MINUTES OF 20TH EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) MEETING HELD DURING 27TH TO 28TH FEBRUARY 2017 IN INDUS HALL, JAL WING, GROUND FLOOR, MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE, INDIRA PARYAVARAN BHAWAN, ALIGANJ, JOR BAGH ROAD, NEW DELHI -110003.

27thFebruary, 2017 (Day 1)

20.1 **Opening Remarks of the Chairman**

20.2. **Confirmation of the Minutes of the 19th Meetings of the EAC (Industry-2) held on 6th to 7th February 2017 at New Delhi.**

20.2.1 **Correction in the minutes of previous meetings**

(I). Setting up of 200 KLPD Molasses Based Distillery along with 6.0 MW Cogeneration Power Plant at village Hariawan, Tehsil & District Hardoi, Uttar Pradesh by M/s DCM Shriram Ltd.- [IA/UP/IND2/48115/2016, J-11011/62/2016- IA II(I)] -Environmental Clearance

The Member Secretary informed that the aforesaid project was recommended for EC in 18th EAC meeting held during 23-25th January, 2017. The PP vide letter dated 3rd March, 2017 made a request seeking corrections in the Minutes of the 18th EAC meeting.

S. No.	Information as given in MOM	Correction sought
1	Specific condition xii: All the activities committed in the ESR vide letter dated 24.01.2017 has to be implemented._At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Lucknow. Implementation of such program shall be ensured accordingly in a time bound manner.	All the activities committed in the ESR vide letter dated 24.01.2017 has to be implemented._At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Lucknow. Implementation of such program shall be ensured accordingly in a time bound manner.

2	**Specific Condition no i:** Bagfilter shall be provided to the bagasse/slope fired boiler to control particulate emissions within permissible limit. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	ESP shall be provided to the bagasse/slope fired boiler to control particulate emissions within permissible limit. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

The committee after deliberation accepted the aforesaid corrections and directed to modify the minutes of 18th EAC meeting accordingly.

(II). Proposed capacity enhancement in existing grain/molasses based distillery (120 KLPD to 144 KLPD) & co-generation power plant (10 MW to 11 MW) by modernization & efficiency improvement at village sandharshi, Rajpura, Patiala, Punhab by M/s NV Distilleries and Breweries Pvt. Ltd.- Environment Clearance [IA/PB/IND2/31450/2015, J-11011/261/2015-IA II (I)]

The Member Secretary informed that the aforesaid project was recommended for EC in 19th EAC meeting held during 6th to 7th February, 2017. The PP vide letter dated 6rd March, 2017 made a request seeking corrections in the Minutes of the 19th EAC meeting.

S. No.	Information as given in MOM	Correction sought
1	Point no. vii Existing unit has Incinerator boiler of 40 TPH with ESP and 72 m stack height. Fuel of incineration boiler is concentrated effluent with bagasse/coal. The capacity of boiler will remain unchanged. Thus, there will be no impact on air quality due to the proposed capacity enhancement. CO2 will be generated during fermentation process will be collected and sold to authorized vendor.	Existing unit has Incinerator boiler of 85 TPH with ESP and 72 m stack height. Fuel of incineration boiler is concentrated effluent with bagasse/coal. The capacity of boiler will remain unchanged. Thus, there will be no impact on air quality due to the proposed capacity enhancement. CO2 will be generated during fermentation process will be collected and sold to authorized vendor.

2	**Specific Condition no i:** ESP shall be provided to the existing concentrated effluent with bagasse/coal fired Incinerator boiler of 40 TPH to control particulate emissions within permissible limit. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	**Specific Condition no i:** ESP shall be provided to the existing concentrated effluent with bagasse/coal fired Incinerator boiler of 85 TPH to control particulate emissions within permissible limit. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

The committee after deliberation accepted the aforesaid corrections and directed to modify the minutes of 19th EAC meeting accordingly.

(III). Enhancement of Phosphoric Acid production (from 700 MTPD to 1000 MTPD) P2O5 and other auxiliary facilities within the existing Fertilizer Complex, Sriharipuram, Vishakhapatnam district, Andhra Pradesh by M/s Coromandel International Limited (Formerly M/s Coromandel Fertilizer Limited)- [IA/AP/IND2/49286/2016; J-11011/51/2016- IA II(I)] Environmental Clearance

The Member Secretary informed that the aforesaid project was recommended for EC in 19th EAC meeting held during 6th to 7th February, 2017. The PP vide letter dated 6rd March, 2017 made a request seeking corrections in the Minutes of the 19th EAC meeting.

S. No.	Information as given in MOM	Correction sought

	1	**Specific Condition no.** ii The surface water requirement to be limited to 1650 m3/day	The present fresh water requirement is 8700 m3/day. Additional fresh water for the proposed enhancement is to be limited to 1650 m3/day. The total fresh water requirement post enhancement shall not exceed 10350 m3/day. The present sea water requirement for once through cooling is 63000 m3/day and the same will be increased post enhancement to 84600 m3/day.
	2	**Specific Condition no.** v Imported coal fired boiler of 40 TPH will be installed with ESP and 56 m stack height.	Imported coal/ rice husk/bagasse fired boiler of 40 TPH will be installed with ESP and 56 m stack height with SO2 emissions limited to 1188 Kg / day. Existing two nos of LSHS fired boilers will be kept on standby mode
	3	**Specific Condition no.** vi The gaseous emissions (SO2, NOx, NH3, **HC and Urea dust**) and particulatematter from various process units shall conform to the norms prescribed by the CPCB/SPCB from time to time.	The gaseous emissions (SO2, NOx, NH3) and particulate matter from various process units shall conform to the norms prescribed by the CPCB/SPCB from time to time.
	4	**Specific Condition no.** vi In Urea Plant, particulate emissions shall not exceed 50 mg/Nm3. Monitoring of Prilling Tower shall be carried out as per CPCB guidelines.	This condition is to be deleted as Urea is not manufactured in our existing fertilizer complex
	5.	**Specific Condition no.** viii The levels of PM10 **(Urea dust)**, SO2, **NOx**, Ammonia, **Ozone and HC** shall be monitored in the ambient air and displayed	The levels of PM10, SO2, NOx, Ammonia, shall be monitored in the ambient air and displayed at a convenient location near the main gate of

	at a convenient location near the main gate of the company and at important public places.	the company and at important public places.
6.	**Specific condition no. ix** No process effluent shall be discharged in and around the project site. Sewage shall be treated in STP and treated water shall be recycled/reused within factory premises to achieve zero discharge except rainy season.	No process effluent shall be discharged in and around the project site. Process effluents shall be treated in ETP. Sewage shall be treated in STP. Both treated sewage water and process effluents shall be recycled/reused within factory premises to achieve zero discharge except during the rainy season.
7.	**Page no: 33, item (vi)** About32000 employees will work under the project.	This is to be deleted as this number indicates workforce of Murugappa group.
8.	**Page no: 35** The PP in this regard informed the Committee that EC dated 10th June 2009 has not commissioned and project was dropped. So, the question of having compliance report for the same does not arise.	The PP in this regard informed the Committee that EC dated 10th June 2009 was commissioned and then stopped after some time. So, the question of having compliance report for the same does not arise
9.	**Page no: 33 & 34, item no vii**	Installing of storage facility for a capacity of 5000 MT for Sulphuric Acid (100% strength)

The committee after deliberation accepted the aforesaid corrections and directed to modify the minutes of 19th EAC meeting accordingly.

(iv). Bulk Drug Manufacturing Unit at Plot/Survey nos 447, 450-52, 455 to 476, 482 to 510 at Village Ontimamidi (Kona), Mandal Thodangi, District East Godavari, Andhra Pradesh by M/s Divis Laboratories Limited Unit-IV – [(J- 11011/408/2014-IA II (I)]- correction in the minutes.

The proposal was earlier considered in the 14th Expert Appraisal Committee (Industry-2) Meeting held during 26th to 27th October, 2016 and subsequently in 18th Expert Appraisal Committee meeting held during 23rd -25th January, 2017.

During 14th Expert Appraisal Committee meeting after deliberation, the committee deferred the proposal for want of following additional information:

a. Revised water balance chart with special emphasis on water recycling and reuse.
b. Action plant to be drawn at the rate of 5% of project cost under ESR activities.

During presentation before the EAC in its 18th meeting held during 23rd -25th January, 2017, the PP has submitted the revised water balance chart with special emphasis on water recycling and action plan at the rate of 5% of project cost under ESR activities. After examining the facts and detailed deliberations the committee decided to recommend the proposal for grant of environmental clearance subject to compliance of certain specific & general conditions.

The PP vide letter No. DLL-2/0217/25 dated 21st February, 2017 informed that the a condition is mentioned at sr. no. (v) i.e., *No effluent should be discharged outside the premises and Zero Liquid Discharge should be maintained.*, in the Minutes of the 18th EAC (industry-2) meeting held during 23rd -25th January, 2017; whereas, in the TOR amendment letter No. J-11011/408/2014-IA.II (I) dated 5th March, 2016 the Ministry already permitted the PP to release the treated effluent into the sea. The PP requested to amend the aforesaid condition in tune with the condition prescribed in the amended TOR letter dated 5th March, 2016.

The PP has submitted the Andhra Pradesh Coastal Zone Management Authority letter no. 006/CZMA/2016 dated 17.10.2016 inter-alia recommending the laying of a pipeline from the plant from the plant site located outside the CRZ to the designated disposable point of sea, exclusive 100 m wide pipeline protection corridor for surveillance purpose, raw water and waste water treatment facilities, storage of non hazardous storage material that includes new and fresh packing material drums, pallets, carts, wood etc and coal and coal ash storage facility at Ontimamidi (Kona) village, Thondangi Mandal, East Godavari District, Andhra Pradesh.

The PP also submitted the EDS details (IA/AP/MIS/60086/2014 dated 10.03.2017) of the CRZ sector wherein the CRZ Sector of the Ministry informed the PP that " *Kindly refer our EDS dated 14.2.2017, it is reiterated that as per CRZ Notification, 2011 those projects which are listed under CRZ notification and also attract EIA Notification, 2006 (S.O. 1533 (E), dated 14th September, 2006), for such projects clearance under EIA*

	notification only shall be required subject to being recommended by the concerned State Coastal Zone Management Authority." The EAC observed that the PP had not submitted the recommendations of the SCZMA, Andhra Pradesh at the time of consideration of the proposal for grant of EC; therefore the committee could not appraise the proposal from CRZ perspective. The EAC deliberated on the recommendations of the SCZMA, Andhra Pradesh and EDS sent by the CRZ sector of the Ministry (IA/AP/MIS/60086/2014 dated 10.03.2017) regarding the proposal. After detailed deliberations the EAC accepted the corrections requested by the PP and also recommended the proposal for grant of Environmental Clearance and CRZ Clearance subject to strict compliance of the conditions stipulated by SCZMA, Andhra Pradesh.
20.3.	**Terms of Reference (TOR):**
20.3.1	**Onshore Oil & Gas development drilling and production in Tinsukia and Dibrugarh districts under Hugrijan, Naharkatiya & Naharkatiya Extn, Sapkaint and few parts of Dumduma (Block-A & B),Borhat and Moran Extn PMLs by M/s Oil India Limited-[IA/AS/IND2/61415/2016, J- 11011/388/2016-IA.II(I)]-TOR reg.** The PP made a presentation before the EAC and informed that: 1. Onshore Oil & Gas development drilling and production in Tinsukia and Dibrugarh districts under Hugrijan, Naharkatiya & Naharkatiya Extn, Sapkaint and few parts of Dumduma (Block-A & B), Borhat and Moran Extn PMLs. In Jorajan area in Tinsukia & Dibrugarh District, Assam. 2. Unskilled labours required (20 nos. approx. per well) will be engaged from the project affected areas during the project execution stage on temporary basis. 3. 67 onshore drilling wells to be drilled and associated production installations along with laying of gas pipeline from Jorajan to OCS-3 (400mm x 77Km) and assorted Oil & Gas flowlines/ delivery lines (from 50mm to 300 mm NB of total length: 40 km). 4. Existing EC Reference: F.No. J-11011/1252/2007-IA II (I), Dated 1st November, 2011 for exploratory drilling. 5. Land Requirement- Approximate 3 hectare for each drilling location and around 4.0 to 7.0 hectares for each production installation. 6. Power & Fuel- Drilling installation: DG sets will be used to meet the requirement of power of nearly 1200 KW using nearly 3.5 KLPD of HSD for drilling and other operations. Production installations: 216 KW (Fuel Consumption: around 1500 SCUM of Natural Gas per day). 7. Water- 50 klpd for drilling wells and 20 klpd for production installation ground water will be required. In case of availability of surface water nearby, source of water usage will be done accordingly. 8. Various mitigation measures shall be taken during drill site

	preparations, mobilization of drilling equipment, drilling operations, production testing, demobilization of rig and restoration of drilling site, campsite and access etc as well as mitigation measures shall be taken for production installation which will be of permanent nature. Mitigation measure to be taken such as: • For liquid effluent treatments, ETP shall be installed at each installations, formation water will be disposed into underground structures • Drill cuttings generated will be stored in impervious pits within the drill site. • Domestic solid waste generated in each production installations will be discharged in pits. • Tank bottom sludge generated while cleaning the crude oil tanks which is done in every five years from the tanks of production installations will be kept in secured, covered, impermeable concrete sludge pit before safe disposal. • Sewage sludge or other sludge from effluent treatment will be bio-remediated. • For exhaust gases generated due to combustion of HSD in case of drilling and HSD & natural gas in case of production installations will be provided with exhaust gas stacks with appropriate height. And ambient air quality shall be monitored time to time. 9. For noise generated in drilling and production installations, acoustic gensets will be used and noise level will be limited to 75dBA. 10. Exhaust gases from fuel efficient & well maintained DG sets will be discharged from stacks of recommended heights for wider atmospheric dispersion so that emissions remain within permissible limits. Flare system will ensure that impact of gaseous pollutants remains within permissible limits during the few days of flaring in testing, if hydrocarbon is discovered. However, in case of absence of hydrocarbon no flaring will be done. 11. Waste water consisting mainly of diluted & environment compliant Water Based Mud (WBM) and rain water shall be treated in mobile Effluent Treatment Plant (ETP) whose treated fluid shall comply with the parameters set by MoEF, CPCB and SPCB. Almost the entire volume of treated water is likely to be recycled and reused for various requirements during well site operations. 12. Hazard identification, risk and disaster management plan during oil-spill, blowout, H2S gas presence during blowout or production testing, while setting up heavy equipment/substructures, fire, explosion etc. To place sensors/alarms as per standard drilling practice. 13. The project cost is estimated to be Rs 211000 (in Lakhs). 14. For drilling and testing: 100-120 days per well, since 67 wells is to be drilled therefore total duration of 10 years will be required for completion of the project.Production Installations will be of permanent nature and construction of installation infrastructure will

require considerable amount of time.

15. The Burhi Dihing River is flowing east to west through the block and Namsang river is flowing along the eastern part of the block which is an important tributary of the Burhi Dihing River. Another major river flowing through the block is the Disang River (also known as Dilli River in Assam) which flows from south to north at the south eastern part of the block.
16. The eastern parts of the block covers part of the notified reserve forest viz Jaipur Reserve Forest and Upper Dihing (West Block) Reserve Forest under Dibrugarh and Digboi Forest Division, Assam respectively. Parts of Upper Dihing (W/B), Jaipur Reserve Forests are now parts of the Dehing Patkai Wild life Sacntuary, declared in 19th June 2004.Forest Clearance under The Forest (Conservation) Act, 1980 is applicable and shall be applied for few of the identified locations (12 Nos.) falling within the block. Application for 2 Nos. on priority has been applied.
17. Clearance under the Wildlife (Protection) Act, 1972 will be required and shall be applied for 40 nos. of drilling location. NBWL application has already been done for 2 locations & field survey carried out by DFO, Wildlife.
18. Likely impacts of the project:

    Air: Dust during earth work (road and plinth preparation), Emission from DG sets, flaring during well testing and vehicle emissions. However, impact will be in the close proximity of wellsite temporarily.

    Water: Water based non toxic mud will be used for drilling. Formation water, Waste water and sewage water to be handled as per PCB guidelines so that ground water/water table will not be polluted.

    Flora and Fauna: Effect not significant due to small duration of drilling activities. However, it will allow subsequent recovery once drilling activities is stopped.

    Population: The road infrastructure will be a positive impact for the local people to access in the remote areas. Impact on health due to emissions and noise from Drilling activities is assessed as minimum. Protective devices shall be provided to the well site personnel.

    Land: Marginal impact and no change of topography for drilling locations. However, for production installations there will be permanent change in land cover
19. The project Proponent, OIL INDIA LIMITED has a full-fledged On-Site and Off-Site Emergency Preparedness Plan.
20. Occupational Health (OH) policy is available in the Company. A dedicated Occupational Health Centre is available with dedicated Occupational Health specialist. In pursuance to the policy, necessary steps are taken to comply with the statutory requirement. Initial Medical Examination, Periodical Medical Examination, etc. are carried out as per the statutory requirements which are applicable to the contract workers also. Air, water, soil, land and occupational noise will be monitored during various stages of project advancement and after completion of the project at regular intervals. Monitoring will comply with the legal and statutory controls on operation and

other corporate commitments to responsible environment management. Environment Manuals will be in place with roles & responsibilities, environment management plan etc., detailed out for implementation.

The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website :

i. NBWL/Forest clearance to be obtained as per applicability.
ii. CSR plan @ 5% with implementation period of 5 years shall be prepared.
iii. Public hearing was done on 26.12.2016 in the same district; hence for present proposal it is exempted under Para 7 (ii) of the EIA Notification, 2006.
iv. Eco-sensitivity within 1 KM range of each well shall be provided.

20.3.2 **Expansion and modification of Molasses Based Distillery Plant from 60 KLPD to 70 KLPD through process modification in its existing Distillery Plant at Bagalkot, Karnataka by M/s SIDDAPUR DISTILLERIES LIMITED [IA/KA/IND2/61585/2017, IA-J-11011/10/2017-IA-II(I)]-TOR reg.**

The PP made a presentation before the EAC and informed that:

1. **Project Name and location:**Expansion and Modification of Molasses Based Distillery Plant from60 KLPD to 70 KLPD through process modification in its existing Distillery Plant at Sy. Nos. 49/2B/1 & 2 57/2D & 2E, 58/1B, 58/1A/3, 66/4D, 85/2, 87, 93/2/3, 95/1 & 107/2, Siddapur village, Jamkhandi Taluk, Bagalkot District Karnataka State.
2. **Person to be employed:** Occupancy/Operational phase: 115 employees.
3. **Products and Capacities**
   Existing: - Molasses Based Distillery Plant -60 KLPD
   After Expansion: - Molasses Based Distillery plant – 70 KLPD
4. **Raw material Requirement**

Sl.No.	Particulars	Quantity MT/Month
EXISTING		
1	Molasses	6720
2	Deformer	3.0
3	Urea	1.3
4	DAP (Di-ammonium Phosphate)	1.2
PROPOSED		
1	Molasses	7800

2	Deformer	3.5
3	Urea	1.5
4	DAP (Di-ammonium Phosphate)	1.4

5. DG set: One D.G. set – 1000 KVA with Fuel consumption of 58.75 L/hr Stack/s height 31 m AG to be installed.

6. The existing water consumption including domestic purpose in the plant is 940 m3/day. After expansion of Distillery plant water consumption will be decreasing to the tune of 770 m3/day on account of conversing continuous process fermentation into Fed Batch System & Reuse of Spent leese & process Condensate water after treating through physic chemical treatment and reused in Fermentation process. The total water requirement is met from River Krishna.

7. Solid waste &Hazardous waste:

Sl. No	**Type**	**Quantity**		**Storage**	**Utili**
		Molasses based			
		Existing	**Proposed**		
1	Fermenter Sludge	20 TPD	26 TPD	Separated by Decanter machine &collected in Tractor Trolley	Mixed with Press Mud
	Hazardous Waste				
2	Waste oil	300 LPA	300 LPA	Sealed Carboys	Used as lubricant for Compost yard Aero tiller & Composting Machinery within the premises.

8. Total no. of employees 115 shall be appointed.
9. Assuming per capita solid waste generation rate as 0.20 kg/capita/day.Quantity of solid waste generated 23 kg/day. Organic solid waste : 60 % of the total waste/14 kg/day. Inorganic solid waste : 40 % of the total waste/9 kg/day. Disposal of domestic solid waste:The domestic wastes are segregated at source, collected in bins and composted.
10. Development of Green Belt for 33% of the total project area.Existing Green Belt (25 Acres) developed around the periphery & internal areas within the premises of the plant will help in attenuating the pollutants emitted by the plant.
11. Existing DG Set (1000 KVA) also have adequate stack of height as

	per CPCB Guidelines. 12. The project is based on "Zero Effluent Discharge".(ZLD) 13. Fresh water requirement of the project is being met by Krishna River. 14. Spent lees generation from distillation column is being recycled partly to the columns for dilution and balance is being used for cooling tower makeup. 15. Domestic waste water generated from the plant is being treated in Septic Tank and Soak pit. 16. Effluent Treatment Plant (ETP) has been installed and treated water from ETP is being recycled back to the process and remaining is being used for green belt development. 17. Used oil & grease generated from plant machinery/Gear boxes are hazardous wastes is being used as lubricant for chains for Compost yard Aero-Tiller Machines within premises. 18. No eco-sensitive areas within 10km radius. 19. Reserve Forest i. Siddapur RF – Adjacent ii. Jamkhandi RF – 6.1 Kms - N iii. Hunasikatti RF – 5.7 Kms - NE iv. Banahatti RF – 5.2 Kms – NW v. Hulyal RF – 2.9 kms – NE The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website : i. Certified compliance status report to be submitted. ii. Public hearing to be conducted as per provisions of the EIA Notification, 2006. iii. ZLD system will work with full efficiency. iv. One month baseline data to be collected.
20.3.3	**Resid Upgradation Project by adding Delay Coker Unit, OHCU Revamp Unit, Sulfur Recovery Unit, Sour Water Stripper, Amine Regeneration Unit and LPG-CFC Treating Unit at Manali Refinery complex at Tiruvallur, TamilNadu of M/s CHENNAI PETROLEUM CORPORATION LIMITED- [IA/TN/IND2/61609/2017, IA-J-11011/11/2017-IA-II(I)]- Amendment in EC- reg.** The PP made a presentation before the EAC and informed that: 1. The project was accorded Environmental clearance by MoEF&CC vide letter F.No. J-11011/474/2007-IA II (I) dated 22nd March 2013]During Detail Engineering of the Resid Upgradation Project , few improvements / changes are being incorporated in the design of the project. In view of this, CPCL seeks ToR & Amendment to existing EC from MoEF&CC for the said project for the following changes:

S No	Earlier	Now
1	The open coke yard was proposed at about 3.5 kms away from CPCL premises at amullavoyal.	The coke yard was proposed inside CPCL premises with closed dome storage facility instead of open coke yard thereby reducing Particulate matter emissions.
2	Dispatch of coke through Truck loading	Despatch of coke through Rail wagon loading in addition to Truck loading. This will also reduce road traffic and pollution.
3	No process water recovery from Resid Effluent Treatment Plant (ETP-4).	Process water recovery from Resid Effluent Treatment Plant (ETP-4) by installing a DM Plant with a capacity of 7200 KLD , thereby reducing the process water intake from Chennai Metro Water Supply and Sewage Board (CMWSSB). RO rejects will be generated as a byproduct in the process water recovery. The RO rejects will be used as sprinkling water on coke for safety and dust supression.

