to December 2016 and submitted baseline data indicates that ranges of concentration of PM₁₀ (46.2-67.2 µg/m³), PM_{2.5} (14.7-29.3 µg/m³), SO₂ (10.2-15.2 µg/m³) and NO₂ (14.6-20.4 µg/m³) respectively. AAQ modeling study for point source emissions indicated that the maximum incremental GLCs after the proposed project would be 1.370 µg/m³, 3.574 µg/m³ and 4.737 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(xi) Total water requirement is 121.5 m³/day of which fresh water requirement of 65 m³/day and will be met from harvested rain water.

(xii) Treated effluent of 56.5 KLD will be reused out of total effluent of 71.7 KLD will be treated through Stripper, MEE and ATFD for high TDS Stream and Low TDS will be treated in Biological ETP followed by RO system. The plant will be based on Zero Liquid discharge system.

(xiii) Power requirement for the proposed project will be 1250 KVA and will be met from Andhra Pradesh state power distribution corporation limited (APCPDCL). 1 X 750 and 1 x 380 KVA DG Sets will be used as standby during power failure. Stack (height 8 m and 5 m) will be provided as per CPCB norms to the proposed DG set which will be used as standby during power failure. 2 Lakh K Cal/hr thermic fluid heater is proposed with a stack height of 30 m.

(xiv) 6 TPH Biomass briquette fired boiler and 4TPH Biomass briquette fired stand by boiler will be installed. Bag filter with a stack of height of 45 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm³).

(xv) Details of process emissions generation is 220.2 kgs/day which are scrubbed through double stage scrubbers.

S.No	Emissions	Qty Kgs/day	Control system
1	HBr	112.84	Two Stage Scrubber
2	SO ₂	4.78	
3	CO ₂	54.79	Safely let in to atmosphere
4	H ₂	9.96	
5	N ₂	26.66	
6	O ₂	11.17	
		220.2	

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

S. No	Description of Waste	HW Category No. as per rules	Unit	Quantity	Disposal Option
Disposal Option					
1	MEE Salts	35.3	TPM	44.7*	TSDF
2	Process Inorganic Salts	28.1	TPM	0.4	
3	ETP Sludge	35.3	TPM	6.0	
4	Off specification raw materials/products	28.4	TPM	1.0	TSDF/Cement Units
5	Distillation bottom residue/Process organic residues	28.1	TPM	69.6	Authorized cement plants for Co-Processing/TSDF
6	Spent Carbon	28.3	TPM	3.9	Authorized Cement Industries
7	Stripper waste	34.3	TPM	204.5	

Wastes with Recycling Options					
8	Spent Solvents	28.6	TPM	240	Authorized recyclers after distillation
10	Distillate from stripper	28.5	TPM	337	Authorised recyclers after distillation
11	Detoxified Containers and Container Liners	33.1	Nos/ month	100	Sale after detoxification
12	Used glass bottles from laboratories	--	TPM	0.5	Recyclers after de-contamination
13	Used Oil/Waste Lubricating Oil	5.1	LPM	100	Agencies authorized by pollution Control Board
14	Used Lead Acid Batteries	--	Nos./ annum	5	Returned back to dealer/ Supplier
15	Boiler Ash	--	TPM	30.0	Brick Manufacturers

29.3.6.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Bulk Drugs & Intermediates and Chemicals manufacturing' of capacity 50 TPM' by M/s BSG Chemicals and Pharmaceuticals Pvt Ltd in a total area of 70.4 acres at Survey Nos.3,4,5,9 to 14 in village Donivanilakshmipuram, Nakkapalli (M), District Visakhapatnam (Andhra Pradesh).

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry (Bulk 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.

ToR for the project was granted on 2nd August 2016. Public hearing was conducted by the SPCB on 30th May, 2017.

Total water requirement is 121.5 m³/day, of which fresh water requirement of 65 m³/day will be met from rain water harvesting. Total effluent generation of 71.1 cum/day includes 48.6 cum/day of high TDS effluent, which will be taken to MEE followed by incineration.

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.

29.3.6.3 *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 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 95% recovery.*
 - (d) Solvents shall be stored in a separate space specified with all safety measures.*
 - (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
 - (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed 65 cum/day to be met from rain water harvesting. No ground water shall be extracted.*
- *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.*
 - (g) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
 - (h) Use of automated filling to minimize spillage.*
 - (i) Use of Close Feed system into batch reactors.*
 - (j) Venting equipment through vapour recovery system.*
 - (k) 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 commitment made regarding issues raised during the Public Hearing/consultation meeting held on 30th May, 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.
- Raw material storage should not exceed 3 days at any point of time.
- Continuous online (24X7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

Agenda 29.3.7

Molasses based distillery of 45 KLPD and 10 MW co-generation plant located at post Dhawarwadi, Taluka Karad, District Satara (Maharashtra) by M/s Jaywant Sugars Ltd - For EC

[IA/MH/IND2/51999/2016; F.No. J-11011/111/2016- IA II(I)]

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

- The proposal is for establishment of 45 KLPD molasses based distillery in an integrated complex of 2500 TCD sugar factory and 10 MW co-gen plant by M/s Jaywant Sugars Ltd located at Post Dharwarwadi, Taluka Karad, District Satara (Maharashtra).
- All molasses based distilleries are listed at S.N. 5(g) of the Schedule to the Environmental Impact Assessment (EIA) Notification, 2006 listed under category 'A'. Therefore are appraised at Central Level by Expert Appraisal Committee (EAC).
- ToR was issued by the Ministry vide letter No. J-11011/111/2016-IA II (I) dated 15th July, 2016. Public hearing was conducted by Maharashtra Pollution Control Board on 24th May, 2017.
- Total land acquired by JSL industry is 23.32 ha. Out of this built-up area for establishment of proposed 45 KLPD distillery will be about 1.87 ha.
- Details of proposed products are as under:

Industrial Unit	Products	Quantity
Distillery (45 KLPD)	Rectified Spirit (RS)	1350 KL/M (45 KLPD)
	Extra Neutral Alcohol (ENA)	1290 KL/M (43 KLPD)
	Absolute Alcohol (AA)	1230 KL/M (41 KLPD)
	Impure Spirit	75 KL/M (2.5 KLPD)
	By-products	
	Carbon Di-oxide	32 MT/Day

- Industry will develop total green belt area of 9.8 ha (42% of total plot area).
- The estimated proposed project cost is Rs.63.04 Cr. Total capital cost earmarked towards environmental pollution control measures for proposed project shall be Rs.39.70 Crores and the Recurring cost (operation and maintenance) will be about Rs.2.52 Crores per annum.
- Employment generated will be 98 persons as 61 skilled & 37 unskilled in proposed distillery unit. Industry proposes to allocate Rs.5 crores towards Corporate Social Responsibility.
- It is reported that as per Form-I, no National Parks, Wildlife Sanctuaries, Biospheres Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km. distance. River Tarali is flowing at a distance of 4.6 km.
- Ambient air quality monitoring was carried out at eight locations during October 2016 – December 2016 and submitted baseline data indicates that ranges of concentrations of PM₁₀

(55.48 – 67.03 $\mu\text{g}/\text{m}^3$), $\text{PM}_{2.5}$ (14.29-18.94 $\mu\text{g}/\text{m}^3$), SO_2 (12.68 – 22.55 $\mu\text{g}/\text{m}^3$) and NO_x (26.59 – 33.59 $\mu\text{g}/\text{m}^3$) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 6.49 $\mu\text{g}/\text{m}^3$ with respect to PM_{10} , 1.91 $\mu\text{g}/\text{m}^3$ with respect to $\text{PM}_{2.5}$ and 8.57 $\mu\text{g}/\text{m}^3$ with respect to SO_2 . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(xi) The total water requirement for 45 KLPD distillery project would be 444 M^3/Day . During sugar cane crushing season (180 days) out of total water required 217 M^3/Day would be sugar cane condensate & 227 M^3/Day would be recycled water from proposed CPU. It could be seen that during sugar cane crushing season 100% recycled water will be used for proposed distillery. No any fresh water will be required during crushing season. During non crushing season of sugar factory out of total water requirement only 217 M^3/Day fresh water (4.8 KL/ KL of Alcohol) taken from river Tarali will be required for distillery. Remaining 227 cum/day (52% recycled) would be recycled water from proposed CPU.

(xii) Raw spentwash to the tune of 337 CMD will be concentrated in integrated evaporation system and standalone evaporation system. Concentrated spentwash to the tune of 114 CMD will be blend with coal and burnt in 21 TPH incineration boiler. Spent lees @ 90 CMD, MEE condensate @ 226 CMD and other effluents such as effluent from lab and washing, cooling blow down @ 15 CMD will be treated in to proposed Condensate polishing unit (CPU) plant. This achieves Zero Liquid Discharge (ZLD).

(xiii) Power requirement for existing sugar factory & co-gen plant is 4.3 MW. Distillery power requirement will be 1.5 MW. The same will be met from own co-gen plant. Remaining 4.2 MW electricity will be sold to MSEB Grid. In existing sugar factory & co-gen plant a D.G. sets of 320 kVA & 250 kVA is already installed. Stack of 7 m & 4.5 m above roof level is installed respectively for controlling the particulate matter emissions for same.

(xiv) Existing sugar factory & co-gen plant has 65 TPH bagasse fired boiler. A stack of 76 M height along with Wet scrubber as Air Pollution Control (APC) Equipment is provided to the same for control of air pollution. A boiler of 21 TPH will be installed under proposed distillery project. Concentrated spentwash blended with coal is used as fuel for the incineration boiler. A stack of 70 M height will be provided to the same along with ESP as APC.

(xv) Carbon dioxide to the tune of 32 MT/Day will be generated as a process emission after fermentation of molasses in distillery. The same will be bottled and supplied to manufactures of beverages.

(xvi) Yeast sludge to the tune of 10 MT/day will be generated from proposed distillery. Same will be sold. No any hazardous waste shall be generated from the proposed 45 KLPD Distillery plant.

(xvii) No any litigation is pending against the proposal.

29.3.7.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Setting up 45 KLPD molasses based distillery' in an integrated complex of 2500 TCD sugar factory by M/s Jaywant Sugars Ltd in a total area of 23.32 ha at Post Dharwarwadi, Taluka Karad, District Satara (Maharashtra).

The project/activity is covered under category A of item 5(g) 'Distillery' 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 July, 2016. Public hearing was conducted by the SPCB on 24th May, 2017.

During sugar cane crushing season (180 days), fresh water requirement of 217 cum/day (4.8 KL/ KL of Alcohol) shall be met from sugar cane condensate. Whereas, during non-crushing season, fresh water requirement will be met through river Tarali.

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

Consent to Operate for the present industrial operations (Sugar unit-2500 TCD, co-generation power plant-10 MW) has been obtained from the State Pollution Control Board, which is presently valid up to 31st July, 2016. The unit has applied for the renewal of the same.

29.3.7.3 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to the 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. Sulphur content should not exceed in the coal for use in coal fired boilers to control particulate emissions within permissible limits. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Total fresh water requirement shall not exceed 217 cum/day, which during crushing season (180 days) shall be met from sugar cane condensate and during non-crushing season it shall be met through river Tarali. Prior permission shall be obtained from the concerned regulatory authority in this regard.*
- *Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.*
- *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:-*
 - (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 commitment made regarding issues raised during the Public Hearing/ consultation meeting held on 24th May, 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.

Agenda No.29.3.8

BS-VI Fuel Quality Up-gradation, Capacity Expansion of PX/PTA, NCU, MEG, HDPE, PP Units & New Catalyst Manufacturing Unit at Panipat Refinery & Petro-Chemical Complex (PRPC) in Panipat (Haryana) by M/s IOCL - For Environmental Clearance

[IA/HR/IND2/56442/2016; F.No. J-11011/177/2016- IA II(I)]

29.3.8.1 The project proponent and the 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:

- The proposal is for BS-VI Fuel Quality Up-gradation, Capacity Expansion of PX/PTA, NCU, MEG, HDPE, PP Units & New Catalyst Manufacturing Unit by M/s Indian Oil Corporation Limited at Panipat Refinery & Petro-Chemical Complex (PRPC) in Panipat (Haryana).
- All products are listed at S No.4(a) 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).
- ToR was issued by the Ministry vide letter No.J-11011/177/2016-IA II(I) dated 24th November, 2016. Public hearing was exempted as per para 7(ii) of the EIA Notification, 2006.
- Earlier, the Ministry has issued Environmental Clearance for expansion of Panipat Refinery from 12 MMTPA to 15 MMTPA vide letter No.J.11011/7/2004-IA II(I) dated 9th August, 2004 and Integrated Paraxylene and Purified Terephthalic Acid Projects at Panipat vide letter No.J-11011/52/2000-IA-II dated 30th April, 2001.
- Following are the existing and proposed facilities and products will be MS, HSD, ATF, Bitumen, Sulphur, PTA etc:

S.No	Facilities	Existing capacity	Proposed capacity	Remarks
1.	Diesel Hydro De-Sulphurisation (DHDS)	700 KTA	1000 KTA	Revamp
2.	Prime – G	370 KTA	445 KTA	Revamp
3.	Diesel Hydro – Treater (DHDT)	-	2200 KTA	New
4.	Hydrogen generation Unit	-	44 KTA of hydrogen production	New
5.	Tertiary Amyl Methyl Ether	-	36 KTA	New
6.	OCTAMAX	-	116 KTA	New

7.	Sulphur recovery Unit (SRU) with Tail Gas Treating Unit (TGTU)	-	225 T / Day Sulphur production	New
8.	Amine Regeneration Unit (ARU)	-	188.9 T/hr	New
9.	Sour water Stripper (SWS)	-	56.7 T/hr	New
10.	DHDT feed tank	-	20,000 KL	New
11.	Para Xylene Unit	363 KTA	460 KTA	Revamp
12.	Purified Terephthalic Acid Unit (PTA)	553 KTA	700 KTA	Revamp
	TAME feed tank		5500 m ³	New
	TAME product tank		2 X 3600 m ³	New
	Methanol tank		2 X 500 m ³	New

(vi) The proposed upgradation and capacity expansion of PX-PTA will be within the existing area of 665 ha.

(vii) Industry has already developed Greenbelt in an area of 232 ha out of 665 ha i.e. 35% of area of the project.

(viii) The estimated project cost for BS-VI upgradation & PX-PTA revamp is Rs.2754.15 Crores with +/- 30% accuracy. Total capital cost earmarked towards environmental pollution control measures is Rs.115 Crores (though it is worth mentioning that BSVI Project itself is conceived as per GOI Directive for BS VI Grade fuel availability across country as per Auto Fuel Policy 2025 as an environmental measures).The Recurring cost (operation and maintenance) will be about Rs.2 Crores per annum.

(ix) Additional manpower required for BS - VI Quality Upgradation, Capacity Expansion of PX/PTA is approximate 100 nos (Existing Manpower Strength is 2200). The Industry proposes to allocate the funds towards Corporate Social Responsibility as per its IOCL's policy.

(x) It is reported that as per Form-1, no National Parks, Wildlife Sanctuaries, Biosphere reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Yamuna River is flowing at a distance of 22.5 km in Eastern direction.

