Minutes of the 130^{th} meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction and Miscellaneous projects held from 22^{nd} to 24^{th} January, 2014 at Conference Hall, MMTC, Scope Complex, New Delhi – 110 003.

1. Opening Remarks of the Chairman.

The Chairman welcomed the members to the $130^{\rm th}$ meeting of the Expert Appraisal Committee.

2. Confirmation of the Minutes of the 129th Meeting of the EAC held on 26th to 28th December, 2013 at New Delhi.

The EAC confirmed the minutes of the 129th Meeting.

3. Consideration of old Proposals

3.1 CRZ Clearance for up-gradation of existing Dock for Ship building and repairing facilities at existing Bedi Port, Jamnagar by M/s Parekh Marine Agencies Ltd. [F.No.11-38/2011-IA.III]

The Committee decided to defer the project, since the project Proponent requested for postponement.

3.2 CRZ Clearance for laying of additional phosphoric acid pipeline from jetty (Kakinada Seaport) to its Plant at Kakinada, Andhra Pradesh by M/s. Coromandel International Ltd. [F.No.11-62/2013-IA.III]

As presented by the Project Proponent the proposal involves laying of additional phosphoric acid pipeline from jetty (Kakinada Seaport) to Plant at Kakinada, Andhra Pradesh by M/s. Coromandel International Ltd.

The present proposal is for the following 2 components

(i) Laying of additional pipe line for unloading Phosphoric acid from jetty to plant premises

Raw materials like Sulfuric acid and Phosphoric acid for the production of NP/NPK fertilisers are received at Kakinada Port and transferred to the plant, 2.5 KM away from the berth. At present both Sulfuric acid and Phosphoric acid are transported through one single dedicated pipe line from the Port and these acids are stored in storage tanks located in the plant premises.

As the pipe line is utilized for both Sulfuric and Phosphoric Acid service, huge corrosion has been observed in the line which is reducing the life of the pipeline. Apart from becoming unsafe to operate, it has limited discharge rates for transfer of acid and is thus delaying the unloading of acid shipments and causing longer berth occupancies and additional demurrage. In view of the above, the Proponent proposes to lay a new dedicated line of SS316 material in the pipe rack and trench (approved pipe line corridor) along with the existing pipe line for phosphoric acid and use the existing line

for Sulfuric acid transfer.

(ii) Establishment of Sulfuric acid storage tanks in plant premises:

Coromandel Kakinada proposes to install 2 nos of Sulfuric acid storage tanks each 5000 MT capacity in plant premise in place of existing old acid storage tanks. This is a replacement which is to be done due to ageing of old tanks which were built in the year 2001. Proponent is not clear about the location of the storage facility. The EAC noted that storage of hazardous chemicals -Sulfuric acid within CRZ is not permissible.

The EAC in Nov, 2013 suggested the PP to submit details regarding the location of the existing storage tanks, capacity of the tanks and approvals obtained for the same, drawings for the cross-sections of viaduct showing the existing pipeline, inspection road and the proposed pipeline along with the photographs, recommendation from the APCZMA instead of No Objection Certificate (NOC), shape file for the CRZ map from the authorized agency.

The Proponent has submitted the details regarding existing storage tanks, approvals obtained and shape file for CRZ map.

After deliberation, the EAC recommended to defer the proposal with the following suggestions

PP to submit the exact location of the tanks and details regarding insulation system to be provided for the pipeline passing through the viaduct and also a system for continuous photography of the same as these are corrosive and hazardous substances. The insulation system has to be monitored. Committee also suggested to submit details for the pressure monitoring system at the site for the proposed and existing pipeline system under the viaduct to detect any leakage in the pipeline during operation.

Extension of validity of Environmental Clearance granted for the project of two new riverine multipurpose jetties at Haldia Dock Complex by Kolkata Port Trust (KoPT) [F.No.10-41/2007-IA.III]

The Committee decided to defer the consideration of project, since the Project Proponent did not circulate the documents.

Environmental and CRZ Clearance for expansion of Redi Port, VengulaTaluka, Sindhudurg Dist., Maharashtra by M/s Redi Port Ltd. [F.No.11-15/2010-IA.III]

The Committee decided to defer the consideration of project, since the Project Proponent requested for postponement.

Finalization of ToR for expansion of storage tanks in existing terminal at Port Exim Park area, Visakhapatnam, Andhra Pradesh by M/s East India Petroleum Pvt. Ltd. [F.No.11-18/2013-IA.III]

As presented by the Project Proponent, East India Petroleum Pvt. Ltd, is a storage terminal facility located at Visakhapatnam, Port Exim Park area, Andhra

Pradesh, for receipt, storage and handling of POL products. EIPL is having earthen bund Fire water reservoir consisting of two compartments of capacity 5000 KL each of which was built in 1996. Water is procured from Visakhapatnam Municipal Corporation through Road Tankers. In order to prevent seepage in the reservoir and also evaporation losses, EIPL proposes to build two numbers of MS Tanks of diameter 22 Meter and 20metres height to store Fire water. The capacity of proposed water tanks will be 7606 KL each totaling 15,212 KL. EIPL proposes to build following new storage tanks in the 9656 sqm reservoir area for storage of liquid petroleum and chemical products in Vizag Port for upcoming Pharma based industries in Vizag.

- 1. The Fire Water Pump house (10m x 41m) will be shifted to new location nearer to above MS Tanks.
- 2. 3 numbers of 14 m dia x 20m height MS Storage Tanks for storage of Petroleum Products and Petrochemicals.
- 3. 12 number of 16m dia x 20m height MS Storage Tanks for storage of Petroleum Products and Petrochemicals.
- 4. 8 Bay POL Loading Gantry (40m x 10m) for Tank Truck loading.
- 5. POL Pump house (23m x 10m) for loading pumps installation.

EIPL has carried out Risk Analysis, Disaster Management Plan and Environment Management Plan for the proposed expansion. The proposed layout plans have been prepared according to OISD Standards and existing Petroleum Rules. Approval from Chief Controller of Explosives, PESO, Nagpur for proposed additional storage tanks and approval from Directorate of Factories, Andhra Pradesh have been obtained.

The EAC in November, 2013 sought the MoU with Port of M/s Visakhapatnam Port Trust since the facility is proposed within the Port. PP has submitted the same.

The EAC noted that the proposal is for storage of petro-chemical and petroleum products which are not permitted for storage within CRZ area. However, in terms of Annexure-II of the CRZ Notification, 2011, storage of following petroleum products is permissible in CRZ area except CRZ-I (A).

(i) Crude oil;(ii) Liquefied Petroleum Gas;(iii) Motor spirit;(iv) Kerosene;(v) Aviation fuel;(vi) High speed diesel;(vii) Lubricating oil;(viii) Butane;(ix) Propane;(x) Compressed Natural Gas;(xi) Naphtha;(xii) Furnace oil;(xiii) Low Sulphur Heavy Stock; (xiv) Liquefied Natural Gas; (xv) Fertilizers and raw materials for manufacture of fertilizers.

The Committee noted that the proposal is for construction of storage tanks for the storage of petro-chemical and petroleum products. It was observed by the Committee that according to EIA Notification 2006, the proposed proposal should be considered under item 6(b) "Isolated storage & handling of hazardous chemicals (As per threshold planning quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules 1989 amended 2000)", at the state level as "all projects" for item 6(b) come under category "B". As far as applicability of General Conditions is concerned, the moratorium from the Visakhapatnam area has been lifted, therefore, General Conditions shall not be applicable.

The Committee decided to only consider items attracting CRZ Notification

2011 within the proposal. The Committee suggested to resubmit the application only for components which are permissible under the CRZ Notification 2011.

Revalidation of Environmental Clearance for Optimization of Inner Harbour Development at V.O. Chidambaranar Port-Construction of Three Numbers Shallow Draught Berth by M/s V.O. Chidambaranar Port Trust. [F.No.10-7/2005-IA.III]

As presented by the Project Proponent, V.O. Chidambaranar Port got Environment Clearance from Ministry of Environment and Forest vide letter No.10-7/2005-IA-III dated: 09.05.2006 for the following projects.

- 1. Deepening the approach channel and harbor basin to cater to 12.80m draught vessels from the existing draught of 10.70m
- 2. Construction of berth no.9 and North Cargo Berth
- 3. Construction of three number Shallow Draught Berths

The projects under Sl.No.1 & 2 above have already been completed within the validity period of Environment Clearance. Regarding the project under Sl.No3- the Port has planned to construct 2 Shallow draught Berths including dredging instead of 3 berths planned earlier. The backup areas of the proposed 2 Shallow Draught Berths have already been developed by the Port within the validity period of clearance.

In the Environmental Clearance application which was submitted by the Port on 06.12.2004, the total dredging quantity was mentioned as 5.87 Million Cu.m, but the actual quantity dredged was only 3.34 Million Cu.m. The proposed dredging quantity in front of 2 of Shallow Draught Berths is 0.5 Million Cu.m approximately. Therefore, PP requested for revalidation of clearance dated 09.05.2006 for the project "Optimization of Inner Harbour Development" which includes Construction of Three Numbers (now two numbers) of Shallow Draught Berths with dredging in front of berths another four years from 08.05.2011.

The project was examined by the EAC in the meeting held in December, 2013 and Committee advised the Ministry to clarify whether the EC accorded to the Proponent, vide letter dated 09.05.2006 is valid till date, as the Proponent mentioned that the project was commenced within the validity period for the approved components. The Committee also observed that the proposed revised component (two shallow draft berths instead of three shallow draft berths) are proposed to be executed in PPP mode, therefore, the revalidation of the existing EC may have to be transferred again in the name of the PPP Proponent. Committee also suggested the Proponent to depute a senior officer from the port in the next meeting.