2. **Persons to be employed:**

a. Construction Phase:
During construction, influx of about 1000 personnel of contract labors (skilled/unskilled) is envisaged. The above personnel are required till the mechanical (36 months) completion of the project.

b. Operation Phase:
40 persons are required for the project.

3. **Products and capacities:**

S.No	Product	Capacity

1	Delayed Coker unit	2.2 MMTPA
2	Once Through Hydrocracker revamp	1.85 MMTPA to 2.25 MMTPA
3	Sulphur Recovery Unit	2 x 100 TPD
4	Sour Water Stripper Unit	60 m^3/hr
5	Amine Regeneration Unit	250 m^3/hr
6	Coker LPG CFC treating unit	8.8 TPH
7	Gas Turbine Generator	20 MW
8	Boiler	130 TPH
9	Coke Storage Yard	30000 Tonnes
10	Cooling Water System	5000 m^3/hr
11	DM Water System	300 m^3/hr

4. The project will be executed in existing land of the refinery.
5. Vacuum residue (2 MMTPA) and pitch (0.2 MMTPA) are the main raw materials required for the project.
6. The water required for the operation phase will be around 14800 KLD and during construction phase will be around 8000 KLD. Presently majority of water requirement for the refinery is met by treated effluent from Effluent Treatment Plant (ETP) / reclaimed sewage, water from desalination plant and minor quantity of drinking water supplied by Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB).
7. Effluent water usage as process water by putting DM plant. This reduces raw water intake from CMWSSB by 7200 KLD. RO rejects will be generated as a byproduct in the process water recovery. The RO rejects will be used as sprinkling water on coke thereby ensuring safety and dust suppression.The water from dome area will go to existing storm water network through Coke Settling Pond and then to ETP.
8. The power requirement will be 27 MW sourced from Internal captive power plant. One new GT (20 MW), TG-A revamp (8 MW) as a part of Resid Upgradation Project.
9. Process description in brief, specifically indication the gaseous emission, liquid effluent and solid & hazardous wastes:
   - **Gaseous emission**
     - Usage of low sulfur fuel in all process heaters/boilers
     - Incorporation of low NOx Burners/DeNOx Technology
     - Process integration of OHCU with FCCU to reduce SOx emissions
     - Control of fugitive emissions by LDAR
   - **Liquid effluent**

Wastewater generated from proposed Resid Upgradation project is around 3398 m^3/d. The capacity of existing ETP-I, ETP- II and ETP-III are 3600 m^3/d,7200 m^3/d & 4800 m^3/d respectively with total capacity of 15600 m^3/d. An Effluent Treatment Plant (ETP-4) with a capacity of 9840 m^3/day is constructed as a part of Resid upgradation project which is designed to treat the Resid upgradation effluent along with ETP-1 input effluent.

- **Solid & hazardous wastes**

ETP oily sludge

ETP oily sludge will be generated from API separator, TPI separator and from treatment of physico - chemical treatment in the ETPs. The proposed ETP under Resid upgrdation project will generate about 97 m^3/day of oily sludge which will be dispatched along with coke.

Spent catalysts

Spent catalyst will be generated from Resid upgradation project (i.e.,Sulphur Recovery unit and Once through Hydro cracker Revamp) and the quantity will be about 55.6 MT/yr. Spent catalysts are sold to TNPCB authorized agencies for recycling / reprocessing.

10. **Measures for mitigating the impact on the environment and mode of discharge or disposal:**
    - Periodic check on possible leaks in pipelines and their integrity
    - Proper earthing of the pipelines and vessels carrying hydrocarbons
    - Provision of alarms and gas detection systems in the plant area
    - Proper storage will be provided to prevent any risk of leakage or spill.
    - Emission from the equipments/machineries shall be monitored on regular basis and possible implementation shall be provided on site.

    As a part of environment management plan, a new Sulphur recovery Unit with Tail Gas Treating is constructed as a part of Resid upgradation project, which converts H_2S to elemental Sulphur thereby reducing emissions. Capital cost of SRU is Rs. 360 Crores.

11. **In case of hazardous operation, safety systems incorporated:**
    i. Hazardous chemicals are stored in closed tanks and drums with appropriate blanketing systems.
    ii. Fixed water spray system equipped with water spray nozzles for specific water discharge is envisaged for hazardous equipment.
12. **Capital cost of the project, estimated time of completion:**

	i. The cost of the proposed project cost is Rs. 3110.36 Crores (Rs 31103.6 Millions) ii. Estimated year of completion: 2017 13. No forests, wild life sanctuaries, protected / important historical or archaeological monument, hilly / mountainous areas, defence installations, airports are located around the refinery and within 10 km radius of the project site. The project is envisaged within the existing refinery land / premises (Govt owned). The nearest water bodies are Bay of Bengal (2.8 km East direction) and Buckingham Canal (1 km East direction) away from the refinery. Population of study area is 926204 (within 5 km radius). 14. Baseline environmental data of air, water, soil and noise are monitored around 8 different locations and it is found within the limits.CPCL has an Emergency Response and Disaster Management Plan and having adequate facilities for emergency situation. 15. Public hearing is not applicable for the proposed project. Public hearing was exempted as per section 7(i), (iii) Stage (3), Para (i)(b) of EIA Notification, 2006. 16. **CSR plan:** Rs. 133.02 Lakhs& Rs. 93.2 lakhs was spent towards CSR activities for the year 2015 – 2016 & Apr-Dec 2016 respectively. The activities involved are education, health, sanitation, skill development, sports, natural calamities etc. 17. **Occupational Health Measures:** CPCL has in-house Occupational Health Centre with full time Doctor / Nurses to ensure proper health check of employees. All employees and contract workers are provided with proper health and safety measures. Personal protection equipment is given to the employees and made sure they wear it during the work. Regular health camps are also conducted for all the workers alike. 18. **Post project monitoring plan:** Environmental Monitoring Programme is in practice at the existing plant. Further, ambient air quality is monitored both online and offline. Monitoring of environmental samples shall be done as per the guidelines provide by MoEF&CC/CPCB/TNPCB. The EAC noted that the proposal is for amendment in the EC granted to the project by MoEF&CC vide letter F. No. J-11011/474/2007-IA II (I) dated 22nd March 2013; however, the PP has applied for seeking TOR. On enquiry the PP informed that the existing area under green belt is 27 % of the total project cover area. The EAC emphasized the need for addition of 6% area under green belt to make the area under green belt as per prescribed norms i.e., 33%. The PP agreed. The EAC also inquired about effluent treatment system in the existing plant. The PP informed that ZLD system is operating. The EAC suggested for operating the ZLD with full efficiency and no effluent in any situation should be discharged outside the plant. The EAC accepted the amendments as requested by the PP in the EC granted to the project by MoEF&CC vide letter F. No. J-11011/474/2007-

	IA II (I) dated 22nd March 2013
20.3.4	**Proposed manufacturing unit of Sandhya group located at Plot No. 1249 & 1250, GIDC, Sarigam- 396155. Tal.- Umbergaon, Dist.- Valsad (Gujarat) by M/s. Sandhya Organic Chemicals Pvt. Ltd. [IA/GJ/IND2/61613/2017, IA-J-11011/12/2017-IA-II(I)]- TOR-reg.** 1. Project name and location (Village, Dist, State, Industrial State (if applicable): M/s. Sandhya Organic Chemicals Pvt. Ltd. Plot no. 1249 & 1250, GIDC, Sarigam- 396155. Tal.- Umbergaon, Dist.- Valsad (Gujarat) INDIA. 2. Person to be employed: Total 62 Persons 3. Nature of land- Industrial Land in notified industrial area in GIDC Sarigam. 4. Water Body- Damanganga River (6 Km NE) 5. Populated area- Sarigam Residential Town (2.43 Km SE approx.) 6. Other Industries- Numbers of small, medium & large scale industries in sector of chemicals, pharma, paper etc. 7. Protected Area**:** none 8. In case of hazardous operation, safety systems incorporate. 9. Risk Assessment study will be conducted for hazardous operation and accordingly safety systems will be incorporated in EIA. 10. Health & Safety measures will be also be followed properly. 11. Products and capacities. If expansion proposal then existing products with capacities and Reference to early EC: i. Trimethyl Phosphite (TMP) and Triethyl Phosphite (TEP) @ 300.00 MT/Month, ii. TMP derivatives @ 200 MT/Month, iii. Dichlorvos-Technical @100 MT/Month, iv. Dichlorvos-Formulation @100 MT/Month, v. Plastic , Paint Additives (Organic Phosphite) – 300 MT/ Month, vi. Organic Phosphates @ 150 MT/ Month and vii. Co -products (Ammonium Chloride Solution or Crystal, Methanol, HCL, Phenol)@ 2667.94 MT/month The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website : i. ZLD to be installed. ii. Plant layout plan should have provision for 10 M wide green belt of perennial trees like neem, seasam, teak around the plant periphery. iii. Certified compliance status report to be submitted. iv. Public hearing is exempted under the provisions as per para 7 III. Stage (3) (b) of of the EIA Notification, 2006 being the site located in notified industrial area. v. CSR plan @ 5% with implementation period of 5 years shall be

prepared.

vi. Storage of hazardous material would be limited to maximum 2 days.

20.3.5 **Proposed Bunkering Facilities at Jawahar Dweep (Butcher Island) at Mumbai Maharashtra by M/s Hindustan Petroleum Corporation Limited[IA/MH/IND2/61616/2017, IA-J-11011/13/2017-IA-II(I)] – TOR reg.**

1. Project Name: Proposed Bunkering Facilities at Jawahar Dweep (Butcher Island) at Mumbai by M/s Hindustan Petroleum Corporation Limited Village, Dist, State: Mumbai , Maharashtra.

2. It is a Modernization Project, Existing capacities are mentioned below:

Type of Tanks	**Nos**	**Capacity**	**Total Capacity**
Vertical Cylindrical	5	Ranging from 2680 to 10210 m^3	33123 m^3

3. Land: HPCL has already signed Agreement with Mumbai Port Trust (MbPT) for taking-over of 6 nos. of Storage Tanks, Pump House and allied facilities for setting-up of Bunker Fuel Terminal within the area of 16588.33 m2 (1.66 ha). As per Agreement, MbPT has also offered plot portion of the said Tank-Farm premises on long term lease (30 years) to HPCL.

4. Water Requirement, Source & Wastewater Generation :Total Water Requirement is approx 10m^3/day via MbPT. Water balance table & diagram are given below:

S. N.	Domestic water requirement (m^3/day)	Industrial water requirement (m^3/day)	Domestic sewage generation (m^3/day)	Wastewater from process / Tank washing (m^3/day)*
		Tank washing		
1	8	2	6.4	1.6
Total	10		8	

5. Power : Total power requirement for operation of the Terminal has been worked out as 1400 kVA. The same shall be obtained from BEST grid and further distribution system shall be provided. Backup

power arrangement by providing 1x1000 kVA stand by capacity of DG sets shall be provided.

S. No.	Capacity	Number	Stack height (m)	Stack diameter (M)
1	1000	1	6.3	0.3

6. Manpower Requirement: The total manpower requirement will be 10 persons is as shown below,

CATEGORY	NOS.
Management / Supervisor	1
Skilled Workers	3
Unskilled / Watch & ward	6
Total	10

7. There is no manufacturing process involved in the terminal. The process involved can be divided into
- Receipt of petroleum Product Via Pipelines from HPCL/BPCL Refinery and/or Coastal Inputs
- Storage of petroleum products in storage tanks fabricated as per international standards.
- Dispatch of petroleum products through Pipelines to Jetties

8. Waste: There is no hazardous waste as well as solid waste is generated from process. The waste oil generated from DG sets and fire engines will be collected in barrel and stored in a closed shed until its disposal and the same will be disposed per statutory requirements. Sludge generated from tank cleaning (once in 5 years) shall be disposed off to CHWTSDF.
9. There will be no process / trade effluent generated during operations.
10. The proposed project is a closed loop operation. However, there is negligible risk of fire while loading/unloading of petroleum products. There is risk of fire while loading and unloading of Petroleum products. The study is done for Pool fire, Jet fire, BLEVE, Vapour cloud explosion. Appropriate fire-fighting equipment shall be provided throughout the factory premises. Workers shall be trained for safety and emergency cases.
11. Capital cost of the project is INR 23.25 crores and the proposed project is estimated to be completed within 24 months after obtaining all the regulatory clearances.

12. Site selected for project is already being used as industrial land. The proposed project will be established in premises of existing industry and infrastructure will be optimized. There are no eco-sensitive zones and major industries.

13. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population is obtained by monitoring. Quality of surface water, ground water, air is found to be within limit and satisfactory. Soil characteristics are also agreeable. There are no eco-sensitive areas and endangered species of flora & fauna within 10 km area. For improving their status and avenue for livelihood, industries like this are required.

The EAC noted that the project site is located on an Ireland and there is no human habitation and settlement and the proposed project is only a storage facility. The EAC after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website:

i. Public hearing is exempted under Para 7 (ii) of the EIA Notification, 2006.
ii. SCZMA recommendations shall be obtained.

20.3.6 **Proposed LPG Bottling Plant at Additional Buti-Bori MIDC Nagpur, Maharashtra by M/s Indian Oil Corporation Limited- [IA/MH/IND2/61619/2017, IA-J-11011/14/2017-IA-II(I)]- TOR reg.**

The PP made a presentation before the EAC and informed that:
The project proponent informed followings:-

(i) The project involves proposed LPG Bottling Plant at Additional Buti-Bori MIDC Nagpur, Maharashtra by M/s Indian Oil Corporation Limited. The proposed project is a green field project.
(ii) The products and capacities are:-

Type of Vessel	Nos	Capacity	Total Capacity
Mounded Bullets	3	600 MT	1800 MT

(iii) The total land requirement is 16.7 ha (41.5 acres).
(iv) Total Water Requirement is approx 15m3/day via MIDC. Water balance table & diagram are given below:

S. No.	Domestic water requirement (m^3/day)	Industrial water requirement (m^3/day)	Domestic sewage generation (m^3/day)	Wastewater from process / cylinder washing (m^3/day)*
		Cylinder washing		

1	10	5	8	1
Total	15		9	

* Note – Wastewater generated from cylinder washing will be primarily dirty water with suspended solids. After sedimentation, this water will be reused for cylinder washing. There will be no process / trade effluent generated during operations.

(v) Power required for the existing operations is 400 KW sourced from Maharashtra State Electricity Board. D.G sets are used & their specifications are detailed below table:

S. No.	Capacity	Number	Stack height (m)	Stack diameter (M)
1	750	1	5.5	0.3
2	250	1	3.5	0.3

(vi) There will be no chemical process involved and the operation carried out will be receipt of LPG in Bulk form in tank trucks.

(vii) No industrial solid waste will be generated during the bottling process. Damaged cylinders will be segregated & stored on site prior to disposal as scrap metal. Hazardous waste generated from D.G set operation will be disposed to MPCB Authorized Recyclers. The details are provided in below Table:

S. No.	Type of waste generated	Qty	Disposal method
1	Solid (damaged cylinders, parts etc.)	---	Sold as scrap metal to dealers
2	Hazardous waste (Spent lube oil)	5 LPM	Sold to MPCB Authorized Recyclers

(viii) Wastewater generated from cylinder washing will be primarily dirty water with suspended solids. After sedimentation, this water will be reused for cylinder washing. There will be no process/trade effluent generated during operations.

(ix) The Bottling Plant is estimated to cost Rs 139.39 crores and the proposed project is estimated to be completed within 36 months after obtaining all the regulatory clearances.

(x) Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population is obtained by monitoring. Quality of surface water, ground water, air is found to be within limit and satisfactory. Soil characteristics are also agreeable. There are no eco-sensitive areas and endangered species of flora & fauna within 10 km area. People in study area are mainly dependent on agriculture. For improving their status and avenue for livelihood, industries like this are required.

(xi) The project is located within the MIDC area, no public hearing is

	envisaged. (xii) Baseline data collected during months Nov- January, 2016-17. (xiii) Is is a 'B' category project, but due to non- existence of SEIAA the proposal is being considered at centre lavel in the Ministry. The EAC noted that the project site is located on an Ireland and there is no human habitation and settlement and the proposed project is only a storage facility. The EAC after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website: i. Public hearing is exempted under the provisions as per para 7 III. Stage (3) (b) of of the EIA Notification, 2006 being the site located in notified industrial area. ii. ZLD to be installed. iii. Plant layout plan should have provision for 10 M wide green belt of perennial trees like neem, seasam, teak around the plant periphery.
20.3.7	**Development of 8 wells by setting up of 7 proposed surface facilities , Kheda, Gujrat by M/s Gujarat State Petroleum Corporation Ltd. – [IA/GJ/IND2/61691/2017, IA-J-11011/17/2017-IA-II(I)]- TOR reg.** Development of 8 wells by setting up of 7 proposed surface facilities , Kheda, Gujrat by M/s Gujarat State Petroleum Corporation Ltd. – TOR - reg. [IA/GJ/IND2/61691/2017, IA-J-11011/17/2017-IA-II(I)] The project proponent informed followings:- (i) The project involves development of 8 wells by setting up of 7 proposed surface facilities, Kheda, Gujrat by M/s Gujarat State Petroleum Corporation Ltd. (ii) The products and capacities are Crude Oil-30-40 m^3/day, Associated Gas - 3000-5000 m^3/day and Produced Water- 10 m^3/day/well (Initially there will not be any effluent water production but in later stages of field production life). (iii) The land requirement is ~27000 Sqm area. (iv) Raw Material: Chemical for production activity. (v) Power will be sourced from GEB and one DG will be standby in case of power failure. 10-15 Liters/hr of Diesel will be consumed in D.G set (62.5 KVA). (vi) Process description: With the subsequent discovery of oil in these wells, Surface facilities are required to be developed to commence the commercial production from 8 wells (exploratory, appraisal & development nature). Accordingly, GSPC is planning to carry out construction of 7 nos. of Production Facility at the well sites (depending on technical and commercial feasibility to optimize the numbers of EPS creation) and connecting wells to EPS through laying of 4"/6" underground pipeline. (vii) GSPC proposes development of 8 wells by setting up of 7 EPS (Early

	Production system) Facilities and connection of wells to the EPS by laying underground pipelines in block CB-ON/02 (Tarapur Block) in Gujarat State. 1.1 Handling of Hydrocarbon (Oil +Water+ Gas) Produced hydrocarbons from wells flows through 4"/6" underground pipe line up to EPS (Early Production System): • Firstly, in to the well manifold • hen, if required, directed to the Indirect Bath Heater for raising the temperature of fluid 45-50 0C for ensuring its mobility. • Dozing of chemical (Demulsifier /PPD) for treating produced emulsified fluid before entering to the Indirect Bath Heater, if required. • From here, the fluid (Liquid + gas) flows into the separators for separation of liquid (oil + water) & gas. 1.2 Handling of Separated Liquid HC (Crude Oil + Water, if any) Separated liquid HC through separator, flows into Heater Treater for processing (if required) and then over head storage tanks for measurement & storage. Proper settling time given to the liquid in the storage tank: • If liquid contains water after separation, it will be drained from the tank bottom to effluent drain pit. Further water effluent will either be disposed at CETP or will be treated by mobile ETP. • Remaining crude oil with no or reduced water% will be loaded in tankers via the tanker loading point and transported to ONGC-CTF, Nawagam. 1.3 Handling of produced associated gas: The gas coming out of the separator will be measured by a Solar panel powered digital gas flow meter. This measures the differential pressure across the orifice plate and calculates the flow rate accordingly. After measurement, gas will be utilized as follow • Mostly utilized as a fuel for indirect water Bath Heater for crude oil heating. • Part of it is utilized in place of instrument air for operation of pressure, temperature and level control valves. • Part of Gas will be supplied to local nearby industry(s) through underground pipeline, if feasible. • The excess gas generated would be sent to Vt. flare stack for hot flaring, if any. (viii) After the depletion of reservoir pressure leading to cease of self flow life of well, artificial lift method will be proposed to bring the oil on the surface to maintain the production.

Proposed EPS Facility:

S. No	Detail/Equipment	Quantity/ Capacity
1	Storage tanks (OHT: Over Head Storage Tank)	3+3 = 6 Nos (Each tank capacity =45m3, Total= 180 m3)
2	Vertical Two Phase Separators	2 Nos (Liquid handling Capacity: 1500 BOPD & Gas handling capacity: 3.5 mmscf/day)
3	Indirect Water Bath Heater	2 Nos (Heating Capacity : Inlet:20-30 0c & Outlet: 50-700c,Amount of fluid to be heated:15 MT/hr)
4	Heater Treater (Optional)	1 Nos (Amount of fluid to be treated : 20 MT / hour)
4	Hot Water Circulation Pump	2 Nos (Flow rate: 10 m3/hr with flame proof motor)
5	Chemical Dozing Pump	2 Nos (Flow rate :0-6 lt/hr with flame proof reciprocating pump)
6	Fire fighting facilities a) Diesel driven centrifugal Pump b) Jockey Pump c) Stand post type water cum foam monitors d) Stand post type water hydrants with double outlet e) Water reservoir tank f) Portable fire extinguisher of different types as per OISD 1959	 2 Nos (Capacity: 171 m3/hr at 7 kg/cm2) 1 Nos (Capacity: 15 HPx10kg/cm2 for maintain water line pressure) 4 Nos 6 Nos 400 m3 16 Nos
7	Electrical panel room with fire siren	1

8	DG Set(62.5 KVA to be utilized in case of power failure from GEB.	1

(ix) The cost for setting up of EPS cost would be ` 3.5 crores per EPS. The Total cost is approximately ` 23.8 Crores.

(x) Agriculture land will be taken on lease base on temporary base considering nearby water body, population, eco-sensitive zones as per norms.

(xi) baseline study will be consider for air quality , surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition for nearby population will be considered as per norms.