(xi) 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 PM₁₀ (41.0 - 95.6 µg/m³), PM_{2.5} (31.1- 57.6 µg/m³), SO₂ (18.0 - 32.5 µg/m³) and NO_x (27.0 - 43.0 µg/m³) respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(xii) Total water requirement for BS VI and capacity expansion of PX, PTA expansion is 354 m³/hr (8500 KLD) will be met from Munak Regulator on Western Yamuna Canal which is within the allocated water of 3458 m³/hr (83000 KLD).

(xiii) The effluent generated from proposed projects will be marginal and same shall be treated in existing ETPs (Effluent Treatment Plant).

(xiv) Power requirement will be 28 MW and will be met through existing captive power plant.

(xv) Proposed unit does not have any fired boiler.

(xvi) Gaseous emission from various process units meets the prescribed standards. Nitrogen blanketing facility is proposed for additional tanks, for ensuring no release of VOC into atmosphere. Sulphur Recovery Units (SRUs) with efficiency of 99.9% is in operation to bring down the Sulphur emissions level within norms. 45 No's of stack are being monitored online and also from MOEFCC recognized lab (M/s Haryana Test house and Consultancy Services, Panipat) on monthly/bi-monthly basis. SO₂, NO_x, CO, PM analyzers are available and linked with CPCB server. Fugitive emission monitoring for hydrocarbon is being done regularly through SPCB/MoEF approved agency regularly on quarterly basis.

(xvii) Solid hazardous waste generation will be marginal and intermittent which shall be handled as per existing systems.

(xviii) Details of certified compliance report submitted by RO, MoEF&CC vide letter No.4-81/2004-RO (NZ)/291-292 dated 14th July, 2017.

29.3.8.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'BS-VI fuel quality up-gradation and expansion of PX/PTA (PX from 363 to 460 KTA & PTA from 553 to 700 KTA) manufacturing Unit' by M/s Indian Oil Corporation Ltd in a total area of 665 ha at Panipat Refinery & Petro-Chemical Complex (PRPC) in Panipat (Haryana).

The project/activity is covered under category A of item 4(a) 'Petroleum refining industry' of the Schedule to the Environmental Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 24th November, 2016 providing exemption from public hearing as per the provisions of the EIA Notification, 2006. The said ToR mentions the project title as per the project profile envisaged at that stage, which also included expansion of NCU, MEG, HDPE, PP units, and commissioning of new catalyst manufacturing unit. Subsequently, as per advice of the EAC, the project title was revised to BS-VI fuel quality upgradation and expansion of PX/PTA plant only. The same was considered and recommended by the EAC in its meeting held on 8-9 December, 2016 for the amendment therein accordingly, which was, however, not issued. It was further clarified that the scope of work contained in the ToR dated 24th November, 2016 remains the same.

Total water requirement for the project (BS-VI and PX/PTA Plant) is estimated to be 354 m³/hr (8500 KLD), which is proposed to be met through Munak Regulator on Western Yamuna Canal. The same is within the allocated water of 3458 m³/hr (83000 KLD).

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

Consent to Operate for the present refinery complex (including PX/PTA Plant) has been obtained from the State PCB, which is presently valid up to 30th September, 2021.

Earlier, the Ministry had issued environmental clearance on 9th August, 2004 for expansion of Panipat Refinery from 12 MMTPA to 15 MMTPA. For Integrated Paraxylene and Purified Terephthalic Acid (PTA) project at Panipat, EC was granted on 30th April, 2001. The monitoring report on compliance status of conditions in respect of EC dated 9th August, 2004, forwarded by the Regional Office at Chandigarh vide letter dated 14th July, 2017 is found to be satisfactory, except the concluding remarks that '*It was observed during the visit that construction work for the proposed expansion is in progress*'. No monitoring report on compliance status of conditions for the EC dated 30th April, 2001 (for PX/PTA Plant) was available.

In case of the project limited to BS-VI Fuel Quality Upgradation only, environmental concerns are reported to be as under:-

(a) There shall be no change in the total capacity of the refinery of 15 MMTPA for which the earlier EC was granted on 9th August, 2004.

(b) Due to the proposed change in the product specifications, there shall be additional requirement of fresh water of 3500 KLD, which will be well within the present allocation. Also,

the waste water generation will be increased by 20 cum/hr, which will be processed in the existing ETPs.

(c) Total SO₂ emissions will be increased from 1000 kg/hr to 1100 kg/hr i.e. by 10%.

29.3.8.3 *The EAC, after deliberations, recommended the project 'BS-VI Fuel Quality Upgradation', for grant of environmental clearance, subject to the 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 with different stacks (attached to DHDT, HGU, Prime G) to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stacks of adequate height as per CPCB/SPCB guidelines.*
- *Total fresh water requirement shall not exceed 3500 KLD to be met from Munak Regulator. Necessary 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 to be done through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
 - (a) *Metering and control of quantities of active ingredients to minimize waste.*
 - (b) *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
 - (c) *Use of automated filling to minimize spillage.*
 - (d) *Use of Close Feed system into batch reactors.*
 - (e) *Venting equipment through vapour recovery system.*
 - (f) *Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*

- At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.
- Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

For the EC to the expansion project of PX/PTA, the Committee asked first for the monitoring report on compliance status of EC conditions (EC dated 30th April, 2001 for the capacity of PX-363 KTA & PTA-553 KTA) certified and forwarded by the Regional Office of the Ministry.

In respect of observations of the Regional Office in their monitoring report dated 14th July, 2017, the Committee desired that the Ministry may take a view in terms of the extant policy/norms of the EIA Notification, 2006 after seeking clarifications from the project proponent.

Agenda No.29.3.9

Expansion of Carbon Black Plant from 10,950 TPM to 15,750 TPM and Co-Generation Power Plant from 22 MW to 32 MW in existing premises located at Survey No. 47, SH-46, Village Mokha, Taluka Mundra, District Kutch (Gujarat) by M/s Phillips Carbon Black Ltd - For Environmental Clearance

[IA/GJ/IND2/58103/2016; F.No. J-11011/195/2016- IA II(I)]

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

- (i) The proposal is for expansion of Carbon Black Plant capacity from 10,950 TPM to 15,750 TPM and Co-Generation Power Plant capacity from 22 MW to 32 MW by M/s Phillips Carbon Black Ltd in existing premises located at Survey No.47, SH-46, Village Mokha, Taluka Mundra, District Kutchh (Gujarat).
- (ii) All Products are listed at S.N. 5 (c) 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) ToR was issued vide letter No. J-11011/195/2016- IA II(I) dated 18th November, 2016. Public Hearing was conducted by the State Pollution Control Board on 16th May, 2017.
- (iv) Earlier, the Ministry had issued EC vide letter No. J-11011/590/2007/1-A/II (I) dated 19th August, 2008 and letter No. J-11011/544/2009/1-A/II (I) dated 4th October, 2010 for Carbon Black manufacturing unit and Co-Generation Power Plant to M/s Phillips Carbon Black Limited.
- (v) Proposed land area is 2,91,456 sqm.

- (vi) Industry will develop greenbelt in an area of 41% i.e. 1,19,210 sqm out of 2,91,456 sqm of area of the project.
- (vii) The estimated proposed project cost is Rs. 210 Crores. Industry purposes to allocate Rs. 1 Crore towards Corporate Social Responsibility.
- (viii) It is reported that No National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance from the project site.
- (ix) Ambient air quality monitoring is carried out at 8 locations during October-2016 to December-2016. The arithmetic mean values of PM₁₀ at all the locations in residential/rural areas ranged between 67.28-78.67 µg/m³. Similarly, the arithmetic mean values of PM_{2.5} varied in the range of 41.57-47.85 µg/m³. The arithmetic mean values of NO_x at all the locations in residential/rural areas were observed to be in the range of 21.07-45.64 µg/m³. The arithmetic mean values of SO₂ at all the locations in residential/rural areas ranged between 19.68-42.15 µg/m³. The arithmetic mean values of O₃ at all the locations in residential/rural areas ranged between 9.37-10.50 µg/m³. The arithmetic mean values of CO at all the locations in residential/rural areas ranged between 1.14-1.82 µg/m³. At all the AAQM locations (Industrial as well as residential) C₆H₆, BaP, As, Ni, NH₃ and Pb values were below detectable limit.
- (x) Total water requirement will be 2029 m³/day of which fresh water requirement of 1690 m³/day and will be met from GWIL Water Supply. Source of water will be met through GWIL water supply. Total water requirement will be 2029 m³/day (Fresh: 1690 m³/day + Recycled: 339 m³/day).
- (xi) Treated Effluent of 339 KL/Day will be reused in plant premises. The total wastewater generations will be 392 m³/day. 339 KL/Day wastewater from the Cooling and chilling, boiler, and washing will be treated in ETP and treated effluent recycled back for cooling & chilling purpose and gardening. 53 m³/day Domestic wastewater generated shall be disposed through septic tank & soak pit.
- (xii) Existing power requirement is 7 MW from own CPP. After Proposed expansion the total will be 9.5 MW from own CPP.
- (xiii) Unit will have 2 Nos. of Flare Stack, 3 Nos. of Boiler of CPP, 3 Nos. of VBC, 3 Nos. of Dryer. Bag Filter with a stack of height of 80m, 50 m will be installed for controlling the Particulates emissions.
- (xiv) Details of process emissions generation and its management are as under:

S.No.	Process Stack Attached To	Height From Ground (M)	Diameter (M)	Air Pollution Control System	Expected Pollutants
1	VBC- 1 (Existing)	50	1.0	Bag Filter	SPM, SO _x , No _x
2	VBC- 2 (Existing)	50	1.0	Bag Filter	SPM, SO _x , No _x
3	Dryer -1 (Existing)	50	1.1	Bag Filter	SPM, SO _x , No _x
4	Dryer -2 (Existing)	50	1.1	Bag Filter	SPM, SO _x , No _x
5	VBC- 3 (Proposed)	50	1.0	Bag Filter	SPM, SO _x , No _x
6	Dryer -3 (Proposed)	50	1.1	Bag Filter	SPM, SO _x , No _x

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

S.N.	Name of Waste	Waste Category	Existing Qty. Mt/Year	Additional Qty. Mt/Year	Total	Mode of Disposal
1	Used Oil	I-5.1	1.56	0.64	2.2	Collection, Storage, Transportation, reuse in process/sent to GPCB registered recycler
2	Spent Acid from Batteries	I-36.3	0.024	0.00	0.024	Collection, Storage, Transportation, Disposal to Authorized facility

3	Chemical Sludge from Waste water treatment	I-34.3	27	8	35	Collection, Storage, Transportation, Disposal at TSDf site of SEPPL.
4	Oily Sludge Emulsion	I-4.1	6	0	6	Collection, Storage, Transportation, Disposal at Common Incineration site of SEPPL – Bhachau
5	Used Batteries	IV-17	0.1	0	0.1	Collection, Storage, Transportation, and Disposal as per Lead batteries rules.

23.3.9.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Expansion of Carbon Black Plant from 10,950 TPM to 15,750 TPM and Co-Generation Power Plant from 22 MW to 32 MW' by M/s Phillips Carbon Black Ltd in a total area of 2,91,456 sqm in existing premises located at Survey No. 47, SH-46, Village Mokha, Taluka Mundra, District Kutchh (Gujarat).

The project/activity is covered under category A of item 5(e) 'Petroleum products and petrochemical based processing such as production of carbon black' 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 18th November, 2016. Public hearing was conducted by the SPCB on 16th May, 2017.

Out of the total water requirement of 2029 m³/day, fresh water requirement of 1690 m³/day shall be met from Gujarat Water Infrastructure Limited (GWIL) Water Supply. An Agreement in this regard has been signed on 16th December, 2014 between GWIL and the project proponent. Remaining 339 cum/day shall be through recycled water.

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

Consent to Operate for the presently manufactured Carbon Black of capacity 10950 TPM and co-gen plant of 22 MW has been obtained from the Gujarat PCB, which is presently valid up to 20th August, 2019.

Earlier, the Ministry had issued environmental clearance on 19th August, 2008 in favour of M/s Phillips Carbon Black Ltd for Carbon Black manufacturing of 80000 TPA and co-gen plant of 16 MW. For expansion of the Carbon Black plant from 80000 to 131400 TPA and co-generation Power Plant from 16 to 22 MW, EC was granted on 4th October, 2010. The monitoring report on compliance status of existing ECs conditions, forwarded by the Ministry's Regional Office at Bhopal vide letter dated 28th August, 2017 is found to be satisfactory. In case of some of the conditions partially complied or not-complied, the action plan submitted by the project proponent has been found to be adequately addressing the same.

23.3.9.3 *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.*
- *Total fresh water requirement shall not exceed 1690 cum/day to be met from GWIL supply.*
- *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 16th May, 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.*
- *Raw material storage should not exceed 3 days at any point of time.*
- *Continuous online (24X7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*

Agenda No.29.3.10

Pesticide, Dye & resin manufacturing at Plot No.119 & 120, Ranpur Road, GIDC Dhandhuka, District Ahmedabad (Gujarat) by M/s Veer Poly Chem - For EC

[IA/GJ/IND2/58337/2016; F.No. J-11011/303/2016- IA II(I)]

29.3.10.1 The project proponent and the 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 manufacturing of pesticide, dye & resins having capacity of 960 MTPM by M/s Veer Poly Chem at Plot No. 119 & 120, Ranpur Road, GIDC Dhandhuka, District Ahmedabad (Gujarat).

(ii) All Synthetic Organic Chemicals Industry located within designated industrial area/estate are listed at S.N. 5(f) and industry including production of pesticide and pesticide intermediates (except formulation) are listed at S.N. 5(b) of the Schedule to the Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).

(iii) ToR was issued by the Ministry vide letter No. J-11011/303/2016- IA II(I) dated 3rd April, 2017. Public Hearing was conducted by the State Pollution Control Board on 11th July, 2017.

(iv) Proposed land area is 4051 sqm.

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

S.No.	Name of Product	Types	Quantity (MTPM)		
			Existing	Proposed	Total
1.	Copper Sulphate	Inorganic chemical (non EC product)	100	0	100
2.	Solvent Black 5 (Nigrosine Black SS)	Dyes –Synthetic organic chemical [EC product – 5(f)]	0	300	300
3.	Solvent Black 7 (Nigrosine Black Oil soluble)	Dyes –Synthetic organic chemical [EC product – 5(f)]	0	100	100
4.	Acid Black 2 (Nigrosine Black water soluble)	Dyes –Synthetic organic chemical [EC product – 5(f)]	0	100	100
5.	Phenol Formaldehyde Resin	Resin –Synthetic organic chemical [EC product – 5(f)]	0	50	50
6.	PF Moulding Powder	Blending product (non EC product)	0	50	50
7.	2, 4-D Acid (Technical)	Pesticide (Herbicide) [EC product – 5(b)]	0	20	20
8.	2,4-D Ethyl Ester (Technical)	Pesticide (Herbicide) [EC product – 5(b)]	0	20	20
9.	Plaster of Paris	Inorganic chemical (non EC product)	0	220	220
Total			100	860	960

(vi) Industry has already developed greenbelt in an area of 120 sqm out of 4051 sqm of project area, and unit will increase the greenbelt area to 1350 sqm hence it will be 33% of the total area.