It has been clarified that since the application for extension of validity of EC was sent within the validity period the EC can be revalidated. Regarding transfer of EC, the Proponent clarified that they will apply for transfer of EC to the PPP Proponent as soon as they are shortlisted.

The Committee recommended the proposal for the revalidation of environmental Clearance along with amendment for construction of 2 shallow berths instead of 3 shallow births.

Revalidation of CRZ Clearance granted for Hotel Project at Madura-Devaneri Village, Mamallapuram, Thirukazhukundram Taluk, Kancheepuram, Tamil Nadu for M/s Chandrakala Resorts Hotels Pvt. Ltd [F.No. J-19011/6/97-IA.III]

The Committee decided to defer the project, since the project Proponent requested for postponement.

3.8 CRZ Clearance for Eco-restoration of Adyar Creek and Estuary in 300 acres in Chennai by M/s CRRT, Chennai [F.No.11–71/2013-IA.III]

The project was examined by the EAC in its meeting held in December, 2013 and Committee suggested to the PP to take up the proposed project in a phased manner so that there is no opening of sand bar into the sea without ensuring treatment of the discharged effluent in the Adyar River. This would be in keeping with the spirit of the Tamil Nadu State CZMA Recommendation. The Committee commended the objective of the project and appreciated the good work done in Phase I of the project. It did not want a break in the momentum of the cleanup operation of Adyar River. The EAC advised the PP to take up the proposed work in Phase II without puncturing the sand bass, or creating an opening into the sea without fully treating the effluent outlet into the sea. This could be taken up as Phase III of the project, if agreeable to the project Proponent. If the project Proponent agrees to the modification as suggested above, the project may be recommended for approval without puncturing the sand bar subject to certain conditions.

PP submitted and presented the additional information to the EAC in January, 2014 and also informed that opening of sand bar will be taken up in Phase-III if the EAC insisted on the same, although they would have preferred to execute the entire project in one go. The EAC was definite that it could not grant clearance of opening the sand bar and letting any untreated effluent into the sea. It is noted that the Adyar river and creek receives a large quantity of untreated effluent. After deliberation the EAC recommended the grant of CRZ clearance stipulating the following conditions:-

- (i) The sand bar shall not be opeed before all the sewage outfalls presently connected to the Adyar river/creek are trapped and diverted to the existing sewage network.
- (ii) Approval from the Chennai Corporation shall be obtained for accepting the excavated soil and debris from the choked Adyar Check.
- (iii) There shall be no construction of permanent structure within the above project area. Only such activities shall be carried out which are permissible under CRZ Notification, 2011.
- (iv) All the sewage outfalls presently connected to the Adyar river/creek shall be trapped and diverted to the existing sewage network which will be eventually diverted to the STP for final treatment. No sewage effluent or industrial effluent shall be allowed to enter the Adyar creek/river within the project area as committed.

CRZ Clearance for installation and operation of a conveyor belt (92 M) at Gut			
221, Kokmandle village, Taluka Shrivardhan Dist. by M/s Sun Rise Marine			
Enterprises.[F.No. 11-13/2013-IA.III]			

The Committee decided to defer the project, since the Project Proponent did not circulate the documents.

3.10 CRZ Clearance for Installation and operation of a conveyor belt (30 M) at Survey No.227, 278 Kokmandle village, Ubershet, Taluka Dapli, Distt Ratnagiri by M/s Sun Rise Marine Enterprises.[F.No. 11-14/2013-IA.III]

The Committee decided to defer the project, since the Project Proponent did not circulate the documents.

Extension of validity of ToR granted for development of a Multiuser Liquid Terminal at Cochin Port Trust [F.No. 10-21/2009-IA-III]

As presented by the Project Proponent, ToR was granted by the MoEF on 20/05/2009. Though CoPT had approached several agencies like M/s. NIO, Cochin, M/s. Anna University. M/s. NEERI, M/s. CUSAT, M/s. NIOT etc., for carrying out the EIA studies, they were not ready to undertake the assignment due to various reasons. Finally, the assignment could be entrusted to the Consultants, M/s. WAPCOS, Haryana only on 12/10/2010.M/s. WAPCOS had commenced the study in November, 2010 but the final reports were submitted only in June 2013, as the updation of Risk Assessment and Disaster Management Studies covering all the projects of Cochin Port that was included in the TOR proved to be a time consuming item.

The EAC noted that the ToR was valid up to 20.05.2013 and PP has submitted the application only in October, 2013 for extension of validity after the lapse of validity of ToR. The EAC therefore advised the PP to submit a fresh application to consider for grant of ToRs.

3.12 CRZ Clearance for laying of roads and railway line for the SEZ, Dahej, Taluka Vagra, Dist. Bharuch. M/s Dahej SEZ Ltd. [F. No. 11-50/2011-IA-III]

As presented by the project Proponent, the project involves laying of roads and railway line for the SEZ, Dahej, TalukaVagra, Dist. Bharuch. M/s Dahej SEZ Ltd is developing SEZ in the area of 1803 ha near village Dahej, Gujarat. The SEZ is divided into Part-I and Part-II. Both are connected by a dedicated corridor of 35/45 mtrs width and 5 km long. Environmental Clearance for non- CRZ area of SEZ was issued by the Ministry on 17.03.2010.

The present proposal involves providing essential infrastructure facilities like road, water supply, drainage, power supply etc. In Part-I of SEZ, 1.4 km of road, 2.8 km of storm water drainage, 1.4 km water distribution pipeline, 1.4 km drainage pipeline and 1.4 km power line and in Part-II of SEZ, a road of 1.8 km fall within CRZ area.HTL/LTL demarcation was got prepared from the Institute of Environmental Studies and Wetland Management, Kolkata. According to the map about 224 ha.falls within CRZ area.

The proposal was earlier examined by the EAC in its meeting held in September, 2011 and April, 2012 and it asked the PP to superimpose the facility on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale, Sectional details with dimensions, other utilities running along the road, number, dimension and location. of culverts, nature of soil etc, SCZMA recommended the project vide letter dated 15.12.2011.

The details submitted and presented by the PP were examined by the EAC in the meeting. EAC noted that the roads proposed are in CRZ-III. After deliberation, the EAC recommended for grant of CRZ clearance stipulating the following conditions:

- (i) There shall be no allotment of plot in 227 ha of CRZ area to industries except the port and harbor or any activity requiring foreshore facilities.
- (ii) There shall no water logging due to the proposed roads.
- (iii) The runoff from SEZ shall be collected and taken to ETP.
- (iv) All the recommendations of GCZMA shall be complied with.

Environmental Clearance for rehabilitation and upgradation of existing 2-lane to 2-lane with paved shoulder and 4-lane of Birmitrapur–Barkot section from km.211.200 to km.336.815 of NH-23 in the State of Orissa by M/s NHAI [10-1/2013-IA]

The EAC in November, 2013 noted that the answer/ responses given to the public during Public Hearing were not satisfactory, NHAI has informed that the matters had been resolved, however, EAC suggested that NHAI should properly address all the issues raised during Public Hearing and submit the same to MoEF and PCB.

PP has submitted and presented the revised responses to the issues raised during Public Hearing, and also submitted to OPCB which in turn acknowledged and communicated the same to the MoEF.

The EAC noted that the proposed preferred alignment at Birmitrapur appears counterproductive in the longer term. Such a minor deviation without enforcing access control can lead to a lot of punctures if real estate development picks up and is not controlled along the bye pass or diversion. Such diversions without access control are avoidable as they can lead to opportunistic real estate development. The proposed Option -IV appeared ideal in the longer perspective, if it is realigned leaving out the small forest area towards the end of the alignment.

The EAC after deliberation recommended the proposal for grant of EC stipulating the following conditions:

(i) PP should ensure and satisfy himself that the proposed project is in conformity with the notified Town Planning Schemes, before commencing the project. It should ensure appropriate access control

- along the new alignment or broadening to obviate chances of congestion, rendering the proposed project infructuous.
- (ii) The proposal indicates the diversion of 70 ha forests land. Necessary stage –I forestry clearance shall be obtained. An undertaking as required according to OM dated 19.03.2013 regarding execution of work in non-forests area shall be submitted to the Ministry.
- (iii) It is indicated that 7280 nos. trees fall within the proposed RoW, however, bare minimum trees should be cut and information of the same should be provided. Necessary permission from competent authority shall be obtained for tree cutting. Necessary compensatory plantation shall be carried out and cost provision should be made for regular maintenance.
- (iv) Rain water harvesting including oil and grease trap shall be provided. Water harvesting structures shall be located at every 500 mts along the road. Vertical drain type rainwater harvesting structures shall be set up to minimize surface runoff losses of rainwater.
- (v) R&R shall be as per the guidelines of NHAI/State/Central Government which ever is higher.
- (vi) IRC guidelines shall be followed for widening & up-gradation of road.
- (vii) The responses/commitments made during public hearing shall be complied within letter and spirit.
- (viii) All the recommendations of the EMP shall be complied within letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.
- 4.1 CRZ Clearance for development of Shollingnallur to Kalpakkam stretch of South Buckingham Canal in NW-4, Tamil Nadu by M/s Inland Waterways Authority of India [F.No.10-60/2013-IA.III]

The Committee decided to defer the project, since the Project Proponent did not attend the meeting.