The EAC noted that the project site is located on an Ireland and there is no human habitation and settlement and the proposed project is only a storage facility. The EAC after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website:

i. Environmental sensitivity within 1 km of each drilling location will be submitted in the EIA/EMP report.

ii. Public hearing to be conducted as per provisions of the EIA Notification, 2006.

20.3.8 **Expansion cum modernization of sugar from 4800 to 8000 TCD along with cogeneration from 22 MW to 45 MW and distillery from 30 KLPD to 95 KLPD by M/s SAR SENAPATI SANTAJI GHORPADE SUGAR FACTORY LTD.- [IA/MH/IND2/61710/2017, IA-J-11011/45/2017-IA-II(I)]- TOR reg.**

1. The proposal is for expansion cum modernization of sugar from 4800 to 8000 TCD along with cogeneration expansion from 22 MW to 45 MW and distillery from 30 KLPD to 95 KLPD at village BelewadiKalamma, Tal. Kagal, Dist. Kolhapur, Maharashtra.
2. For Sugar and cogeneration 80-100 Skilled and unskilled and for proposed distillery 100 Skilled and unskilled shall be employed.
3. The details of products (existing/proposed):

Products	Existing	Total Proposed
Cane crushing	4800 TCD	8000 TCD
Sugar	600 TPD (12.05% on cane)	1000
Bagasse	1368TPD	2280TPD
Molasses	192TPD	307 TPD
Presumed	192 TPD	320TPD
Power generation	22 MW	45 MW
Pure Rectified Spirit/ Impure Spirit/ENA	30.0 KLPD	95 KLPD

	4. Total plot area : 85 acres. 5. Green belt area: 27 acres (33% of the total plot). 6. Existing sugar and cogeneration fresh water requirement: 482 CMD. For expansion Sugar 188 CMD. For expansion cogeneration 1186 CMD (Initial startup). 7. For **Distillery unit the** Existing water requirement is 260 CMD and for Expansion the water requirement is 563 CMD. 8. Total cogeneration plant power generation: 43 MW, Total captive consumption: 12.794 MW and Export: 30.276 MW. 9. Proposed distillery expansion power requirement will be 2.2 MW from incineration boiler TG. 10. Total bagasse required for existing and proposed as fuel for boiler 87.79 TPH. 11. Existing boiler 120 TPH. New boiler 120 TPH. Exiting spent wash fired boiler 10 TPH. Proposed spent wash fired boiler 20 TPH. 12. **Project cost :**Sugar expansion: 38.1040 cr. , Cogeneration expansion: 8.7143 cr. ,Project cost of the distillery : 84.2546 cr **13. EMP cost :**Sugar and cogeneration proposed: 1.78 Cr. Distillery : 2.05 Cr. 14. As Zero Liquid Discharge (ZLD) system shall be implemented, hence no impact on water, flora, fauna, land and nearby population due to discharge of effluent is envisaged.ESP has proposed for air pollution hence, negligible air pollution impact on environment and its subsequent environment is anticipated. 15. Chikotra river is flowing at distance of 1.16 km. The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website: i. 80% Fuel requirement will be met from spent wash and only 20% fuel requirement will be sourced from coal. ii. Layout plan with 10m wide green belt of perennial trees like neem, seasam, teak etc. around plant periphery to be submitted. iii. Public hearing to be conducted as per provisions of the EIA Notification, 2006. iv. Certified compliance report of existing EC from RO, MoEF&CC to be submitted. v. NOC from forest department shall be obtained. vi. Zero Liquid Discharge (ZLD) system shall be implemented
20.3.9	**Proposed expansion of specialty chemicals in existing unit of m/s. paushak ltd. plot no.: 135, 136, 145, 146, 147, 229 & 230, vill.: Panelav, Po: Tajpura, Tal.: halol, Dist. Panchmahal–389 350 Gujarat- [IA/GJ/IND2/60354/2016, IA-J-11011/19/2017-IA-II(I)]- TOR reg.** The PP made a presentation before the EAC and informed that:

1. Under the proposed project following chemicals shall be produced:

Sr. No.	Name of the Product	Quantity (MT/Month)		
		Existing	Additional	Total
1	**Phosgene**	400	800	1200
2	**3,4,4 – Trichlorocarbanilide**	50	-50	0
3	**Carbamyl Chloride**	40	-12	28
	Dimethyl Carbamoyl Chloride			
	Diphenyl Carbamoyl Chloride			
	Diethyl Carbamoyl Chloride			
	N Ethyl N Methyl Carbamoyl chloride			
	N Methyl Piperazine Carbamoyl chloride			
	N, N Bis 2 chloroethyl carbamoyl chloride			
	Morpholine Carbamoyl chloride			
	Any other Carbamoyl Chloride			
4	**Chloroformates**	250	150	400
	Benzyl Chloroformate			
	Isobutyl chloroformate			
	N Pentyl chloroformate			
	N Hexyl chloroformate			
	Phenyl Chloroformate			
	Methyl Chloroformate			
	2 Ethyl Hexyl chloroformate			
	Cetyl chloroformate			
	Myristyl chloroformate			

		Tert-Butyl cyclohexyl chloroformate			
		Sec Butyl chloroformate			
		1 chloro2 methyl propyl chloroformate			
		Any other Chloroformates			
	5	**Vinyl Chloroformates**	1	0	1
		Isopropenyl chloroformate			
	6	**4 Nitrophenyl Chloroformate**	10	-5	5
	7	**Urea**	10	190	200
		Diuron			
		Tert Butyl Urea			
		3,4,4 Trichloro carbanilide			
		1,3 Diethyl Urea			
		Any other Urea			
	8	**Isocyanates**	50	250	300
		Trans 4 Methyl Cyclohexyl Isocyanate			
		2 Phenyl Ethyl Isocyanate			
		Cyclohexyl Isocyanate			
		2 Chloroethyl Isocyanate			
		Isopropyl Isocyanate (75% in toluene)			
		4 Chloro -3 -(trifluoromethyl) phenyl Isocyanate			
		Phenyl Isocyanate			
		Tert Butyl Isocyanate			
		3,4 Dichlorophenyl Isocyanate			
		4 Chloro Phenyl Isocyanate			
		P - Toluene sulfonyl Isocyanate			

		Stearyl Isocyanate			
		Any other Isocyanate			
	9	**Carbonates**	20	20	40
		Chloromethyl Isopropyl carbonate			
		Bis 4 Nitro phenyl Carbonate			
		4,5-Dimethyl-1,3-Dioxolen-2-One			
		4-Chloromethyl-5-methyl-1,3-dioxol-2-one			
		4-(Hydroxy Methyl)-5-methyl-1,3-dioxol-2-one			
		2-Methyl Cryloxy Ethyl Vinyl Carbonate			
		Dimethyl Carbonate			
		Any Other Carbonate			
	10	**Benzimidazol**	2	-2	0
		2 Benzimidazol			
		Any other Benzimidazol			
	11	**Forskoline Carbonate**	0.5	-0.5	0
	12	**Chlorides/Acid Chlorides**	22.5	17.5	40
		3 Chloropropionyl chloride - 3 CPC			
		Isobutyryl Chloride			
		5 - chlorovaleroyl chloride			
		Pivaloyl Chloride			
		Other Chlorides/Acid Chlorides			
	13	**Carbamates**	22.5	17.5	40
		N Butyl Propargyl carbamate			
		2-Methyl-2-propyl-1,3-propanediol dichlocarbamate (90% in toluene)			

	Benzyl Carbamate			
	Other Carbamates			
14	**Carbodiimides**	10	-5	5
	Dicyclohexyl carbodiimide - DCC			
	Other Carbodiimides			
15	**Protected Amino Acids**	3	-3	0
	CBZ Valine			
	Other Amino Acids			
16	**Nitriles**	5	-4	1
	Ethyl 2-(Hydroxylmino) Cyanoacetate			
	Acetonitrile			
	Other Nitriles			
17	**FTMA**	1	-1	0
18	**Polymers**	0.5	0.5	1
	Polyquat			
	Other Polymers			
19	**Thiadiazole**	0	20	20
	5-Methoxy-1, 3, 4-thiadiazol-2(3H)-one			
20	**Esters**	0	209	209
	Methyl 3-aminocrotonate			
	Phenyl Benzoate			
	Ethylene glycol Dibenzoate			
	Benzyl carbazate			
	Tert Butyl carbazate			
Total		**898**	**1592**	**2490**

By-Products List

Sr.	Name of By-Product	Quantity (MT/Month)		
		Existing	Additional	Total
1	Hydrochloric Acid (30 %)	500	1000	1500
2	$FeCl_2$	6	12	18
3	Recovered Mercury	3.6	3.6	7.2
4	Recovered Mercury Chloride	3.6	3.6	7.2
Total		**513.2**	**1019.2**	**1532.4**

2. Total fresh water requirement will be 528 KL/Day (Existing: 144 KL/Day + Additional: 384 KL/Day) which shall be met through own bore well. The total wastewater generation will be 377 KL/Day (Industrial: 287 KL/Day + Domestic: 90 KL/Day).
3. Industrial wastewater generation will be 287 KL/Day (Existing: 65 KL/Day + Additional: 222 KL/Day) which shall be treated in ETP and Final treated effluent shall be disposed to CETP of M/s. Enviro Infrastructure Co. Ltd., Umraya, Dist: Vadodara.
4. Domestic wastewater generation will be 90 KL/Day (Existing: 30 KL/Day + Additional: 60 KL/Day) which shall be treated in own STP and then shall be used for land irrigation.
5. There will be emissions from Flue gas Stacks like Boiler 10 TPH, Boiler 3 TPH & D.G.Set (320 KVA, 625 KVA, 125 KVA & 1000 KVA) and emissions from Process Vents like Final Caustic Scrubber & Central Scrubbing System. Electrostatic Precipitator, Bag Filter, Caustic Scrubber & Silencers will be provided to control Air Pollution.
6. **Hazardous Waste generation:**

SR. NO.	NAME OF WASTE	CATEGORY	QUANTITY		MODE OF DISPOSAL
			EXISTING	TOTAL AFTER PROPOSED EXPANSION	
1	Used Oil	5.1	1 MT/Yr	2 MT/Yr	Collection, Storage, Transportation, Disposal by Selling to Registered Refiner
2	ETP Sludge	35.3	50 MT/Yr	150 MT/Yr	Collection, Storage, Transportation,

	3	MEE Salt	37.3	-	250 MT/Yr	Disposal at TSDF of NECL, Nandesari
	4	Discarded Container (Drums / Bags)	33.1	400 Nos. / Yr	1,500 Nos. /Yr	Collection, Storage, Transportation & given to registered vendors
				8,000 Nos. /Yr	24,000 Nos. /Yr	
	5	Spent Carbon	28.3	1 MT/Yr	5 MT/Yr	Collection, Storage, Transportation, given for co-processing in cement industries/RSPL, Panoli or disposal at CHWIF of NECL, Nandesari
	6	Residue & Waste (from VCF Process)	28.1	6 MT/Yr	20 MT/Yr	
	7	Distillation Residue	20.3	20 MT/Yr	60 MT/Yr	
	8	Distillation Residue (from contaminated organic solvents)	36.1	45 MT/Yr	135 MT/Yr	
	9	Toxic Metal residue (from water purification plant)	26.1	5 MT/Yr	10 MT/Yr	Collection, Storage, Transportation, Disposal at TSDF of NECL, Nandesari/RSPL, Panoli
	10	Hydrochloric Acid (30 %)	-	500 MT/M	1500 MT/M	Collection, Storage, Transportation & Sell to authorized end users
	11	$FeCl_2$	-	6 MT/M	18 MT/M	
	12	Recovered Mercury	-	3.6 MT/M	7.2 MT/M	
	13	Recovered Mercury	-	3.6 MT/M	7.2 MT/M	

	Chloride				

7. Green Belt

Total 1,19,108 m^2 land area is available at site; out of this 65,308 m^2 (i.e. approx 55 % of total area) is developed as greenbelt and other forms of greenery.

8. Power & Fuel Requirements:

Sr.	Scenario		Total
1	Existing	MGVCL/DG sets of 620 KVA, 325 KVA & 125 KVA (used in emergency only)	1,200 KW
2	Total after Proposed Expansion	MGVCL/ DG sets of 1000 KVA + 620 KVA + 325 KVA & 125 KVA (shall be used in emergency only)	3,000 KW

9. DETAILS ON FUEL & SOURCE (EXISTING + PROPOSED)

Sr.	Fuel	Consumption		
		Existing	Additional	Total
1	Bio Mass (Agro Waste) or FO or Coal (MT/Day)	30	30	60
2	LDO (Lit./Day)	5,400	5,400	10,800
3	Diesel (Lit./Day)	15	15	30

10. Estimated Project cost along with analysis in terms of economic viability of the project.

Total Project Cost for Expansion Project is Rs. 70 Crores.

Sr.	Particulars	Amount (Rs. In Crores)
1	Plant Up gradation / Modification	50
2	ETP & Pollution Control System	10
3	Utilities & Contingency	10

	Total	**70**
	The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website: i. No storage of phosgene & isocynate shall be done in plant. limit of phosgene centre to be fixed at 0.1 ppm. ii. 24x7 online monitoring of air and water shall be done. iii. GCMS monitoring shall be done for phosgene and iso-cynate. iv. Public hearing shall be conducted as per provisions of the EIA Notification, 2006. v. Layout plan with 10m wide green belt of perennial trees like neem, seasam, teak etc. around plant periphery to be submitted. vi. Certified compliance report of existing EC from RO, MoEF&CC to be submitted. vii. Zero Liquid Discharge (ZLD) system shall be implemented	
20.3.10	**Expansion and introduction of new products in synthetic organic chemical Industry capacity of 510.76 MT/M (Existing 100.58 MT/M + Proposed 410.17958 MT/M) and products having capacity of 3356 MT/M at S. No.: 9-24, Wasarang 34-36, Chinchwali, and KhopoliDist: Raigad, Maharashtra by M/s Innovassynth Technologies (I) Ltd. (ITIL) [IA/MH/IND2/61782/2017, IA-J-11011/20/2017-IA-II(I)]- TOR reg.** The PP made a presentation before the EAC and informed that: 1. The proposal was discussed in the 17th meeting of EAC on 26th December 2016 under item no: 17.4.4. Item wise clarification for the observation made by EAC committee is presented below: I. Patalganga river is flowing adjacent to the boundary and the google image reflects that plant boundary seems to be encroaching the main stream of the river - II. Corrected google image showing the boundaries of the wall is attached in PFR. It is not encroaching the streams of the Patalganga River III. PP also informed that water will be taken form Patalganga River only. IV. Innovassynth has permission from the irrigation department for withdrawal of water from Patalganga River. V. After the detailed deliberation, the committee suggested for revising the Plant layout by incorporating:	

Sr. no.	Observation	Comments
1.	Creation of buffer zone, with tree plantation of at least 10 meter wide between plant boundary and adjacent bank of the river. List of tree species to be planted in buffer zone shall be prepared as per CPCB guidelines and after consultation with forest department	Detailed Layout showing river bank distances from Factory boundary wall are given in PFR& the same is incorporated in Presentation. However Forest department has not given permission for plantation of trees in buffer zone.
2.	Proper river conservation plan in view of proximity of the plant to the river, with commitment regarding no disturbance in natural flowing of the river.	PP is committed for the conservation of the river by: I. 1.Placing Dustbins and facilitates transportation at dumping ground. II. Creating awareness to prevent littering through posters, pamphlets etc. III. Conducting lectures and environment awareness programme. IV. Not disposing the effluent into the river. V. Financial assistance will be provided to the tune of 10% of CSR funds for the above proposed activities. Regarding no disturbance in natural flowing of the river PP has provided barbed wire fencing on the boundary wall where river flow is near to the boundary. As the location of the project is in hilly area where gradient differences are high hence there are remote chances of river getting flooded. So there is no probability in disturbing natural flow of the river.
3.	Provision for Zero Liquid Discharge system.	Unit has already provided Zero Liquid Discharge

			system for the existing activity and committed for zero liquid discharge system for proposed expansion.

The EAC was of the view, as the existing factory is almost on the neck of the river, a subcommittee should visit site to study the implications on river arising out the proposed expansion by project proponent.

20.3.11 **Proposing for expansion of Pulp Plant, VSF Plant, Sulphuric Acid Plant, Carbon Disulphide plant and Captive Power Plant along with new Excel Fibre Plant at Village: Kumarapatnam, Taluka: Ranebennuru, District: Haveri, Karnataka by M/s GRASIM INDUSTRIES LTD- [IA/KA/IND2/60015/2016, J- 11011/346/2016-IA.II(I)]- TOR reg.**

The PP made a presentation before the EAC and informed that:

1. There is no additional man power required for the Pulp Plant as the existing man power of 491 employees will be utilized for the proposed expansion project. However, The additional manpower required for the VSF and Excel Fibre plant are 287 persons.

2. Products & Capacities details are as under:

S.No.	Particulars	Unit	Existing	Proposed	Total after expansion
1.	VSF Plant	TPA	87,600	87,600*	1,75,200
2.	Sulphuric Acid	TPA	75,110	75,110	1,50,220
3.	Carbon disulphide	TPA	14,365	14,365	28,730
4.	By-product (Anhydrous sodium sulphate)	TPA	69,205	69,205	1,38,410
5.	Captive Power Plant	MW	20	30	50
6.	Pulp Plant	TPA	74,400	74,400	1,48,800
7.	Recovery Boiler	MW	10	10	20
8.	Excel Fibre	TPA	Nil	36,500	36,500

	Plant (Solvent Spun Cellulosic Fibre)				

3. Details of existing **Environmental Clearance**: Expansion of Viscose Staple Fibre (51,00 TPA – 87,600 TPA) and Captive Power Plant (10 MW – 20 MW) vide MoEF letter no. J-11011/371/2006- IA II (I) dated 8th November, 2007.

4. **Consent: Pulp Plant**: The latest consent has been obtained from Karnataka State Pollution Control Board vide their letter no. PCB/162/HPI/2016 for the period from 1.07.2016 to 30.06.2021.

5. Total Cost of the Proposed Project- Rs. 2550 Crores. Estimated time of completion- within 5 years from the date of environment clearance.
6. Tungabhadra River is flowing ~200 m, East direction.
7. Ranebennur Blackbuck Sanctuary is at ~4.5 km distance in NNW direction.
8. As per the standard terms of references issued by the MoEFCC, New Delhi dated 09 Dec., 2016, we have already started baseline data collection for the winter season i.e. Dec., 2016 to Feb., 2017.
9. Measures for mitigating impact on environment:

A. Air Management:

Pulp Plant:

•High efficiency electro static precipitator in Pulp Plant for recovery boiler and lime kiln

VSF Plant:

•CS_2 recovery system

•Exhaust system to maintain clean working environment

•Klaus Kiln Plant for sulphur recovery

• Scrubber

•Mist Eliminator / Demister in Sulphuric Acid Plant

Captive Power Plant

•Electrostatic Precipitator in Captive Power Plant

B. Water Management

•VSF Effluent Treatment Plant of 20,000 KLD (capacity)

•Pulp Effluent Treatment Plant of 36,000 KLD (capacity)

Sewage treatment plant of 200 MLD is being / will be used for the treatment of domestic waste water.

The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional

TOR along with standard TOR as available on the Ministry website:

i. Public hearing shall be conducted as per provisions of the EIA Notification, 2006.
ii. Layout plan with 10m wide green belt of perennial trees like neem, seasam, teak etc. around plant periphery to be submitted.
iii. Certified compliance report of existing EC from RO, MoEF&CC to be submitted.
iv. Zero Liquid Discharge (ZLD) system shall be implemented.
v. CS2 to be monitored in ambient air with 5 km of vicinity of project site.
vi. Zinc recovery plan to be worked out.
vii. Use of alternate fuel to be explored

20.3.12

Expansion of manufacturing capacity of "Dispersing agent, leather chemicals and construction chemicals", in the main chemical hub of the country at Plot No. 1734 & 1702/B, Phase – III, G.I.D.C., Vapi, Gujarat by M/s. Gujarat Polysol Chemicals Pvt. Ltd- [IA/GJ/IND2/61675/2017, J-11011/176/2011-IA II (I)]- TOR reg.

The PP made a presentation before the EAC and informed that:

1. Existing EC Letter No.: J-11011/176/2011-IA II (I), Dated: 25/02/2013
2. Products and capacities details are as under:

Sr. No.	Name of Product	Product Capacity MT/Month		
		Existing	Proposed	Total
1.	Naphthalene Based Dispersing Agent (Liquid)	2500.00	500.00	3000.00
2.	Naphthalene Based Dispersing Agent (Powder)	300.00	500.00	800.00
3.	Phenol Based Dispersing Agent (Liquid)	200.00	800.00	1000.00
4.	Phenol Based Dispersing Agent (Powder)	200.00	100.00	300.00
5.	Lather Chemicals (Powder)Syntans	200.00	100.00	300.00
6.	Lather Chemicals (Liquide)Fat Liquor	100.00	100.00	200.00
7.	PEG Based Polycarboxylate Ether (Liquid & Powder)	400.00	1600.00	2000.00

8.	BOPP Self Adhesive	50.00	200.00	250.00
9.	Sulphonated Alkyl naphthalene Formaldehyde Condensate Sodium Salt	30.00	270.00	300.00
10.	Dibutyl Naphthalene sulphonated sodium salt	-	350.00	350.00
11.	Waterproofing polymer	-	300.00	300.00
	Total	**3980.00**	**4820.00**	**8800.00**

3. Capital Cost for the proposed project: Rs. 775.00 Lakhs (And total after proposed expansion will be Rs. 2031.80 Lacks)
4. Estimated time of completion: 6-8 months after the grant of Environment Clearance.
5. **Nature of land-** Industrial Land in notified industrial area in GIDC Vapi.
6. **Water Body**- Damanganga River (7 Km SW)
7. **Populated area**- Vapi City (5 Km W aprox.)
8. **Other Industries**- Numbers of small, medium & large scale industries in sector of chemicals, pharma, paper etc.
9. **Protected Area:** non.
10. Total area of Project: 9696.00 Sq. m.(Construction area- 4244.00 m^2, Open land area- 2794 m^2,Internal Road Area- 558.00 m^2 Greenbelt area- 2100.00 m^2).
11. Existing plot located within Notified Industrial Area GIDC Vapi.
12. Fresh water requirement:

Fresh Water	Existing: 64.50 KL/day Proposed: 150.87 KL/day Total: 217.37 KL/day	From GIDC Water Supply dept.