- (vii) The estimated project cost of proposed unit will be Rs.3 crore. Total capital cost earmarked towards environmental pollution control measures will be Rs.0.50 crore and the Recurring cost (operation and maintenance) will be about Rs.0.35 crore per annum.
- (viii) Total employment including direct and indirect will be 60 persons. Industry proposes to allocate Rs.15 lakhs of 5.0% towards Corporate Social Responsibility.
- (ix) It is reported that no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc lies within the 10 km distance of the project site.
- (x) Ambient air quality monitoring was carried out at 8 locations during Oct, 2016 to Dec, 2016 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (60.5 – 68.7 µg/m³), PM_{2.5} (28.8 – 37.7 µg/m³), SO₂ (9.3- 13.5 µg/m³) and NOx (12.3 – 17.9 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs from the existing project would be 0.689 µg/m³, 0.190 µg/m³ and 0.250 µg/m³ with respect to PM₁₀, SO₂ and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- (xi) Total water requirement is 88.65 m³/day of which fresh water requirement of 26.25 m³/day will be met from GIDC.
- (xii) Total effluent generation will be 64.1 m³/day; out of which 51 KLD recycle in process in close loop without treatment and 13.1 KLD wastewater from pesticide process, utilities & washing will be taken in evaporator and condensate will be recycled in greenbelt & utility. No effluent will be discharged outside the plant premises.
- (xiii) Power requirement will be 125 kVA made from UGVCL. Unit will also install stand by D.G. Set (25 kVA) and used as standby during power failure. Stack (height 11 meters) will be provided as per GPCB norms.
- (xiv) Existing unit has Hot Air Generator; fuel consumption rate is 15 MTPM (still not installed). Proposed unit will have additionally boilers (2 nos. of 0.5 TPH each) having common stack and HAG with fuel consumption rate of 30 MTPM and 15 MTPM using coal/ Agro Briquettes as fuel.
- (xv) Process emissions generation from the vent attached with Reaction vessel of Acid Black 2. Two stage water scrubbers will be provided.
- (xvi) Details of solid waste/hazardous waste generation and its management are as under:

S.No.	Name of Waste	Category	Total	Disposal method
1	ETP sludge & Evaporation salt	35.3	3.0 MT/month	Collection, Storage, Transportation & Disposal at TSDF site
2	Used oil	5.1	25 lit/Annum	Collection, Storage, Transportation and disposal by selling to authorized re-refiners
3	Discarded containers/ drums Liners	33.1	250 nos./month 0.1 T/month	Collection, Storage, Transportation and disposal by selling to authorized recycler

23.3.10.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Pesticide, Dye & resin manufacturing Unit' of capacity 860 TPM by M/s Veer Poly Chem in a total area of 4051 sqm at Plot No.119 & 120, Ranpur Road, GIDC Dhandhuka, District Ahmedabad (Gujarat).

The project/activity is covered under category A of item 5(b) 'Pesticides' and category B 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 3rd April, 2017. Public hearing was conducted by the SPCB on 11th July, 2017.

Out of the total water requirement of 88.65 m³/day, fresh water requirement of 26.25 m³/day shall be met from GIDC 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.

23.3.10.3 *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 95% recovery.*
 - (d) *Solvents shall be stored in a separate space specified with all safety measures.*
 - (e) *Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
 - (f) *Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
 - (g) *All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- *Total fresh water requirement shall not exceed 26.25 cum/day to be met from GIDC supply.*
- *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 11th July, 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. The item-wise details along with time bound action plan in this regard 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.*
- *Raw material storage should not exceed 3 days at any point of time.*
- *Continuous online (24X7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*

Agenda No.29.3.11

Exploratory drilling at additional 18 locations in the onshore NELP VI Block: KG-ONN-2004/1 in East Godavari District (Andhra Pradesh) by M/s Oil India Limited - For Environmental Clearance

[IA/AP/IND2/57973/2016; F.No. J-11011/191/2016- IA II(I)]

29.3.11.1 The project proponent and the accredited consultant M/s Bhagavathi Ana Labs Pvt Ltd made a detailed presentation on the salient features of the project and informed that:

- (i) The proposal is for the exploratory drilling of additional 18 locations in the onshore NELP VI Block KG-ONN-2004/1 by M/s Oil India Ltd in East Godavari District (Andhra Pradesh).
- (ii) All projects that attract general conditions and specific conditions are listed at S.N 1(b) of the schedule to the EIA Notification, 2006 under category A and are appraised at Central Level by Expert Appraisal Committee (EAC).
- (iii) Earlier, the Ministry was issued EC vide letter No.J-11011/618/2010-IA II(I) dated 11th July, 2012 for six wells and subsequent issued EC for another six wells vide letter No.J-11011/618/2009-IA II(I) dated 24th January, 2014 in favour of M/s Oil India Ltd.
- (iv) ToR was issued by the Ministry vide their letter No. J-11011/191/2016-IA-II(I) dated 30th November, 2016 with exemption of public hearing for this project.
- (v) Existing land area is 353.46 sq km, and no additional land will be used for proposed expansion.

(vi) The estimated project cost is Rs. 710 Crores including existing investment of Rs.1118 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 7 Crores and the Recurring cost (operation and maintenance) will be about Rs. 4 Crores per annum.

(vii) Total employment will be 30 persons for each rig as direct & 30 persons indirect after expansion. Industry proposes to allocate Rs 6.85 crores@ of 5/2.5 % towards Corporate Social Responsibility.

(viii) It is reported that as per Form-1, no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc within 10 km distance. Godavari River is flowing at a distance a distance of 0.5 km in East direction.

(ix) 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 PM₁₀ (26.7 - 55.7 µg/m³), PM_{2.5} (11.0 – 26.2 µg/m³), SO₂ (9.9 – 8.6 µg/m³) and NO_x (6.3 – 25.8 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 36 µg/m³, 40.2 µg/m³ with respect to SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(x) Total water requirement is 25 m³/day of which fresh water requirement of 25 m³/day and will be met from tankers.

(xi) Effluent water of 20 KLD will be treated through METP unit with RO Plant on Zero Liquid discharge system.

(xii) Power requirement after expansion will be zero including existing 4240 kVA and will be met from DG sets. Existing unit has 4 no's DG sets of 1950 kVA capacity, additionally 350 kVA DG sets are used as standby during power failure. Stack (height 3.5m.) will be provided as per CPCB norms to the proposed DG sets of 10 ft. in addition to the existing DG sets of 10 ft. This will be used as standby during power failure.

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

S.N.	Category	Approximate Quantities per Well	Management
1	Drill Cutting	3 M ³ /day	Drill cuttings separated from Mud will be properly washed and unusable drilling fluids will be disposed-off in a Well -designed pit lined with impervious liner located on-site for evaporation. If O&G content exceeds, it will be temporarily stored / packed in pits / bags and then disposed to TSDF.
2	Waste/ Used Lubricating Oil	70 liter/day	Waste oil will be disposed through the authorized recyclers approved by APPCB. MoEF&CC guidelines dated 30 th August 2005 will be followed.
3	Domestic waste	15 kg/day (estimated @ 0.5 kg/capita/day for 30 employees/Rig)	Domestic solid waste will be segregated, stored and disposed in line with the Solid Waste Management Rules, 2016.

(xiv) EC Compliance Report has been submitted along with EIA report and also uploaded online in MoEF&CC online EC Portal, with vide letter No: EP/12.1/2012-13/7/AP dated 24th August, 2017.

29.3.11.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Exploratory drilling of additional 18 well locations' in the onshore NELP VI Block KG-ONN-2004/1 by M/s Oil India Ltd in a total area of 353.46 sq km in East Godavari District (Andhra Pradesh).

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 30th November, 2016 providing exemption from public hearing as per the provisions of the EIA Notification, 2006.

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 11th July, 2012 in the name of M/s Oil India Ltd for exploratory drilling of six wells in the NELP VI Block KG-ONN-2004/1. Later, another EC was issued vide letter dated 24th January, 2014 for another six wells in the same Block. The monitoring report on compliance status of EC conditions forwarded by the Ministry's Regional Office, Chennai vide their letter dated 24th August, 2017 was found to be satisfactory.

29.3.11.3 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of specific 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 to any surface water body, sea and/or on land. Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/soak pit.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 for PM₁₀, PM_{2.5}, SO₂, NO_x, CO, CH₄, HC, Non-methane HC etc.*
- *Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.*
- *Approach road shall be made pucca to minimize generation of suspended dust.*
- *The company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosure shall be provided to DG sets and proper stack height shall be provided as per CPCB guidelines.*
- *Total water requirement shall not exceed the proposed and prior permission shall be obtained from the concerned regulatory authority.*
- *The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.*

- *Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.*
- *Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.*
- *The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.*
- *The company shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self containing breathing apparatus.*
- *The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and Regional Office.*
- *Blow Out Preventer (BOP) system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.*
- *The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.*
- *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.*
- *Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.*
- *Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.*
- *An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to the Ministry's Regional Office.*
- *Company shall have own Environment Management Cell having qualified persons with proper background.*
- *Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.*
- *On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.*
- *Hazardous Waste shall be handled and disposed as per the provisions of the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and necessary permissions shall be obtained under the said rules.*

Agenda No.29.3.12

Molasses based Distillery of 90 KLPD at Village Sonawade, Taluka Shahuwadi, District Kolhapur (Maharashtra) by M/s Athani Sugars Ltd - For Environmental Clearance

[IA/MH/IND2/61382/2016; F.No. J-11011/372/2016-IA.II(I)]

29.3.12.1 The project proponent and the accredited consultant M/s Athani Sugars Ltd and M/s Ultra-Tech gave detailed presentation on the salient features of the project and informed that:

- (i) The proposal is for 90 KLPD Distillery Plant by M/s Athani Sugars Ltd at Village Sonawade, Taluka Shahuwadi, District Kolhapur (Maharashtra).
- (ii) Distillery are listed at S.N. 5(g) of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- (iii) ToR was issued by the Ministry vide letter No. J-11011/372/2016-IA II (I) dated 20th July, 2017. Public hearing was conducted by the State Pollution Control Board on 27th January, 2016.
- (iv) Total land area is 6.2 ha, no additional land will be proposed for Distillery unit.
- (v) List of proposed product:

S.No.	Details	Capacity (TPA)
1	Ethanol/ Rectified Spirit/ ENA	2400TPA

- (vi) Industry will develop green belt in an area of 33% i.e. 2.4 ha out of 6.2 ha of area of the project.
- (vii) The estimated cost is Rs.115 crore. Total capital cost earmarked towards environmental pollution control measures is Rs.22 Cr. and the Recurring (operation and maintenance) will be about Rs. 0.85 Cr. per annum.
- (viii) The total employment will be 80 persons as direct and indirect more than 500 persons for proposed project. Industry proposes to allocate Rs.3 Cr. @ 2.6% towards Corporate Social Responsibility.
- (ix) It is reported that no National Park, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance from the project site.
- (x) Baseline Environmental Studies were conducted at 9 locations during March to May 2016 and the data submitted indicated: PM₁₀ (72 µg/m³-58 µg/m³), PM_{2.5} (35-27 µg/m³), SO₂ (21-14 µg/m³) and NO_x (26-17 µg/m³), CO (1.1 to 0.7 mg/m³). The results of the modeling study indicates that the maximum increase of GLC for the proposed project 63.1 µg/m³ with respect to the PM₁₀, 23.96 µg/m³ with respect to the SO₂ 26.87 µg/m³ with respect to the NO_x.
- (xi) Total water requirement is 1135 m³/day of which fresh water requirement of 535 m³/day and will be met from Kadvi and Warna River, permission obtained.
- (xii) Treated effluent of 180 m³/day will be treated through CPU, MEE & incineration plant will be based on Zero Liquid Discharge system.
- (xiii) Power requirement will be 1800 KW and will be met from own Turbine & MSEDCL. Proposed 2 Nos. of DG sets of capacity 750 KVA. Additionally no DG sets are used as standby during power failure. Stack (height 3.5 m) will be provided as per CPCB norms. No additional DG set required.
- (xiv) Proposed unit required 35 TPH bagasse fired boiler will be installed. ESP with stack height 80 m will be installed for controlling particulate emissions (within statutory limit of 150 mg/Nm³).
- (xv) Process emissions generation from boiler will be up to 50 mg/Nm³ and its controlled by ESP.

(xvi) Hazardous waste shall only be in the form of distillation residue. This will be collected and used in own boiler as fuel. Solid waste will be from colony, offices, CPU, packing section yeast sludge and ash etc. details are given below:

S. No.	Waste	Quantity/day	Disposal	Remark
1	Colony	1 CuM	Own garden	Mixed
2	CPU	20 kg	Manure	Organic, Non-Haz
3	Office	1 CuM	Sales	Non-Haz.
4	Packing Sec.	0.5 CuM	Sales	Non-Haz.
5	Yeast Sludge	5T	Sales/ Green	Organic, and Non-Haz.
6	Ash	60 T	Sales	Takers available

29.3.12.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Molasses based Distillery of 90 KLPD' by M/s Athani Sugars Ltd in a total area of 6.2 ha at Village Sonawade, Taluka Shahuwadi, District Kolhapur (Maharashtra).

The project/activity is covered under category A of item 5(g) 'Distillery' of the Schedule to 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 with the condition to conduct public hearing. However, the same was amended vide letter dated 20th July, 2017 exempting from the public hearing as per the provisions of the EIA Notification, 2006. Public hearing was earlier conducted by the SPCB on 27th January, 2016.

Fresh water requirement of 535 cum/day out of the total water demand of 1135 m³/day will be met from Kadvi and Warna River. Necessary permission in this regard has been obtained from the Irrigation Department of the State Government of Maharashtra.

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.

29.3.12.3 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to the 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 535 cum/day, and will be met from Kadvi and Warna River. Prior permission shall be obtained from the concerned regulatory authority in this regard.
- Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- Hazardous chemicals, if any, 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 commitment made regarding issues raised during the Public Hearing/consultation meeting held on 27th January, 2016 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. The item-wise details along with time bound action plan in this regard shall be prepared and submitted to the Ministry's Regional Office.
- For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- Continuous online (24X7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

Agenda No.29.3.13

BS-VI fuel quality up-gradation project Phase-I at Haldia Refinery, Haldia (West Bengal) by M/s IOCL - For Environmental Clearance

[IA/WB/IND2/56071/2016; F. No. J-11011/175/2016- IA II(I)]

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

- (i) The proposal is for BS-VI fuel quality up-gradation project Phase-I at Haldia Refinery by M/s IOCL located at Haldia, Tehsil Tamruk, District Purba Medinipur (West Bengal).
- (ii) All Petroleum Refining Industry are listed at S.N.4(a) 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) ToR was issued by Ministry vide letter No.J-11011/175/2016-IA II (I) dated 23rd September, 2016 and subsequent amendment on 12th May, 2017. Public Hearing was exempted as per the granted TOR dated 23rd September 2016.
- (iv) Earlier, the Ministry was issued EC vide letter No.J-11011/299/2013- IA II (I) dated 4th March, 2016 for Haldia Refinery unit to M/s IOCL.
- (v) Existing land area is 580 acres, approximate 55000 sqm land within the refinery premises will be used for proposed modernization.
- (vi) Haldia refinery has so far planted more than 55,000 saplings in and around refinery which have flourished and maintained greenery as well as eco-balance in Haldia region. Around 5200 Nos of tree sapling planted in 2016-17 around refinery and township at Haldia. Around 3000 tree saplings are planted in the current year 2017-18. Space has been earmarked in the newly acquired land for Distillate Yield Improvement Project (DYIP) for development of green belt. IOC shall be developing Greenbelt in an area of 33 % of area of the project.
- (vii) The estimated project cost is Rs.3200 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 20 Crores and the Recurring cost (operation and maintenance) will be about Rs. 8 Crores per annum.
- (viii) Total Employment during construction phase of the proposed project, about 600-700 people would be engaged for carrying out constructional activities. The necessary manpower would be engaged from area around Haldia to the extent possible. During operation, permanent personal requirement will be about 80 Nos. In the year 2016-17 around Rs.60 Lakhs CSR expenditure was spent on Construction of School roofs, toilets, health camps etc. Industry proposes to allocate budget of Rs.6.45 Crores for 2017-18 towards Corporate Social Responsibility.
- (ix) As per Form-1, there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Hooghly River is adjacent to Refinery and Haldi River flowing at a distance a distance of 8 km away from Refinery in Northern direction.
- (x) Ambient air quality monitoring was carried out at 8 locations during November, 2016 to January, 2017 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (56 - 270 µg/m³), PM_{2.5} (31-180 µg/m³), SO₂ (12.8-36.2 µg/m³) and NO₂ (20.3-46.8 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 4.23 µg/m³, with respect to SO₂. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- (xi) Total water requirement post BS-VI phase-1 project is 1395 m³/hour of which BS-VI Phase-1 project estimated fresh water requirement would be 250 m³/hour to be supplied by Haldia Development Authority (HDA).