4.2 CRZ Clearance for proposed project of laying additional pipeline (offshore segment) for disposal of treated effluent in to the Gulf of Khambhat, parallel to the existing pipeline at Dahej Taluk Vagra, District Bharuch, Gujarat by M/s Gujarat Alkalies and Chemicals Ltd. [F.No.11-50/2012-IA.III]

As presented by the Project Proponent, the proposal is for laying additional pipeline (offshore segment) for disposal of treated effluent in to the Gulf of Khambhat, parallel to the existing pipeline at Dahej Taluk Vagra, District Bharuch, Gujarat.GACL has setup technical grade Phosphoric Acid, a Membrane Cell based Caustic Chlorine

Unit and Captive co-generation power plant at Dahej. The effluent from this Dahej complex is treated and pumped into the Sea through a marine outfall pipeline. The design flow capacity of the pipeline was 6000 cum/day. The pipeline is 12 KM long from the lagoon to the discharge point at 10 mtr Chart Datum in the Gulf of Cambay with multi-port diffuser Location.

The present proposal involves the installation of an alternative pipeline in offshore segment, parallel to the existing pipeline. This is necessitated due to the gradual deterioration of the old existing outfall pipeline subjected to partial chokage from silt and sediment deposition in the offshore pipeline as well as its diffuser in Gulf of Cambay with consequent progressive reduction in flow capacity from the original design volume.

The proposed pipeline is 6.2 KM length & 280 mm OD. The alternative pipeline (offshore segment) is proposed to be hooked-up to the old existing pipeline at the shore line (Land Fall Point) with a flow diversion valve assembly housed in a valve chamber to regulate the flow and divert the effluent alternatively in 8/12 hours intervals through both the pipelines. This alternative pumping in both the pipelines is required to maintain flushing velocity in the pipelines and effect healthy functioning of the pipelines and diffusers ensuring maximum lifespan of the disposal system.

The diffuser of the newly proposed pipeline will be provided with imported Tideflex non return valves which will disallow entry of silt and sediments into the diffuser and the pipeline even in idle periods. This added special feature would ensure long life and trouble-free functioning of this pipeline in future.

The Gujarat CZMA recommended the project vide letter dated 24.05.2012.

The EAC examined the project in August, 2012 and sought additional information viz. compliance of conditions of earlier clearances, CRZ map, valid consent order. The details submitted and presented by the PP were examined by the EAC in the meeting.

The EAC after deliberation recommended the proposal for grant of CRZ clearance stipulating the following conditions:

- (i) The pipelines shall be buried 2 m below the ground level /sea bed.
- (ii) The marine outfall shall be at 10m CD. The effluents shall be discharged through multiple ports at the outfall for proper dispersion.
- (iii) The disposal shall meet State Pollution Control Board norms.
- (iv) The outlet quality as well as the sea water near the outfall shall be monitored especially for temperature and salinity regularly. A report in this regard shall be submitted to Regional Officer, MoEF along with six monthly monitoring report.
- (v) All the recommendations of GCZMA shall be complied with.

4.3 EC and CRZ for setting up of Ship recycling facility near Mundra in Kutchch, Gujarat by M/s Adani Ports and Special Economic Zone Ltd [F.No. 11-7/2012-IAIII]

As presented by the project Proponent, the proposal involves development of Recycling facility adjacent to existing West Port, Mundra near Vandh Village of Kachchh District Gujarat. The project area covers 40.7432 ha reclaimed land created by dumping dredge spoils. The project envisages recycling of ~40 ships annually of average Light Displacement Tonnage 7582 t. nearly 0.25 Mt/yr of scrap metal will be recovered along with ~11,000 t/yr machinery and ~10000 t/yr of miscellaneous items. Ships will be raised for breaking/recycling on dry land, on air bags and cut up by LPG – Oxygen torches. For ships too large to be hauled up on air bags, partial demolition on beach will be done and the process will be completed on dry land. The annual consumption of LPG and Oxygen are expected to be 1000 t and 6450 t respectively. The project will require 60 m³/day of industrial water and 100 m³/day of potable water. Treated sewage and sea water will be used for dust suppression & horticulture. The potable water will be supplied by Gujarat Water Infrastructure Limited tankers or will be drawn from desalination plant in the West port. Power will be required only for illumination and in the offices. The power will be drawn from the grid.

About 2200 t/yr of solid wastes will be generated, which will be sold to scrap recyclers, or authorized Common Treatment Storage & Disposal Facility (TSDF), as applicable. Ship effluents (bilge water, slop water and tank washings) will be pumped to onshore storage tanks & transported to treatment plants operated by an authorized agency.

The project was examined by the EAC in its meeting held in July, 2012 which finalized ToR including conduct of Public Hearing. The Public Hearing was conducted on 30.07.2013 at Tunda Village. Major issues raised at the Public Hearing are blockage of creek, destruction of vegetation including mangroves, impact on fisheries, water pollution etc. The response of the PP was examined by the EAC. The EAC did not find merit in the above stated issues in view of the plans set forth by the PP.

The EAC has noted that temperature difference of the effluent was higher than the permissible limit (10-14C against 5C). PP clarified that it was due to heat of engine since the effluent was collected from the ship while the engine was on and this would not be the case in actual recycling activity when the ship engine would be off.

The EAC after deliberation decided to defer the project and suggested the PP to submit the following additional information:

- i. Details of the measures to prevent the spillage of oil and paint waste etc on land / sand bund, during ship breaking, along with quantity, method of disposal of contaminated soil in case of any accidental spillages. It also suggested PP to explore usage of oil absorbents.
- ii. Details of Hazardous wastes disposal along with MoU made with the TSDF facility, their permitted and operational capacity, EC under EIA Notification, 2006 and authorisation from PCB,

- iii. Details of facility of detection of any radioactive materials which may accidentally or otherwise be present in the ship to the broken along with the details of disposal, mandatory approval required and the follow up, if any.
- iv. Details of the connectivity to the proposed facility (5 km 4 lane and 2 km 2 lane road)with superimposition on CRZ map.
- v. Details of transportation of waste water, bilge and slop water to the CETP with quantity, number of tankers, route of transportation etc. EAC also suggested that ballast water shall not be handled and beaching shall be only after exchange of ballast water in conformity with regulations including MARPOL. No waste containing oil more than 15 mg/l shall be discharged in to sea.
- vi. Details of Cumulative impact of the existing activities and proposed activity.
- vii. Details of the proposed green belt on the layout
- viii. As the night time noise level in Dhurb village was observed to be higher than the permissible level, the PP clarified that it was due to round the clock port activity. Details of mitigative measures should be submitted.
- 4.1 CRZ Clearance for construction of school orphanage, school, Vruddhashram, Dispensary, free vocational training school, library, meditation hall, temple and garden in Survey no.112/1, Yendada village of GVMC, Andhra Pradesh by M/s ISKCON [F.No. 11-82/2013-IA.III]

International Society for Krishna Consciousness (ISKCON), is doing spiritual and social services. ISKCON in Visakhapatnam is serving daily 47000 Mid Day Meals and doing social service by running free Clinics etc. ISKCON has purchased 2 acres of land, Sy. No. 113/1, in Yendada, Visakhapatnam, through Tourism Department of Government of Andhra Pradesh in the year 2005 to build a School, Orphanage, Virdhashram, Vocational Training Center, Temple etc. In the year 2006, the State Environment Department had issued order permitting ISKCON to build Ashram year the building at site. In the 2010, State **CZMA** Committee recommended ISKCON land to MoEF to be re-classified from CRZ-III to CRZ-II. MoEF sent back the proposal stating that since the area is developed area, the whole area should be recommended in one go and not in piecemeal.

APCZMA considered the proposal in its meeting held on 07.11.2012 and recommended the proposal to MoEF for approval by treating the proposal as Tourism oriented project. It has been requested to get the proposal examined under Annexure – III of CRZ Notification 2011 and approval for construction of school, Orphanage School, Vrudhashram, Dispensary, free Vocational Training School, Library, Meditation Hall, Temple and garden in survey no 113/1, Yendada Village, GVMC by ISKCON, Visakhapatnam.

The EAC after deliberation decided to defer the project and suggested the PP to submit the following additional information:

(i) The Committee observed that the component of the project presented

during the meeting includes Planetarium and Cultural Center which are certainly tourist oriented facilities, but not covered in the list of components recommended by the APCZMA. Also there is a mismatch in the Form-I submitted by the Proponent. It was suggested by the Committee to get the components approved from the APCZMA for getting the final CRZ clearance.

- (ii) The Proponent shall submit the revised Form I after getting the additional components approved from APCZMA.
- (iii) The school and dispensary should be at the farthest end of the plot from the seaward side.
- 4.2 CRZ Clearance for proposed development of school in Mira Bhainder Municipal Corp. area, Maharashtra by M/s Mira Bhayander Municipal Corp F.No. 11-83/2013-IA.III

The Committee decided to defer the project, since the project Proponent did not attend the meeting.