13. Power requirement:

Power Requirement	Existing: 300 KVA Proposed: 175 KVA Total: 475 KVA	From DGVCL (Gujarat) Standby Power source during power failure: D.G. Set: 2 Nos. (1 no. existing and 1 no. proposed) Capacity:250 KVA each

	The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website: i. Rapid EIA study with one month data collection. ii. Layout plan with 10m wide green belt of perennial trees like neem, seasam, teak etc. around plant periphery to be submitted. iii. Certified compliance report (CCR) of existing EC from RO, MoEF&CC to be submitted. The MoEF&CC may take up the matter with concerned Regional Office for submission of CCR. iv. Zero Liquid Discharge (ZLD) system shall be implemented. v. Public hearing is exempted under para 7 (ii) of the EIA Notification, 2006
20.3.13	**Expansion of existing few products & also plans to add new products at the existing site viz Pesticides, Herbicides, Fungicides and Intermediates at Plot No.415, GIDC Industrial Estate Panoli, Distt. Bharuch, Gujrat by M/s Mega Innovative Crops Pvt. Ltd. [IA/GJ/IND2/61950/2017, IA-J-11011/48/2017-IA-II]-TOR-reg.** **The PP made a presentation before the EAC and informed that:** 1. The project category is 5(b) Pesticides industry and pesticide specific intermediates (excluding formulations). 2. The existing EC details: IA/GJ/IND2/61949/2008, File no. J-11011/425/2008-IA-II (I) dated 24.10.2008. 3. The project cost is 1603.7 lacs. 4. The unit is currently Zero Discharge. Low COD effluent shall be sent to PETL after proposed expansion.8 kLD of low COD effluent shall be sent to M/s. PETL for further treatment and disposal. 5. Electricity Power is supplied from DGVCL Existing= 650 kVA Proposed after expansion = 300 kVA DG set (stand by power) = 320 kVA (Proposed). 6. Fugitive emissions will be well within ambient norms specified by GPCB as most of the chemicals are stored and handled in closed vessels. Minor fugitive emissions during transportation. 7. Narmada river is flowing at 12.17 km distance to North direction. 8. There are no forest reserves, national sanctuaries, eco-sensitive area, surface resources, mineral resources, place of tourist importance etc. in the near vicinity. The PP requested for considering the data to be collected during February - April, 2017 at the time of consideration of EIA/EMP report. The EAC accepted the request. The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional

	TOR along with standard TOR as available on the Ministry website: i. Layout plan with 5 m wide green belt of perennial trees like neem, seasam, teak etc. around plant periphery to be submitted. ii. Certified compliance report (CCR) of existing EC from RO, MoEF&CC to be submitted. The MoEF&CC may take up the matter with concerned Regional Office for submission of CCR. iii. Zero Liquid Discharge (ZLD) system shall be implemented.

20.4 <u>Any Other</u>

20.4.1	**Underground Coal Gasification (UCG) at Vastan Mine Block, NaniNaroli, Surat in Gujarat by M/s Gujarat Industries Power Company Limited-reg. [IA/GJ/IND2/26532/2007, J-11011/815/2007-IA.II] Extension of validity of Environment Clearance-reg.** The EAC recommended to the Ministry that the matter is pending since long, the records may be examined and if the issue has been resolved, appropriate decision may be taken regarding deletion of the proposal.
20.4.2	**Synthetic Resin Manufacturing Unit (4500 TPM) at Sy. No. 72, Village Sampa, Tehsil Dehgam, District Gandhinagar, Gujarat by M/s Vince Decor Pvt. Ltd. – [IA/GJ/IND2/26804/2013, J-11011/379/2013-IA II (I)]- correction in EC reg.** The PP was not present. The EAC recommended to the Ministry that the matter is pending since long, the records may be examined and if the issue has been resolved, appropriate decision may be taken regarding deletion of the proposal.
20.4.3	**Exploratory Drilling (24 Wells) Additional in Onshore PEL Block L – II of Cauvery Basin, District Nagapattinam, Tamil Nadu by M/s Oil and Natural Gas Corporation- [IA/TN/IND2/27229/2010, J–11011/2/2011 – IA II (I)]- Amendment in EC reg.** The PP informed that the proposal has been recommended by the EAC in March, 2015. The official litter of the Ministry has not been received. The EAC recommended to the Ministry to look into the matter.
20.4.4	**Red Pigments (40 MTPM) & Yellow Pigments (40 MTPM) manufacturing unita at Old Survey No. 81/2, Block No. 142, Village Dabhasa, TalukaPadra, District Vadodara, Gujarat by M/s. Globex**

	Laboratories (R & D) Ltd.- [IA/GJ/IND2/27409/2010, F.No. J-11011/95/2010- IA II (I)]- Amendment in EC reg. The PP was not present. The EAC recommended to the Ministry that the matter is pending since long, the records may be examined and if the issue has been resolved, appropriate decision may be taken regarding deletion of the proposal.
20.4.5	**Exploration, Testing of wells and commercial exploration of Mannarguddi CBM Block, MG-CBM-2008/IV in districts Thiruvarur and Thanjavur, Tamil Nadu by M/S. GREAT EASTERN ENERGY CORPORATION LTD [IA/TN/IND2/27620/2010, J-11011/615/2010 IA II (I)]- Corrigendum in EC reg.** The PP made a presentation before the EAC and informed that: 1. The Environment Clearance (EC) issued by MoEF vide letter J-11011/615/2010-IA.II (I) dated 12th September, 2012 for exploration, testing of wells and commercial exploration of Mannarguddi CBM Block, MG-CBM-2008/IV in districts Thiruvarur and Thanjavur, Tamil Nadu. 2. With respect to the EC (Annexure-1), we would like to bring following to your kind notice: i. There is a typographical error in our EIA Report with respect latitude and longitude of the CBM Block Boundary in the EIA report in Table 1.1 on page no. 12 of Chapter 1. Here, we have inadvertently inter-changed headings of "latitude" with "longitude" and vice-versa which has been reproduced in the EC. ii. In our EIA Report, we have given the CBM Block Boundary co-ordinates, i.e., latitude and longitude, in "Degree and Decimal Minutes" format. However in the EC letter, CBM Block boundary coordinates are mentioned in "Degree, Minutes and Seconds" format – this has led to mis-representation of the CBM Block Boundary co-ordinates, and may kindly be corrected. iii. The above points do not materially change any of the findings in the EIA report, the EMP or other mitigation measures, which continue to be valid and relevant as EIA Study was conducted around 10 km area surrounding the CBM Block Boundary and 1 km around each Core Hole Location. The PP requested for considering for incorporating the above corrections in the EC letter issued by MoEF vide letter J-11011/615/2010-IA.II (I)

	dated 12th September, 2012 The EAC after examination of the records accepted the aforesaid corrections as requested by the PP.
20.4.6	**Exploratory drilling of 35 wells in LI PML, Kuthalam PML, Kali&Greator Kali PML, Bhuvnagiri PML and Neyveli PML in Cauvery Basin, Tamilnadu by M/s ONGC Ltd.- reg. [IA/TN/IND2/27663/2008, J-11011/178/2008-IA II (I)]- Amendment in EC reg.** The EAC recommended to the Ministry that the matter is pending since long, the records may be examined and if the issue has been resolved, appropriate decision may be taken regarding deletion of the proposal. .
20.4.7	**Proposed caustic soda plant of 550 TPD and 100 MW captive power plant at GIDC Dahej, District: Bharuch in Gujarat by M/s Action Petrochem (P) Ltd.- reg Extension of validity of Environment Clearance [IA/GJ/IND/19959/2010, J-11 0111254/2009- IA II (I)]- Amendment in EC reg.** The PP was not present. The EAC recommended to the Ministry that the matter is pending since long, the records may be examined and if the issue has been resolved, appropriate decision may be taken regarding deletion of the proposal.
20.4.8	**Expansion of Refinery Capacity 9.0 MMTPA to 60 MMTPA with Petrochemical Complex by M/s ESSAR Oil Limited (EOL)- [IA/GJ/IND2/27513/2006, J-11011/320/2006-IA-II(I)]- Amendment in EC** The PP was not present. The EAC recommended to the Ministry that the matter is pending since long, the records may be examined and if the issue has been resolved, appropriate decision may be taken regarding deletion of the proposal.
20.4.9	**Expansion of dyes manufacturing unit at Sy. No.92 Block 86 at Dhanot, Taluka Kalol in District Gandhinagar in Gujarat by M/s GOPINATH CHEM TECH LTD UNIT II- [IA/GJ/IND2/27294/2009, J-11011/265/2009 -IA II (I)]- Amendment in EC reg.** The PP was not present. The EAC recommended to the Ministry that the matter is pending since long, the records may be examined and if the issue has been resolved, appropriate decision may be taken regarding deletion of the proposal.
20.4.10	**Proposed for expansion of 50 KLPD to 125 KLPD total Spirit Graing based distillery unit by M/s PIONEER INDUSTRIES LIMITED – [**

	IA/PB/IND2/28674/2010, J-11011/38/2010-IA.II(I)]- Amendment in EC reg. The PP was not present. The EAC recommended to the Ministry that the matter is pending since long, the records may be examined and if the issue has been resolved, appropriate decision may be taken regarding deletion of the proposal.
20.4.11	**Expansion project of Single super Phosphate (1,81,000 to 3,15,000 TPA) and 300,000 TPA converted tin Granular SSP), NPL (60,000 TPA) and Additional Bronated SSP (25,000TPA) and LABA(20.000TPA) of M/s Rama Phosphates Ltd. at Plot no.4807/11, Jhamarkotra Road, Village Umra, Tehsil Girwa, Distt. Udaipur, Rajasthan- [IA/RJ/IND/27811/2011, J-11011/292/2011-1A-II(I)]- Amendment in EC reg.** The PP was not present. The EAC recommended to the Ministry that the matter is pending since long, the records may be examined and if the issue has been resolved, appropriate decision may be taken regarding deletion of the proposal.
20.4.12	**Exploratory Drilling of 182 Wells in 33 Blocks in Western Onshore Basin, Baroda, Ahemdbad, Gandhi Nagar and Kheda District of Gujarat by M/s ONGC LTd. – [IA/GJ/IND2/28808/2011, J-11011/431/2011-IA II (I)]- Amendment in EC reg.** The PP informed that the EAC recommended the proposal in its meeting held in January, 2016. The official letter of the Ministry has not been received. The EAC recommended to the Ministry to examine the matter and take action accordingly.
20.4.13	**Exploratory & Development Drilling of 8 Wells in Khubal Discovery Block AAONN-2001/1, East Tripura, District North Agartala, Tripura by M/s ONGC Ltd.- [IA/TR/IND2/28672/2012, J -11011/104/2012-IA II (I)] -Amendment in EC reg.** The PP informed that the amended EC letter has been received. The EAC recommended to the Ministry to examine the matter and take action accordingly about deletion of the project from the website of the Ministry.
20.4.14	**Expansion of Pesticide Manufacturing Unit at Plot no. 1, 15, 16, Opp. State Bank of India, GIDC Ind. Estate, Nandesari, District Vadodara, Gujarat by M/s GSP Crop Science Pvt. Ltd. [IA/GJ/IND2/29275/2012, J-11011/403/2012 - IA II (I)]- amendment in EC reg.**

	The PP informed that the proposal has been recommended in the EAC meeting held on 16.12.2015. The EAC recommended to the Ministry to look in to the matter and take action accordingly.
20.4.15	**200 KLPD Grain Based Distillery, 15 KLPD Malt Spirit, Bottling of IMFL, Country Liqour& 10 MW Cogeneration Power Plant at Village & PO Rampur, District - Kamrup, State – Assam by M/s NV Distilleries & Breweries (North East) Pvt. Ltd [IA/AS/IND2/29317/2008, J-11011/839/2008-IA II (I)] -Extension of validity of EC reg.** The PP informed that the proposal has been recommended in 46th EAC meeting held during 20th – 21st August, 2016. The EAC recommended to the Ministry that the matter is pending since long, the records may be examined and if the issue has been resolved, appropriate decision may be taken regarding deletion of the proposal.
20.4.16	**90 KLPD Distillery Unit (45 KLPD based on molasses and 45 KLPD based on molasses/grain) by M/s Pearl Distillery Limited at village old Singarakonda in District Prakasam in Andhra Pradesh by M/s PEARL DISTILLERY LIMITED. [IA/AP/IND2/29425/2006, J-11012/13/98-IA II (I)] –amendment in EC reg.** The PP informed that the proposal has been recommended in 46th EAC meeting held during 20th – 21st August, 2016. The formal letter issued by the Ministry on 28.12.2015. The EAC recommended to the Ministry to look into the matter and may take action accordingly about deletion of the project from the website of the Ministry
20.4.17	**Mankapur Chini Mills, Distillery Division, 100 KLD Distillery at Village : Datauli, Mankapur Gonda UP by M/s Mankapur Chini Mills Distillery Division- [IA/UP/IND2/30088/2006, J-11011/318/2006 – IA-II(I)]- Amendment in EC reg.** The PP was not present. The EAC recommended to the Ministry that the matter is pending since long, the records may be examined and if the issue has been resolved, appropriate decision may be taken regarding deletion of the proposal.
20.4.18	**Proposed Co-generation plant at Tamil Nadu by M/s Empee Sugars And Chemicals LTD- [IA/TN/IND/5546/2009, J-11011/540/2008-IA.II(I)]- Amendment in EC reg.**

	The PP was not present. The EAC recommended to the Ministry that the matter is pending since long, the records may be examined and if the issue has been resolved, appropriate decision may be taken regarding deletion of the proposal.
20.4.19	**Expansion of Dyes & Pigments Intermediates Manufacturing Unit at Survey No.73 behind GEB Sub station at Karkhadi, TalukaPadra, District Vadodara, Gujrat by M/s Philoden Agro chem. Pvt. Ltd.- [IA/GJ/IND2/31048/2015, J-11011/561/2010-IA II(I)]- Amendment in EC reg.** The PP was not present. The EAC recommended to the Ministry that the matter is pending since long, the records may be examined and if the issue has been resolved, appropriate decision may be taken regarding deletion of the proposal.
20.4.20	**Eapansion of Bulk Drugs manufacturing Unit ((1TPM to 57.2 TPM) at Plot No. 582, ECP Road, Village Luna, TalukaPadra, District Vadodara, Gujarat by M/s Paragon Organics- [IA/GJ/IND/5848/2009, J-11011/603/2009-IA.II(I)]- Amendment in EC reg.** The PP was not present. The EAC recommended to the Ministry that the matter is pending since long, the records may be examined and if the issue has been resolved, appropriate decision may be taken regarding deletion of the proposal.
20.4.21	**Bulk Drug And Bulk Drug Intermediates Manufacturing Unit of M/s. Karunesh Remedies Plot No. 417/2, Phase-II, GIDC Industrial Estate, Panoli-394 116, Tal: Ankleshwar, Dist: Bharuch, Gujarat - Extension of validity reg. [IA/GJ/IND2/61255/2008, J-11011/811/2007-IA II (I)]** The proposal was earlier listed in 19th EAC meeting. The project proponent did not attend the meeting. The PP vide email dated 4.02.2017 informed about his inability to attend the EAC meeting. During 20th EAC meeting though the proposal was not in the agenda the Chairman permitted the PP to present the case before the EAC. The PP informed that: i. M/s. Karunesh Remedies, Plot No. 417/2, GIDC Estate, Panoli-394 116, Dist: Bharuch (Guj.) received EC from MoEFCC, New Delhi on June 9, 2008 [File No. J-11011/811/2007-IA II (I)]. ii. Hard copy of EC Extension Application was submitted in MoEFCC, New Delhi on April 25, 2013 (During this application time, online submission was not in existence on portal of www.envfo.nic.in).

	iii. Then after, applied online for EC Extension to MoEFCC, New Delhi on Dec. 23, 2016. The EAC after examining the records recommended for extending the validity of EC granted by the Ministry on June 9, 2008 [File No. J-11011/811/2007-IA II (I)] up to 8th June, 2018.

28th February, 2017 (Day 2)

20.5 Terms of Reference (TOR)

20.5.1	**Environmental Clearance for proposed LPG bottling plant, (3x600 MT capacity, horizontal mounded bullet) by IOCL at Plot no. 6A, SIDCUL Industrial Area, Sector – 01, SIDCUL, Sitarganj, District Udham Singh Nagar, Uttarakhand by M/s IOCL SITARGANJ – (IA/UK/IND2/61790/2017, IA-J-11011/21/2017-IA-II(I)]- TOR reg.** The pp made a presentation before the EAC and informed that: 1. The project will be constructed at land of State Industrial Development Corporation Of Uttarakhand Ltd. (SIDCUL). SIDCUL is ultra modern industrial park providing all the amenities to upcoming Industries. The proposal fall under Category 'A' and item no. 6(b)Isolated storage & handling of hazardous chemicals of the EIA Notification, 2006. (As per threshold planning). 2. The capacity of proposed plant is 3 x 600 MT, horizontal mounded bullet for LPG storage. 3. The proposal does not attracts the provisions of Forest (Conservation)Act,1980 wildlife (Protection)Act,1972 and C.R.Z notification,2011 4. No litigation pending against the project and/or land in which the project is proposed to be set up. 5. The project cost is 2786 lacs. 6. At IOCL Sitarganj LPG bottling facility, The LPG from Indane bottling Plant of Madanpur Khadar (Delhi) & Loni (UP) will be received through bullet trucks. The LPG will be unloaded through LPG compressors & stored in mounded bullets of capacity 3 x 600MT (total 1800MT). LPG will be pumped from storage bullets to filling shed where cylinders will be filled prior to dispatch through road. 7. No solid waste will be generated. DG sets waste lube oil will handed over to authorised UEPPCB vendor. The Sewage will be generated by washing and cleaning of plant premises. Approx 3.2 KLD of sewage will be generated from the whole plant. The sewage will be treated in septic tank and then it will be disposed in soak pit. 8. the total water requirement is 4.0 KLD during Construction &

	Operation Phase. The water will be sourced from Tube well on the site. Drinking Water will be provided by SIDCUL (Source: Begul River). 9. No major influx of people. 20 no. Labours will be hired from near by local areas. 10. Power requirement: During Construction Phase: 250 KVA (1 no. DG Set). At Operation phase: Power Requirement: 450 KVA [from SIDCUL]. During power failure DG sets of 250 KVA (1 no. DG Set) and 750 KVA (1 no. DG Set) will be used. There would be controlled emission from vehicles in construction phase. All the vehicles will comply the BS3 norms. All Vehicles will be regularly check for PUC tests. DG Sets with 1 x 750 KVA, DG SET 1 x 250 KVA, will be operated during power failure using HSD. Appropriate stack height will be provided as per CPCB guidelines. 11. Storage of LPG which is highly inflammable liquid but non toxic. The proposed unit will take safety measures for storage and handling of materials. 12. Noise will be emitted from machinery like JCB, Trucks, Mixers during construction phase. At operation phase Noise will be emitted from DG sets. It will be maintained as per CPCB specifications/guidelines. 13. There are no process effluents. 3.2 KLD of Sewage wastewater will be generated. It will be suitably treated in Septic tank and then, it will be disposed soak pit. 14. The layout of facilities for proposed mounded LPG storage is prepared in line with CCOE / OISD144 & 150 guidelines. The handling of LPG product will be as per the laid down industry practices. A risk analysis will be carried out and mitigation measure will be implemented. Fire hydrant system with medium velocity sprinkler system shall be installed. 15. Proposed project is located in Seismic Zone IV. All the foundations are earthquake proof and are designed as per IS 1893 Part 1. Criteria for earthquake Resistant Design of Structures: Part 1 General Provision and buildings. The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website: i. Layout plan with 10 m wide green belt of perennial trees like neem, seasam, teak etc. around plant periphery to be submitted. ii. Zero Liquid Discharge (ZLD) system shall be implemented. iii. Public hearing is exempted under the provisions as per para 7 III. Stage (3) (b) of of the EIA Notification, 2006 being the site located in notified industrial area. iv. The committee underrated the performance of the consultant as he was not able to present the project details properly.

20.5.2	**Integrated Sugar (3500 Tcd) & Cogen Power Plant (20 MW) for M/s Jai Kisan Agriculture Industries Ltd. at Village Babhulgaon, Tal. Kandhar, District Nanded, Maharashtra- [IA/MH/IND2/61813/2017, IA-J-11011/25/2017-IA-II(I)]- TOR reg.** The PP made a presentation before the EAC and informed that: 1. The integrated project comprises of a sugar mill for the manufacture of high quality sugar, thereby making available required bagasse for the cogen power plant and molasses which can be sold in open market. The command area of the proposed sugar mill has adequate irrigation facilities, potential for sustained cane supply to the sugar mill and biomass availability. 2. The proposal fall under Category 'B' and item no. 5(j) Sugar Industry of the EIA Notification, 2006. Due to absence of SEIAA the proposed is submitted before the EAC at Centre level in the Ministry 3. The capacity of the proposed plant is - Sugar 3500 TCD, Cogeneration 20 MW/Day. 4. No litigation pending against the project. 5. The proposal does not attracts the provisions of Forest (Conservation)Act,1980 wildlife (Protection)Act,1972 and C.R.Z notification,2011 6. The project cost is 18359 lacs. 7. There will permanent change in the Land use. As the new Sugar factory will be build. Identified site for locating the plant is large and flat land is already in possession of M/s. Jai Kisan Agricultural Industries Ltd.. Total 94.15 acre of land is acquired. The total area requirement for the Integrated project is worked out at around 2,00,000 m2 . 8. A sugar mill of 3500 TCD will be installed for manufacture of white sugar of good quality. The proposed sugar plant of 3500 TCD will require about 5.6 lakh MT of sugarcane for 160 days crushing season, including sugarcane required for seeding purposes. 9. The cogen power project of 20 MW capacity will mainly operate on mill bagasse during 160 season days of the sugar mill and on saved bagasse for 27 off-season days. At designed levels, it will generate about 83.16 million kWh and export about 65.62 million kWh through 132 kV substation of MSEDCL to MSETCL or to third party consumers, as per prevailing tariff. 10. Water will be abstracted from Lower Manar Project situated at 3km distance. 11. All the domestic waste will be disposed as per the norms. Scrap material like empty containers, bags, plastics etc will be sent to authorized vendors for recycling / disposal. 12. The sources of emissions from the proposed sugar & cogen plant shall be boiler of120 TPH based on bagasse / coal. Adequate air pollution control equipment in the form of Electro static precipitator shall be provided for the proposed boiler of 120 TPH capacity. The air pollution control equipment proposed for both

	the boiler shall ensure that the air emissions shall confirm to MPCB / CPCB standards. 13. Sources of noise Pollution during construction phase are machinery like compressor, Compactors, Concrete Plant, Cranes and Transportation Materials.- 65 – 70 dB(A) During operation phase Noise due to various machines.- 80 – 85 dB(A) All machinery will be procured as per OSHAS / MoEF guidelines. Ambient noise levels will be within prescribed limits. 14. The WTP discharge will be diluted with the blow down from the cooling tower and the other discharges before letting the same out to the effluent treatment plant. The effluent is then will be neutralized in the neutralizing pit and then it will be pumped into the effluent treatment ponds which from part of the sugar plant's effluent treatment systems. STP will be provided for proper disposal of domestic effluent. 15. Floods and landslides are not expected in the area. Earthquake proneness: The area falls under Zone III as per IS- 1893-2002. Hence relevant design parameters as per zone III have been considered for RCC design of the buildings. (As per Seismic Zoning Map of India.) The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website: i. Layout plan with 10 m wide green belt of perennial trees like neem, seasam, teak etc. around plant periphery to be submitted. ii. Zero Liquid Discharge (ZLD) system shall be implemented. iii. Public hearing to be conducted as per provisions of the EIA Notification, 2006.
20.5.3	**Manufacturing of Organic chemicals at Survey No. 316, Navagam Bhavnagar-Sihor road, Village: Navagam, (Kardej) 364001, Taluka: Bhavnagar, Dist: Bhavnagar, Gujarat by M/s. Arvee Laboratories (India) Pvt. Ltd. [IA/GJ/IND2/61830/2017, IA-J-11011/26/2017-IA-II(I)]-TOR reg.** The PP made a presentation before the EAC and informed that: 1. M/s. Arvee Laboratories (India) Pvt. Ltd. is an existing unit engaged in manufacturing of Organic chemicals-Specialty Chemicals at Survey No. 316, Navagam Bhavnagar-Sihor road, Village: Navagam, (Kardej) 364001, Taluka: Bhavnagar, Dist: Bhavnagar, Gujarat. 2. The project category is "A", because it is located outside the notified industrial area, Project or Activity - 5(f)- Synthetic organic

chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates).