- (xii) Total effluent generated Post BS-VI project is 971.5 m³/hour and shall be treated in existing ETPs (2 Nos.).
- (xiii) Total additional power required for revamp as well as new units will be approximately 17.4 MW and will be met from Local power agency and West Bengal State power Distribution Corporation limited (WBSPDCL).
- (xiv) Existing unit has two numbers of boilers in operation. Air pollution control systems with stack height of 80 m are provided for controlling the emissions (within statutory limit).
- (xv) Certified compliance report is submitted by RO, MoEF&CC vide letter No.102-05.E.P.E/372 dated 1st May, 2017.
- (xvi) Emissions from various stacks of existing refinery contain Particulate Matter, SO₂ & NO_x. The proposed project envisages four nos. of new stacks from following plants:

- DHDT
- HGU-II- Revamp
- Prime-G - Revamp
- Sulphuric Acid Plant

SO₂ emissions post DYIP and Post BS-VI phase-1:

Pollutant	post DYIP kg/hr	Post BS-VI phase-1 kg/hr	Total emission kg/hr
SO ₂ emission	941	39	980

- (xvii) The other sources of emission during operation of the facilities are:
- Purge and flash gases
 - Intermittent emissions (venting and flaring)

- (xviii) Details of existing and proposed products are as follows:

Product list Prior to BS-VI Phase-1 Project

S.No	Products	Quantity (TMTPTA)
1.	LPG	303
2.	BS-VI GASOLINE REG	1107
3.	BS-VI GASOLINE PREM	0
4.	SKO	840
5.	JET	419
6.	BS - VI DIESEL	3422
7.	HFHSD	53
8.	JBO`	24
9.	BITUMEN VG-10	90
10.	BITUMEN VG-30	200
11.	LOBS GR-II H-70	24
12.	LOBS GR-II H-500	58
13.	LOBS GR-II H-150	45
14.	PET COKE	439
15.	Sulphur	149

Feed and Product list after BS-VI Phase-1 Project:

S.No.	Feed/Product Pattern	Capacity (in TMTPA)
1.	HS Crude as feed	6400
2.	LS Crude as feed	1600
3.	Total Crude as feed	8000
4.	HS% w/w	80%
5.	LPG	357
6.	Naphtha	604
7.	MS (BS-VI)	574
8.	ATF	420
9.	SKO	849
10.	HFHSD	72
11.	HSD (BS-VI)	3435
12.	JBO	24
13.	H-70 Gr-II LOBS	24
14.	H-150 Gr-II LOBS	42
15.	H-500 Gr-II LOBS	106
16.	Furnace Oil (380 cSt Bunker grade)	72
17.	Bitumen	302
18.	Sulphur	50
19.	Pet coke	475
20.	Sulphuric Acid	232

29.3.13.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'BS-VI fuel quality up-gradation project Phase-I' to reduce sulphur content to 10 ppm at Haldia Refinery by M/s IOCL located at Haldia, Tehsil Tamluk, District Purba Medinipur (West Bengal).

The project and/or the activities are covered under category A of item 4(a) 'Petroleum Refining Industries' of the Schedule to Environmental Impact Assessment Notification, 2006 and require appraisal at Central Level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The ToR for the project was granted on 23rd September, 2016 with the exemption from public hearing as per the provisions contained in para 7(ii) of the EIA Notification, 2006.

Baseline air quality for PM₁₀ ranges 56-270 ug/m³, SO₂ from 12.8 to 36.2 ug/m³, NO_x from 20.3 to 46.8 ug/m³. With the implementation of the project, incremental values are reported to be 0.746 ug/m³, 4.23 ug/m³ & 1.49 ug/m³ respectively. SO₂ emission load shall be increased from the present of 941 kg/hr to 980 kg/hr.

Fresh water requirement shall be increased from the present of 1270 m³/hr to 1395 m³/hr, which shall be supplied by Haldia Development Authority. Necessary permission in this regard has been obtained from the concerned authority. Total effluent generation would be reduced from 1150 m³/hr to 971.5 m³/hr, whereas the discharge to Hooghly river shall be now 240 m³/hr from that earlier of 262.5 m³/hr.

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 4th March, 2016 in favour of M/s IOC Ltd for expansion of Haldia Refinery from 7.5 MTPA to 8 MTPA along with Distillate Yield Improvement Project and installation of Feed Preparation Unit. The monitoring report on

compliance status of EC conditions forwarded by the Ministry's Regional Office, Bhubaneswar vide their letter dated 1st May, 2017 is found to be satisfactory.

29.3.13.3 *The EAC expressed its deep concern over the poor base line air quality especially in respect of PM₁₀ & PM_{2.5} reported to be higher than the standards prescribed. The prevailing levels are bound to increase further with the commissioning of the project. The Committee opined that the same could be one of the reasons for not allowing such activities/projects in the area in anticipation of further deterioration. Instead, the concerned State Government and the State Pollution Control Board to be directed for overall environmental assessment of the area for identifying the hotspots, and to prepare the action plan accordingly for the corrective measures. Such an action plan needs to be reviewed by the CPCB in consultation with the SPCB and make its recommendations to the Ministry for consideration of projects in the area and/or further action into the matter.*

The Committee, after duly taking note of the prevailing environmental concerns and further deliberations, suggested for the pre-emptive actions as above, and recommended the project for grant of environmental clearance, subject to the 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 with different stacks (attached to DHDT, HGU-II-Revamp, Prime G-Revamp and Sulphuric Acid Plant) to minimize the incremental concentrations (for PM₁₀ & PM_{2.5}) in order to meet the prescribed norms/NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits. The gaseous emissions shall be dispersed through of adequate height as per CPCB/SPCB guidelines.*
- *Total fresh water requirement shall not exceed 1395 cum/hr to be supplied by Haldia Development Authority. Necessary permission in this regard shall be obtained from the concerned regulatory authority. No ground water shall be used without prior permission from the CGWA.*
- *Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams, if any. 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 solvent transfer to be done through pumps.*
- *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.*

- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.*
- *The company shall undertake waste minimization measures as below:-*
 - (g) Metering and control of quantities of active ingredients to minimize waste.*
 - (h) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
 - (i) Use of automated filling to minimize spillage.*
 - (j) Use of Close Feed system into batch reactors.*
 - (k) Venting equipment through vapour recovery system.*
 - (l) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 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 5% of the total project cost shall be allocated for Enterprise Social Commitment. The item-wise details in this regard along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Wetland habitat shall be provided for migratory birds, at the reservoir and green belt areas.*
- *Natural surface water bodies within 10 km study area shall be rejuvenated and developed as complete eco-system with the tree plantation development and growth using satellite imageries.*

Agenda No.29.3.14

Enhancement of capacity of sugar unit from 5,000 to 8,500 TCD and Co-generation unit from 19.7 to 36 MW at PO/Village Kundal, Taluka Palus, District Sangli (Maharashtra) by M/s Krantiagrani Dr. G.D. Bapu Lad Sahakari Sakhar Karkhana Ltd - For Environmental Clearance

[IA/MH/IND2/68043/2017; F.No. IA-J-11011/233/2017-IA-II (I)]

29.3.14.1 The project proponent and the accredited consultant engaged M/s Vasantdada Sugar Institute, Pune made a detailed presentation on the salient features of the project and informed the following:

- (i) The proposal is for enhancement of capacity of sugar unit from 5,000 to 8,500 TCD and Co-generation unit from 19.7 to 36.0 MW by M/s Krantiagrani Dr. G.D. Bapu Lad Sahakari Sakhar Karkhana Ltd at PO/Village Kundal, Tal. Palus, District Sangli (Maharashtra).
- (ii) All Cogeneration (Thermal Power) project is listed at S.N. 1 (d) and Sugar Industry is listed at S.N. 5 (j) of the Schedule to the Environmental Impact Assessment (EIA) Notification, 2006 under category 'B' but general conditions are applied to the project (due to proximity of Yashwantrao Chavan Sagreshwar Wildlife Sanctuary which is 1.7 km from the boundary of the unit), hence appraised at Central Level by Expert Appraisal Committee (EAC).
- (iii) Earlier, the Ministry had issued EC vide letter No.J-11011/222/2012-IA-II(I) dated 22nd March, 2016 for expansion of sugar plant capacity from 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.
- (iv) ToR was issued by the Ministry vide letter No.J-11011/233/2017-IA II(I) dated 8th August 2017 with exemption of public hearing.
- (v) Existing land area is 126.5 acre, no additional land will be used for proposed expansion. Industry has already developed greenbelt in an area of 41.2 acres which is 33% of the plot area. The estimated project cost is Rs.150 crore. including existing investment of Rs. 66.38 crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 3.45 crore and the Recurring cost (operation and maintenance) will be about Rs.1.63 crore per annum. Total employment will be 40 persons as direct/permanent & 130 persons contractual/seasonal after expansion. Maximum working days for sugar unit will be 180 days and for cogeneration 273 days per annum. Industry proposes to allocate Rs.754 Lakh @ of 5.00% towards Corporate Social Responsibility.
- (vi) Details of existing and proposed products are as under:

Existing (at 5000 TCD capacity) Product list (In case of Expansion proposals)		
S. No	Products	Quantity(TPA) considering maximum days of operation i.e. 180 days
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 (@ 5000 + 3500 = 8500 TCD) and their Capacities for Expansion		
Sl. No	Products	Quantity(TPA) considering maximum days of operation i.e. 180 days
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

- (vii) Yashwantrao Chavan Sagareshwar Wildlife Sanctuary lies within 10 km distance of the project site. Yerala River towards North-East and Krishna River is located towards South-West and direction flowing at a distance of 4 km & 7 km, respectively.

(viii) Ambient air quality monitoring was carried out at 9 locations during March to May 2016 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (55 - 70µg/m³), PM_{2.5} (28-36µg/m³), SO₂ (14-22µg/m³) and NO₂ (20-28µg/m³) CO (0.56-1.33 mg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.75 µg/m³ for PM₁₀ and 2.46µg/m³ for SO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(ix) Total water requirement is 284 m³/day (during season) & 1449 m³/day (during off season). Fresh water requirement will be fulfilled from Krishna River (permission of Irrigation Department is available).

(x) Fuel requirement (Bagasse) will be 86.95 TPH during season and 19.82 TPH during off season.

(xi) Treated effluent of 850 m³/day will be treated through Effluent Treatment Plant. The unit will be based on Zero Liquid discharge system.

(xii) Power requirement after expansion will be 10.29 MW including existing 9.70 MW and will be met from own cogeneration unit. Existing unit has 3 DG sets two of 320 kVA capacity each and one of 110 kVA capacity is sufficient for proposed expansion. Stack height (3 m) as per CPCB norms, DG will be used as standby during power failure.

(xiii) Existing unit has two boilers of 35 TPH & one of 50 TPH which will be disassembled after installation of new bagasse fired boiler of 70 & 130 TPH. Electro static precipitator with a stack of height of 75.0 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm³) for proposed 70 & 130 TPH bagasse fired boilers.

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

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

S.N	Waste	Quantity	Treatment	Disposal	Remark
1	Sugar ETP sludge	80 TPA	Disposal into land/soil	Sold to member farmer/own plot	Organic
2	Ash (Total = season + off-season)	8397 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	burnt in boiler	Oily

29.3.14.2 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 Sagreshwar Wildlife Sanctuary), the project was appraised at Central Level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The ToR for the project was granted on 8th August, 2017. In case of public consultations, exemption was granted 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.

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, 2017. The unit has applied for the renewal of the same.

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 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. However, the same is yet to be endorsed by the Regional Office and reported to the Ministry.

29.3.14.3 *The EAC, after deliberations, deferred the project 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.*

Agenda No.29.3.15

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

[IA/HR/IND2/31067/2015; F.No. J-11011/253/2015-IA II (I)]

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

- (i) The proposal is for expansion of Pesticide (Technical) project from 2940 MT/Annum to 4260 MT/Annum by M/s Bharat Rasayan Ltd located at 2 KM Stone, Madina-Mokhra Road, Village Mokhra, Tehsil - Meham, District Rohtak (Haryana).
- (ii) The 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 References (TORs) for the Project. The TOR has been issued by Ministry vide letter No.J- 11011/253/2015-IA II(I) dated 2nd August 2016.
- (iii) The project/activity is covered under category A of item 5(b) 'Pesticides industry and pesticides specific intermediates' of the Schedule to EIA Notification, 2006, and requires appraisal at central level i.e. EAC, MoEF&CC.
- (iv) Existing land area is 44517 sqm and no additional land is required for the proposed expansion.