4.3 Proposed Additional Butibori Industrial Area, Nagar, Mumbai by M/s Maharashtra Industrial Development Corporation [F.No.21–16/2013-IA.III]

As presented by the Project Proponent, Government of Maharashtra has established MIDC under MID Act'1961 as the premier Industrial infrastructure development agency in the state of Maharashtra for rapid and orderly establishment of industrial areas and Industrial estates. The organization was established in 1962 Ref. Copy of GOM Act. The Maharashtra Industrial Development Corporation has established 'Butibori Industrial Area' in 1992 which is 28 Km from Nagpur highway No.7. The total area of existing Butibori MIDC is 2428.14 hectares which covers 16 villages. Approximately 2500 industrial plots have been carved out, Approx 2000 industrial plots have been allotted. To encourage the entrepreneurs, M.I.D.C. has constructed 46 work sheds. This industrial estate has IT park (180 ha), Textile park (147 ha), apparel park (68 ha), Food Park (25 Ha) are developed in the area, remaining area is allotted for other categories of Industries. Existing Butibori Industrial Estate CHW TSDF site is developed by MIDC. Total land area is 29.7 ha. Designed capacity is to accept 60,000 tons per annum for 20 years. At present only 10,000 tons per annum is received. Adequate spare capacity is available. Existing CETP at Butibori Industrial Estate is located in 5 ha with capacity of 5MLD. The total land area for the project in the Additional Butibori MIDC is 1391.85 ha. and the total area under plots is 835 ha. area under roads, open spaces etc is 556.85 ha. A CETP of capacity 1.6 MLD is also proposed for additional Butibori area. Total water requirement will be 27 MLD. Water supply from Irrigation Department will be the main source of water during operational phase.

During the discussions, the Committee finalized the following additional ToRs for carrying out EIA studies:

(i) Submit the details of natural drains and PP to ensure no blockage of

- natural drainage.
- (ii) No air polluting industrial shall be allotted near the village / residential area.
- (iii) A green buffer of 15 m shall be provided all along the boundary and roads as committed during the meeting
- (iv) Submit justification of the project site from environmental angle.
- (v) Submit the details of the present land use as per the revenue records and present status.
- (vi) Submit water requirement, identified sources and impact on the existing users.
- (vii) Submit whether the site falls in semi-critical, critical over exploited zones as per the CGWA classification? NOC for proposed Ground Water withdrawal shall be obtained from the Central Ground Water Authority.
- (viii) Submit Roles and legal responsibilities of Industrial Estate and individual member units for EMP implementation and monitoring as well as effluent discharge.
- (ix) Submit the details of the approach road and its adequacy.
- (x) Submit the impacts due to land use change.
- (xi) Submit the impacts due to liquid waste discharge, air emissions, solvent emissions, handling of hazardous waste & chemicals, odour.
- (xii) Submit the EMP at Industrial Estate level to handle the liquid waste by segregation as per the CPCB document for Bulk drug manufacturing units. Explore the options for reuse of treated effluent.
- (xiii) Submit the storm water management and impacts due to contamination of storm water with effluent/chemicals and mitigation measures at industrial Estate developer level and Unit level.
- (xiv) Submit the parking arrangements at Industrial Estate level.
- (xv) Submit fire fighting arrangements at Industrial Estate level.
- (xvi) Submit the details of effluent collection system at member units level to meet the inlet norms for the CETP.
- (xvii) Submit the effluent conveyance system from the member units to CETP.
- (xviii) Submit on-site and off-site emergency plan and infrastructure requirements at Industrial Estate level to comply MSIHC Rules 1989.
- (xix) Submit the details of the CETP with design parameters.
- (xx) The General guidelines as per the Annexure-II to this Minutes shall also be considered for preparation of EIA/EMP.

A detailed draft EIA/EMP report should be prepared in terms of the above additional TOR and should be submitted to the PCB for conduct of PH. Public Hearing to be conducted for the project in accordance with the provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.

A detailed final EIA/EMP report be prepared after addressing issues raised during Public hearing and be submitted to the Ministry as required under the above Notification.

4.4 Finalization of ToR for Common Effluent Treatment Plant (CETP) by M/s Pashamylaram Common Infrastructure Pvt. Ltd.[F.No.10–65/2013 - IA.III]

As presented by the Project Proponent, the proposal involves setting up of a Common Effluent Treatment Plant at Phase II, IDA Pashamylaram, Patancheru Mandal, Medak District, Andhra Pradesh. Pashamylaram Common Infrastructure Pvt. Ltd., proposes to develop a Common Effluent Treatment Plant (CETP) of 480KLD and 2.5MW Co-generation Power Plant in an area of 5.78 acres. The nearest human settlement from the site is Pashamylaram Village at a distance of 1.5 km in east direction. Nakkavagu stream is at a distance of 5.8 km in east direction, flowing from north to south. There are no national parks or sanctuaries within 15 km radius of the site. The capital cost of the project is Rs. 20 crores.

The proposed Common Effluent Treatment Plant (CETP) shall be based on "Zero Liquid Discharge" principle, and the treated wastewater is returned to the member units for reuse. The common Effluent treatment plant is meant for treating the effluents from mainly synthetic organic chemicals industries located in the Pashamylaram Industrial development area. The CETP shall have the following treatment train; collection tank, neutralization tank, settling tank, stripper, Multiple effect evaporator (MEE), Agitated thin film dryer (ATFD), Biological treatment system, UF followed by RO. The steam requirement for the stripper, MEE and ATFD shall be met by using a 20 TPH coal fired boiler. The steam shall be passed through step down turbine to obtain 2.5 MW of cogeneration power. The power requirement of CETP shall be met by cogeneration plant, and excess if any shall be sent to the grid.

The sources of air pollution from the proposed CETP are from 1 x 20 TPH coal fired boiler and stand by DG set of capacity 2 x 500KVA. It is proposed to provide bag filters as air pollution control equipment to the boiler, while effective stacks based on CPCB formula shall be provided for DG sets and boilers.

The total water requirement shall be 250.9 KLD out of which 230.9 KLD shall be drawn from APIIC and the balance shall be recycled water. The source of wastewater from CETP are mainly from R&D, utilities and domestic use, and the total effluents of 33.8 KLD are treated in CETP.

The details of the solid waste generation and disposal plan are as follows;

S.No	Description	Units	Quantity	Mode of Disposal
1	Ash from	TPD	26.2	Sold to Brick manufactures
	Boilers			
2	Stripper	KLD	24	Sent to TSDF/Cement
	Distillate			Industries
3	Evaporation	TPD	40	Sent to TSDF
	Salts			
4	Municipal Solid	Kg/day	15	Municipal solid waste disposal
	Wastes			
5	ETP Sludge	TPD	20	Sent to TSDF
6	Detoxified	No.s/month	500	Sold to Authorized agencies
	Containers			after detoxification
7	Waste oil	lts/month	125	Sent to Authorized Recyclers
8	Used batteries	No.s/Year	4	Sent to Authorized Recyclers

34% of the total land area shall be developed as green belt.

Common Effluent Treatment Plant are listed at serial no. 7(h) of schedule of EIA Notification, 2006 and categorized under "B". However the proposed site for CETP is located within 5.5 km of critically polluted area of Patancheru and Bollarum Industrial areas, hence it is considered as category "A".

During the discussions, the Committee finalized the following additional ToRs for carrying out EIA studies:

- (i) Submit a copy of MoU with clear cut responsibilities to be settled made with member units.
- (ii) Details of the storage facilities for handling segregated waste by member industries, method of transportation of segregated liquid effluent and storage facility at CETP shall be discussed in detail. The consented quantity of each liquid effluent stream by the SPCB for the member industries shall be submitted
- (iii) Details on type of influent, quantity, quality, treatment method and final disposal.
- (iv) Details of transportation of effluent to the proposed CETP, traffic network.
- (v) Design details of the different treatment systems proposed and the laboratory studies conducted to establish the treatment system
- (vi) Details of Hazardous wastes disposal along with MoU made with the TSDF facility, their permitted and operational capacity, EC under EIA Notification, 2006 and authorisation from PCB,
- (i) Compliance with reference to norms notified for CETPs vide GSR 93 (E) dated 21-02-1991 under E (P) Act, 1986.
- (ii) Laboratory facilities and man power for monitoring
- (iii) Stand by power details for continue operation of ETP units especially the biological system.

PP requested exemption of Public Hearing on the ground that the CETP is proposed within the notified industrial area. PP has submitted copy of the Notification dated 9/03/1998. The EAC therefore recommended exemption of PH.

4.5 & TORs for development of Jawahar Dock (East), berths as container terminal at Chennai Port by M/s Chennai Port Trust F.No. 11-84/2013-IA.III

Development of additional berth, modify the Ro Ro berth in to Ro Ro cum multipurpose berth and multilevel car parking at Chennai Port [F.No. 10-83/2007- IA-III]

Being components of the same Port, for a comprehensive assessment the two

proposals were considered together as a single project .As presented by the Project Proponent, the handling of coal and iron ore at Jawahar Dock has been suspended based on the direction of High Court and it is proposed to use the facility for container terminal.

Further, the Chennai Port Trust (ChPT) has obtained the Environmental Clearance (EC) for the Project "Construction of Additional Berth (Ro-Ro berth) of size 300m x 30m at Southern side of the Bharathi Dock to handle cars vide MoEF Lr No.10-83/2007-IA-III dt 16.1.2008. Considering the delay in execution of project through PPP mode, on the request of Chennai Port Trust, validity of EC was extended upto 16.1.2018 by MoEF vide its Lr No.10-83/2007-IA-III dt 8.3.2013.

However, due to increase in export volume of automobiles users like Hyundai, Nissan, Ford and Ashok Leyland are demanding more space for car cargo. Due to space constraint in the Port, it is proposed to develop a Ro-Ro cum Multipurpose Berth to augment the facility. In view of additional requirement of car handling at Port, it is proposed to construct a Multilevel Car Parking Facility to park 5000 cars on a ground area of 10290 sqm with 5 floor structure adjacent to the proposed Ro-Ro berth. Out of 10290 Sq mt area proposed for construction of a Multilevel car parking an area of 2200 sqm is on seaward side. Similarly, in order to accommodate the vessels of larger size, the berth also requires dredging of 2,00,000 cum. The cost estimate for Construction of Ro-Ro berth cum Multipurpose berth including dredging and Multilevel Car park is about Rs.100 crores.