3. After expansion the total manpower at all level of plant will be 280 i.e. existing 80 nos. and proposed 200 nos.
4. Proposed Capacity is given in below table.

Sr. No.	Name of product	Quantity (MT/month)		
		Existing	**Proposed addition**	**Total**
Isophthalic Acid derivatives				
1.	Dimethyl 5-SodiosulfoIsophthalate	30	325	390
2.	5-Sodiosulfo Isophthalic Acid (Na-SIPA)	20		
3.	5-Lithosulfo Isophthalic Acid (Li-SIPA)	00		
4.	5-Hydroxy Isophthalic Acid (5-HIPA)	05		
5.	5-Sodio Sulpho-bis-(B-Hydro Xyethyl) Isophthalate (Na-SIPHE)	00		
6.	5-Nitro Isophthalic Acid (5-NIPA)	00		
7.	Dimethyl 5-Nitro Isophthalate (DM 5-NIPA)	00		
8.	Mono Methyl 5-Nitroisophthalic Acid (MM 5-NIPA)	05		
9.	5-Amino Isophthalic Acid (5-AIPA)	05		
10.	Dimethyl 5-Amino Isophthalic Acid (DM-	00		

	5-AIPA)				
11.	5-Amino Tri Iodo Isophthalic Acid (ATIPA)	00			
12.	5-Amino Tri Iodo Dichloride	00			
13.	5-Lithio Sulpho-bis-(B-Hydro Xyethyl) Isophthalate (Li-SIPHE)	00			
14.	5-Amino N-N-Bis(2-3 Dihydroxy Propyl) Isophthalamide HCl (ABA-HCl)	00			
15.	5-Amino N-N-Bis(2-3 Dihydroxy Propyl) 2,4,6 TriIodo Isophthalamide (ABATRIIODO)	00			
16.	5-Acetylamino N-N-Bis(2-3 Dihydroxy Propyl) 2,4,6 TriIodo Isophthalamide (ACETRIIODO)	00			
Benzoic Acid Derivatives					
17.	3,5 Di Nitro Benzoic Acid (DNBA)	00		65	65
18.	3,5 Di Amino Benzoic Acid (DABA)	00			
19.	2-Chloro 5-Nitro Benzoic Acid	00			
20.	4-Chloro 3,5 Di Nitro Benzoic Acid (4Cl DNBA)	00			
21.	4-Chloro 3,5 Di Amino Benzoic Acid (4Cl DABA)	00			
22.	4-Chloro 3,5 Di Amino Benzoic Acid Isobutyl	00			

	Ester (4Cl DABA)			
23.	3 Sulpho Benzoic Acid Sodium Salt	00		
Thiopene Derivatives				
24.	Thiopene 2-Aldehyde	05	10	30
25.	Thiopene 2-Acetyl	05		
26.	Thiopene 2-Methanol	05		
27.	Thiopene 2-Carbo Oxalyic Acid	05		
28.	**4-Amino Pyridine (4AP)**	00	05	05
29.	**Bromo benzene**	00	10	10
	Total	**85**	**415**	**500**
By Products				
1.	Sodium Nitrate solution	00	22	22
2.	Hydrochloric Acid 25%	00	4.16	4.16
3.	Aluminium chloride solution	00	34	34
4.	Sulfuric Acid (50 to 70%)	70	670	740
5.	HBr Solution	00	28	28
6.	Sodium Bisulphate Solution	00	8.5	8.5
7.	Acetic Acid	00	19.0	19.0
8.	IBA	00	6.0	6.0
	Total	**70**	**791.66**	**861.66**

5. **Water Requirement& w/w generation:** After expansion, total water requirement will be 151.5 KLD (54.5 KLD fresh + 97 KLD recycle). It

will be satisfied from bore well. Total industrial w/w generation will be tune around 84.0 KLD; which will be treated in ETP and finally evaporated in MEE to achieve zero discharge (ZLD). Condensate of MEE will be reuse and salt of MEE will be sent to TSDF site. Sewage will be treated in Sewage Treatment Plant (STP) and the treated water will be utilized for greenbelt development.

6. **Power Requirement:** Total Power requirement will be 1800 kVA [300 kVA (Existing) + 1500 KVA (Proposed)], which will be fulfilled by PGVCL.

7. **Fuel Requirement:** Consumption of Coal/Lignite/Agrowaste – 31 MT/day and LDO/FO – 500 lit/day. HSD (80 lit/hr.) will be used as fuel in D.G. set.

8. **Air pollution and its control measure:**The main source of emission will be of flue gas emission and Process gas emission. Proper Stack height and APC measure will be provided in order to achieve norms prescribed by statutory authority.

9. **Solid/Hazardous waste generation**: Details are given as under.

Sr. No.	**Type of Waste**	**Category No. as per HWM rules, 2016**	**Quantity**		**Method of Disposal**
			Existing	**Total after expansion**	
1.	ETP waste + MEE salt	35.3	--	50 + 25 =75	Collection, storage & disposal at TSDF site approved by GPCB.
2.	Discarded containers / drums/ liners	33.1	25 nos./year	2500 nos./year	Collection, storage and disposal by selling to approved recycler or traders.
3.	Used Lubricating Oil	5.1	2.5 lit/year	500 lit/year	Collection, storage & use within premises as lubricant/sell to registered recycler.
4.	Spent Carbon	28.3	2.5 MT/year	1.1 MT/year	Collection, Storage, Transportation, Disposal at TSDF.
5.	Spent Catalyst	28.2	--	1.2 MT/month	Collection, Storage, Transportation and sent back to supplier/ manufacturer for

					regeneration.
6.	Spent Sulphuric Acid	26.3	--	740 MT/month	Collection, Storage, Transportation and sold to actual users.
7.	Hydro Chloric Acid (25%)	26.3	--	4.16 MT/month	Collection, Storage, Transportation and sold to actual users.
8.	Aluminum Chloride (20%)	26.3	--	34 MT/month	Collection, Storage, Transportation and sold to actual users.
9.	Hydrogen Bromide(20%)	-	-	28 MT/month	Collection, Storage, Transportation and sold to actual users.

10. **Capital cost:** Existing cost of the project is Rs. 20.0 crore. Estimated cost for the proposed expansion is Rs. 70.0 crore. Out of which Rs. 9.0 crores will be used for Environmental Management System (EMS).
11. **CSR plan:** Promotion of education and possible infrastructure development in nearby villages will be undertaken possibly.
12. **Descriptions of Environmental sensitivity:** No Eco-sensitive location falls within the 10 km radius including National Park, Wild Life Century and any Eco Sensitive area declared by MoEF&CC.
13. **Emergency preparedness plan:** Emergency preparedness plan will be prepared and incorporate in our EIA report.
14. **Forest land involved:** No forest land involved in the project.
15. **Occupational Health Measures:** Periodical health checkup of workers will be carried out; First Aid facility will be available at the plant site.

The EAC during deliberations noted that the project details given in Form-1 are not matching with the information presented before the EAC. The EAC took it seriously and further directed the PP to submit revised Form-1. The EAC decided to defer the proposal.

20.5.4 **Set up ammonia plant of 1550 MTPD capacity based on surplus Synthesis gas (approx. 1,15,000 Nm3 per hour) available from the existing Lurgi FBDB (Fixed Bed Dry Bottom) Coal Gasification Plant at Angul by M/s Jindal Steel & Power Ltd. – [IA/OR/IND2/61858/2017, IA-J-11011/27/2017-IA-II(I)] -TOR reg.**

The PP made a presentation and informed that:

1. JSPL proposes to install synthesis gas based ammonia plant with capacity of 1550 TPD. The project proposal is based on utilization

	of surplus synthesis gas available from existing CGP. 2. Synthesis gas flow rate of 1.15, 000 Nm^3/hr is required for the proposed Ammonia Plant. 3. Estimated project cost of the proposed plant- Rs. 1900 Crores. 4. Estimated time of completion of the project is 36 months from the start of construction. 5. The project will reduce the import of Ammonia to some extant, thereby resulting in national savings. 6. The proposed project will be located in the existing plant premise, no additional land will be required. 7. Brahmani River is flowing at 35 km distance from the plant. 8. Solid wastes generation like spent catalysts, spent resins, activated carbons, etc. Spent catalyst shall be stored, handled as per Hazardous Rules, 2016 and sent back to manufacturers for recovery of metals. Spent resins & activated carbon be utilized in secured land filling. Effluents shall be taken to existing Guard pond of power plant. Wastewater from DM plant shall be treated locally, transferred to same guard pond and treated in the existing ETP for reuse. 9. Proposed Ammonia Storage facility is 1 x 10000 MT & 1X5000 MT. 10. Water requirement for the proposed project is 446 m3/hr. This water will be sourced from the already allocated 66.16 cusec (6700 m3/hr) surface water from Brahmani River by Water Resource Deptt., Govt of Odisha to the existing Integrated Steel & Power project. 11. The existing STP outlet is being used for maintenance of green belt after proper disinfection. The effluents generated from DM Water Plant, Cooling Tower blow down and other effluents shall be treated in existing integrated ETP and used for ash disposal. Thus, Zero effluent discharge concept have been adopted in the existing integrated steel & power plant of JSPL at Angul. 12. Solid waste in the form of service boiler ash around 12800 Kg/hr shall be integrated with the existing Ash Handling Facility of CGP. The hazardous waste in the form of spent catalyst to the tune of 550 MT in 4 - 5 years shall be disposed off through CPCB approved recyclers and Hazardous & other waste (Management & Trans-boundary Movement) rules, 2016. Construction material and plant equipment shall be transported through existing road, rail and sea route. The handling, storage & use of hazardous materials will be carried out as per best available standard practices to prevent contamination of land or water. 13. The proposal does not attract the provisions of Forest (Conservation) Act,1980, wildlife (Protection)Act,1972 and C.R.Z notification,2011? 14. No litigation pending against the project and/or land in which the project is proposed to be set up. 15. The broad provision of plant and facilities to be made for the proposed project are presented below.

Sr. No.	Plants & Facilities	Provisions
1	Ammonia Plant	1550 MTPD
2	Condensate Polishing Unit	200 m3/hr
3	Service Boiler for steam generation	300 MTPH
4	Ammonia Storage Facility	1 x 10,000 MT + 1 x 5000 MT
5	Steam Turbo Generator	2.5 MW
6	Safety & Fire Fighting System including fire water ring with Hydrant System	Provided & shall be integrated with JSPL's existing facility
7	Effluent Treatment Facility	Provided & shall be integrated with JSPL's existing ETP
8	Railway Siding	2 x 5 Km (Existing)
9	Ammonia Rakes	2 nos. consisting of 35 wagons each along with 2 engines

The EAC was of the view that sub-committee should visit site to see the actual site conditions from environmental angle permitting the feasibility of setting up fertilizer project.

The EAC decided to defer the proposal.

20.5.5 **Expansion & Modernization of existing project for manufacturing of explosives and defense products at Village – Chakdoh Near Bazargaon, Tahsil - Katol, Dist. Nagpur-440 023 by M/s Solar Industries India Limited- [IA/MH/IND2/61877/2017, IA-J-11011/28/2017-IA-II(I)]- TOR reg.**

The PP made a presentation before the EAC and informed that:

1. The proposal fall under Category 'A' and item no. 5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs) of the EIA Notification, 2006.
2. No litigation pending against the project.
3. The proposal does not attracts the provisions of Forest (Conservation)Act,1980 wildlife (Protection)Act,1972 and C.R.Z notification,2011.
4. The project cost is 18401lacs.
5. The existing D.G. sets 2x 380 KVA, 1x 400 KVA and 1x 600 KVA = 1760 KVA and proposed 1x300 KVA hence total capacity 2060 KVA. The DG sets as a standby arrangement.
6. Total Cost of Project**:**Rs. 184.01 Crore .
7. Water requirement: Source: Groundwater within plant area. Existing water requirement: 646 KLD. Proposed additional water requirement: 234 KLD

8. Total water requirement after expansion: 880 KLD. Project area: Presently 273.910 acres land area is under possession.
9. The industry has been obtained contract demand for 2000 KVA by MSEDCL.The present power requirement of the plant is met from connected power supply of 2350 KW. Additional power requirement of 1000 KW will be sourced from the MSEDCL grid.

DG sets with capacity(KVA)	
Existing	Proposed addition
2 x 380	1x300
1 x 400	
1x 600	
Total=1760 + 300=2060KVA	

10. Existing and Proposed products with their Capacities are provided in following four tables based on their units and respective consent.

Table-I (Product Units are in Million Nos./Annum)

Sr. No.	Name of products	Existing capacity Per Annum	Consent (Water/Air/HW) vide no. 1612001045 Dated 30/12/2016	Proposed Additions Per Annum	Total Capacity after Expansion Per Annum Proposed EC capacity
1.	DETONATORS (FINISHED)	125	125	Nil	125
2.	FILLING / PRESSING FOR FILLED SHELL (CAPTIVE)	63	63	Nil	63
3.	GI / CU WIRE COATING	90	90	Nil	90

Table-II (Product Units are in Million Meters/Annum)

Sr. No.	Name of products	Existing capacity Per Annum	Consent (Water/Air/HW) vide no. 1612001045 Dated 30/12/2016	Proposed Additions Per Annum	Total Capacity after Expansion

					Per Annum Proposed EC capacity
1.	DETONATING FUSE	75	75	75	150

Table-III (Product Units are in M.T./Annum)

Sr. No.	**Name of products**	**Existing capacity Per Annum**	**Consent (Water/Air/HW) vide no. 1612001045 Dated 30/12/2016**	**Proposed Additions Per Annum**	**Total Capacity after Expansion Per Annum Proposed EC capacity**
1.	SLURRY EMULSION EXPLOSIVES (FINISHED)	100000	1,00,000	56,250	1,56,250
2.	SORBITAN MONO OLEATE (SMO) (C & F)	9162	9162	Nil	9162
3.	POLY ISO BUTYLENE SUCCINIC ANHYDRIDE (PIBSA) C & F	6000	6000	Nil	6000
4.	PETN -(PENTA ERITHRITOL TETRA NITRATE) I & C & F	2062.5	2062.5	937.5	3000
5.	PENTOLITE / CAST BOOSTER (FINISHED)	1875	1875	1125	3000
6.	CALCIUM / SODIUM	3600	3600	Nil	3600

	NITRATE MELT (CAPTIVE)				
7.	DUST SUPPRESSANT (FINISHED)	1000	1000	Nil	1000
8.	LEAD AZIDE (CAPTIVE)	9	9	Nil	9
9.	LEAD STYPHANATE (CAPTIVE)	3	3	Nil	3
10.	ASA MIXING & DRYING (CAPTIVE)	12	12	Nil	12

Table-IV (Product Units are in M.T./Annum)

Sr. No.	**Name of products**	**Existing capacity Per Annum**	**Consent to Establish (Water/Air/HW) vide no. 7819 Dated 15/06/2016**	**Proposed Additions Per Annum**	**Total Capacity after Expansion Per Annum Proposed EC capacity**
1.	CYCLOTETRA METHYLENE TETRA NITRAMINE-HMX & HMX COMPOUNDED PRODUCT	62.5	62.5	237.5	300
2.	RDX AND RDX COMPOUNDED PRODUCT	Nil	125	2875	3000
3.	BULK EMULSION	Nil	Nil	125,000	125,000
4.	TNT	Nil	625	2375	3000
Proposed Boiler					
1.	COAL FIRED BOILER	12 TPH			

The EAC noted that some of the chemical compounds which are being manufactured in the plant are synthetic organic chemicals. The EAC enquired about the applicability of the EIA Notification, 2006 to the

existing unit, the PP could not provide the satisfactory clarification about the same. The EAC suggested to provide a copy of the consent to operate order issued by the concerned State Pollution Control Board after enforcement of EIA Notification, 2006.

The EAC decided to defer the proposal till the information is submitted.

20.5.6 **Proposed Bulk Drugs And Bulk Drug Intermediates Manufacturing Unit of M/s. PGC DRUGS PVT. LTD. Plot No. 6104/6, GIDC Industrial Estate, Ankleshwar, Tal: Ankleshwar, Dist: Bharuch-393002, Gujarat- [IA/GJ/IND2/62239/2017, IA-J-11011/30/2017-IA-II(I)]- TOR reg.**

The PP made a presentation before the EAC and informed that:

(i) The project involves proposed bulk drugs and bulk drug intermediates manufacturing unit Plot No. 6104/6, GIDC Industrial Estate, Ankleshwar, Tal: Ankleshwar, Dist: Bharuch-393002, Gujarat by M/s PGC Drugs Pvt. Ltd.

(ii) The products along with Production Capacity:-

Sr. No.	Product	Proposed Quantity (MT/Month)
Group-1		
1	4-Sulfonamido Phenyl Hydrazine Hydrochloride	20
2	4,4,4-trifluoro-1-[4-(methyl)phenyl]-butane-1,3-dione	
3	4-[5-(4-Methylphenyl)-3-(trifluoro methyl) pyrazol-1-yl]benzenesulfonamide **Celecoxib**	
4	4 Chloro Phenyl Hydrazine	
5	7-(1,3-Dioxolan-2-ylmethyl)-1,3-dimethyl purine-2,6-dione **Doxofylline**	
Group-2		
6	2-(*tert*-Butylamino)-1-(3-chlorophenyl)	10

		propan-1-one **Bupropion hydrochloride**	
	7	6-Methyl pyridine-3 yl-2,4-Methylsulfonyl phenyl Etanone (**Ketosulfone**)	
	8	5-Chloro-6'-methyl-3-[4-(methylsulfonyl)phenyl]-2,3'-bipyridine **Etoricoxib** and It's Intermediates	
	9	2-(2-Fluorobiphenyl-4-yl)propanoic acid **Flurbiprofen** and It's Intermediates	
	10	Benzamide 5-chloro-N-[2-[4-[(cyclohexylamino)carbonyl] amino]sulfonyl]phenyl]ethyl]-2-metoxy **Glibenclamide** and It's Intermediates	
	11	Dibenzo[b,f][1,4]Thiazepin-11(10H)-One	
	12	2-[2-(4-dibenzo [b,f] [1,4]thiazepin-11-yl-1-piperazinyl)ethoxy]-ethanol **Quetiapine fumarate** and It's Intermediates	
	Group-3		
	13	*N*-{2-[4-(aminosulfonyl)phenyl]ethyl}-3-ethyl-4methyl- 2-oxo-2,5-dihydro-1*H*-pyrrole-1-carboxamide **[Glimepiride Sulphonamide]**	5
	14	3-Ethyl-4-methyl-N-[2-(4-{[(trans-4-methylcyclohexyl) carbamoyl]sulfamoyl}phenyl)ethyl]-2-oxo-2,5-dihydro-1H-pyrrole-1-carboxamide **Glimepiride** and It's Intermediates	
	15	m-Hydroxy-alpha-(methylaminomethyl) benzyl alcohol **Phenyl ephrine hydrochloride** and It's Intermediates	
	16	3-ethyl 5-methyl 2-[(2-aminoethoxy)methyl]-4-(2-chlorophenyl)-	

		6-methyl-1,4-dihydropyridine-3,5-dicarboxylate **Amlodipine besylate** and It's Intermediates	
	Group-4		
	17	10,11-dihydro- 10-oxo- 5*H*-dibenz(b,f)azepine-5-carboxamide **Oxcarbazapine**	30
	18	2, 3-Dibenzoyl-D-tartaric acid (DBDT)	
	19	p Anisic Alcohol	
	20	2-Chloro-1,3-bis (dimentylamino)trimethinium hexafluorophosphate)	
	Group -5		
	21	5-Bromo-*N*-(4,5-dihydro-1H-imidazol-2-yl) quinoxalin-6-amine **Brimonidine tartrate** and It's Intermediates	10
	22	(S)-N-{(3, 4-Dimethoxy benzocyclobut-1-yl)}-N-(methyl)]-N-(methyl) amine **Ivabradine** and It's Intermediates	
	23	Trifluoro Methyl Cinnamic Acid	
	24	((R)-N-[1-(1-naphthyl)ethyl]-3-[3-(trifluoromethyl) phenyl]propan-1-amine **Cinacalcet hydrochloride** and It's Intermediates	
	25	1-{4-[2-Isopropoxy ethoxy)methyl] phenoxy}-3-(isopropylamino) propanol **Bisoprolol fumarate** and It's Intermediates	
	26	5-Methyl-1-phenylpyridin-2(1H)-one **Pirfenidone** and It's Intermediates	

27	Ursodeoxycholic acid and It's Intermediates	
Total		**75**

(iii) **Water Requirement, Waste Water Generation and Treatment -** Source of water will be met through GIDC Water Supply. Total water requirement will be 39 m^3/day. Total 27.9 m3/day (23.9 m^3/day Industrial + 4.0 m^3/day domestic) of effluent shall be generated, 23.3 m^3/day = low COD stream will be treated in ETP then sent it to CETP, Ankleshwar and 0.6 m^3/day = High COD stream will be neutralized then sent it to Common MEE for further treatment.

(iv) **Air Pollution Source and Control Management -** The source of air pollution due to the project will be Flue gas emission & Process Vents.