- (v) Industry is already/ will be developed Greenbelt in an area of 36% i.e.16068.65 SQM out of 44517 SQM of area of the project.
- (vi) Cost of Estimates of the Expansion Project is 150 lacs while existing assest value is Rs 2900lacs including cost of environmental system. Recurring cost on environmental system as ondate is Rs 234 Lacs per annum.
- (vii) Total Employment will be 230 persons as direct &275 persons indirect after expansion. Industry proposes to allocate Rs.19.65 lacs @ of 5/2.5% towards Corporate Social Responsibility.
- (viii) It is reported that as per Form-1, no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. No River/ waterbody (except pond and canal) are flowing within study area.
- (ix) Ambient air quality monitoring was carried out at 8 locations during 1st dec 2015 to 29th Feb 2016 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (61-78 µg/m³), PM_{2.5} (26 - 35 µg/m³), SO₂ (5.4-6.6 µg/m³) and NO_x (11.1-13.1 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). As per baseline data of AAQ maximum GLC for PM in downwind direction is near Madina Gindhran is 79.0 µg/m³ and with this proposed expansion project, 4.0 µg/m³ rise in GLCs so PM level will be 83.0 µg/m³. The Particulate Matter in the study area is contributed mainly by commercial activities and traffic movement (vehicular emissions), re-suspended dust from paved and unpaved roads and open uncovered areas as well as from industrial activities. Maximum baseline GLC for SO₂ (Process) at downwind direction (Near Madina Gindhran) was as 7.5 µg/m³ observed at Madina Gindhran. With the expansion project SO₂ level may increase by 3.4 µg/m³ so post project level of SO₂ is 10.9 µg/m³. It can be concluded that with the expansion of project all the AAQ parameters will remain within the NAAQ norms.
- (x) Total water requirement is 234.719 m³/day of which fresh water requirement 234.719 m³/day and will be met from tubewell.
- (xi) Effluent of 49.61 m³ from process and 35 m³ from domestic will be treated through MEE/ ETP/STP. Plant will be based on Zero Liquid discharge system.
- (xii) The power requirement of the proposed project will be met with the power supply from State electricity board. To meet Emergency power requirement of critical operations for ensuring safety, DG sets are provided as standby power back up (2DG set of 1250 KVA & 275 KVA capacities is installed). BRL are increasing power load from 1450 KVA to 1720 KVA.
- (xiii) Existing unit has 6 TPH Pet Coke & 3 TPH and 2TPH FO fired boiler will be installed. Multi cyclone separator/ bag filter with a stack height of 30 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm³) for Proposed 8 TPH coal/Pet coke fired boilers respectively.
- (xiv) Details of Process emissions generation and its management are as under:

S. N o.	Stack attach ed to	Sta ck Ht. (m)	Stack Diamet er (m)	Flow (Nm ³ / hr)	Exist Velocity (m/se c)	Tem p. 0K	Emission load (mg/sec)								APCM
							PM		SO ₂						
1	Boiler (Avg)	30	1.0m	16645	7.17	363	3700		1850						Cyclone Separat or
Process Stacks							Emission load (mg/sec)								
							H Cl	CL 2	H2 S	SO 2	NH 3	P M	CH3 Cl	H Br	
2	Proces s Vent	15	0.05	12	1.73	35-40	0.07	0.02							Acld/Alk ali

	- I														scrubber
3	Process Vent - II	15	0.05	18	2.6	35-40	0.10			0.05					Acid/Alkali scrubber
4	Process Vent-III	15	0.05	11.86	1.69	35-40	0.07	0.02							Acid/Alkali scrubber
5	Process Vent-IV	15	0.05	21.27	3.03	35-40		0.02						0.03	Acid/Alkali scrubber

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

Sr. No.	Type of Waste	Category as per HW	TOTAL QUANTITY, MT/Year		Treatment / Disposal Method
			Existing	After Product Mix	
1.	Used Oil	5.1	0.726	2.5	Collection, Storage, Transportation & Disposal by selling to registered reprocessor / reuse as lubricant
2.	Process Waste / Waste Residue containing Pesticides	29.1	229.42	523.07	Collection, Storage, Incineration at common Incineration / Disposal of Incinerable waste to Cement Industry
3.	ETP Sludge	29.2	1247.53	1140.45	Collection, Storage, Transportation & Disposal at nearest TSDf site (GEIPL, Pali) / Sludge from Primary Treatment to Cement Industry
4.	Date Expired / off specification products	29.3	Nil	1.0	Collection, Storage, Incineration at common incineration
5.	Discarded Container	33.3	3000 Nos.	5000 Nos.	Collection, Storage, Decontamination, Detoxification & sell to authorized vendor
6.	Discarded bag / liners	33.3	3	4	
7.	Distillation Residue from contaminated organic solvents	36.4	0	0	Collection, Storage, Incineration at common incinerator

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

(xvii) There is no litigation pending against the proposal.

(xviii) Details of the products are as follow:

Sl. No.	Particulars	Existing capacity (TPA)	Proposed Capacity (TPA)
INSECTICIDE			
1	Alphacypermethrin Technical	0	100
2	Bifenthrin Technical	0	120

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

By Products

Sr. No.	Byproducts	Quantity in MT/Year	
		Existing	After Product Mix
1	Alum	5086.08	9536.4
2	Pot. Chloride	2001.6	5036.5
3	Spent acid	1125.9	824.95
4	Hydrochloric Acid 28%	2027.6	2255
5	Sodium sulphite	1473.3	1402.9
6	Potassium bromide (soln.)	1850.88	3726.7
7	Sodium Bromide (soln.)	948.6	758.6
	Total	14513.96	23541.05

29.3.15.2 During deliberations, the EAC noted the following:-

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

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

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

Fresh/total water requirement of 234.719 cum/day shall be met from ground water. The required permission in this regard has been obtained from the concerned authority/CGWA.

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

Consent to Operate for the present capacity of 2940 TPA has been obtained from the State Pollution Control Board, which is presently valid up to 30th September, 2021.

The project is reported to be established 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 to discharge by Haryana SPCB issued vide their letter dated 28th December, 1992.

29.3.15.3 *The EAC in the first instance and in view of the submissions by the project proponent regarding zero liquid discharge stipulations, preferred for a certification in this regard by the CPCB and/or the SPCB to ensure compliance of the directions by CPCB. The EAC further desired that to expedite the process, if so required, site visit may also be undertaken by the Committee members.*

Agenda 29.3.16

Captive Resin Plant of 100000 TPA production capacity at Routhusuramala Village, Thottambedu Mandal, Chittoor District (Andhra Pradesh) by M/s Greenply Industries Ltd - For Environmental Clearance

[IA/AP/IND2/58746/2016; F.No. J-11011/322/2016 – IA II (I)]

29.3.16.1 The project proponent and the accredited consultant engaged M/s. Vimta Labs Limited made a detailed presentation on the salient features of the project and informed the following:

- (i) The proposal is for Captive Resin Plant of 100000 TPA production capacity by M/s Greenply Industries Ltd at Routhusuramala Village, Thottambedu Mandal, Chittoor District (Andhra Pradesh).
- (ii) The present proposal falls under “All synthetic organic chemical industry listed in Schedule 5(f) of the EIA Notification, 2006 under category ‘A’ and needs to be appraised at MOEF&CC, New Delhi to Expert Appraisal Committee (EAC).
- (iii) The ToR was issued by the Ministry vide letter No. J-11011/322/2016-IA.II(I) dated 14th December, 2016. The public hearing was conducted on 17th August, 2017.
- (iv) M/s Greenply Industries Limited (GIL) proposes to set up captive resin manufacturing plant at Routhusuramala village, Thottambedu Mandal, Chittoor District, Andhra Pradesh to cater upcoming medium density fiberboards (MDF) manufacturing unit. GIL has applied for Consent for Establish (CFE) for MDF plant to Andhra Pradesh Pollution Control Board (APPCB) and has obtained CFE vide order No. CTR – 039/PCB/ZOK/CFE/2016 dated 04.05.2016. Due to limitations of resin manufactures in nearby area for supply of required consistent quality and quantity, a captive resin manufacturing is necessitated.
- (v) Total land for the MDF plant is 196.21 acres (79.40 ha), out of which about one acre land is required for resin plant. GIL will develop greenbelt/green cover in an area of 50.9 acres out of 196.21 acres, required for the entire MDF plant.
- (vi) The estimated project cost of proposed resin plant is Rs.13.75 Crores.

(vii) Total employment for Resin Plant will be 50 persons in construction phase & 20 persons in operational phase, Industry proposes to allocate Rs.120 lakhs towards Corporate Social Responsibility in next three years.

(viii) There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc lies within 10 km distance. The important rivers are Kalinga river (4.0 km, SE), Swarnamukhi river (4.0 km, SE) and Telugu Ganga canal (6.1 km, WSW) from the proposed project site.

(ix) Ambient air quality monitoring was carried out at eight locations during 1st December 2016 to 28th February 2017, representing winter season and submitted baseline data concentrations of PM₁₀ (30.1-49.2 µg/m³), PM_{2.5} (14.1-25.7 µg/m³), SO₂ (9.1-13.9 µg/m³) and NO₂ (10.0-14.7 µg/m³) respectively. AAQ modeling study has been carried out for point source emissions the maximum incremental GLCs due to the proposed project is 0.3 µg/m³, 1.2 µg/m³ and 1.4 µg/m³ with respect to PM₁₀, SO_x and NO_x respectively. The resultant concentrations are well within the National Ambient Air Quality Standards (NAAQS).

(x) Total water requirement for resin plant will be 10 m³/day, out of which fresh water requirement is 1 m³/day and remaining 9 m³/day (Floor washing & cleaning) will be the recycled water from MDF plant. Water required for MDF plant will be sourced from Telugu Ganga canal (surface water) and ground water, for which allocation from the concerned authorities are in place.

(xi) There will be no wastewater generation from resin manufacturing process. Wastewater from floor wash will be transferred to equalization tank of common effluent treatment plant. Plant will be based on Zero Liquid discharge system.

(xii) The capital cost earmarked towards environmental pollution control measures for the integrated MDF board manufacturing plant is Rs 2475 lakhs and the Recurring cost (operation and maintenance) will be about Rs 290 lakhs per annum.

(xiii) 500 KW power is required for resin plant which shall be sourced from State Electricity Board connection meant for integrated MDF plant. In case of power failure, emergency power will also be drawn from MDF plant. DG sets of @800-1000 kVA capacity is proposed during power failure.

(xiv) Boiler of 40 TPH (wood chips fuel) installed for integrated MDF board manufacturing plant from which steam required for Resin plant will be supplied Electro static precipitators will be provided to arrest the particulate matter. Emergency stack of 38 m height is provided.

(xv) Details of process emissions generation and its management suggested are as follows:

- There will be no process gas emissions from the plant. The VOC emissions from storage tanks will be condensed;
- As the process of all products will be taken up in the closed reactors, there will be no source of process emissions;
- The VOC emission in terms of handling losses will be reduced by storing raw material in a tank and handling raw material feeding will be carried out by pumps in a close loop;
- Regular ambient air quality monitoring will be carried out within premises and nearby area for VOC in the downwind directions as well as where maximum ground level concentration is anticipated and record of the same shall be maintained.

(xvi) No hazardous waste will be generated from resin manufacturing process. Discarded bags and lines of about 64,000 bags/ month are sent to the authorised recyclers.

29.3.16.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Captive Resin Plant' of 100000 TPA by M/s Green Ply Industries in an area of nearly 1 acre at Routhusuramala Village, Thottambedu Mandal, Chittoor District (Andhra Pradesh).

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of the Schedule to 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 14th December, 2016, and the public hearing was conducted by the SPCB on 17th August, 2017. Public hearing proceedings were chaired by the District Revenue Officer, District Chittoor (AP). It was informed that District Revenue Officer is equivalent to the rank of ADM as required under the EIA Notification, 2006.

Fresh water requirement of 1 cum/day out of the total water demand of 10 cum/day shall be supplied through Teluguganga Canal and also the ground water. Necessary permission in this regard has been obtained from the concerned authorities.

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

Consent to Establish for the presently manufactured Medium Density Fibreboards (not covered under the EIA Notification, 2006) has been obtained from the AP Pollution Control Board. The unit has applied for the renewal of the same.

29.3.16.3 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to the 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.*
- *Total fresh water requirement shall not exceed 1 cum/day, which is to be met from the surface water source (Telugu Ganga Canal). Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA, as applicable.*
- *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 nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- All the commitment made regarding issues raised during the Public Hearing/ consultation meeting held on 17th August, 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.
- 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.
- Raw material storage should not exceed 3 days at any point of time

Agenda No.29.3.17

Expansion of capacity from 104 KLD to 241 KLD in grain based distillery unit located at Village Khodi, Tehsil Barwaha, District Khargone (Madhya Pradesh) by M/s Associated Alcohol & Breweries Ltd - For Environmental Clearance

[IA/MP/IND2/48354/2016; F.No. J-11011/64/2016- IA II(I)]

29.3.17.1 The project proponent and the accredited consultant M/s Creative Enviro Services, Bhopal, made a detailed presentation on the salient features of the project and informed that:

- (i) The proposal is for expansion of existing grain based distillery plant capacity from 104 KLPD & 2 MW Power Plant to total spirit of 241 KLPD by adding of new distillery unit of 137 KLPD along with 6 MW Co-generation plant with total CO₂ generation (100-105 TPD) M/s Associated Alcohol & Breweries Ltd at their existing location at Khasara No.34/1, 31 Village Khodi, Tehsil Badwaha, District Khagone (Madhya Pradesh).
- (ii) All grain based distillery (>60 KLD) are listed at S.N. 5(g) (ii) 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) ToR was issued by the Ministry vide letter No.J-11011/64/2016-IA II (I) dated 21st June 2016. Public Hearing was conducted at site by the State Pollution Control Board on 24th December, 2016 at site.
- (iv) Existing land available is 30 acres. Out of which, 6.8 acres of land have been earmarked for proposed project, land occupied by existing unit is about 27768 sqm.
- (v) Details of existing and proposed products are as under:

Existing Product list

S.No	Product	Quantity
1.	Total Spirit	104 KLD

2	Co generation of Power	2 MW
3	DDGS	60-90 TPD

Proposed products and their capacities for expansion

S.No	Product	Quantity
1	Total Spirit	137 KLD
2.	Co generation of Power	6 MW
3	CO ₂ generation	100-105 TPD
4	DDGS	56-62 TPD

(vi) Greenbelt has been developed within the existing premises covering an area of about 9.32 acres with approx 3500 number of plants. Total plantation is proposed over 11.43 acres of area with 9250 number of trees out of 30 acres of total land, which is more than 33%.

(vii) The estimated project cost is Rs 288.47 crore including existing investment of Rs 150 crores. Total capital cost for environmental measures is proposed as Rs 34.53 crore including of existing capital cost of 13.02 crores. The recurring cost (operation and maintenance) will be about Rs. 82.39 lacs per annum including of existing recurring cost of Rs 24 Lacs.

(viii) Total employment will be 550-600 persons after expansion as direct & 900 persons as indirect after expansion. Industry proposes to allocate Rs. 3.46 Crores @ 2.5 % of project cost towards Corporate Social Responsibility. Budget of Rs 19.50 Lacs per annum is proposed for execution of need base programme for the socio economic development of the area.

(ix) It is reported that as per Form-1, no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Three reserve forest and one protected forest are reported in the study area. Major River Narmada is flowing at a distance of 8.80 km in SSE direction whereas seasonal Gularjhira river is flowing a distance of 1.15 km in W direction.

(x) Ambient air quality monitoring was carried out at 10 locations during March to May 2016 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (48.76-73.52 µg/m³), PM_{2.5} (16.49-27.74 µg/m³), SO₂ (6-10.36 µg/m³) and NO₂ (8- 29.03 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 75.62 µg/m³, 10.66 µg/m³ and 29.33 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(xi) For the capacity expansion, total water requirement is estimated to be 3107 KLD and after recycling & reuse of 1982 KLD of water, net fresh water requirement is estimated to be 1125 KLD. Whereas the total raw water requirement for the existing operation is reported as 2872 KLD whereas after recycling/reuse, net fresh water requirement is 916 KLD. Hence cumulative net fresh water requirement for existing and proposed plant will be 2041 KLD and will be met from River Narmada and Ground water resources.

(xii) Multi Effect Evaporator with thermal recompression for thin slops evaporation and CPU is proposed for treatment of spent wash to maintain zero discharge condition. For existing operation for 104 KLD, spent wash generation is reported at about 605 KLD whereas spent wash generation for proposed unit is estimated as 797.