PP has stated that the elimination of the coal and iron ore handling will reduce the air pollution substantially and modifications in Ro Ro berth are in conformity with the earlier proposal where all the studies have been carried out as per CRZ notification and the project site is already within the Port limits and is in existing operational area. The construction of building in water front of 2200 Sq mt is also within the alignment of the berth. As such the modified proposal will not cause any additional environmental impact. Hence requested for exemption of Public Hearing.

The EAC noted that the proposed activities are not likely to increase any public inconvenience and pollution. The expansion in overall traffic to the port is minimal. The proposed project is likely to reduce pollution substantially, modernise the car parking facilities and economics of land use Otherwise the port need to purchase more area. In the above context, the request of PP was justified. Hence EAC exempted the Public Hearing.

EAC suggested following ToRs for further studies and update the EMP:

- (i) Submit the details of incremental traffic and likely impact along with management plan.
- (ii) Submit the details of Oil Spill Contingent Management Plan. Existing infrastructure and its adequacy and additional infrastructure, if any shall be discussed
- (iii) Submit the details of dredging quantity and quality in terms of toxic metals (atleast Cr+6, Arsenic, Mercury, and lead) and its disposal with quantity (reclamation/dredging disposal site. If disposal is proposed in the sea, its location, the justification for selecting such location and its

- effect on marine environment, effect onmarine life etc.
- (iv) Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.
- (v) Submit details of Risk Assessment, Disaster Management Plan including emergency evacuation during natural and man-made disasters like floods, cyclone, tsunami and earth quakes etc. Compliance to the MSIHC Rules shall be discussed. Existing infrastructure and its adequacy and additional infrastructure, if any shall be discussed.
- (vi) Environmental aspects, mitigation measures and post project monitoring shall be submitted project wise.
- (vii) Submit the Details of Hazardous Wastes generated, and precautions planned during handling, compliance with Hazardous Waste Rules.
- (viii) Details of the existing and proposed green belt, with suitable plan.
- (ix) Submit the details of the fishing activity and likely impact due to the activity.
- (x) The General guidelines in terms of the Annexure-II to this Minute shall also be considered for preparation of EIA/EMP.

TOR for proposed CETP at Khasra No.19/21, 20/24, 20/25, 28/4, 28/5, 28/6 and 28/7 village Saidapura, Derabassi, SAS Nagar, Mohali, Punjab by M/s Saidpura Envirotech Pvt. Ltd [F.No. 10- 66/2013-IA.III]

As presented by the project Proponent, the proposal is for setting up of the Common Effluent Treatment Plant at Village Saidpura, Tehsil-Derabassi, District SAS Nagar, Mohali, and Punjab. The capacity of common effluent treatment plant (CETP) will be 5MLD (2 MLD in first phase for present requirement and 3MLD in second phase for future requirement) and the sewage treatment plant (STP) will be of 7MLD (3.5 MLD in first phase for present requirement and 3.5 MLD in second phase for future requirement). The CETP will treat the effluent from industries located in Free EnterpriseZone of Derabassi and the STP will treat the sewage received from nearby villages.

The project falls under Category A schedule 7(h) as per the EIA Notification, 2006, due to interstate boundary of Haryana within 10 km.

Dera Bassi, near Chandigarh, has a cluster of Pharma Industries mostly manufacturing bulk drugs. The process of production includes extraction, processing, purification and packaging. Pharmaceutical manufacturing is divided into two major stages: production of the active ingredient or drug (primary processing, or manufacture) and secondary processing, the conversion of the active drugs into products suitable for administration.

The major manufacturing groups include, active pharmaceutical ingredients & their intermediates, broad range of semi synthetic antibiotic. Pharmaceutical Industries require huge quantity of water and generate wastewater (effluent) with chemical and biological contaminants. The ground water is the major source of raw water for use in Pharmaceutical industries. Wastewater, thus generated by the industries, after collection from individual industry through a network of tankers & pipelines is proposed to be treated in 5 MLD Common Effluent Treatment Plant (CETP)

The scheme is designed to treat tertiary treated wastewater from CETP to industrial grade water. The treatment units includes Air Stripper , Multiple Effect Evaporators, SBR system , Plate and Tube Reverse Osmosis. The treated wastewater from CETP & STP will be used for gardening, construction activity, industrial & irrigation purposes & boiler feed water to generate steam for multiple effect evaporators (MEE). MEE which is a part of CETP. The generation of steam in boiler will be coupled with co-generation of power. Fuel for the boiler will be rice husk/biomass available in the area. The requirement of steam for MEE unit of CETP will be through boiler of co-generation of power (1.3 MW capacity) using rice husk/biomass as a fuel (2700-3000kg/hr). Total Power demand will be 1060kW. Power supply source — Co-generation plant and Punjab State Transmission Corporation Limited (PSTC Ltd.) In case of power failure D.G. Set can be used (1000KVA capacity). Water requirement will be during construction phase approximately 50 KLD & 20KLD during operation of CETP. The investment total cost of project is estimated about Rs. 50.00 crores.

During the discussions, the Committee finalized the following additional ToRs for carrying out EIA studies:

- (i) Submit a copy of MoU with clear cut responsibilities to be settled with member units.
- (ii) Details of the storage facilities for handling segregated waste by member industries, method of transportation of segregated liquid effluent and storage facility at CETP shall be discussed in detail. The consented quantity of each liquid effluent stream by the SPCB for the member industries shall be submitted
- (iii) Details on type of influent, quantity, quality, treatment method and final disposal.
- (iv) Details of transportation of effluent to the proposed CETP, traffic network.
- (v) Design details of the different treatment systems proposed and the laboratory studies conducted to establish the treatment system
- (vi) Details of Hazardous wastes disposal along with MoU made with the TSDF facility, their permitted and operational capacity, EC under EIA Notification, 2006 and authorisation from PCB,
- (vii) Laboratory facilities and man power for monitoring
- (viii) Stand by power details for continuous operation of ETP units especially the biological system.

A detailed draft EIA/EMP report should be prepared in terms of the above additional TOR and should be submitted to the PCB for conduct of PH. Public hearing to be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the

public should be addressed in the Environmental Management Plan.

A detailed final EIA/EMP report after addressing issues raised during Public hearing and be submitted to the Ministry as required in the above Notification.

Development of Krishnapatnam Port by KPCL-issue of Show Cause Notice [F. No. 19-122/2011-IA-III]

Krishanapatnam Port is a green field deep water multipurpose all weather port being developed by Krishnapatnam Port Company Limited in Nellore District Andhra Pradesh (East Coast), under PPP mode, licensed by GOAP, who also allocated an area of 6800Ac on lease basis and also approved a Master Plan. After the due process of Environmental Clearances both at the Central and State levels, the Phase-I with 3 berths was commissioned during March, 2009. Simultaneously Phase-II development with additional 14 berths was also taken up and completed 70% on date. Within a period of 4 years, the port has reached a throughput of 30 MPTA and created an impact on industrialization and socio economic development in the region. The GOAP have provided the required R&R package to the affected villages. The port in turn is implementing a number of welfare schemes under the CSR along with necessary EMP to ensure a sustainable socio economic development. The port is using only 2273Acres on date as against 3063Acres designated as per EC, due to delay in transfer of land by GOAP.

The project area is classified as CRZ-III and the inter tidal zone as CRZ-I (b). The berths are being developed by altering a meandering creek, dredging and reclamation of the lands as per EIA report. A Control Building with Helipad on the top, Few Bridges/ Culverts and a Loco shed, all essential for port operations were also developed along with the main components like Break Waters, Berths, Dredging and reclamation specifically mentioned in the EC.

The above developmental activities were challenged before various statutory authorities and Government departments alleging (i) Closure of creeks and canals (ii) Unauthorized development of structures on water front (iii) Unauthorized reclamation of land (iv) Damage to Mangroves and (v) Delay in development of Green Belt. Several Committees both from State and Centre have inspected the port and sought item-wise clarifications. NOC was obtained from APCZMA who in turn also recommended to MoEF for their consideration. In the meantime, a Show Cause Notice was issued from MoEF during January 2013, for which item-wise response was submitted.

The EAC took an extensive briefing on the project and perused the voluminous data presented to it. The EAC noted and observed the following:

i. Regarding item no (i) and (vi) of the Show Cause Notice related to reclamation of the area and diversion of creek for port activity, the Committee observed that the Proponent has reclaimed the area which is outside the area approved in the EC i.e outside 3064 acres. However the Proponent mentioned that the area is within the designated area and the point was well covered in the EIA report, paragraph 4.2.2, 4.2.6 and drawing FD0201 and FD0401 and also submitted as a part of reply to the observation raised during one of the EAC meetings.

This usage has the consent of APCZMA and they have also recommended the same to MoEF vide their letter dated 17.05.2013. The Committee noted that although the activity namely the straightening of the creek is permitted as per CRZ Notifications 1991 and 2011, the violation has been done as the activity took place outside the area which is permitted vide EC dated 13/11/2009. The Committee noted that a substantial agreed land allotment was inordinately delayed and has not been done by the State Government, the Proponent has reclaimed the area outside the EC since the area is within the port limit and is being utilized by the port authorities for the stated objectives in the given situation. They can apply for modification in the clearance for the additional reclamation or any other activity beyond the scope of the already approved clearance and the same can be in accordance with the procedure in respect of violation cases.