(v) **Green Belt -** Company will developed an effective green belt within the factory and on periphery of the factory. In addition to this, majority of the vacant land shall be planted with trees, shrubs and grasses.

(vi) **Fuel:-**

Sr. No.	**Fuel**	**Fuel Quantity**
1	Natural Gas	4,200 NM^3/Day
2	Agro waste	10 MT/Day
3	HSD	20 Liters/Hr

(vii) **Energy:** 500 KVA from DGVCL and 1 DG Set = 250 KVA for emergency only.

(vii) The total costs of the project will Rs. 5 Crore. Capital cost of air & water pollution control system and environmental monitoring equipments will be Rs. 50 Lakh.

The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website:

i. Layout plan with 10 m wide green belt of perennial trees like neem, seasam, teak etc. around plant periphery to be submitted.

	ii. Zero Liquid Discharge (ZLD) system shall be implemented. iii. Land allotment letter issued by MIDC Ankleshwar, Gujarat to be submitted. iv. No ground water shall vbe used. v. Public hearing is exempted under Public hearing was exempted as per section 7(i), (iii) Stage (3), Para (i)(b) of EIA Notification, 2006, being the project site located in notified industrial area.
20.5.7	**Drilling of 10 exploratory wells in Nohta-Damoh-Jabera PML Block, Vindhyan Basin, Damoh District, Madhya Pradesh by M/s ONGC Ltd. – [IA/MP/IND2/62262/2017, IA-J-11011/31/2017-IA-II(I)]- TOR reg.** The PP made a presentation before the EAC and informed that: 1. The project proponent informed followings:- 2. The project involves drilling of 10 exploratory wells in Nohta-Damoh-Jabera PML Block, Vindhyan Basin, Damoh District, Madhya Pradesh by M/s ONGC Ltd. 3. Nohta-Damoh-Jabera PML Block in Son Valley, Vindhyan Basin, located in the state of Madhya Pradesh, has been awarded to Oil & Natural Gas Corporation Ltd by Govt. of India for a period of 7 years with validity up to 09.02.2022, with a minimum work commitment of drilling at least seven exploratory wells within the block which measures 1150 km2.The PML Block has been carved out from the erstwhile Damoh-Jabera-Katni nomination PEL Block where ONGC has made a number of gas discoveries having sub-commercial flow rates. The mandate for the 7-year PML period is to establish the commerciality of the gas discoveries by drilling additional exploratory / appraisal wells and complete assessment of the gas reserves. 4. The present request for granting Environmental Clearance pertains to drilling of ten (10) exploratory wells in the State, which is way forward of the present exploration efforts. These wells have beenplanned to explore a number of newly identified prospective locales through drilling of Cluster based deviated / vertical wells to target the promising fractured tight gas reservoirs in the sub-surface. Detailed geological and geophysical studies, including both 3D and 2D-seismic mapping have been carried out to identify these locations, keeping inmind the results of previously drilled wells. Initially, four cluster based deviated wells are to be completed as pilot wells for which environmental clearance already exists. Simultaneously, new 3D seismic data is being acquired adjacent to the existing 3D seismic area in the block. Based on the result of initial pilot wells and API of new 3D data in the area, additional 10 exploratory locations are likely to be subsequently released.

5. Successful completion of this project is expected to establish the commerciality of hydrocarbon reserves (total envisaged inplace gas volume~40 BCM) and in turn augment thehydrocarbon production of the country. The proposed exploratory wells will be drilled in compliance with all existingHealth, Safety, Environment and Pollution control norms.

6. The ten exploratory locations proposed for Environmental Clearance are located within the state of Madhya Pradeshand can be grouped under two broad categories: two (2) wells to be drilled from one (1) surface clusters and eight (8) standalone wells. Thus, environmental clearance is proposed for 10 locations. All locations lie within the administrative boundaries of Damoh district all fall in non-forest areas. It is expected that the proposed drilling activities in Nohta-Damoh-Jabera PML Block in Madhya Pradesh will lead to the establishment of commerciality and proper assessment of the tight gas reserve potential in this part of Vindhyan Basin. This, in turn, will facilitate firming up of the development strategy for the early monetization of the discovered gas pools and favourably help the country to meet the daunting challenge of ever increasing hydrocarbon demand.

7. Coordinates of 10 locations to be drilled in Nohta-Damoh-Jabera PML are as under:

Sl. No.	**Location**	**Surface Co-ordinates Lat. / Long. (WGS-84)**	**Target Depth of well (m)**	**Land Type**
1	R-NA-K	23°43‘11.34"N 79°30‘02.54"E	~2350	Forest Land
2	R-NA-L-A	23°38'25.93"N 79°32'21.98"E	~2450	Forest Land
3	R-NA-L-B	23°38'25.93"N 79°32'21.98"E	~2450	Forest Land

	4	R-NA-M-A	23°39‘51.43"N 79°36‘51.46"E	~2590	Forest Land
	5	R-NA-M-B	23°39‘51.43"N 79°36‘51.46"E	~2850	Forest Land

The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of standard TOR as available on the Ministry website along with Public Hearing as per provisions of the EIA Notification, 2006.

20.5.8 **Drilling 5 exploratory wells in Nohta-Damoh-Jabera PML Block, Vindhyan Basin, Damoh District, Madhya Pradesh by M/s ONGC Ltd. –IA/MP/IND2/62265/2017, IA-J-11011/32/2017-IA-II(I)]- TOR reg.**

The PP made a presentation before the EAC and informed that:

(i) The project involves drilling 5 exploratory wells in Nohta-Damoh-Jabera PML Block, Vindhyan Basin, Damoh District, Madhya Pradesh by M/s ONGC Ltd.

(ii) The present request for granting Environmental Clearance pertains to drilling of five (5) exploratory wells falling in open / reserve forest areas in the State, which is way forward of the present exploration efforts. These wells have been planned to explore a number of newly identified prospective locales through drilling of Cluster based deviated/vertical wells to target the promising fractured tight gas reservoirs in the sub-surface. Detailed geological and geophysical studies, including both 3D and 2D-seismic mapping have been carried out to identify these locations, keeping inmind the results of previously drilled wells. Initially, four cluster based deviated wells are to be completed as pilot wells for which environmental clearance already exists. Simultaneously, new 3D seismic data is being acquired adjacent to the existing 3D seismic area in the block. Based on the result of initial pilot wells and API of new 3D data in the area, additional 5 exploratory locations are likely to be subsequently released.

(iii) Successful completion of this project is expected to establish the commerciality of hydrocarbon reserves (total envisaged inplace gas volume~40 BCM) and in turn augment thehydrocarbon production of the country. The proposed exploratory wells will be drilled in compliance with all existingHealth, Safety, Environment and Pollution control norms.

	(iv) The five (5) exploratory locations proposed for Environmental Clearance are located within the state of Madhya Pradesh and can be grouped under two broad categories: four (4) wells to be drilled from two (2) surface clusters (2 wells from each cluster in different directions) and one (1) standalone well. Thus, environmental clearance is proposed for 5 locations. All locations lie within the administrative boundaries of Damoh district. (v) It is expected that the proposed drilling activities in Nohta-Damoh-Jabera PML Block in Madhya Pradesh will lead to the establishment of commerciality and proper assessment of the tight gas reserve potential in this part of Vindhyan Basin. This, in turn, will facilitate firming up of the development strategy for the early monetization of the discovered gas pools and favourably help the country to meet the daunting challenge of ever increasing hydrocarbon demand. (vi) Exploratory drilling of these wells is temporary and of short duration and includes site preparation, well foundation, rig building, drilling and restoration of the well site. These activities take approximately 6 months per well under normal conditions. Drilling Rig is used which involves rotation of drill bit attached to long string of drill pipes down the well. Water Based Drilling mud is pumped through the string which returns to annulus, this cools the drill bit while cutting and removes the cuttings from the well. The drilling mud is reused as much as possible. At the end of drilling operations, the residual unusable mud is collected in lined pits and solar evaporated. (vii) The domestic sewage will be treated in septic tanks followed by soak pit system. The solid waste generation is limited to spent drill bits, packaging waste and used containers, drill cuttings and waste oil. The only hazardous waste generated in exploratory drilling operations is spent lube oil. The spent oil will be collected, stored and disposed as per the MoEFCC guidelines and in compliance to the hazardous waste (handling and management) rules. All DG sets will be installed with adequate stack heights to ensure wider dispersion. Emission standards stipulated by CPCB and SPCB would be complied with. The noise level will not exceed 85 dB beyond the boundary of drill site. Personal protective equipment will be provided and their proper use will be ensured for the protection of workers. (viii) ONGC is a prominent E&P company of the country. The rising population and consequent increase in demands on petroleum and petroleum products puts lot of pressure on the government despite its best efforts, the country has to import oil from the international market. It is expected that the proposed drilling activities in PML Nohta-Damoh-Jabera Block will favorably help the country to meet

this daunting challenge.

The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of standard TOR as available on the Ministry website along with Public Hearing as per provisions of the EIA Notification, 2006.

20.5.9 **Proposed Dyes & Dyes Intermediates, Pigments, Specialty Chemicals & Pesticide Intermediaes unit of M/s. Alps Chemicals Pvt. Ltd. Location: Plot No. DP-102/103, GIDC Saykha, Taluka: Vagra, District: Bharuch, Gujarat- [IA/GJ/IND2/62303/2017, IA-J-11011/33/2017-IA-II(I)]- TOR reg.**

The PP made a presentation before the EAC and informed that:

i) The project involves Proposed Dyes & Dyes Intermediates, Pigments, Specialty Chemicals & Pesticide Intermediaes unit at Plot No. DP-102/103, GIDC Saykha, Taluka: Vagra, District: Bharuch, Gujarat by M/s Alps Chemicals Pvt. Ltd.

(ii) The list of Products Along With Production Capacity:

Sr. No.	Name of Product	Proposed Capacity
Dyes		
Acid Dyes		**500 MT/Month**
1	Acid Black 1	
2	Acid Black 52	
3	Acid Black 63	
4	Acid Black 71	
5	Acid Black 84	
6	Acid Black 107	
7	Acid Black 172	
8	Acid Blue 158	
9	Acid Brown 75	
10	Acid Brown 161	
11	Acid Brown 165	
12	Acid Brown 355	
13	Acid Brown 425	
14	Acid Brown 432	
15	Acid Brown 434	
16	Acid Green 104	
17	Acid Orange 74	
18	Acid Orange 142	
19	Acid Red 97	
20	Acid Red 357	
21	Acid Violet 90	
22	Acid Yellow 42	
23	Acid Yellow 59	

	24	Acid Yellow 194	
Direct Dyes			
	1	Direct Black 40	**1000 MT/Month**
	2	Direct Black 168	
	3	Direct Blue 71	
	4	Direct Green 26	
	5	Direct Orange 15	
	6	Direct Orange 118	
	7	Direct Red 81	
	8	Direct Red 239	
	9	Direct Red 254	
	10	Direct Violet 9	
	11	Direct Violet 35	
	12	Direct Yellow 11	
	13	Direct Yellow 44	
Reactive Dyes			
	1	Reactive Black B	**250 MT/Month**
	2	Reactive Red-195	
	3	Reactive Golden Yellow-145	
	4	Reactive Golden Yellow Her	
	5	Reactive Orange H2R	
		Reactive Blue	
	6	Blue 3R	
	7	Blue F4R	
	8	Blue HERD	
	9	Blue 221	
	10	Blue HEGN	
	11	Blue LFNG	
	12	Blue BF	
	13	Blue BFN	
	14	Blue 2B	
		Reactive Golden Yellow	
	15	Golden Yellow R	
	16	Golden Yellow RNL	
		Reactive Navy Blue	
	17	Navy Blue 2G	
	18	Navy Blue XLE	
	19	Navy Blue RGB	
Disperse Dyes			
	1.	**Azo Dyes**	
	a.	Yellow Dyes	
	b.	Orange Dyes	
	c.	Red Dyes	
	d.	Blue Dyes	

	e.	Violet Dyes	**500 MT/Month**
	f.	Green Dyes	
	g.	Black Dyes & Mixtures	
	2.	**Anthraquinones/Condensed Dyes**	
	a.	Yellow Dyes	
	b.	Orange Dyes	
	c.	Red Dyes	
	d.	Blue Dyes	
	e.	Violet Dyes	
	f.	Green Dyes	
	g.	Black Dyes & Mixtures	
	3.	**Cyanation Dyes**	
	a.	Yellow Dyes	
	b.	Orange Dyes	
	c.	Red Dyes	
	d.	Blue Dyes	
	e.	Violet Dyes	
	f.	Green Dyes	
	g.	Black Dyes & Mixtures	
	Solvent Dyes		
	1	Solvent Blue 35	**50 MT/Month**
	2	Solvent Blue 104	
	3	Solvent Blue 122	
	4	Solvent Green 3	
	5	Solvent Orange 60	
	6	Solvent Orange 86	
	7	Solvent Red 52	
	8	Solvent Red 135	
	9	Solvent Red 168	
	10	Solvent Red 195	
	11	Solvent Red 207	
	12	Solvent Violet 13	
	13	Solvent Violet 14	
	14	Solvent Yellow 33	
	15	Solvent Yellow 157	
	16	Solvent Yellow 163	
	17	Solvent Orange 58	
	18	Solvent Red 127	
	19	Solvent Black 27	
	Dye Intermediates		
	1	H Acid	
	2	J Acid	
	3	6 Nitro 1-Diazo, 2-Naphthol, 4-Sulphonic Acid	
	4	Vinyl Sulphone	
	5	Pyrazolones	

a.	2:5 Dichloro 4 Sulpho Phenyl 3 Methyl 5 Pyrazolone	**250 MT/Month**
b.	2 Chloro 5 Sulphophenyl 3 Methyl 5 Pyrazolone	
c.	1,3 Sulpho Phenyl 3 Methyl 5 Pyrazolone	
d.	1,4 Sulpho Phenyl 3 Methyl 5 Pyrazolone	
e.	1:3 Phenyl Methyl 5 Pyrazolone	
Pigments		
1	Activated CPC Blue	**500 MT/Month**
2	CPC Blue	
3	Alpha Blue (15:0 and 15:1)	
4	Pigment Beta Blue (15:3)	
5	Pigment Beta Blue (15:4)	
6	Copper Phthalocyanine Pigment Green-7	
7	Pigment Violet 23	
8	Pigment Red 122	
9	Pigment Violet 19	
10	Solsperse 5000	
11	Carbazole	
Speciality Chemicals		
1	2,4-Dichloro Phenyl Acetic Acid	**200 MT/Month**
2	2,4-Dichloro Phenyl Acetyl Chloride	
3	2,4,6-Trimethyl Phenyl Acetyl Chloride	
4	2,3,4,5-Tetrachloro Benzoyl Chloride	
5	3,4,5 Trimethoxy Benzyl Chloride	
Pesticide Intermediates		
1.	2-Amino Benzo Nitrile	**100 MT/Month**
2.	2-Amino-5-Bromo Benzo Nitrile	
3.	2,4,6-Trimethyl Benzaldehyde	
4.	Indoline	
5.	5-(1-Carboxy Ethyl)-2-(Phenylthio)Phenyl Acetic Acid	
	TOTAL	**3350 MT/Month**

	(iii) The total Land requirement is 52,000 sq. meters. (iv) Fuel to be used - Coal = 50 T/Day, Diesel/Gas = 8.4 KL/Day (v) Source of Water & Consumption - Water requirement for the project will be met through GIDC Water Supply. Water Consumption (Total): 1184 KL/Day (vi) Quantity of industrial effluent generation and domestic wastewater generation - Domestic: 12 KL/Day, Industrial effluent: 981 KL/Day (vii) Power requirement & source - Power required from DGVCL is 1000 KVA. D.G. set: 1000 KVA (Stand by) (viii) The Total Cost of the Project is ` 125 Crore. Capital cost of air & water pollution control system and environmental monitoring equipments will be ` 15 Crore. The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website: i. Layout plan with 10 m wide green belt of perennial trees like neem, seasam, teak etc. around plant periphery to be submitted. ii. Zero Liquid Discharge (ZLD) system shall be implemented. iii. Public hearing to be conducted as per provisions of the EIA Notification, 2006.
20.5.10	**Proposed Bulk Drug and Bulk Drug Intermediates manufacturing Unit by M/s Vasoya Industries Pvt. Ltd. at Plot No. A2/N-59, Eakta Industrial Estate, TempaGali, N.H. 8, Pipodara, Tal: Mangrol, Dist: Surat (Guj.)-TOR reg. [IA/GJ/IND2/62304/2017, IA-J-11011/34/2017-IA-II(I)]** The PP made a presentation before the EAC and informed that: (i) The project involves proposed Bulk Drug and Bulk Drug Intermediates manufacturing Unit by M/s Vasoya Industries Pvt. Ltd. at Plot No. A2/N-59, Eakta Industrial Estate, Tempa Gali, N.H. 8, Pipodara, Tal: Mangrol, Dist: Surat, Gujarat. (ii) The total Land requirement is 1500 sq. meters. (iii) The Total water requirement will be 33.5 m^3/day which is met through ground water supply. (iv) The waste water generations will 21.6 m3/day. The effluent will be treated in ETP consists of primary treatment then it will be sent to common MEE of M/s. ACPTCL, Ankleshwar for further treatment and disposal. Domestic Waste water will be disposed by septic tank & soak pit. (v) Power required is 150 KVA, Source : DGVCL, D.G. Set = 150 KVA (It will be kept for emergency power back up). (vi) The total cost of the project is ` 800 Lakh.

(vii) **GASEOUS EMISSION:**

FLUE GAS EMISSION

Sr. No.	Stack Attached to	Stack Height in meter	APCM	Parameter	Expected Pollutants
1.	Boiler (1.5 MT/Hr)	15	-	SPM SO2 NOX	150 mg/Nm^3 262 mg/Nm^3 94 mg/Nm^3
2	DG Sets (150 KVA)	8	-	SPM SO2 NOX	150 mg/Nm^3 262 mg/Nm^3 94 mg/Nm^3

PROCESS EMISSION

Sr. No.	Stack Attached to	Stack Height in meter	APCM	Parameter	Expected Pollutants
1.	Reaction Vessels (1/R-101 2/R-202)	11	Scrubber	NH3	175 mg/Nm^3
2.	Reaction Vessel (3/R-303)	11	Scrubber	HCl	25 mg/Nm^3

(viii) The list of products along with Production Capacity:

S. No.	NAME OF PRODUCTS	DRUG TYPE	PROPOS QUANTI (MT/Mon
	Group-A (APIs)		
1	Eslicarbazepine Acetate	Anti -Epiletic	10
2	Oxcarbazepine	Anti -Epiletic	
3	Dapoxetine Hydrochloride	Anti- Depressant	
4	Dobutamine Hydrochloride	Cardiac Drug	
5	Edaravone	Anti Oxidant	
6	Flupirtine Maleate	Anti Parkinsonian Agent	
7	Topiramate	Anti- Convulsant	
8	Levosulpirride	Antagonist	
9	Metaxalone	Muscle Relaxant	
10	Metoprolol Succinate	Anti Hypertensive	
11	Modafinil	Cns Stimulant	

12	Dexmethylphenidate	Cns Stimulant		
13	Quetiapine Fumarate	Anti Psychotic		
14	Carbamazepine	Epilepsy		
15	Rivaroxaban	Anticoangulant		
16	Betahistine dihydrochloride	Anti-vertigo		
17	Flurbiprofen	Anti Inflammatory		
18	Aripiperazole	Bipolar Disorder		
	Group-B (API Intermediates)			
19	N-(2-methyl-5-nitrophenyl)guanidine Nitrate		15	
20	3-dimethylamino-l-pyridin-3-ylpropenone			
21	(2-methyl-5-nitrophenyl)-(4-pyridin-3-ylpyrimidin-2-yl)amine			
22	1-(2-(2-Hydroxyethoxy)ethyl piperazine (HEEP)			
23	3-(Dimethylamino)propiophenone hydrochloride			
24	N,N-Dimethyl-3-phenyl-3-hydroxypropylamine			
25	N,N-Dimethyl-3-(2-methylphenoxy)-3-phenylpropylamine oxalate			
26	3-Dimethylamino-1-(2-thienyl)-1-propanone hydrochloride			
27	N,N-Dimethyl-3-hydroxy-3-(2-thienyl)-1-propylamide			
28	N,N-Dimethyl-3-(1-naphthoxy)-3-(2-thienyl)-1-propylamine oxalate			
29	10-Methoxy Iminostilbene			
	Total		25	

The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website:

i. Layout plan with 10 m wide green belt of perennial trees like neem, seasam, teak etc. around plant periphery to be submitted.
ii. Zero Liquid Discharge (ZLD) system shall be implemented.
iii. Public hearing to be conducted as per provisions of the EIA Notification, 2006.

20.5.11 **Proposed Bulk Drugs And Bulk Drug Intermediates Manufacturing Unit of M/s. SIGMA LIFE SCIENCE Plot No. 1032/16, Phase II, GIDC Industrial Estate, Panoli, Tal: Ankleshwar, Dist: Bharuch, (Guj.) – [IA/GJ/IND2/62310/2017, IA-J-11011/35/2017-IA-II(I)- TOR reg.**

The made a presentation before the EAC and informed that:

(i) The project proponent involves proposed bulk drugs and bulk drug intermediates manufacturing unit of Plot No. 1032/16, Phase II,

GIDC Industrial Estate, Panoli, Tal: Ankleshwar, Dist: Bharuch, (Guj.) by M/s Sigma Life Science.

(ii) The products along with Production Capacity:-

Sr. No.	Product	Proposed Quantity (MT/Month)
Group-1		
1	4-Sulfonamido Phenyl Hydrazine Hydrochloride and It's Intermediates	20
2	4,4,4-trifluoro-1-[4-(methyl)phenyl]-butane-1,3-dione and It's Intermediates	
3	2 Amino Phenyl phenyl Sulfide and It's Intermediates	
4	Dibenzo[b,f][1,4]Thiazepin-11(10H)-One	
5	2-Chloro-1,3-bis(dimentylamino)trimethinium hexafluorophosphate and It's Intermediates	
6	m Chloro Nitro benzene	
7	m Bromo Nitro benzene	
8	2,3-Dibenzoyl-D-tartaric acid	
9	4 Methyl Acetophenone	
Group-2		
10	*N*-{2-[4-(aminosulfonyl)phenyl]ethyl}-3-ethyl-4-methyl-2-oxo-2,5-dihydro -1*H*-pyrrole-1-carboxamide and It's Intermediates	10
11	3-Ethyl-4-methyl-N-[2-(4-{[(trans-4-methyl cyclohexyl)carbamoyl] sulfamoyl} phenyl)ethyl]-2-oxo-2,5-dihydro-1H-pyrrole-1-carboxamide	
12	2,4 Difluoro Benzylamine and It's Intermediates	
13	P Methoxy Phenyl Acetonitrile and It's Intermediates	
14	3-Trifluoromethyl Cinnamic Acid and It's Intermediates	
15	Ethyltrifluoro Acetate	
Group-3		
16	Bupropion Hydrochloride and It's Intermediates	5
17	Doxofylline and It's Intermediates	
Total		**35**

(iii) Water requirement will be met through GIDC Water Supply. Total water requirement will be 15.8 m^3/day. Total 11.7 m3/day (9.7 m^3/day Industrial + 2.0 m^3/day domestic) of effluent shall be generated, 3.9 m^3/day = low COD stream will be treated in ETP then sent it to CETP, Panoli for further treatment & disposal and 5.8 m^3/day = High TDS stream will be neutralized then sent it to Common Spray Dryer for further treatment & disposal.