(xiii) Power requirement after expansion will be 10215 KWH including existing 3555 KWH and will be met from Co generation unit of 2MW and 6 MW. Existing unit has 1 DG sets of 750 kVA capacity, and are used as standby during power failure. Additionally 1250 kVA of DG sets with Stack height (30 m) will be provided as per CPCB norms and will be used as standby during power failure.

(xiv) Existing unit has 03 boilers of 20, 12 & 08 TPH which are coal fired and provided with bag filters. Bag filter with a stack of height of 50 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg /Nm³) for proposed 45 TPH coal fired boiler.

(xv) PM, SO₂, NO_x will be generated from the fuel combustion. Following measures are proposed for implementation:

- Bag filter shall be provided at stack of boiler to control the emission below 50 mg per cubic meter.
- Adequate stack height of 50 m for boiler and 30 m for the DG set shall be provided for better dispersion.
- Dust collectors system shall be provided at various material transfer points.
- Online continuous monitoring system shall be provided for stack of boiler
- Development of green belt in time bound manner in consultation with forest department.
- Dense phase conveying system for ash handling shall be provided to prevent the fugitive emission.
- Provision of cover over coal conveyors belt along with dust suppression system
- Provision of dust mask for workers and instruction of compulsory use.
- Regular maintenance and water spraying arrangement over approach road of the unit crossing the village and meeting to SH.
- It is proposed to fire low sulphur coal in the boiler.
- CO₂ generated during the fermentation process is being/will be collected by utilizing CO₂ Scrubbers.

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

Type of Waste	Quantity (existing & proposed)	Utilization/ Disposal
DDGS (by product)	60-90 TPD + 56 -62 TPD	Sold as cattle feed directly
Boiler ash	(20 TPD and 45 TPD)	Brick making to Brick Manufacturing unit at Barwaha Industrial area
Waste papers/Boxes	2 T.P.D.	Sale to recyclers
Used Oil	< 500 lit per year	Given to re-cycler authorized by MPPCB/MoEF
Waste Resin From DM plant	200 Kg per year	Shall be disposed off at TSDF, Pithampur
Waste activated Carbon	50-75 Kg per year	Shall be disposed off at TSDF Pithampur

(xvii) Certified compliance report is not applicable for the proposed project as unit is in operation prior to 1994.

(xviii) No litigation is pending against the proposal.

29.3.17.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Expansion of grain based distillery from 104 KLPD to 241 KLPD and co-generation power plant from 2 to 8 MW' by M/s Associated Alcohols & Breweries Ltd in an area of 6.8 acres out of total area of 30 acres at Khasara No. 34/1, 31 Village Khodi, Tehsil Badwaha, District Khagone (Madhya Pradesh).

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

The ToR for the project was granted on 21st June 2016. Public hearing was conducted by the SPCB on 24th December, 2016.

Total water requirement is estimated to be 3107 KLD for expansion. After recycling and reuse of 1982 KLD of water, net fresh water requirement was earlier estimated to be 1125 KLD. The same would now be reduced to 1096 cum/day (8 KL/KL of Alcohol), which shall be met from River Narmada and ground water resources. Present fresh water demand is being met through ground resource without any permission from the concerned authority/CGWA.

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. As per one of the conditions, Wildlife Conservation Plan for conservation of Schedule I fauna, was submitted to the Principal Chief Conservator of Forests (Wildlife), Government of MP. The Wildlife Conservation Plan envisages a provision of Rs.213.50 lakhs for a period of 10 years. The same has since been approved vide their letter dated 3rd July, 2017 for implementation.

Consent to Operate for the presently manufactured product has been obtained from the MP Pollution Control Board, which is presently valid up to 31st August, 2019.

Certified compliance report is not applicable for the proposed project as unit has been in operation since prior to 1994. Documentary evidence in this regard (Consent letter issued by SPCB) was shown to the Committee.

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

- *Grain unfit for human consumption (also not attacked by pests and/or pesticides), shall only be used as raw material for the distillery.*
- *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. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Total fresh water requirement shall not exceed 1096 cum/day including both surface and groundwater. 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.*
- *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by*

flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.

- The company shall undertake waste minimization measures as below:-
 - (a) Metering and control of quantities of active ingredients to minimize waste.
 - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (c) Use of automated filling to minimize spillage.
 - (d) Use of Close Feed system into batch reactors.
 - (e) Venting equipment through vapour recovery system.
 - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- The green belt of 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 commitment made regarding issues raised during the Public Hearing/ consultation meeting held on 24th December, 2016 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. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.

Agenda No.29.3.18

Expansion of Viscose Staple Fibre (1,27,750 to 2,33,600 TPA), Sulphuric Acid (1,46,000 to 2,19,000 TPA), Carbon-Disulphide (21,600 to 37,295 TPA) and Captive Power Plant (25 to 45 MW) at Birladham, Village Kharach, Tehsil Hansot, District Bharuch (Gujarat) by M/s Birla Cellulosic (A Unit of Grasim Industries Ltd) - For Environmental Clearance

[IA/GJ/IND2/59092/2016; F.No. J-11011/320/2016-IA.II(I)]

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

(i) The proposal is for expansion of Viscose Staple Fibre capacity from 1,27,750 to 2,33,600 TPA, Sulphuric Acid capacity from 1,46,000 to 2,19,000 TPA, Carbon-Disulphide capacity from 21,600 to 37,295 TPA and Captive Power Plant capacity from 25 to 45 MW by M/s Birla Cellulosic (A Unit of Grasim Industries Ltd) at Birladham, Village Kharach, Tehsil Hansot, District Bharuch (Gujarat).

(ii) Earlier, the Ministry had issued EC vide letter No. J-11011/130/2006-IA II (I) dated 15th January, 2007 for Viscose Staple Fibre, Sodium Sulphate & CPP. NoC has been issued by

GPCB vide letter No. GPCB/BRCH/NOC-3243 [CCA-295(4)]/16204 dated 25th May, 2006 for Sulphuric Acid & Carbon-Disulphide to M/s Birla Cellulosic (A Unit of Grasim Industries Ltd.)

(iii) All products are listed at S.N. 5(d) & 1(d) 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) ToR was issued by the Ministry vide letter No.J-11011/320/2016-IA-II (I) dated 13th February, 2017. Public hearing was conducted by the Gujarat Pollution Control Board on 30th August, 2017 at School Ground of Birla Cellulosic, Village Kharach, Taluka Hansot, District Bharuch (Gujarat).

(v) Existing land area is 242.81 ha (230 ha plant + colony & 12.81 ha open area), proposed expansion will be done within the existing plant premises.

(vi) Details of existing and proposed products are as under:

S.N.	Name of Products (Units)	Existing Capacity	Additional (Proposed) Capacity			Total capacity after expansion
			Debottle necking	New Machines	Total	
1.	Viscose Staple Fibre (TPA)	1, 27,750	14,600	91,250	1, 05,850	2,33,600
2.	Sulphuric Acid* (TPA)	1,46,000	-	73,000	73,000	2,19,000
3.	Carbon-Disulphide** (TPA)	21,600	Nil			21,600
4.	Sodium Sulphate (By Product) (TPA)	96,000	11,000	68,751	79,751	1,75,751
5.	Captive Power Plant (MW)	25	-	20	20	45
6.	Solvent Spun Cellulosic Fibre (Excel Fibre)	1,09,500	Nil			1,09,500
7.	Captive Power Plant (MW) (For Excel Fibre)	71	Nil			71
<p>*Surplus quantity of H₂SO₄ will be sold to open market for economic viability. **Birla Cellulosic has proposed to withdraw its expansion in Carbon-Disulphide Plant (additional capacity) in reference to the Additional ToR point no. vii stating - A study to be conducted on possibility for use of non-charcoal based CS₂. The additional requirement of CS₂ will be now purchased form open market and sister concern using Natural Gas based process (non-charcoal based) to avoid the use of charcoal and comply to the ToR condition.</p>						

(vii) Industry will develop greenbelt in an area of 33% i.e., 80 ha out of 242.81 ha of area of the project. Presently, 70 ha area has been developed under greenbelt. Greenbelt planned for 10 ha in next three years.

(viii) The estimated project cost is Rs. 1800 Crores (Debottlenecking: Rs. 12 Crores & New Machines: Rs.1788 Crores). Total capital cost earmarked towards environmental pollution control measures is Rs.90 Crores and the Recurring cost (operation and maintenance) will be about Rs. 11 Crores per annum.

(ix) Total employment will be 1267 persons as direct & 1039 persons as indirect after expansion. Industry proposes to allocate Rs. 45 Crores (Debottlenecking: Rs. 0.3 Crores, New machines: Rs. 44.7 Crores) @ of 2.5% towards Enterprise Social Commitment.

(x) It is reported that as per Form-1, no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Kim River is flowing at a distance of 0.50 km in South direction.

(xi) Ambient air quality monitoring was carried out at 8 locations during Winter Season (December, 2016 to February, 2017) and submitted baseline data indicates that ranges of concentrations of PM₁₀ (52.9 to 82.8 µg/m³), PM_{2.5} (24.6 to 47.6 µg/m³), SO₂ (7.6 to 16.3 µg/m³), NO₂ (13.2 to 28.4 µg/m³), CS₂ (21.7 to 37.4 µg/m³) & H₂S (7.5 to 12.8 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after

the proposed project would be 0.13 µg/m³, 4.07 µg/m³, 0.22 µg/m³, 6.35 µg/m³ & 4.33 µg/m³ with respect to PM₁₀, SO₂, NO₂, CS₂ & H₂S. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS) & GPCB standards.

(xii) Total fresh water requirement (existing and proposed) after proposed expansion project will be 22,286 KLD which will be met from Kim River.

(xiii) Effluent generated from the project activity will be treated through existing Effluent Treatment Plant and treated effluent will be discharged into Kim Estuary through 24 km long pipeline.

(xiv) Total Power requirement after expansion will be 45 MW. Existing requirement of 25 MW is being met through Captive Thermal Power Plant. After expansion total requirement will be met from Captive Thermal Power Plant.

(xv) Existing unit has 2x100 & 1x120 TPH coal fired boiler. Electrostatics Precipitators with a stack of height of 100 m will be installed for controlling the Particulate emissions (within prescribed norms) for proposed 3x100 TPH coal/petcoke fired boilers respectively.

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

Emissions	Source	Management Measures
CS ₂	VSF Plant-spinning	<ul style="list-style-type: none"> CS₂ Recovery System (46.55% recovery). Powerful Exhaust System for spinning off gases (CS₂ and H₂S) Air dilution with adequate stack height. Shutters for spinning machine.
	CS ₂ Plant	<ul style="list-style-type: none"> Oil Scrubbing system for recovery of CS₂ Alkali Scrubber Klaus kiln for recovery of sulphur Dust extraction cum Ventury Scrubbing system for Furnaces.
SO ₂	H ₂ SO ₄ Plant	<ul style="list-style-type: none"> Alkali scrubber
	CPP boiler	<ul style="list-style-type: none"> Lime dozing in boiler Adequate stack height (as per CPCB guidelines).
Acid Mist	H ₂ SO ₄ Plant	<ul style="list-style-type: none"> Mist eliminator
PM	CPP boiler	<ul style="list-style-type: none"> ESPs
Fugitive Emission	CPP-handling & Storage	<ul style="list-style-type: none"> Covered storage yard to store coal at the plant site. Silos to store fly ash at the plant site. Transportation of Fly ash through closed tankers / bulkers. Dust collection system to control dust emission. Water sprinkling to reduce dust generation. Greenbelt / plantation done along the plant boundary to attenuate air pollution.
	CS ₂ Plant-Sulphur handling	<ul style="list-style-type: none"> Covered storage yard for storage of sulphur. Sulphur melting in closed system

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

Plant Unit	Waste	Treatment / Disposal
Acid Plant	Sulphur Filter Residue	TSDF
	Spent Catalyst (V ₂ O ₅)	
ETP	ETP Inorganic Sludge (Gypsum)	Sold to cement industries
Plant	Oil soaked Cotton Waste &	TSDF

Maintenance-Different sections	cotton waste	
	Used Oil	Sent to Authorized Recycler
	Used Resin	Sent to TSDF for disposal
STP	STP Sludge	Used as manure in greenbelt development/ plantation
Proposed CPP	Fly Ash	Will be supplied to Brick manufacturers, Cement industries

(xviii) Details of Certified compliance report submitted by RO, MoEF&CC: Certified compliance report of the conditions stipulated in the EC is obtained from Regional Office of MoEF&CC vide letter No. 5-1/2007(ENV)/291 dated 15th May, 2017.

(xix) No litigation is pending against this proposal.

29.3.18.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Expansion of Viscose Staple Fibre capacity from 1,27,750 to 2,33,600 TPA' by M/s Birla Cellulosic (A Unit of Grasim Industries Ltd) in a total area of 242.81 ha, at Birladham, Village Kharach, Tehsil Hansot, District Bharuch (Gujarat).

The project/activity is covered under category A of item 5(d) 'Manmade fibres manufacturing Rayon' 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 13th February, 2017. Public hearing was conducted by the SPCB on 30th August, 2017.

Total fresh water requirement after the proposed expansion project will be 22,286 KLD which will be met from Kim River.

Consent to Operate for the present industrial operations (Viscose Staple Fibre - 127750 TPA, Carbon Disulphide - 21600 TPA, Sulphuric Acid - 146000 TPA, CPP-25 MW and Sodium Sulphate of 96000 TPA as Bye-product) has been obtained from the State Pollution Control Board, which is presently valid up to 11th April, 2019.

Earlier, the Ministry had issued environmental clearance on 15th January, 2007 for the project 'Expansion of Viscose Staple Fibre from 60000 TPA to 127750 TPA and CPP from 15 MW to 25 MW). The monitoring report on compliance status of EC conditions forwarded by the Regional Office at Bhopal vide their letter dated 15th May, 2017 (site inspection carried out in April, 2017) was not found to be satisfactory due to the specific and general conditions not being complied with. For the conditions partially complied or not-complied, the action plan has been submitted to the Regional Office by the project proponent on 5th October, 2017. The same is yet to be endorsed by the Regional Office and reported to the Ministry.