- ii. Regarding Show Cause Notice item no. (ii) related to Control Building with helipad on the top, the Committee observed that the activity is a permissible activity according to CRZ Notification 2011. However, as the location of the building was not mentioned in the layout map submitted with the EIA report and also in the DPR, the construction of control building and Helipad is a technical violation of CRZ Notification 2011. It cannot be denied that the port cannot be operated without a control building and a facility for helicopter landing would be a very useful facility in an emergency. The Committee suggested the Proponent to seek permission from MoEF for the location of the control building and the Helipad in the interest of port management as an activity directly connected thereto.
- iii. Regarding Show Cause Notice item no. (iii) and (iv), the Committee suggested that the Proponent should submit the calculation for the total area of the Mangroves which could have been disturbed during the construction of the bridges assuming as the worst case scenario, that the entire land area under the bridge/culvert were mangroves. The Proponent shall have to plant ten times the area of mangroves which were deemed to have been disturbed during the construction of all the bridges.
- iv. Regarding Show Cause Notice item no. (iii), the Committee noted that the Loco-shed was mentioned in the EIA report and also in the DPR. However, the Committee observed that the location of the loco-shed was not mentioned in the layout map submitted with the EIA report and also in the DPR. The Proponent mentioned that the loco-shed comes under essential facilities for port activities under CRZ I and was permissible as per clause 8 (I)(i)(c) of CRZ Notification 2011. The Committee suggested the Proponent to provide justification regarding the location of the loco-shed and its size in the CRZ area.
- v. Regarding Show Cause Notice item no. (vii) related to Greenbelt development, one of the condition mentioned in the EC letter is that, 'the total area of Greenbelt to be developed in phase I & II shall be 191.8 ha'. However, in the Show Cause Notice it has been mentioned that green belt developed so far is 70 ha. only. The Committee noted that the figure 70 ha. instead of 170 ha appeared to be a typographic error.

4.12 CRZ Clearance for the marine disposal of treated effluent through dedicated pipeline to bay of Bengal from the proposed Bulk Drug unit located at Sy.no.49,50 to 54,65,67 and 69 village Lankalpalli Palem, Puspati Rega Mandal, Andhra Pradesh by M/s Loven Labs Pvt Ltd [F.No. 11-87/2013-IA.III]

The Committee decided to defer the project, since the project Proponent did not attend the meeting.

4.13 CRZ Clearance for the Karanja Creek crossings through HDD method forproposed Uran to Chakan/Shikrapur underground LPG Pipeline, Maharashtra by M/s HPCL [F.No. 11-86/2013-IA.III]

As presented by the Project Proponent, the proposal is to lay pipeline across Karanja creek for the evacuation of LPG produced at HPCL & BPCL Refineries at Mahul and BPCL, Uran, to Industry Bottling Plants at Chakan as well as onward movement into various markets in Maharashtra.. The project has been taken up with a view to eliminate the LPG Bulk movement by road on the ghat section between Mumbai/Uran and Pune. The project is part of 164.65 KmUran-Chakan/Shikrapur LPG Pipe Line project. The capacity of pipe line is 1.0 MMTPA.

The pipeline selected as per design is of 12" dia. seamless carbon steel line pipe of API 5L Gr. X 60/52 PSL 2 grade. For spur lines a 10" dia., seamless carbon steel pipeline of grade API 5L Gr. X 52 PSL2 has been considered.

The operating pressure and the design pressure of the pipeline system will be 81 kg/cm² and 117 kg/cm² respectively and designed for a flow rate of 313 m³/hr. All the rivers and major canal crossings have been considered by HDD method. Similarly the pipeline crossing of National Highways, Major roads, Railways are proposed by Cased Jack and Boring method.

The Dispatch Station will be located at BPCL, Uran for which an area has been earmarked by BPCL within their plant premises. The facility will have two booster pumps, two mainline pumps, pig launcher facility, filtration, metering skids, and SCADA & Telecom network integrated with Mahul-Uran pipeline.

The SCADA system would be located at BPC LPG Plant, Uran with a repeater at HPCL LPG Plant at Chakan. Suitable provision shall be made at HPCL/BPCL refinery (Mumbai) for on line pumping from HPCL/BPCL refinery though Mahul Uran pipeline to Uran Chakan LPG Pipeline up to Chakan / Shikrapur. The system will facilitate an APPS package for leak detection along with the location of leak, if any.

A telecommunication system is provided for supporting voice, data and video communication along the pipeline. This would include an optical fiber system, satellite communication system and mobile communication system. The Optical fiber system would have direct dialing facilities at all the SV Stations and receiving Stations and the dispatch Station.

MCZMA recommended the project vide letter dated 07.10.2013. Pipeline is proposed to cross Karanja Creek at Ghasakoshi village, intertidal area at Kachrepada, Patalganga River at Kasarbhat, CRZ-III areas in Kharpada, Dushmi villages.

After deliberation, the EAC recommended the proposal for grant of CRZ stipulating the following conditions for strict compliance by the Project Proponent:

- (i) All the conditions stipulated by MCZMA shall be complied with.
- (ii) HDD method shall be used to lay pipeline acrosscreek, river areas as committed.
- (iii) The smooth and safe operation of the system shall be ensured by incorporating a computerized SCADA (Supervisory Control And Data Automation) system. Any leakage in the pipeline shall be immediately detected by the Computer system and product pumping shall be immediately cut off.
- (iv) PP shall obtain all required statutory clearances as applicable.

4.14 CRZ Clearance for eco friendly hotel and resort at Bada Balu, A&N by M/s Smartspace Infra structure Pvt. Ltd. [F.No. 11-86/2013-IA.III]

The Committee decided to defer the project, since the project Proponent did not attend the meeting.

4.15 CRZ clearance for intake and outfall facility of Marine Algae at Chittarkottai, Ramanad District, Tamil Nadu[F.No.11-68/2013-IA-III]

As presented by the Project Proponent, the proposal is for construction of intake and outfall facility at Chittarkottai, Ramanad District, Tamil Nadu.EID Parry (India) Ltd. (Parry Nutraceuticals Division) have proposed marine algae Culturing unit at S.F. No. 220Part, 238/1Part & 238/2Part, Mangammal Salai, Chitharakottai Village, Ramanathapuram Taluk, Ramanathapuram district. The proposed project is for development of marine algae by way of uptake of seawater, culture it and dispose the treated effluent in to sea. Significant environment aspect is the wastewater discharge in to marine environment and its environmental impact. Keeping this in view, generic methodology recommended by MoEF has been adopted while conducting EIA studies covering Marine and Terrestrial Environment Components. There is no forest land present in the plant site. Installation of associated mechanical and electrical equipment, auxiliary units like water handling, water treatment plant etc. will form part of the total installation. The total land requirement for the proposed project for power block and pond area, water treatment plant, greenbelt, sea water intake and outfall lines, and other utilities has been optimised to 37.155 ha. The present land usage at the proposed unit site is mostly uncultivable and unused land. As per the demarcation of the HTL/LTL for the proposed study the process, utilities, sumps areas, production pond, seed pond are falling outside the Coastal Regulation Zone area and only the sea water intake and outfall line falling under the Coastal Regulation Zone I,III, IV. As the project area is devoid of any habitation, the Rehabilitation and Resettlement (R&R) issues have been ruled out.

The total water requirement for the proposed project is 559 KLD. The water

demand for the proposed plant will be met from sea water. Out of the total sea water requirement, the fresh water Requirement will be 28 KLD. Out of 28 KLD, 26 KLD will be used for process requirements and 2 KLD for domestic purposes. The expected wastewater generation is about 97 KLD from the proposed unit. The wastewater generated in the plant area will be treated and utilized in various activities service water and greenbelt development. The balance treated wastewater will be disposed into sea. Apart from standby DG set, no other sources will generate air pollution during operational Phase. It is proposed to develop greenbelt in an area of 12.27 Ha. which is 33 % of total plot area.

After deliberation the Committee recommended the proposal with the following conditions in the Clearance letter for strict compliance by the project Proponent

- i. The natural drain passing through the project site should not be disturbed and green belt should be developed on both the sides of the drain.
- ii. The waste water generated shall be treated as committed during the meeting before disposal as per prescribed limits into the creek.
- 4.16 CRZ Clearance for Bhavanapadu Heavy Mineral Sand Project (ML area 1788.00 Ha and capacity 10.0 MTPA) at village Rajapuram & Bhavanapadu, inSanthabommali Mandal and Devunalthada, Suryamani Puram, Komariathada, Sainooru, URK Puram, Amalapadu & Palliivuru in Vajrapukothuru Mandal, in Santhabommai & Tajrapukothuru Talika in Srikakulam District in AP by M/s Trimex Heavy Minerals Pvt Ltd [F.No.11-88/2013-IA.III]

The Committee decided to defer the project, since the project Proponent did not attend the meeting.

4.17 CRZ Clearance for proposed resort at S.No.125/1A3 of Kokilamedu village,Thirukalukundram Taluk, Kancheepuram, Tamil Nadu by M/s Silver Reeds Hotels & Resorts Pvt. Ltd. [F.No. 11-80/2013-IA.III]

The project seeks to set up of a beach resort at S.No.125/1A3 of Kokilamedu village, Thirukalukundram Taluk, Kancheepuram, Tamil Nadu on an area of 10.390 ha. The entire project area is falling in CRZ-III. It involves the development of a resort with a facility of 31 cottages, 92 guest rooms besides other features comprising of restaurants, meeting hall etc. with ground floor and first floor with total built up area of 29,406,35 sqm. within the development zone of 200 mts to 500 mts in CRZ. The total height of the buildings is 8.93 mts. The FSI is 0.226. The total water requirement is 89 KLD and will be met through outsourcing. Ground water shall not be extracted.