(iv) **Air Pollution Source and Control Management -** The source of air pollution due to the project will be Flue gas emission & Process Vents.

DETAILS OF FLUE GAS EMISSION THROUGH STACK ATTACHED TO BOILER

SR. NO.	TYPE OF STACK	PARTICULAR	STACK HEIGHT (M)	STACK DIAMETER (M)	AIR EMISSION		FUEL	APCM
					POLLUTANT	CONC.		
1.	Thermic Fluid Heater (2 Lac Kcal)	STACK-1	30	0.6	PARTICULATE MATTER SO_2 NO_X	≤ 150 MG/NM^3 ≤ 100 PPM ≤ 50 PPM	Agro Waste	Multi cyclone Separator with Bag Filter
2.	Steam boiler(1 TPH)						Agro Waste	
3.	D G Set	STACK	11	0.5			HSD	--

DETAILS OF PROCESS EMISSION THROUGH VARIOUS VENTS

SR. NO.	TYPE OF STACK	AIR POLLUTION CONTROL SYSTEM	HEIGHT (M)	AIR EMISSION	
				POLLUTANT	CONC.

	1.	Process Vent	Two Stage Scrubber	12.5	HCL SO_2 HBR NH3	≤ 20 MG/NM^3 ≤ 40 MG/NM^3 ≤ 5 MG/NM^3 ≤ 175 MG/NM^3

(v) **Green Belt -** Company will develop an effective green belt within the factory and on periphery of the factory. In addition to this, majority of the vacant land shall be planted with trees, shrubs and grasses.

(vi) **Power & Fuel Requirements - FUEL:** Bio-Coal = 90 MT/Month (Proposed), HSD = 20 Liter/Hr
ENERGY: 250 KVA from DGVCL, 100 KVA = D G Set in emergency only

(vii) The total costs of the project will ` 2.5 Crore. Capital cost of air & water pollution control system and environmental monitoring equipments will be ` 40 Lakh.

The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website:

i. Zero Liquid Discharge (ZLD) system shall be installed.
ii. Public hearing to be conducted as per provisions of the EIA Notification, 2006.

20.5.12 **Proposed production of Active Pharmaceutical Ingredientsin the existing plant at Plot No. 67, SIPCOT Industrial Complex, Ranipet, Navlock Village, WalajahTaluk, Vellore district, Tamil Nadu by M/s. Malladi Drugs and Pharmaceutical Limited- [IA/TN/IND2/62324/2017, IA-J-11011/36/2017-IA-II(I)]- TOR reg.**

The PP made a presentation before the EAC and informed that:

(i) The project involves proposed production of Active Pharmaceutical Ingredients in the existing plant at Plot No. 67, SIPCOT Industrial Complex, Ranipet, Navlock Village, WalajahTaluk, Vellore district, Tamil Nadu by M/s Malladi Drugs and Pharmaceutical Limited.

(ii) The increase production capacity of Ephedrine hydrochloride from **0.34 MT/day to 1.4 MT/day.** The proposed increase in production capacity will fall under Schedule 5 (f) of the EIA Notification 2006. The existing facility is located within a notified industrial area/estate i.e. Ranipet Industrial Area, Vellore which comes under CEPI moratorium as per CPCB hence attracts general conditions of EIA notification 2006 & treated as Category 'A' project, requires prior Environmental Clearance from the Ministry of Environment,

	Forests & Climate Change (MoEFCC). (iii) The unit has employed 170 persons and the expansion will be carried out within the existing site area of 107255.75 Sq.m. Raw materials for the process will be sourced from indigenous sources by truck. (iv) The Total water requirement is increased from 345 KLD to 367 KLD. Water will be sourced from SIPCOT. (v) Power requirement is increased from 670 KVA to 970 KVA will be sourced from Tamilnadu Electricity Board (TNEB). (vi) Fuel requirement for DG Set (500 KVA) will be HSD & and it's around 80 lit/hr will be sourced locally. (vii) The process involves fermentation, hydrogenation, Purification, re-crystallization and centrifugation to produce the API. The emission from the boilers will be treated through wet scrubbers and Dust collectors. The emission from DG set will be discharged through adequate height of stack. Effluent generated from the process, vessel washing etc. is treated in the Effluent treatment plant operating with ZLD concept. The used oil, spent solvent, discarded containers will be disposed to authorised recyclers. (viii) M/s Malladi Drugs and Pharmaceutical has obtained Valid Consent to Operate under Air and Water from Tamil Nadu Pollution Control Board. (ix) The estimated cost of the proposed expansion project is about ` 23.7 Crores. (x) There is no national park, wildlife sanctuaries located in 10 km radius of the project site. Water bodies near the project site are Vanapadi Lake at a distance of 0.81 km in the northern direction and Palar River at 3.2 km in the southern direction. The project site is well connected with NH-4 which is adjacent to the project site and Walajah Railway station at 4.8 km in North north East direction. (xi) Inspection of regular storage drums and cans, readiness of fire fighting system, clear access to the raw material storage, and elimination of all sources of ignition around the storage area, equipment and pipelines carrying flammable substances will ensure safe work environment. (xii) Hazards are identified as Fire and explosion hazards due to storage of toxic chemicals and handling. Safeguards include usage of non-sparkling tools, preventive maintenance schedules providing PPE, provision of fire fighting system. Chemicals storage on impervious floor, proper exhausts ventilation, and storage of chemicals based on compatibility, display of MSDS, etc., (xiii) Emergency preparedness plan include rapid central and containment of the hazardous situation, minimizing the risks and impact of events/accidents and effective rehabilitation of the affected persons and prevention of damage to properties. The EAC noted the project location is falling under identified Critically Polluted Area. The PP informed that the moratorium is in place in the CPA. The EAC asked the PP to submit the letter from SPCB concerned. A

	copy of the valid CTO issued by concerned SPCB to be submitted. The EAC decided to defer the proposal till the requsite information is submitted to the Ministry.
20.5.13	**Expansion of 30 KLPD distillery unit to 60 KLPD based on latest fermentation and atmospheric distillation technology to produce alcohol from cane molasses by M/s SamarthaSahakariSakharKarkhana Ltd AnkushnagarTah. Ambad, Dist. Jalna,, State – Maharashtra. [IA/MH/IND2/62325/2017, IA-J-11011/37/2017-IA-II(I)]- reg.** The PP was not present. The EAC decided to defer the proposal.
20.5.14	**Bulk Drugs & Intermediates Manufacturing unit at Sy. No: 109, Jayanthipuram (Village), Jaggayyapet (Mandal), Krishna (District), Andhra Pradesh by M/s Sarvani Labs Private Limited- [IA/AP/IND2/62366/2017, IA-J-11011/38/2017-IA-II(I)]- TOR Reg.** The PP made a presentation before the EAC and informed that: (i) The project involves Bulk Drugs & Intermediates Manufacturing unit at Sy. No: 109, Jayanthipuram (Village), Jaggayyapet (Mandal), Krishna (District), Andhra Pradesh by M/s Sarvani Labs Private Limited. (ii) The products and capacities

TABLE: PROPOSED PRODUCTS AND QUANTITIES

S. No	Name of the Product	Quantity In Kg/Month	Quantity In Kg/Day
1	Closantel Amine(Intermediate of Closantel Sodium)	3000	100.00
2	Closantel Sodium	2000	66.67
3	Niclosamide	1000	33.33
4	Rafoxanide	1000	33.33
5	Triclabendazole	2000	66.67
Total		**9000**	**300.00**

(iii) The total land area of the unit is 2.93 Acres /11843.0 SQM.
(iv) **RAW MATERIAL**:

1. CLOSANTEL AMINE (INTERMEDIATE OF CLOSANTEL BASE)

S.No.	Raw Material	Consumption / Batch in Kgs	Consumption/ Day in Kgs

1	4-Chloro -1-methy -2-nitro - benzene	62.00	41.33
2	Para Chloro Benzyl Cyanide	55.00	36.67
3	Methanol	500.00	333.33
4	Sodium sulfide	28.20	18.80
5	Sodium bicarbonate	30.50	20.33
6	Potassium hydroxide	10.00	6.67
7	Toluene	500.00	333.33

2. CLOSANTEL SODIUM

S. No.	Raw Material	Consumption/ Batch in Kgs	Consumption/ Day in Kgs
1	4-Chloro -1-methy -2-nitro -benzene	56.00	28
2	Para Chloro Benzyl Cyanide	50.00	25
3	Methanol	1000.00	500
4	Sodium sulfide	26.00	13
5	Sodium bicarbonate	28.00	14
6	Potassium hydroxide	10.00	5
7	Toluene	1100.00	550
8	2-hydroxy -3,5-diiodo-benzoic acid	121.00	60.5
9	Phosphorus trichloride	43.00	21.5
10	Sodium Hydroxide	50.00	25
11	Activated carbon	5.00	2.5
12	Hyflow	3.00	1.5

3. NICLOSAMIDE

S. No.	Raw Material	Consumption/ Batch in Kgs	Consumption/ Day in Kgs
1	5-Chloro Salicylic Acid	115.00	19.17
2	Thionyl chloride	77.50	12.92
3	Mono Chloro Benzene	1100.00	183.33
4	2-Chloro 4-Nitro aniline	110.00	18.33

4. RAFOXANIDE

S. No.	Raw Material	Consumption/ Batch in Kgs	Consumption / Day in Kgs
1	Iodine	97.00	16.17
2	Chlorine gas	27.00	4.50
3	Salicylic acid	50.00	8.33

4	MDC	1000.00	166.67
5	1,2 –Di chloro -4-nitro-benzene	75.00	12.50
6	4-chloro -phenol	50.22	8.37
7	Potassium hydroxide	22.00	3.67
8	Methanol	500.00	83.33
9	Iron powder	20.45	3.41
10	Hydrochloric acid	10.00	1.67
11	Toluene	1500.00	250.00
12	Phosphorus trichloride	47.55	7.93
13	Acetone	500.00	83.33
14	Acetic acid	20.00	3.33

5. TRICLABENDAZOLE

S. No.	Raw Material	Consumption/ Batch in Kgs	Consumption/ Day in Kgs
1	3,4-Di chloro-phenyl amine	120.00	40.00
2	Acetic anhydride	76.00	25.33
3	Nitric acid	45.00	15.00
4	Potassium hydroxide	40.00	13.33
5	2,3-Di chloro -phenol	110.50	36.83
6	Toluene	500.00	166.67
7	Methanol	3100.00	1033.33
8	Hydrogen	1.50	0.50
9	Raney nickel	10.00	3.33
10	Carbon di sulfide	46.90	15.63
11	Sodium hydroxide	95.50	31.83
12	Ethyl acetate	500.00	166.67
13	Di methyl sulphate	82.50	27.50

(v) **Water Consumption Details**

S. No	Purpose	Water Input KLD
1	Process	3.00
2	Washings	0.50
3	Boiler make up	18.00
4	Cooling towers make up	12.00
5	Scrubber	0.50
6	Domestic	1.50
7	Gardening	3.00
	Total	**38.50**

(vi) The total project cost for the proposed project is ` 6.38 Crores, construction activities will be started after getting statutory clearance form related authorities. The project will be completed

	within two years. The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website: i. Layout plan with 10 m wide green belt of perennial trees like neem, seasam, teak etc. around plant periphery to be submitted. ii. Zero Liquid Discharge (ZLD) system shall be implemented. iii. Public hearing to be conducted as per provisions of the EIA Notification, 2006.
20.5.15	**Pesticides industry and pesticide specific intermediates (excluding formulations) Proposed Production Capacity: 2469 MT/month. Byproductscapacity : 5837 MT/ month at Plot no- K-2/1/2, Additional MIDC Mahad , Mahad, Raigad, Maharashtra by M/s Sanjivani Paranteral Limited. [IA/MH/IND2/62425/2017, IA-J-11011/40/2017-IA-II(I)]** The PP made a presentation before the EAC and informed that: (i) The project involves pesticides industry and pesticide specific intermediates (excluding formulations) Proposed Production Capacity: 2469 MT/month, By products capacity: 5837 MT/month at Plot no. - K-2/1/2, Additional MIDC Mahad, Mahad, Raigad, Maharashtra by M/s Sanjivani Paranteral Limited. (ii) The total plot area is 11975 Sq. m. The built up area is 5938.93 sq. m. (iii) The Green Belt Area is 1975 Sq. m. (iv) The Proposed Production Capacity is 2469 MT/month. Byproducts capacity is 5837 MT/ month. (v) The proposed water requirement is 728.5 CMD. The source of water is Additional MIDC, Mahad. (vi) The total 93.3 CMD effluent is generated from process containing 11 CMD from manufacturing process, 65 CMD cooling tower blow down and 17.1 CMD boiler blow down. (vii) The Total 93.3 CMD effluent will be treated in 100 CMD evaporator. (viii) The Sewage generation is 3.6 CMD. (ix) The STP capacity is 5 CMD. (x) The power requirement of project is proposed power demand - 2 MVA, Proposed connected load - 1.5 KW, Source: MSEDCL. (xi) Boiler details - Proposed **–** 1 boiler: 10 TPH steam capacity, 1 Thermic fluid heater- 15 Lakh Kcal capacity. (xii) D. G. Sets - 500 KVA * 2 nos. (Proposed D.G Set). (xiii) Fuel requirements - Boiler: 34 MT/d coal/ briquettes, Thermic fluid heater: 7 MT/d coal/briquette or 4 MT/d FO, D.G. set: 1000 L/day HSD.

	(xiv) Stack height - Boiler: 39 m, Thermic fluid heater: 32 m, D.G. set: as per CPCB guidelines, Scrubber : 5m above roof. (xv) The EMP cost is ` 284 Lakh. (xvi) The total project cost is ` 3542 Lakh. (xvii) CSR Plan - Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment. Socio-economic development activities will be conducted in the surrounding area. The EAC noted the submissions made by the PP and after detailed deliberations recommended the project for grant of following additional TOR along with standard TOR as available on the Ministry website: i. Layout plan with 5 m wide green belt of perennial trees like neem, seasam, teak etc. around plant periphery to be submitted. ii. Zero Liquid Discharge (ZLD) system shall be implemented. iii. Public hearing to be conducted as per provisions of the EIA Notification, 2006.
20.5.16	**Manufacturing of Pharmaceutical Formulations in Keron Life sciences Pvt. Ltd. At Plot No- D-5, Sara Industrial Estate Rampur, Dehradun, Uttarakhand M/s Keron Life sciences Pvt. Ltd. [IA/UK/IND2/62753/2017; IA-J-11011/57/2017-IA-II(I)]-TOR-reg.** The PP made a presentation before the EAC and informed that: i. The project category is B2 falling under Doon Valley. The unit situated at Plot No- D-5, Sara Industrial Estate, Rampur, Dehradun, Uttarakhand is a well-defined and developed industrial area in Tehsil of Vikas Nagar and District of Dehradun at a distance of 28Km west of Dehradun on National Highway No 72 to Chandigarh. ii. The total land area for project is 2000 m 2 in which (33%) will used for green belt. iii. M/s Keron Life sciences Pvt. Ltd; proposes to manufacture Pharmaceutical formulations such as Tablets, Capsules, Ointment, Liquid Oral, Dry Powder, Herbal and Cosmetic & Food. C. Need for the Project & Importance to the Country The Proponent has expertise in the manufacture of above medicines. There is a growing demand for the pharmaceutical products internationally as well as in the domestic market. A need has therefore been felt to establish the unit for manufacturing. iv. With this proposed project direct employment generation of40persons will be there in worker/supervisor/ managerial category. Indirect generation of employment will also be there in way of contractors, transportation, suppliers, other service

	providers with continues chain of employment. v. The details of products and quantity to be produced is given as under:

Sr. No.	Items of Manufacture/ Type of Service	Quantity/year/No.
1	TABLETS & CAPSULE	20 Crore Nos
2	OINTMENT	20qtl
3	LIQUID ORAL	50 KL
4	DRY POWDER	10 MT
5	HERBAL COSMETIC & FOOD	200MT

vi. Total Power requirement is 300 KVA and will be met from Uttarakhand electricity board, also DG set of 250 KVA is proposed. DG set shall be used at the time of power failure only.

vii. Water requirement in industrial process shall be 8 KLD which will be met from bore wells. Water required for domestic consumption shall be around 7 KLD, most of this shall be met from recycling of treated effluent.

viii. Effluent Treatment Plant is proposed for industrial waste. Capacity of ETP shall be 10 KLD.

ix. Solid waste generated from sludge drying beds of ETP shall be disposed to TSDF as per the norms of State Pollution Control Board. 2. Used oil shall be disposed to authorized recycler. 3. Expired drugs shall be disposed as per HWM rule R regulation.

The EAC observed that the products unit will produce formulation products; hence does not attract the provisions of EIA Notification, 2006.

20.6 <u>Any Other:</u>

20.6.1	**Expansion of Bulk and Intermediates Manufacturing (from 15 TPM to 421 TPM) at Sy. No. 404,405, 407, 408,409 & 410 at Village Veliminedu, ChityalMandal, District Nalgonda, Telangana by M/s Dasami Lab Pvt. Ltd. (formerly known as Medchem Organics Pvt. Ltd.) [IA/TG/IND2/61214/2016, J-11011/57/2016-IA II (I)] -Amendment in TOR –reg.** The PP informed that TOR has been recommended in April, 2016 EAC meeting. Formal letter of the Ministry has not been received by the PP. Now the instant proposal is for seeking amendment in TOR recommended by the EAC in its meeting held on 1.04.2016 due to change in lay out plan. The only change is the change in Layout. There would be no Increase in land area and no change in survey numbers of land area. It was also informed that the changed lay out plan will have provision for development of minimum 9 m peripheral

	green belt inside the plant. The PP also requested for name change from Medchem Organics Pvt. Ltd. to M/s Dasami Lab Pvt. Ltd. The requisite documents for the name change have been submitted. The EAC noted the submissions made by the PP and accepted the proposed amendment for change in lay out plan subject to development minimum 9m peripheral green belt with perennial trees like neem, seasom, teak etc.
20.6.2	**Expansion of Petrochemical and synthetic organic chemicals manufacturing facility at Plot No. T-2, MIDC Taloja, Tehsil Panvel, District Raigad, Maharashtra by M/s I G Petrochemicals Ltd. (IGPL).- [IA/MH/IND2/50347/2016, J-11011/73/2016- IA II(I)] - TOR Amendment - reg.** The PP informed that the their proposal for grant of TOR was considered in the 7th EAC meeting and TOR were granted vide letter No. J-11011/73/2016-IA II (I) dated 21st June 2016. The instant proposal has been submitted for seeking following amendments in the TOR prescribed vide letter dated 21st June, 2016: **1) Change in Products/Production/By product Quantity as applied for:** The changes in Products/Production/By product Quantity from that at the time of ToR is summarized as given below :

Name of Product	**Quantity (for which TOR granted), MTPA**	**Name of Product**	**Changed Quantity, MTPA**
PA manufacturing division		**PA manufacturing division**	
Phthalic anhydride	53, 000	Phthalic anhydride	53, 000
By product Benzoic acid (recovery from effluent & residue)	500	By product Benzoic acid (recovery from effluent & residue)	500
Plasticizer manufacturing		**Plasticizer manufacturing**	

division		**division**	
Di-Octyl phthalate (DOP)	62,500	Di-methyl phthalate (DMP)	12,600
Di-isooctyl phthalate (DIOP)			
Di-isononyl phthalate (DINP)			
Di-Decyl phthalate (DIDP)			
Di-Butyl phthalate (DBP)		Di-ethyl phthalate (DEP)	
Di-Iso butyl phthalate (DIBP)			
Di-methyl phthalate (DMP)			
Di-ethyl phthalate (DEP)			
By products		**By products**	
Sodium sulphate	900	Sodium sulphate	900
Phthalic acid	800	Phthalic acid	800
		Monoester salt	3000

During process of manufacture DEP &DMP, monoesters are formed which we wish to include in as a byproduct.

2) Change in Fuel Consumption as applied for during ToR:

At the time of ToR, we had applied for two new Boilers of 20 TPH based on Coal (72 TPD) and Furnace Oil (33 TPD). However, now we will be installing one boiler of 20 TPH capacity based on Furnace Oil 33 TPD only. This is due to reduction of production quantity of Plasticizer plants.

3) Specific ToR point no. (ii) and Additional TOR Point no (ii): Detailed plan for Water Conservation including reuse and recycling and plan for zero liquid discharge:

We are examining the techno-economic feasibility of achieving zero liquid discharge and shall revert back to you at the time of final EIA.

4) Additional TOR point no. iv ETP should be independent without mixing effluent from other campus:

IGPL (IG petrochemicals Ltd) and MPCL (Mysore Petrochemicals Ltd) are neighbouring units belonging to same Management in MIDC

	Taloja. IGPL is a manufacturer of Phthalic anhydride - which it manufactures by oxidation of o-Xylene. The off gases during manufacturing process are scrubbed. Scrubbed effluent and distillation residues from the plant are taken for recovery of Benzoic acid. After recovery of Benzoic acid, the scrubber effluent is taken for recovery of Maleic anhydride in neighbouring MPCL plant. The scrubber effluent after MA recovery is sent back for reuse in IGPL in scrubber. Other effluents generated such as column washings are sent to IGPL for treatment in ETP. The PP also requested not to insist for separate ETP for IGPL and MPCL and permit combined treatment of effluents on the following grounds : > IGPL and MPCL have provided combined ETP for last more than 24 years.This has been informed to MPCB and MOEFCC. Indeed. This point has been duly recorded in the Environmental clearances granted by MOEFCC in the past for our expansion project of both IGPL and MPCL. MPCB Consent to operate given to both units duly record the fact that effluent from MPCL is jointly treated in IGPL ETP and disposed off to CETP through IGPL ETP. We thus fail to understand why separate ETPs be installed now. Copy of EC given to IGPL plant for our last expansion PA-III project is enclosed as Annexure IVand Annexure V copy of CTO given to IGPL and MPCL is given in Annexure VI and VII respectively. > Recently (on 9th November 2016), our Board of Directors has approved merger of two companies i.e. "IG Petrochemicals Limited" at Plot T-2, MIDC Taloja and "Mysore Petrochemicals Limited" at Plot T-l, MIDC Taloja and combined entity will be named as "IG Petrochemicals Limited". Board of Directors resolution for the merger is attached as Annexure VIII. > This merger will be enforced wef 01st April 2017. Thus, the site will go under one flagship company viz IG Petrochemicals Ltd. The EAC noted the submissions made by the PP and after detailed deliberations recommended the amendments proposed at Sr. No. 1) about change in Products/Production/By product Quantity & 2) about Change in Fuel Consumption as applied for during ToR above subject to installation of ZLD system; whereas the EAC was not agreed to the amendment requested about installation of separate ETP.