29.3.18.3 *The EAC, after deliberations, deferred the project for want of endorsement of the Action Plan submitted by the project proponent to the Regional Office, Bhopal to firm up compliance of the conditions stipulated in the EC dated 15th January, 2007 for expansion of Viscose Staple Fibre from 60000 TPA to 127750 TPA and CPP from 15 MW to 25 MW vis-à-vis their earlier observations.*

Agenda No.29.3.19

Drilling & Testing of 11 wells and setting of EPS In Sanand, Miroli Block, CB-ONN-2002/3 in Ahmedabad & Mehsana Districts (Gujarat) by M/s Gujarat State Petroleum Corporation Ltd - For Environmental Clearance

[IA/GJ/IND2/31550/2015; F.No. J-11011/278/2015-IA II (I)]

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

- (i) The proposal is for Drilling & Testing of 11 wells and setting of EPS by M/s Gujarat State Petroleum Corporation Ltd in Sanand, Miroli Block, CB-ONN-2002/3 in Ahmedabad & Mehsana Districts (Gujarat).
- (ii) All Onshore oil and gas exploration, development and production are listed at S.N. 1(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) ToR was issued by the Ministry vide letter No. J-11011/278/2015-IA-II(I) dated 5th March 2016 and subsequent amendments dated 4th July, 2017 & dated 3rd August, 2017. Public Hearing was conducted by the State Pollution Control Board on dated 6th April, 2017 in Ahmedabad District and on dated 19th April, 2017 in Mehsana District.
- (iv) Details of proposed products (Well wise production) are as under:-

Details	Quantity per Well
Crude Oil	30-40 m ³ /day
Associated Gas	5000-7000 m ³ /day

- (v) Proposed land required for drill site area is 15,000 sqm and for production facility (EPS) is 27,000 sqm.
- (vi) Industry will develop Greenbelt in an area of 33% i.e., 8910 sqm out of 27,000 sqm of area of the project.
- (vii) The estimated project cost of drilling one well will be Rs.18 crore. Total cost of drilling 11 wells will be about Rs. 198 crore. Cost of establishment of each EPS will be about Rs. 5.8 crore. Total capital cost earmarked towards environmental pollution measure for each drilling site will be Rs. 13 Lacs and approximate recurring & capital cost for each EPS will be Rs. 9.30 Lacs & 33.8 Lacs.
- (viii) During the drilling operations, about 30 to 40 persons will be working in 24 hours shift at site. Approx. 6-10 person per shift will work at EPS. GSPC being Government of Gujarat owned company, all the CSR activity as applicable and instructed by Government of Gujarat shall be carried out.
- (ix) It is reported that as per Form-1, No National Parks, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. lies within 10 km distance. However, Thol Bird Sanctuary is 2.5 km in NW direction from well PR#2 & 7.0 km in S direction from well proposed # 8. As per Final Notification on Eco-Sensitive Zone for Thol Bird Sanctuary, All locations fall outside the eco-Sensitive zone. Sabarmati River is 10.6 km in SE direction from well Proposed#7 & 1.96 km in E direction from well M1_D1. Narmada Branchy Canal is 7.7 km in NW direction from well PR#3.
- (x) Ambient air quality monitoring was carried out at 09 locations during 9th March 2016 to 8th June 2016 and submitted baseline data indicated that ranges of concentrations of PM₁₀ (65.63 to 85.80 ug/m³), PM_{2.5} (26.50 to 44.28 ug/m³), SO₂ (7.97 to 11.16 ug/m³) and NO_x (10.15 to 34.50 ug/m³) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 70.918 ug/m³, 11.249 ug/m³

and 34.139 ug/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within National Ambient Air quality standard (NAAQS).

(xi) During drilling phase approx. 40.0 KLD water will be required & during EPS operation phase approx. 51.0 KLD water will be required. Required water will be met from surface water source and transported through water tanker.

(xii) Treated effluent of 10 KLD generated during drilling phase will be discharged in HDPE lined evaporation pit. Treated effluent of 20 KLD generated during EPS operation phase will be disposed through mobile ETP or injected in well or disposed through water tankers to approved effluent treatment facility. Plant will be based on Zero Liquid Discharge system.

(xiii) During Drilling phase, D. G Set (662.5 kVA (2 Nos. per well)) shall be utilized as prime movers for meeting the power required to run the drilling rig, circulation system etc. and also for lighting. D. G set stack height will be 6 m. During EPS operation phase, Motive power: 75 KVA and Light: 20 KVA required at each EPS. Source of power supply will be UGVCL. One D.G. set of capacity 82.5 KVA will be kept at each EPS as emergency backup power. D. G set stack height will be 6 m.

(xiv) Details of solid waste/ hazardous waste generation and its management (Drilling Phase) are as follows:

S.No.	Type of Waste	Category	Quantity per Well	Disposal
1.	Domestic Waste	-	2 kg/day	Shall be sent through contractor to approved municipal site.
2.	Drill Cutting	2.1	300 m ³	Shall be tested for its hazardous constituent (oil & grease), if it is found hazardous, it shall be handed over to authorized TSD facility. In case of non hazardous, it shall be disposed in to HDPE lined pit.
3.	Spent Drilling Mud	2.3	25 MT	
4.	Used Oil	5.1	1000 Lit	Shall be handed over to authorized recyclers approved by GPCB / CPCB.
5.	Oily Cotton Waste	2.3	180 kg/year	Shall be stored in containers and handed over to authorized disposal site/agency.
6.	Chemical Sacks / Drums	33.3	5 kg/day	Shall be handed over to authorized dealer approved by GPCB / CPCB.

Hazardous/Solid Waste Generation and It's Management (EPS Operation Phase)

S.No.	Type of Waste	Category	Quantity per EPS	Facility
1.	Domestic Waste	-	2 kg/day	Shall be sent through contractor to approved municipal site.
2.	Used Oil	5.1	15 Lit/year	Shall be generated during DG set maintenance at each EPS which shall be max. used for internal purpose for greasing the instrument and balance quantity will be sold to GPCB /CPCB authorized recyclers.

3.	Waste Sludge Oil	2.2	12 m ³ /year	Shall be stored in container or cement drain pit and then handed over to authorized disposal site.
4.	Oily Cotton Waste	2.3	120 kg/year	

29.3.19.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Exploration, Development & Production of 11 wells' (Six wells for exploratory drilling and five development/production) by M/s Gujarat State Petroleum Corporation Ltd in an area of 15,000 sqm (for each well) in Sanand, Miroli Block, CB-ONN-2002/3 in Ahmedabad & Mehsana Districts (Gujarat).

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 5th March 2016, followed by amendments therein on 4th July, 2017 & 3rd August, 2017. Public hearing was conducted by the SPCB on 6th April, 2017 in Ahmedabad District and on dated 19th April, 2017 in Mehsana District.

The water requirement during drilling phase shall be 40 KLD, which would be increased to 51 KLD during EPS operation phase. The water requirement during both the phases will be met from surface water source and transported through water tanker.

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.

29.3.19.3 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of specific 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 to any surface water body, sea and/or on land. Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/soak pit.*
- *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 for PM₁₀, PM_{2.5}, SO₂, NO_x, CO, CH₄, HC, Non-methane HC etc.*
- *Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.*
- *Approach road shall be made pucca to minimize generation of suspended dust.*
- *The company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosure shall be provided to DG sets and proper stack height shall be provided as per CPCB guidelines.*

- Total water requirement shall not exceed the proposed and prior permission shall be obtained from the concerned regulatory authority.
 - The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
 - Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.
 - Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
 - The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
 - The company shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self containing breathing apparatus.
 - The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and Regional Office.
 - Blow Out Preventer (BOP) system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.
 - The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.
 - All the commitments made to the public during public hearing/consultation meeting on 6th & 19th April, 2017 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.
- (g) At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on Public Hearing issues. The item-wise details in this regard along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.
 - Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.
 - An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to the Ministry's Regional Office.
 - Company shall have own Environment Management Cell having qualified persons with proper background.
 - Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of

environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

- *On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.*
- *Hazardous Waste shall be handled and disposed as per the provisions of the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and necessary permissions shall be obtained under the said rules.*

Agenda No.29.3.20

Single Super Phosphate Manufacturing unit at Village Harjiana, Tehsil Garhshankar, District Hoshiarpur (Punjab) by M/s Geminy Acid & Fertilizer Pvt Ltd - For Environmental Clearance

[IA/PB/IND2/69669/2014; F.No. J-11011/73/2014-IAII(I)]

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

- (i) The proposal is for Single Super Phosphate Manufacturing unit by M/s Geminy Acid & Fertilizer Pvt Ltd at Village Harjiana, Tehsil Garhshankar, District Hoshiarpur (Punjab).
- (ii) All the project are listed at S.N. 5(a) 'Chemical fertilizers' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 under category 'B'. Due to general conditions (inter-state boundary of Punjab and Himachal Pradesh at 2.66 km in East) within 5 km radius of the project site, the project falls under Category A and are appraised at Central Level by Expert Appraisal Committee (EAC).
- (iii) ToR was issued by the Ministry vide letter No. J-11011/73/2014-IAII(I)] dated 29th April 2015. Public Hearing was conducted by the State Pollution Control Board on 9th May, 2017.
- (iv) Total 10 acre (4.04 ha) of land is under possession of Geminy. Out of the total land about 0.9010 ha will be required for establishing the proposed plant rest of the land will be retained as greenbelt.
- (v) Details of proposed products are as under:

S.No	Product	Capacity (TPD)
1	Single Super Phosphate (SSP)	300 TPD
2	Granulated Single Super Phosphate (GSSP)	350 TPD

- (vi) The proposed project will require an investment of about Rs. 8.30 crores including expenditure of Rs.105.5 lakhs for pollution Control measures. Recurring cost on environmental system as on date is Rs.3.84 Lacs per annum.
- (vii) Total employment will be 20 persons as direct & 40 persons indirect after expansion. Industry proposes to allocate Rs.8 lacs per year @ of 5/2.5 % towards Corporate Social Responsibility.
- (viii) It is reported that as per Form-1, there is a forest at a distance of 1.50 km in East. There is a dry River stream at a distance of 1.75 km in the South East.
- (ix) Ambient air quality monitoring was carried out at 8 locations during 15th March 2015 to 15th June, 2015 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (39 to 74 µg/m³), PM_{2.5} (14 to 35 µg/m³), SO₂ (4.0 to 7.8 µg/m³) and NO_x (7.0 to 13.5 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project. The nearest settlement in downwind direction is Near Jaijon (towards SE) at a distance of 2.1 km and the incremental PM concentration in

Asanda is 74.248 µg/m³ with addition of 0.248 µg/m³ in baseline data. As per baseline data of AAQ maximum GLC for PM near Jaijon is 74 µg/m³ and with this proposed expansion project, there is rise of 0.248 µg/m³ in GLCs so PM level remains 74.248 µg/m³. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(x) Total water requirement is 61 m³/day, of which fresh water is 54 KLD which will be met from tubewell.

(xi) The plant will be Zero Discharge unit due to complete recycling of scrubbing waste water for dilution of input acid.

(xii) Power requirement for the project is about 1000 KVA, which will be sourced from Grid Power. A 300 KVA DG set will be provided at site for power backup, which will be used only during grid power failure.

(xiii) There is no litigation pending against the proposal.

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

S.N	Stack	Stack Height (m)	Stack Diameter (m)	Stack Exit Velocity (m/s)	Stack Temperature (°K)	Flow Rate (NM ³ /hr)	Emission Rates (g/s)			APCM
							NO _x	PM	HF	
1	SSP Stack	50	0.9	12	313	26169	-	--	0.15	Alkali Scrubber
2	Grinding Section Stack	40	0.6	12.5	308	12312		0.42	--	Bagfilter
3	Granulation Section Stack	40	0.8	9.5	308	16635	-	0.57	-	Dry Scrubber

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

S.No.	Waste	Waste Category No.	Waste generated	Disposal Method
1	Discarded Container	33.3	10Nos. per/year	Sale to authorized decontamination facility and recyclers if available otherwise disposal to TSDF
2	Spent/Used Oil	5.1	150 Lit/year	Sale to authorized recyclers
3	ETP sludge	36.1	Nil	

Note: The spent hydrofluorosilicic acid generating from scrubbers' waste is being utilized at present.

29.3.20.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Single Super Phosphate Manufacturing unit' by M/s Geminy Acid & Fertilizer Pvt Ltd in a total area of 10 acre at Village Harjiana, Tehsil Garhshankar, District Hoshiarpur (Punjab).

The project/activity is covered under category B of item 5(a) 'Chemical fertilizers' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006. Due to general conditions (inter-state boundary of Punjab and Himachal Pradesh at 2.66 km in East within 5 km

radius of the project site), the project has been appraised at Central Level by Expert Appraisal Committee (EAC).

The ToR for the project was granted on 29th April 2015. Public hearing was conducted by the SPCB on 9th May, 2017.

Out of the total water requirement of 106 m³/day, fresh water requirement of 61 m³/day shall be met from ground water resource/tubewell.

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.

29.3.20.3 *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.*
- *Total fresh water requirement shall not exceed 61 cum/day to be met from ground water/tube 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 solvent transfer through pumps.*
- *ETP sludge, process inorganic & evaporation salt, if any, 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 commitment made regarding issues raised during the Public Hearing/consultation meeting held on 9th May, 2017 shall be satisfactorily implemented.*
- *At least 2-2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on Public Hearing issues. The item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24X7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.*

Agenda No.29.3.21

Expansion of Sugar Factory capacity from 2500 TCD to 8000 TCD and New Co-generation Plant of capacity 35 MW at Village Sonawade Bambawade, Tehsil Shahuwadi, District Kolhapur (Maharashtra) by M/s Athani Sugars Ltd - For Environmental Clearance

[IA/MH/IND2/61387/2016; F.No. J-11011/373/2016-IA.II(I)]

29.3.21.1 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Expansion of Sugar Unit from 2500 TCD to 8000 TCD and Co-generation Plant of capacity 35 MW' by M/s Athani Sugars Ltd in a total area of 28.95 ha at Village Sonawade Bambawade, Tehsil Shahuwadi, District Kolhapur (Maharashtra).

The project/activity is covered under category B of item 5(j) 'Sugar Industry' of the Schedule to the Environmental Impact Assessment Notification, 2006, and requires appraisal and approval by SEAC/SEIAA in the State.

The ToR for the project was granted on 22nd June, 2017. Public hearing was exempted under para 7 (ii) of the EIA Notification, 2006.

The project proponent has submitted the proposal for EC on 20th September, 2017.

29.3.21.2 *The EAC, after deliberations and having taken note of the fact that SEIAA in Maharashtra has now been re-constituted, decided not to consider the proposal. The Committee further desired that the proposal may be forwarded to SEIAA for their consideration with the date of submission of the proposal being the same i.e. 20th September, 2017.*

Agenda No.29.3.22

New Integrated Unit of Coal based Fertilizer and Chemical Complex at Village Vikrampur, Tehsil Talcher, District Angul (Odisha) by M/s Talcher Fertilizers Ltd – For EC

[IA/OR/IND2/58560/2013; F.No. J-11011/231/2013-IA II (I)]

29.3.22.1 The project proponent and the accredited consultant M/s Projects & Development India Ltd made a detailed presentation on the salient features of the project and informed the following:

- (i) The project is for setting up new Ammonia & Urea Fertilizer unit based on clean gas coal gasification for production of 1.27 MMTPA of Neem Coated Urea by M/s Talcher Fertilizers Ltd at Village Vikrampur, Tehsil Talcher, District Angul (Odisha).
- (ii) This is a new project to be established after closure of old FCIL in 2002.
- (iii) ToR was issued by the Ministry vide letter No.J-11011/231/2013-IA II (I) dated 26th November, 2013 in favour of M/s Rashtriya Chemicals and Fertilizers Ltd. The validity of ToR was extended up to 25th November, 2017 vide letter dated 8th June, 2017. Public hearing was conducted on 30th August, 2017 at Talcher.
- (iv) The total land required for the project is about 155 ha whereas about 366 ha of industrial land is available under the possession of old/closed Talcher Fertilizer Unit of Fertilizer Corporation of India Limited (FCIL).
- (v) No agricultural/forest land will be utilized for proposed project. The entire land for the project is under the possession of FCIL (one of the members of JVC-TFL). No river passes through the project area. No water body/ water body exist around the project area and there will be no change (modification/diversion) in the existing natural drainage pattern.
- (vi) The proposed capacity for different products for new site are as below:

Name of the Unit	Units	Capacity of each unit	Unit
Coal Gasification Plant	1	Synthesis Gas: 242978	Nm ³ /hr
Ammonia Plant	1	2200	MTPD
Urea Plant	1	3850	MTPD

- (vii) The topography of the area is almost flat and reported to lies between 20^o54'46.27"N Latitude and 85^o09'45.02"E Longitude in Survey of India topo sheet No. *F-45T1(73H/1)* at an elevation of 104 m AMSL. The ground water table reported to ranges between 1.06 to 9.15 m below the land surface during the post-monsoon season and 2.5 m to 11.8 m below the land surface during the pre-monsoon season. Based on the hydro-geological study, it has been reported that the radius of influence of pumped out water will be 3-5 m.
- (viii) It is reported that no National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc are located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. Elephant, sloth bear, python and pea fowl are the only four species of wild animals which are part of Schedule-I of the Wildlife (Protection) Act, 1972 found in the study area.
- (ix) The process of project showing the basic raw material used and the various processes involved to produce the final output, waste generated in process.