The resort has proposed to implement STP to treat the domestic sewage quantity of 66 KLD. The treated sewage of 11 KLD is to be utilized for gardening purpose and the quantity of 30 KLD will be reused for cooling water make up and remaining quantity of 25 KLD will be used for toilet flushing. The food waste and other organic waste of 240 kg/day generated from the resort will be converted as manure through organic waster converter system and the 161 kg/day will be disposed through recycles. The STP sludge of 9 kg/day will be used for manure for gardening. The unit proposed to install DG set of 2x750 KVA with stack of 14.5 m height. The total cost of the project

is Rs. 27.43 Crores.

The TNCZMA has recommended the project vide letter no 22398/EC.3/2013-1 dated 21.11.2013.

The EAC after deliberation decided to seek the following information from the project Proponent:

- Layout maps and Drawings of each unit/ Module.
- Details of the Municipal source of water supply proposed to be used in the further as use of tankers over 38 km does not seems feasible.
- iii. Details of tertiary water treatment facility to be installed.
- iv. Details of energy saving.
- Details of Parking. ν.

CRZ clearancefor mining of Rare minerals in mining lease area of 7.06 ha at 4.18 Manavalakurichi, Lakshmipuram, Colachel villages of Kalkulam taluk in Kannivakumari District. M/s Indian Rare Earths Limited. [F.No.11-72/ 2013-IA.III]

As presented by the Project Proponent the proposal is for mining of Rare minerals in mining lease area of 7.06 ha at Manavalakurichi, Lakshmipuram, Colachel villages of Kalkulam taluk in Kanniyakumari District. Indian Rare Earths Limited (IREL) a Government of India Undertaking, under Administrative control of Department of Atomic Energy (DAE) engaged in mining and separation of beach sand minerals in the country and established mining divisions viz: at Chatrapur, in Odisha, at Chavara, in Kerala and at Manavalakurichi, in Tamil Nadu.

IREL operates three mining units with Corporate Office in Mumbai and produces/sells six heavy minerals namely Ilmenite, Rutile, Zircon, Monazite, Sillimanite and Garnet as well as various value added products. Value addition to Monazite towards manufacturing of Thorium and Rare Earth Compounds, ADU etc. is carried out at Rare Earths Division (RED) at Aluva in Kerala. The minerals produced by IREL are having national importance and also utilized in strategic nuclear applications.

IREL took over the Manavalakurichi Plant in 1965 from M/s.Travancore Minerals Limited & M/s Hopkins & William Limited and since 1966 continuing the mining and mineral separation activities in the coastal areas of Kanyakumari District.

During 1968, Government of Tamilnadu granted the Mining Lease (ML) over an extent of 7.06 hects (Government Sea Beach poromboke area) for mining of Ilmenite, Rutile, Zircon, Monazite, Sillimanite and Garnet in the village Manavalakurichi and the mining lease deed was executed on 30.8.1970 for 20 years. The mining operations are continuing over 7.06 hects ML area for the last four 7.06 hects ML area consists of replenishable mineral sand deposit and decades. major portion of it is located in inter tidal area. Replenishment of beach sand minerals takes place over 7.06 hects ML area due to wave action of Arabian Sea.

Government of Tamilnadu renewed the mining lease for 7.06 hects for another

20 years w.e.f. 1990 upto 2010. 7.06 hects ML area is under renewal w.e.f. 31.8.2010. IREL, Manavalakurichi has submitted the Renewal of Mining Lease application (Form-J of the Mineral Concession Rules 1960) in time during 2009 towards the grant of renewal of mining lease for further period of 20 years (i.e. upto 2030) to the Tamil Nadu Government.

Only manual mining operations are undertaken by IREL, Manavalakurichi over 7.06 hects area engaging the nearby fisherman village society members and the collected mineral sand from the ML area is transported mechanically to the mineral separation plant. The Mining Plan for 7.06 hects mining lease area has been approved by AMDER, Hyderabad during 1991 and IBM, Chennai during Nov 2012. The mining operations over 7.06 hects are carried out as per the approved mining plan. About 70,000 tons of mineral sand is mined annually from 7.06 hects ML area. There is no backfilling nor plantation activities are carried out 7.06 hects area.

Based upon the instructions of MoEF, New Delhi and directions from the Hon'ble High Court, Madras, IREL, Manavalakurichi submitted the application (Form-I as per EIA-2006 notification) to MoEF, Government of India, New Delhi for obtaining environmental clearance for 7.06 hects ML area. EAC (Mining), MoEF, granted the TORs on 16.5.2011 for conducting necessary EIA studies, preparation of EIA/EMP documents & reports, conducting Public Hearing activity etc. towards grant of environmental clearance. M/s Bhagavathi Ana Labs Limited, Hyderabad, an MoEF accredited (QCI/NABET) EIA Consultant for conducting necessary EIA studies and preparation of documents & reports for 7.06 hects mining lease Area.

Public Hearing activity was conducted by Tamil Nadu Pollution Control Board on 22.3.2013. The EAC (Non-coal mining) on 26-28th June 2013 has recommended 7.06 hects mining lease proposal of IREL for grant of EC with specific conditions.

In order to comply the prescribed TORs of EAC(Mining) towards obtaining recommendations of State Coastal Zone Management Authority and preparation of CRZ maps, IREL, Manavalakurichi engaged IRS, Anna University, Chennai (an MoEF Authorized Agency) for preparation of the CRZ maps as per CRZ-2011 notification. IREL, Manavalakurichi also submitted the application (Form-I) along with EIA/EMP documents and CRZ maps to CZMA on 9.2.2013 as per CRZ -2011 notification.

DCZMA, Kanyakumari District, vide their letter no: F-NGL/CRZ/160/13, Dated: 19.7.2013 recommended proposal to Tamil Nadu State Coastal Zone Management Authority (TNSCZMA). TNSCZMA vide letter dated: 13.11.2013 recommended the proposal with specific conditions to MoEF.

Mining operations over 7.06 hects ML area are continuing prior to CRZ – 1991 notification and there is no expansion nor modernization is proposed over the said area. IREL, Manavalakurichi also engaged National Institute of Oceanography, Kochi (NIO) during 2010-11 and conducted the scientific study on near shore sediment transport control mechanism. The study report submitted by NIO inferred that there is no significant change in configuration of shore line in the last 37 years even though IREL is undertaking the mining operations on the beaches. CRZ study report inferred the beaches of IREL, Manavalakurichi are stable.

The Committee observed that one of the condition recommended by the TNCZMA was that there should not be any mining in Coastal Regulation Zone – I (B) areas i.e in the inter-tidal zone. The Proponent has approached the TNCZMA and requested to modify the recommendation, however TNCZMA advised the Proponent to take permission from MoEF.

It was requested by the Proponent that since the major portion of mining lease area falls under inter-tidal zone and major concentration is available in the inter-tidal zone only and also CRZ Notification does not restrict mining of rare minerals in inter-tidal area, EAC may consider and recommend CRZ clearance for inter-tidal zone.

The Committee advised MoEF to seek the necessary clarification from TNCZMA on the subject matter and resubmit the case.

4.19 CRZ Clearance for mining of Rare minerals in mining lease area of 141.22 ha at Manavalakurichi, Lakshmipuram, Colachel villages of Kalkulam taluk in Kanniyakumari District. M/s Indian Rare Earths Limited. [F.No.11–69/ 2013-IA.III]

As presented by the Project Proponent, the proposal is for mining of Rare minerals in mining lease area of 141.22 ha at Manavalakurichi, Lakshmipuram, Colachel villages of Kalkulam taluk in Kanniyakumari District. Indian Rare Earths Limited (IREL) a Government of India Undertaking, under Administrative control of Department of Atomic Energy (DAE) engaged in mining and separation of beach sand minerals in the country and established mining divisions viz: at Chatrapur, in Odisha, at Chavara, in Kerala and at Manavalakurichi, in Tamil Nadu.

IREL operates three mining units with Corporate Office in Mumbai and produces/sells six heavy minerals namely Ilmenite, Rutile, Zircon, Monazite, Sillimanite and Garnet as well as various value added products. Value addition to Monazite towards manufacturing of Thorium and Rare Earth Compounds, ADU etc. is carried out at Rare Earths Division (RED) at Aluva in Kerala. The minerals produced by IREL are having national importance and also utilized in strategic nuclear applications.

IREL took over the Manavalakurichi Plant in 1965 from M/s.Travancore Minerals Limited & M/s Hopkins & William Limited and since 1966 continuing the mining and mineral separation activities in the coastal areas of Kanyakumari District.

During 1981, Government of Tamilnadu granted the Mining Lease (ML) over an extent of 141.2269 hects of area in Kanyakumari district (villages: Manavalakurichi, Laxmipuram and Colachel) for mining of Ilmenite, Rutile, Zircon, Monazite, Sillimanite and Garnet in the village Manavalakurichi and the mining lease deed was executed during 1984 for 20 years. The mining operations are continuing since 1984.