20.6.3	**Expansion of Petrochemical manufacturing facility by adding Maleic anhydride (MAN) (1,160 MTPA) at Plot No. T-1, MIDC Taloja, Tehsil Panvel, District Raigad, Maharashtra by M/s Mysore Petrochemicals Ltd.- [IA/MH/IND2/50477/2016, IA/MH/IND2/50477/2016] -TOR Amendment reg.** The PP made a presentation before the EAC and informed that: The Ministry has issued TOR vide letter No. J-11011/73/2016-IA II (I) dated 21st June 2016, for the proposed expansion of IGPL. The PP requested for amendment in " *Additional TOR Point no iii: ETP should be independent without mix from other campus*" in the TOR letter issued by the Ministry on 21st June 2016, for the proposed expansion of IGPL on following grounds: 1) IGPL and MPCL have provided combined ETP for last more than 24 years. This has been informed to MPCB and MOEFCC. Indeed, this point has been duly recorded in the Environmental clearances granted by MOEFCC in the past for our expansion project of both IGPL and MPCL. MPCB Consent to operate given to both units duly record the fact that effluent from MPCL is jointly treated in IGPL ETP and disposed off to CETP through IGPL ETP. We thus fail to understand why separate ETPs be installed now. 2) Recently (on 9th November 2016), our Board of Directors has approved merger of two companies i.e. "IG Petrochemicals Limited" at Plot T-2, MIDC Taloja and "Mysore Petrochemicals Limited" at Plot T-1, MIDC Taloja and combined entity will be named as "IG Petrochemicals Limited". 3) This merger will be enforced wef 01st April 2017. Thus, the site will go under one flagship company viz IG Petrochemicals Ltd The EAC noted the submissions made by the PP; however the EAC unanimously rejected the amendments made by the PP and directed for strict adherence to the TOR presecribed by the Ministry.
20.6.4	**Manufacturing Bulk Drugs (APIs) at Sy.No.147, Ramalingampally (V) Bommalaramaram(M), Yadadri District, Telangana State by M/s Auric Life Sciences. [IA/TG/IND2/29985/2006, J-11011/412/2007-IA.II(I)]- Amendment in EC reg.** The PP made a presentation before the EAC and requested for following amendments in the informed that: 1. Installation the additional 2 nos of 4TPH coal fired boilers to meet

	the steam requirements of ETP-ZLD with additional 2 nos. of 500 KVA DG sets for standby power supply. 2. Addition land of 1.21 Ha. (Total land 2.82 Ha.) Purchased adjacent to the existing industry. The EAC deliberated on the proposal and recommended the above amendments subject to strict compliance EC conditions. It was also recommended that additional land will only be used for installation of ZLD system and development of 33 % peripheral green belt inside the plant boundary.
20.6.5	**Expansion of purified Terephthalic Acid (PTA) plant by M/s MCC PTA India Corp. Private Limited at village and PO Bhauniaraichak, Tehsil Sutahata in district Purba Midnapore in West Bengal Ms. MCC PTA India Corp. Private Limited –- [IA/WB/IND2/59822/2006 , J-11011/139/2006- IA II (I)] - Amendment in EC reg.** The PP was not present in the meeting. The EAC decided to defer the proposal.
20.6.6	**Isolated LPG storage facility (2x16,00MT) at Bharana Village, Gujrat by M/s Petro Tankages India Limited- [IA/GJ/IND2/31651/2014, J-11011/347/2014/1A II(I)]- Amendment in TOR reg.** The PP was not present. The EAC decided to defer the proposal.
20.6.7	**Bulk Drug Manufacturing Unit at Kongavanipalem (V), Bhogapuram (M), Vijayanagaram District of Andhra Pradesh by M/s Divi's Laboratories Limited - [IA/AP/IND2/26830/2015, J-11011/48/2015-IA II (I)]- Amendment in TOR reg.** The PP was not present. The EAC decided to defer the proposal.
20.6.8	**Proposed Phenol Formaldehyde Resin, Melamine Formaldehyde Resin & Urea Formaldehyde Resin manufacturing at Survey No. 341/P, Village Chiyada in BavlaTaluka of Ahmedabad District, Gujarat by M/s Panara Laminate Pvt. Ltd.- [IA/GJ/IND2/27524/2015, J-11011/112/2015-IA II (I)] - Correction in TOR** The PP was not present. The EAC decided to defer the proposal.
20.6.9	**Expansion of Bulk Drugs Manufacturing Unit (Unit-VI) of M/s Symend Labs (formerly Known as Plasma Labs (P) Ltd.), at Sy. Nos. 750, 753/1, 753/2 & 753/4, Villages Mandollagudem & Chinnakondur, Mandal Choutuppal, District Nalkonda, Telangana- [IA/TG/IND2/27307/2014, J-11011/290/2013 - IA II (I) - Amendment in TOR reg.**

	The PP informed that the proposal has been recommended in January, 2016. The formal letter of the Ministry has not been received. The EAC recommended to the Ministry to check the records and take action accordingly.
20.6.10	**Additional onshore exploratory drilling of 20 wells in PEL block L-II District Tiruvarur, Nagapatnam,Pudukkotai,Tanjavur in Tamilnadu by M/s Oil And natural Gas Corporation Ltd.- [IA/TN/IND2/26873/2013, J-11011/246/2011-IA II(I)]- Amendment in TOR-reg.** The PP informed that the proposal has been recommended in January, 2016. The formal letter of the Ministry has not been received. The EAC recommended to the Ministry to check the records and take action accordingly.
20.6.11	**Exploratory Drilling of Additional two wells in PEL Block L-II located in District Tanjavur,Tamilnadu by M/s Oil And natural Gas Corporation Ltd.- [IA/TN/IND2/26876/2013, J-11011/276/2013-IA II(I)] -Amendment in TOR** The PP informed that the proposal has been recommended in January, 2016. The formal letter of the Ministry has been received. The EAC recommended to the Ministry to check the records and take action accordingly about deletion of proposal from the website of the Ministry.
20.6.12	**One well B-CY-EOT-1 in onshore PEL Block II in Cauvery Basin, Tamilnadu by M/s ONGC Ltd. [IA/TN/IND2/26878/2014, j-11011/2/2011-IA II(I)]** The PP informed that the proposal has been recommended in 3rd EAC meeting held in January, 2016. The formal letter of the Ministry has not been received. The EAC recommended to the Ministry to check the records and take action accordingly about deletion of proposal from the website of the Ministry.
20.6.13	**Drilling of Exploratory Wells (09 Nos.) in Kutch Offshore, GK-OSN-2010/1 & GK-OSN-2010/2 in West Coast of India by M/s ONGC Ltd. [IA/MH/IND2/27324/2013, J – 11011/106/2015 – IA II (I)]-**

Amendment in EC reg.

The PP informed that the proposal has already been recommended and formal letter has been received from the MoEF&CC in this regard.

20.6.14 **Expansion of Drug Manufacturing Unit (from 655.40 MTPM to 1480 MTPM) at Block No. 21, Village Dabhasa, Taluka Padra, District Vadodara, Gujarat by M/s. Lupin Limited.- [IA/GJ/IND2/33141/2015; J-11011/131/2012-IA II (I)] Corrigendum/ Amendment in EC reg.**

Ministry had issued EC vide letter no. J-11011/131/2012-IA II (I) dated 4th February 2015 for Expansion of Drug Manufacturing Unit (from 655.40 MTPM to 1480 MTPM) at Block No. 21, Village Dabhasa, Taluka Padra, District Vadodara, Gujarat.

Now PP is requesting for the following Corrigendum/amendment in environmental Clearance.

1. Following amendment in name of the products, by-products and quantity of by-products.

Product List:

Sr. No. as Per EC	Product Name in EC	Amendment required in Product Name (as mentioned in EIA report)
1.	1-(3-Chlorophenyle)-4-(3-Chloropropyle) Piperazine Hydrochloride	1-(3-Chlorophenyl)-4-(3-Chloropropyl) Piperazine Hydrochloride
2.	1-[4-Chlorophenyl) (Phenyl) Methyl] Piperazine	4-Chlorobenzhydryl Piperazine
3.	1-Chloro-4-[Chloro (Phenyl) Methyle] Benzene	4-Chlorobenzhydryl Chloride
4.	(4-chlorophenyl) (Phenyl) Methanol	4-Chlorobenzhydrol
9.	4-imino-3-amino Rifamycin-s	Imino Rifamycin-s
27.	Pentoprazole Sodium	Pantoprazole Sodium Sesquihydrate

29.	Levofloxacin	Levofloxacine Hemihydrate
53.	Omeprazole Magnesium	Omeprazole
41.	Rivastigmine	Need to be removed from product List
60.	Sertraline Hydrochloride	
79.	Nabumetone	

By-Product List:

Sr. No. as Per EC	By-Product as per EC	Qty. (T/A)	Amendment required in By-Product as mentioned in EIA report on page no. 60		Qty. (T/A)
6	Manganese Dioxide	1785	-	-	-
10	Ammonium Salts	424	1	Ammonium Sulphate	415
9	Sodium Salts	6918	2	Sodium Salts (NaBr, NaCl, Na_2SO_3)	3634
7	Piperazine + Water	1667	3	Piperazine Liquor	68
8	Potassium Salts	3575	4	Potassium Salts (KBr, KCl)	1567
11	Diammonium Tartarte	800	5	Diammonium Tartarate	928
12	2,3- Dichloro 5,6-Di Cyano Benzoquinol	440	6	Acetic Acid	158
			7	Palmitic Acid	89
	Total	**15609**		**Total**	**6858**

2. In specific condition No. xiv it is stated that, "As proposed, process organic residue and spent carbon 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."

   Amendment required: *"As proposed, process organic residue and spent carbon shall be sent to* ***co-processing / incineration.*** *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." As proposed in EIA report on page no. 229 to 231. 3. In specific condition no. xvii, it is stated that "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." ***Amendment required: Condition need to be removed***. As we have proposed Furnace Oil as a fuel for proposed boilers in EIA report (page no. 225, 226 and 229 to 231) and hence fly ash will not be generated. After deliberation, the Committee recommended the aforesaid amendments in existing EC.
20.6.15	**Bulk Drug Manufacturing unit at Village Bikanoor, Nizamabad, Telangana by M/s Virupaksha Organics Pvt. Ltd.- IA/TG/IND2/61014/2014; J-11011/208/2011-IA II(I)- Amendment and Name change of EC reg.** Ministry had issued Environmental Clearance to Ms. Virupaksha Organics Pvt. Ltd vide letter No.J-11011/208/2011-IA II (I) dated 07th January, 2014 for Bulk Drug Manufacturing Unit at Sy. No. 544 to 546, village & Mandal Bikanoor, District Nizamabad, Andhra Pradesh. The application for name change has been submitted to the Ministry from Ms. Virupaksha Organics to M/s. MSN Life Sciences Private Ltd. The PP further informed that the present proposal submitted online is for following amendments in existing Environmental clearance:- 1. Addition of land *14.16 Ha in the existing land area of 12.5 Ha. .* 2. Installation of additional 2X14 TPH capacity coal fired boiler. After deliberation, the Committee recommended the aforesaid amendment in existing EC subject to the condition that: Imported coal with sulphur content less than 0.5% shall be used.
20.6.16	**Expansion of Sugar Cane Crushing Capacity (10,000 TCD to 20,000 TCD), Co-generation Power Plant (from 44 MW to 75 MW) & Molasses based Distillery (from 75 KLPD to 200 KLPD) at**

	Village Ugar Khurd, Taluka Athani, District Belgaum, Karnataka by M/s The Ugar Sugar Works Ltd.- IA/KA/IND/4173/2012; J-11011/315/2012-IA-II(I)- reconsideration of EC The PP was not present during the meeting. The EAC decided to defer the proposal.
20.6.17	**Extension Drilling & Testing of Hydrocarbons at 7 (seven) locations under Dibru- Saikhowa National Park Area, North-West of Baghjan PML, District Tinsukia, Assam by M/s Oil India Ltd.- IA/AS/IND2/57862/2016; J-11011/150/2016- IA II(I)- Amendment in TOR reg** The PP made a presentation and informed that: i. The MOEF&CC has granted TOR to the above proposal for preparation of EIA/EMP report on 3rd August, 2016 along with conduct of public hearing. ii. The MoEF&CC granted EC earlier for drilling of 26 no. development and 15 no. Exploratory wells in district Tinsukia, Assam vide F.No. J-11011/1255/2007/-IA.II (I) dated 01.11.2011. The elaborated public hearings were conducted for Tinsukia district on 08.07.2011 and 26.08.2011. iii. The PP requested that they may be allowed to use the earlier public hearing details conducted on 08.07.2011 and 26.08.2011 for Tinsukia district, in which the instant proposal falls. The EAC after detailed deliberations accepted the request made by the PP and recommended for exemption from public hearing under Para 7 (ii) of the EIA Notification, 2006.
20.6.18	**Proposed expansion of existing unit at Jhagadia Industrial Estate, Dist. Bharuch, Gujarat by M/s UPL Ltd. (Unit-V)— [IA/GJ/IND2/27263/2015, F.No. J-11011/80/2015-IA-II(I)]- Environment Clearance.** The PP informed that the proposal was considered in 17th EAC meeting held during 8th – 9th December, 2016 wherein the EAC deferred the proposal for want of following additional information: 1. Latest certified compliance report from concerned RO, MoEF&CC. 2. Minutes of the Public Hearing conducted for the project. The PP informed that since the project is located in notified industrial estate the Ministry vide letter no. J-11011/80/2015-IA.II (I) dated

31.08.2015 amended the TOR prescribed vide letter no. J-11011/80/2015-IA.II (I) dated 13th July, 2015 and provided exemption from public consultation. The PP submitted a copy of the certified compliance report of RO, Bhopal issued vide letter no. dated 5-204/2008 (ENV)/ dated 28.09.2016. The EAC examined the compliance status report and found satisfactory.

The PP vide letter dated 18.01.2017 requested for following modifications in the minutes of the 16th EAC meeting held during 8th – 9th December, 2016:

Sr. No. in the minutes of 16th EAC meeting	**Description in MOM of 16th EAC meeting**	**Modifications requested**
iii	The total land area is 866373.98 m2, out of which 25% area of 2,19089.5 m2 will be developed as green belt.	The factory comprises of two plots # 746 (4,81,345.98 m2) and plot #750 (404940.44 m2) with total area of 8,86,286.42 m2 as per final EIA report. 25% of the area i.e., 2,21571.61 m2 area will be developed as green belt.
vii	Additionally, PP informed the Committee that ambient air quality monitoring was carried out at 9 locations during 1st February, 2015 to 31st May, 2015 and submitted baseline data which indicates that max. ranges of concentrations of PM10 (54 to 138 µg/m3), PM2.5 (43-58 µg/m3), SO2 (8-42µg/m3) and NOx (8-54 µg/m3), respectively, which are within the NAAQS. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.82 µg/m3 , 0.08 µg/m3 and 0.17 µg/m3 with respect to PM ,So2 and NO2 . The	Unit wants to have correction in the max ranges of concentration of PM10, SO2 and NOX as per final EIA report as mentioned below: PM10 (83- 138 µg/m3) PM 2.5 (43-58 µg/m3) SO2 (31-42 µg/m3) NOX (31-54 µg/m3)

	resultant concentrations are within the NAAQS.	
xiv	Spent filter material, spent catalyst shall be sent to CHWIF. Spent solvent will be sold to the recyclers/incineration.	Spent solvent is not generated and it is not shown in final EIA report
xv	Contaminated cotton waste, insulation waste, non recyclable plastic waste, used PPE and incineration ash shall be sent to the TSDF.	Insulation waste, non recyclable plastic waste, used PPE, and incineration ash shall be sent to TSDF BUT contaminated cotton waste shall be sent to TSDF/incineration site.
The water consumption will be reduced from 17,000 kl/day to 10,000 kl/day.		

The EAC examined the facts and documents submitted by the PP and accepted the above corrections as requested by the PP.

After detailed deliberation EAC decided to recommend the proposal for grant of environmental clearance subject to compliance of following specific and other general environmental conditions:

i) National Emission Standards for Pesticide Manufacturing and Formulation Industry issued by the Ministry vide G.S.R. 46(E) dated 3rd February, 2006 and amended time to time shall be followed by the unit.

ii) NG/imported coal with less than 5% sulphur content/Biomass/briquettes shall be used as fuel source for One no. new boiler of 150 TPH. Two stage water scrubbers with 30 m stack height shall be provided for control of process emissions of ammonia, HCL and SO2 emissions separately.

iii) Two stage water scrubber followed by alkali scrubber shall be provided to process vent to control process emissions viz. HCl, SO2, Cl2, NOx, HBr. Acidic scrubber shall be provided to process vent to control process emissions viz. NH3 & HC. The scrubbed water should be sent to ETP for further treatment. Efficiency of scrubber shall be monitored regularly and maintained properly. Scrubbers vent shall be provided with on-line detection and alarm system to indicate higher than permissible value of controlled parameters. At no time, the emission levels shall go beyond the prescribed standards. The system should be interlocked with the pollution control equipment so that in case of any increase in pollutants beyond permissible limits, plant should be automatically stopped.

iv) In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions

	shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored and records maintained. v) For further control of fugitive emissions, following steps shall be followed : (a) Closed handling system shall be provided for chemicals. (b) Reflux condenser shall be provided over reactor. (c) System of leak detection and repair of pump/pipeline based on preventive maintenance. (d) The acids shall be taken from storage tanks to reactors through closed pipeline. Storage tanks shall be vented through trap receiver and condenser operated on chilled water. (e) Cathodic protection shall be provided to the underground solvent storage tanks. vi) A proper Leak Detection and Repair (LDAR) Program for pesticide unit shall be prepared and implemented as per CPCB guidelines. Focus shall be given for prevention of fugitive emissions for which preventive maintenance of pumps, valves, pipelines are required. Proper maintenance of mechanical seals of pumps and valves shall be given. A preventive maintenance schedule for each unit shall be prepared and adhered to. vii) Company shall take all the measures in order to protect the machineries and equipments for pesticide producing unit from ageing. viii) Continuous monitoring system for chlorine, HCl as well as VOCs shall be installed at all important places/areas. Effective measures shall be taken immediately, when monitoring results indicate above the permissible limits. Alarm for chlorine leakage if any in the liquid chlorine storage area is provided along with automatic start of the scrubbing system. ix) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. x) Solvent management shall be carried out as follows : i. Chilled brine circulation system shall be provided to condensate solvent vapors and reduce solvent losses. It shall be ensured that solvent recovery should not be less

	than 95%. ii. Reactor and solvent handling pump shall have mechanical seals to prevent leakages. iii. The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery iv. Solvents shall be stored in a separate space specified with all safety measures. v. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. vi. Entire plant shall be flame proof. The solvent storage tanks should be provided with breather valve to prevent losses. xi) Fresh water demand after the proposed expansion should be limited to 17,000 kl/day to 10,000 kl/day and prior permission should be obtained from the competent authority. xii) Industrial effluent generation shall not exceed 183.5 m3/day. As proposed, effluent shall be segregated into cyanide stream and High TDS/COD effluent streams. Cyanide effluent stream will be treated with sodium hypochlorite in alkaline medium. High TDS/COD effluent stream will be passed through steam stripper followed by concentrated in MEE. MEE condensate will be treated in the ETP. Treated effluent from ETP will be passed through RO. RO permeate will be recycled/reused within plant premises. Domestic sewage should be treated in STP. Water quality of treated effluent should meet the norms prescribed by CPCB/SPCB. xiii) 'Zero' effluent discharge shall be adopted and no effluent shall be discharged outside the premises. xiv) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond. xv) Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps. xvi) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from MPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire fighting facilities in case of emergency. Membership of TSDF for hazardous waste disposal shall be obtained. xvii) ETP sludge, inorganic waste shall be sent to TSDF site. High

	calorific value waste such as spent organic shall be sent to cement factory/incinerated. xviii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 11989 *as* amended in October, 1994 and January, 2000. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989. xix) 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. xx) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act. xxi) 10 m wide Green belt of perennial trees like neem, seasam, teak etc should be developed inside along the plant periphery to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. xxii) At least 5 % of the total cost of the project shall be earmarked towards the 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 at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner within 5 years. xxiii) Environmental Manager having Post Graduate qualification in Environmental Sciences/Environmental Engineering shall be appointed to look after the environmental management practices in the plant. xxiv) All the recommendations made in the risk assessment report should be satisfactorily implemented.

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Annexure-II

List of the Chairman and Members of the Expert Appraisal Committee (EAC) for Industry-2.

Sr. No.	Name and Address	
1.	**Dr. J. P. Gupta** A- 1/2 Panchsheel Enclave, New Delhi-110070 E-mail: jpglobalconsultinggroup@gmail.com	Chairman
2.	**Prof. J.R. Mudakavi** 1128, Adarsha Layout, West of Chord Road, III Stage, I Block, Basaveshwar Nagar, Bangalore- 560079 E-mail: mudakavijr@gmail.com	Member
3.	**Shri SuhasRamchandraPharande** Ajinkyatara, Kala Nagar, Gangapur Road, Nashik- 422002 E-mail: s_pharande@yahoo.com	Member
4.	**Shri Sanjay Bist** Scientist- D Indian Meteorological Department, MausamBhawan, Lodhi Road, New Delhi-110003 E-mail: sanjay.bist@imd.gov.in	Member
5	**Sh. Paritosh Kumar** Additional Director, Central Pollution Control Board, New Delhi Email: 45pkumar@gmail.com	Member
6	**Prof. (Dr.) Y.V. Rami Reddy** Dept.of Chemistry, S V University, Tirupati Andhra Pradesh E-mail: dryvrsvu@gmail.com	Member
7.	**Shri Yogendra Pal Singh** Room No. 236, Vayu Wing, 2nd Floor, Ministry of Environment, Forest & Climate Change, JorBagh Road, New Delhi-110003 E-mail: yogendra78@nic.in Tele-fax : 01124695365	Member Secretary

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