SHELL'S Clean gas coal gasification based ammonia-urea plant consisting of following units in series:

- Air Separation Unit
- Coal Gasification Unit
- Ammonia Synthesis Unit
- Urea Synthesis Unit

(a) Raw Material

Coal

Coal & Pet Coke are the raw materials used for this project. The hourly requirement of feed is as under:

Coal (as Feed)	: 120.8 MT
Coal (as Fuel)	: 208.7 MT
Pet Coke (as Feed)	: 40.3 MT
Lime stone (as fluxant)	: 22.6 MT

Water

Raw Water (from Brahmini River): 2050 m³/hr (Max.)

(b) Waste Generated

Slag from Gasification Unit (including Gypsum)	: 65 MTPH (approx.)
Sulphur as by-product from Gasification Unit	: 4.11 MTPH
Fly ash	: 9.4 MTPH
Bottom Ash from CPP	: 100 MTPH
Spent Catalyst	: Approx. 800 MT in 4-5 years
Sludge (Decanted)	: 75 Kg/hr

(x) The targeted production capacity of the Neem Coated Urea is 1.27 Million TPA. The basic raw material coal for the plant would be supplied by CIL (one of the members of JVC-TFL). The coal transportation will be done through closed conveyor system.

(xi) Total raw water requirement of the project is estimated at 49,200 m³/day. The permission for drawl of surface water (Brahmini River) is obtained from the Chief Secretary & Chief Development Commissioner, Govt. of Odisha vide letter No. 1513/SF/59 dated 3rd November, 2009.

(xii) The power requirement of the project is estimated as 72 MW. Power of 80 MW will be obtained from the Captive Power Plant.

(xiii) Baseline Environmental Studies were conducted during Winter season i.e. from December 2013 to February 2014 Ambient air quality monitoring has been carried out at 8 locations during December 2013 to February 2014 and the data submitted indicated: PM₁₀ (70 µg/m³ to 108 µg/m³), PM_{2.5} (32 to 56 µg/m³), SO₂ (7.9 to 13.7 µg/m³) and NO_x (15.2 to 23.9 µg/m³). The results of the modeling study indicates that the maximum increase of GLC for the proposed project is 6.4 µg/m³ for PM₁₀, 11.7 µg/m³ for SO₂ and 9.4 µg/m³ for NO_x.

(xiv) Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.2 to 7.5, Total Hardness: 244 to 650 mg/l, Chlorides: 26 to 256 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 8 locations. pH: 7.2 to 7.8; DO: 6.4 to 8.0 mg/l and BOD: 1.6 to 3.2mg/l. COD from 6.4 to 10.4 mg/l.

(xv) Noise levels are in the range of 48.7 to 53.3 dBA for day time and 41.0 to 43.3 dBA for night time.

(xvi) As the proposed project shall be established within old and closed plant premises of FCIL. No R&R issues are involved. However, local people would be given preference in the direct/indirect employment.

(xvii) It has been reported that a total of 253 MTPH (approx.) of waste will be generated due to the project, out of which 75 MTPH of marketable waste will be stored separately for sale and 100 MTPH of bottom ash will be disposed off in slurry in abandoned mines.

(xviii) It has been envisaged that an area of 55 ha (approx.) will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities. A 100 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of approximately 1000 trees per hectare. Total no. of 55000 saplings will be planted and nurtured in 3-4 years.

(xix) The capital cost of the project is Rs.10741.05 crores and the capital cost for environmental protection measures is proposed as more than Rs.500 crores (which includes in-built pollution control measures in various sub-units of integrated proposed fertilizer project). Most of the pollution control systems are in-built and proprietary of the licensor. The annual

recurring cost towards the environmental protection measures is proposed as Rs.100 crores. The employment generation from the proposed project is 1500 as temporary employment during construction and 550 as permanent during construction & operation.

29.3.22.2 During deliberations, the EAC noted the following:-

The proposal is for environmental clearance to the project 'Setting up new Ammonia & Urea Fertilizer Unit' based on clean gas coal gasification for production of 1.27 MMTPA of Neem Coated Urea (end product) by M/s Talcher Fertilizers Ltd in a total area of 521 ha (includes 366 ha of old/closed fertilizer plant of M/s FCI Ltd, at Village Vikrampur, Tehsil Talcher, District Angul (Odisha).

The project/activity is covered under category A of item 5(a) 'Chemical fertilizers' 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 initially granted on 26th November, 2013 in the name of M/s Rashtriya Chemicals & Fertilizers Ltd. As per the ToR, scope of work included Coal Washery of 650 TPH, Coal Gasification & Purification Unit, Ammonia Synthesis Unit (2700 TPD), Urea Plant (3850 TPD), Nitric Acid Plant (850 TPD), LDPAN Plant (1000 TPD), Coal based boilers (5x250 TPH) and CPP (2x50 MW). The validity of ToR was extended up to 25th November, 2017 vide letter dated 8th June, 2017. Public hearing was conducted by the SPCB on 30th August, 2017 at Talcher.

One season baseline environmental data generation was carried out during December, 2013 to February, 2014. As such, at the time of submission of the proposal on 22nd September, 2017, data was more than three years old i.e. not in consonance with the extant norms/guidelines in this regard. However, the same was relaxed in the instant case with the approval of the competent authority and the proposal was taken to the EAC for consideration.

Baseline air quality data in respect of PM₁₀ ranges between 69-108 ug/m³, SO₂ from 7.9 to 13.7 ug/m³ and NO_x from 15.2 to 23.9 ug/m³. Incremental concentration due to the proposed fertilizer plant is reported to be 6.4 ug/m³ for PM₁₀, 11.7 ug/m³ for SO₂ & 9.4 ug/m³ for NO_x. As such, the maximum GLC for PM₁₀ would be higher than the NAAQS.

Total water requirement is 49,200 m³/day. The permission for drawl of surface water from Brahmini River has been obtained from the State Government of Odisha vide letter No. 1513/SF/59 dated 3rd November, 2009.

The EIA/EMP report based on the ToR dated 26th November, 2013 (in the name of M/s Rashtriya Chemicals & Fertilizers Ltd) was submitted on behalf of M/s Talcher Fertilizers Ltd. As per the request in this regard, the said ToR was also amended on 10th August, 2017.

During the intervening period, the scope of work was revised and now included Ammonia synthesis gas from coal gasification (242978 Nm³/hr), Ammonia Plant (2200 TPD), Urea Plant (3850 TPD), Ammonia Storage (2x5000 MT), Power generation (2x40 MW) and Urea Silo (45000 MT) without getting the ToR amended. As such, the EIA/EMP report was also not in compliance of the ToR issued for the project.

During initial stages of operation of the plant, coal shall be supplied through Bhubaneswari Coal Mine of M/s Mahanadi Coalfields Ltd. Later, the project proponent shall develop the dedicated coal mine for the procurement of coal in the desired quantity.

29.3.22.3 *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.*
- *Total fresh water requirement shall not exceed 49200 cum/day to be met from ground water/tube 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 solvent transfer through pumps.*
- *ETP sludge, process inorganic & evaporation salt, if any, 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:-*
 - (l) Metering and control of quantities of active ingredients to minimize waste.*
 - (m) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
 - (n) Use of automated filling to minimize spillage.*
 - (o) Use of Close Feed system into batch reactors.*
 - (p) Venting equipment through vapour recovery system.*
 - (q) Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 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. As many as 25000 trees to be planted per year during first five years. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*
- *All the commitment made regarding issues raised during the Public Hearing/consultation meeting held on 9th May, 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.*
- *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.*

29.4 Terms of Reference

Agenda No.29.4.1

Manufacturing of Active Pharmaceutical Ingredients of capacity of 129 TPM at Survey No.112 paiki2 and 113 paiki 1 & paiki 2, village Chachapar, Taluka & District Morbi (Gujarat) by M/s Healthgenic Chemicals Ltd - For reconsideration of ToR

[IA/GJ/IND2/65521/2017, F.No. IA-J-11011/328/2017-IA-II(I)]

29.4.1.1 The project involves manufacturing of Active Pharmaceutical Ingredients (APIs) by M/s Healthgenic Chemicals Ltd in an area of 13,304 m² at Survey No.112 Paiki 2 and 113 Paiki 1 & Paiki 2, Village Chachapar, Taluka & District Morbi (Gujarat).

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

The proposal was earlier considered by the EAC in its 26th meeting held on 27-28 July, 2017, wherein the proposal was not taken forward and deferred due to the discrepancy in the Form-I and the presentation.

The revised Form-1 has since been submitted by the project proponent, and now found in order.

29.4.1.2 *The EAC, after deliberations, recommended the project for grant of ToR for preparation of EIA/EMP reports. The ToR shall include the standard ToR as specified/notified applicable for such project/activities, and the additional terms and conditions as under:*

- *Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.*
- *ESR plan for 5 years @ 5% of the project cost in consultation with nearby villagers to be submitted.*
- *Layout plan earmarking space for development of green belt of 5 m width along the plant periphery, and also 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.29.4.2

Polymer Modified Bitumen Plant, Polyvinyl Chloride Plant, Gas Based Power Plant Gas Storage Tanks and LPG Bottling Plant within Dighi Port Limit at Village Dighi, Taluka Shrivardhan, District Raigad (Maharashtra) by M/s Veritas Polychem Pvt Ltd - For reconsideration of ToR

[IA/MH/IND2/65968/2017, F.No. IA-J-11011/365/2017-IA-II(I)]

29.4.2.1 The project involves manufacturing of PVC and Polymer Modified Bitumen, setting up gas based power plant, gas storage, LPG bottling plant and gas pipelines (2200 m) from jetty to different processing units by M/s Veritas Polychem Pvt Ltd, in a total area of 15.9440 ha at Dighi Port limits, village Dighi, Taluka Shrivardhan, District Raigad (Maharashtra).

The project/activity is covered under category A of item 5(f), 1(d) and 6(b) of the Schedule to Environmental Impact Assessment Notification, 2006 and requires appraisal at Central Level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The proposal was earlier considered by the EAC in its 27th meeting held on 28-29 August, 2017, wherein the Committee desired for a clarity on different products proposed to be manufactured, their categorization vis-à-vis the provisions of the EIA Notification, 2006 and also the applicability of the said Notification. The Committee also asked for clarification through MCZMA regarding applicability of the CRZ Notification, 2011.

29.4.2.2 *The EAC, after deliberations, observed that the desired clarifications on applicability of the CRZ Notification, 2011 through MCZMA are yet to be made available. The proposal was, therefore, not taken forward.*

Agenda 29.4.3

Implementation of the permitted (expansion CFE & EC) expansion activity of manufacturing Active Pharmaceutical Ingredients (APIs) from API intermediates at Sy. No. 543/A, 544/A, Seetavani Gudem (V), Bhoodan Pochampally (M), Yadadri District (Telangana) by M/s Saiteja Drugs and Intermediates Pvt Ltd - For ToR

[IA/TG/IND2/65449/2017, F.No. IA-J-11011/316/2017-IA-II(I)]

29.4.3.1 The project involves manufacturing of Active Pharmaceutical Ingredients (APIs) by M/s Saiteja Drugs and Intermediates Pvt Ltd in an area of 2.4897 ha at Sy. No. 543/A, 544/A, Seetavani Gudem (V), Bhoodan Pochampally (M), Yadadri District (Telangana State).

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

The proposal was earlier scheduled for consideration in the 27th EAC meeting held during 28-29 August, 2017. The meeting was not attended by the project proponent.

29.4.3.2 *The EAC, after deliberations, recommended the project for grant of ToR for preparation of EIA/EMP reports. The ToR shall include the standard ToR as specified/notified applicable for such project/activity, and the additional terms and conditions as under:*

- *ESR plan for 5 years @2.5% of the project cost in consultation with nearby villagers to be submitted.*
- *Layout plan earmarking space for development of green belt of 5 m width along the plant periphery, and also 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.29.4.4

Expansion of Grain based Distillery from 120 to 240 KLPD and Co-generation Power Plant from 3.5 to 8 MW at Industrial Park, Panagarh, District Burdwan (West Bengal) by M/s Globus Spirit Ltd - For ToR

[IA/WB/IND2/63642/2017, F. No. IA-J-11011/155/2017-IA-II(I)]

29.4.4.1 The project involves expansion of grain based distillery from 120 to 240 KLPD and co-generation power plant from 3.5 to 8 MW by M/s Globus Spirit Ltd at Industrial Park, Panagarh, District Burdwan (West Bengal).

The project/activity is covered under category A of item 5(g) (ii) 'Distilleries' of the Schedule to Environmental Impact Assessment Notification, 2006 and requires appraisal at Central Level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The proposal was earlier scheduled for consideration in the 26th EAC meeting held during 27-28 July, 2017. The meeting was not attended by the project proponent.

29.4.4.2 *The EAC, after deliberations, recommended the project for grant of ToR for preparation of EIA/EMP reports. The ToR shall include the standard ToR as specified/notified applicable for such project/activities, and the additional terms and conditions as under:*

- *Compliance report for the existing environmental clearance, duly certified by the concerned Regional Office of the Ministry to be submitted.*
- *Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.*
- *ESR plan for 5 years @2.5% of the project cost in consultation with nearby villagers to be submitted.*
- *Layout plan earmarking space for development of green belt of 5 m width along the plant periphery, and also ensuring 33% of the project area to be developed as green area with native species plantation.*

Members of the EAC (Industry-2) present during 29th meeting held on 12-13 October, 2017 at MoEF&CC, New Delhi

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|-----------------------------------|------------------|
| 1. Dr. J. P. Gupta | Chairman |
| 2. Sh. R. K. Singh | Member |
| 3. Dr. Ahmed Kamal | Member |
| 4. Prof. J.R. Mudakavi | Member |
| 5. Dr. N. Nandini | Member |
| 6. Prof. (Dr.) H.R.V. Reddy | Member |
| 7. Dr. Shashank Shekhar | Member |
| 8. Shri Suhas Ramchandra Pharande | Member |
| 9. Sh. Paritosh Kumar | Member |
| 10. Shri S.K. Srivastava | Member Secretary |