IREL, Manavalakurichi has submitted the Renewal of Mining Lease application (Form-J of the Mineral Concession Rules 1960) in time during 2003 towards the grant of renewal of mining lease for further period of 20 years (i.e. upto 2024) to the Tamilnadu Government.

Manual mining operations are undertaken by IREL, Manavalakurichi over the replenishable areas of 141.2269 hects by engaging the nearby fisherman village society members and the collected mineral sand from the beaches is transported mechanically to the mineral separation plant. However, the non-replenishable areas i.e. areas away from the CRZ areas are mined mechanically through tipper-excavator combination followed by dredging activities. The Mining Plan for 141.2269 hects mining lease area has been approved by AMDER, Hyderabad during 2005 and IBM, Bangalore during 2006. About 10 lakh tons of mineral sand is proposed to be mined annually from 141.2269 hects ML area.

Based upon the instructions of MoEF, New Delhi, IREL, Manavalakurichi submitted the application (Form-I as per EIA-2006 notification) to MoEF, Government of India, New Delhi for obtaining environmental clearance for 141.2269 hects ML area. EAC(Mining), MoEF, New Delhi pleased to grant the TORs on 16.5.2011 for conducting necessary EIA studies, preparation of EIA/EMP documents & reports, conducting Public Hearing activity etc. towards grant of environmental clearance. For complying the prescribed TORs, IREL, Manavalakurichi engaged M/s Bhagavathi Ana Labs Limited, Hyderabad, an MoEF accredited (QCI/NABET) EIA Consultant for conducting necessary EIA studies and preparation of documents & reports for 141.2269 hects mining lease Area.

Public Hearing activity was conducted by Tamilnadu Pollution Control Board on 22.3.2013. The EAC (Non-coal mining) on 26-28th June 2013 recommended the proposal of IREL for grant of EC with specific conditions.

In order to comply the prescribed TORs of EAC(Mining) towards obtaining recommendations of State Coastal Zone Management Authority and preparation of CRZ maps, IREL, Manavalakurichi engaged IRS, Anna University, Chennai (an MoEF Authorized Agency) for preparation of the CRZ maps as per CRZ-2011 notification. IREL, Manavalakurichi also submitted the application (Form-I) along with EIA/EMP documents and CRZ maps to CZMA on 9.2.2013 as per CRZ -2011 notification.

DCZMA, Kanyakumari District, vide their letter no: F-NGL/CRZ/162/13, Dated: 19.7.2013 recommended the proposal to Tamilnadu State Coastal Zone Management Authority (TNSCZMA). TNSCZMA, Chennai vide letter dated: 13.11.2013 recommended the proposal with specific conditions to MoEF.

Mining operations over 141.2269 hects ML area are continuing prior to CRZ – 1991 notification and there is no expansion nor modernization is proposed over the said area. IREL, Manavalakurichi also engaged National Institute of Oceanography, Kochi (NIO) during 2010-11 and conducted scientific study on near shore sediment transport control mechanism. The study report submitted by NIO inferred that there is no significant change in configuration of shore line in the last 37 years even though IREL is undertaking the mining operations on the beaches. CRZ study report inferred the beaches of IREL, Manavalakurichi are stable.

The Committee observed that one of the condition recommended by the TNCZMA was that there should not be any mining in Coastal Regulation Zone – I (B) areas i.e in the inter-tidal zone. The Proponent has approached the TNCZMA

and requested to modify the recommendation, however TNCZMA advised the Proponent to take permission from MoEF.

It was requested by the Proponent that since the major portion of mining lease area falls under inter-tidal zone and major concentration is available in the inter-tidal zone only and also CRZ Notification does not restrict mining of rare minerals in inter-tidal area, EAC may consider and recommend CRZ clearance for inter-tidal zone.

The Committee advised MoEF to seek the necessary clarification from TNCZMA on the subject matter and resubmit the case.

4.20 Environmental Clearance for widening and upgradation of existing to 4/6 laning of Goa – Karnataka Border (Km 93.700) to Kundapur (Km 283300) Section of NH-17 in the State of Karnataka by M/s NHAI. (F.No. 10-107/2011-IA-III)

The proposal was examined by the EAC in its meeting held in November, 2013. It is noted that the project involves blasting operation for making tunnel in forests area and there are complaints alleging the PP has started construction activities prior to grant of EC and destructed mangroves etc. PP informed that detailed response have been submitted to MoEF.

The EAC has re- examined the project in respect of blasting in details. After deliberation, recommended the proposal stipulating following additional conditions:

- i) The EAC noted that according to PP, the impact zone is 50-200 m and the nearby habitation is Karwar Town at 600 m. However, NHAI shall intimate local authority before carrying out the blasting. If there are any damage caused due to blasting, NHAI shall compensate 100 % under the notice of local Authority.
- ii) All the other required clearances for carrying out blasting shall be obtained from the competent Authority including Forests / Wildlife.
- *The blasting shall be restricted only for 8 days with restricted time from 8 am to 6 pm.*
- *The technique adopted for controlled blasting at identified locations is non-electric detonating technique.*

4.21 CRZ Clearance for intake Facilities at Sikka, Jamnagar by M/s Reliance Industries Ltd. [F.No.11-63/2013-IA.III]

The proposal was discussed by the EAC in its meeting held in November, 2013. The EAC after deliberation sought maps to scale relating to the existing facilities, the proposed facility, the Eco Sensitive Zones, Marine NationalPark and Sanctuary along with the latest Google Map, NOC from the appropriate wild life authority, in respect of the proposed facilities, the Capital and maintenance dredging, outfall facilities and other operations and their impact if any during the construction and operation phase on the Marine National Park and the Sanctuary. EAC also sought clarification from the

Ministry whether this proposal requires CRZ clearance at this stage or needed it earlier and whether the present proposal with its various components would require the framing of Terms of Reference and Public Hearing before a further decision in the matter. This report is awaited.

The PP requested the EAC to consider intake and outfall facilities for desalination plant only and the other foreshore facilities can be considered in subsequent meetings.

The EAC after deliberation, deferred the proposal and suggested to the PP to either present the entire component as in Form I of the application or resubmit separate application for the present limited proposal along with the required documents including CRZ map of 1: 4000 scale, NOC with respect to Eco Sensitive Zone, and Marine National Park etc. and the impact of dredging etc.

4.22 EC for development of LNG Terminal at Mundra Port, Kutchch, Gujarat by M/s. GSPC LNG Ltd[F.No.10-2/2009-IA.III]

The EAC in December, 2013 suggested to the PP to carryout the hydrodynamic model study to measure the flow at the mouth of Baradi Mata Creek and come with the plan to ensure sufficient flow between creek and the Gulf and also to protect the mouth of Baradi Mata creek.

The details submitted and presented by the PP were examined by the EAC. According to PP, pre-development of Port, there was wider flow at the mouth during high tide and 82 m wide flow during low tide. Post development, the flow is 290 m wide at low tide. The hydrodynamic model study recommended annual bathymetry survey in Baradimata creek and the near shore areas in front of the mouth/ west of breakwaters and maintenance dredging to ensure that the creek mouth remains open.

The EAC examined the proposal of PP for ensuring flow into *Baradimata creek*. Considering different alternatives, it was thought prudent not to construct any civil structure at this juncture.

After deliberation, the EAC recommended the project grant of EC and CRZ clearance to the project stipulating the following conditions:

- (i) PP shall carry out annual bathymetry survey in Baradimata creek and the near shore areas in front of the mouth/west of breakwaters as per the area of extent proposed in the hydrodynamic study.
- (ii) Carryout periodical maintenance dredging to ensure that the creek mouth remains open in all the seasons for tidal exchange of water.
- (iii) Continuous monitoring of tide levels in the upstream sections of the creek as proposed in the study and its comparison with open ocean tide at Mundra Port to serve as an indicator of flows in to the creek.
- (iv) PP shall conduct flow measurement at Baradimata creek at the location derived from hydrodynamic study atleast once a year for 7 days during spring

- and neap tides to establish a trend and monitor any adverse changes in reduction of flow into the creek.
- (v) Findings and action taken on the above studies shall be submitted along with six monthly report to Regional Office, MoEF.
- (vi) Any direction issued by the MoEF with respect to the report submitted by Ms Sunita Narain Committee as applicable shall be complied with by the Proponent as applicable.

4.23 Extension of validity of Adani Port and SEZ Ltd

As presented by the PP the EC and CRZ clearance was granted for the water front developments on 12.01.2009 and an addendum was issued on 19.01.2009. Many facilities have been commenced in 2009 and 13 container berths out of 16, 2 coal berths out of 4, 5 dry cargo berths, 9 liquid berths, 2 shipyard etc are yet to be developed. The overall development was affected due to economic slow down. PP informed that there is no change in the scope of the project. PP requested for revalidation for 5 years.

The EAC recommended to extend validity of clearance for 5 years with any existing qualification in respect of north port.

Minutes of the 130^{th} meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction and Miscellaneous projects held on 22^{nd} to 24^{th} January, 2014 at Conference Hall, MMTC, Scope Complex, New Delhi – 110 003.

List of Participants

Expert Committee

Shri Anil Razdan
Shri. M.L. Sharma
Sh. R. Radhakrishnan
Dr. M.V. Ramana Murthy
Dr. Anuradha Shukla
Shri S.K. Sinha
Shri Y.B. Kaushik
Chairman
Member
Member
Member
Member
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8. Shri.Yadav Representative, CPCB9. Shri Lalit Kapur Member Secretary

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10. Shri E. Thirunavukkarasu Scientist 'C', MoEF 11. Shri Amardeep Raju Scientist 'C', MoEF
