Minutes of the 129^{th} meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction and Miscellaneous projects to be held on 26^{th} to 28^{th} December, 2013 at Fazal Hall, Scope Complex, New Delhi – $110\,003$

1. Opening Remarks of the Chairman.

The Chairman welcomed the members to the 129th meeting of the Expert Appraisal Committee.

2. Confirmation of the Minutes of the 128^{th} Meeting of the EAC held on $20^{th}-23^{rd}$ December, 2013 at New Delhi.

The EAC confirmed the minutes of the 128th Meeting. Member Secretary informed that Shri Rahul Choudhary, Advocate has sent a legal notice in respect of M/s Gujarat Pipavav Port Ltd stating that the PP has not addressed certain issues viz. study on traffic, Road carrying capacity, hydrodynamic, ship movement, dredge disposal location, biological impact etc as per the ToRs and EAC has also not examined all the issues and not applied its mind. It is also stated that the dust control measures have not been compared with other similar ports as observed by Hon'ble NGT, hence it amounts to contempt.

EAC refuted all the allegations and was of the considered view that PP made detailed presentations based upon the TORs and observations of NGT and all the relevant issues have been examined threadbare in its three consecutive meetings held in September, 2013, October, 2013 and November, 2013 in full compliance with the directions of Hon'ble NGT. The measures provided in the existing ports like Chennai Port were also discussed by the members before making recommendations. The additional conditions on certain issues have been stipulated by the EAC. It was of the view that the legal notice was frivolous and a dilatory tactice.

3. Consideration of old Proposals

3.1 CRZ Clearance for enhancing effluent quantity from 60 MLD to 75 MLD treated effluent pipeline for discharge of effluent from Kantiyajal in to deep sea through existing offshore pipeline and diffuser dist: Bharuch by M/s Narmada Clean Tech Ltd. [F.No.11-76/2012-IA.III]

The project was examined by the EAC in its meeting held in November, 2013 and EAC was not convinced that there would be no change or replacement of the pipeline in the offshore area because of the substantial increase in the effluent. It was noted that the proposal is to be considered afresh and not as an amendment to the earlier clearance since the clearance was granted in 2003 and it was put in operation. The EAC after deliberation advised the Project Proponent to submit the effluent balance, modelling and dispersion details, afresh.

The PP submitted the effluent balance, modelling and dispersion details. According to the clearance, the effluent generation is 32 MLD at Ankleshwar + 8 MLD at Panoli & 20 MLD at Jhagadia, however, the effluent generation at Jagadia is about 3 MLD against 20 MLD and it is likely to be increased to 35 KLD. After expansion, the capacity will be 75 MLD (32 MLD-Ankleshwar, 08 MLD – Panoli, 35 MLD-Jhagadia). Total effluent pipeline (Onshore) length is 61 km from Jhagadia

to Kantiajal, Offshore pipeline length is 9.37 km. The pipeline passes 500 m on shore CRZ area and 9.37 km offshore. After deliberation, the EAC noted that the proposal and the HTL /LTL map submitted by the PP is contradict each other. PP was advised to submit a clear revised ma along with a fresh proposal for CRZ clearance. 3.2 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 did not attend the meeting. 3.3 CRZ Clearance for laying of additional phosphoric acid pipeline from jetty (Kakinada Seaport) to Plant Kakinada, Andhra Pradesh by M/s. Coromandel International Ltd. [F.No.11-62/2013-IA.III] The Committee decided to defer the project, since the Project Proponent requested to postpone to next EAC. 3.4 Extension of validity of CRZ clearance for foreshore facilities of - Ennore Thermal Power Station Annex (1X660 MW) at Ernavoor village, Madhavaram Taluka, Thiruvallur District by TANGEDCO[F.No.10-21/2009-IA.III] As presented by the Project Proponent, CRZ clearance for the foreshore facilities has been granted by MoEF vide letter dated 23.12.2008. Environmental clearance was granted for Power Plant on 03.06.2009 for 600 MW subcritical based on 30 % imported and 70 % domestic coal. The same was revised for 660 MW super critical thermal plant based on 100 % domestic coal on 24.01.2013 TANGEDCO have already commenced the project activities viz., site grading and construction of field office and incurred expenditure to the tune of Rs.4.70 crores. Open tender under International competitive Bidding (ICB) route has been called, for the execution of project. Bids have been opened and the tender will be awarded shortly. Hence, PP requested for extension of validity of CRZ clearance for another period of 5 years, which was the likely project commissioning schedule. There will be reduction of water intake from 92, 000 KL/h to 25,000 KL/h due to decommissioning of the existing 450 MW ETPS. The EAC recommended the extension of validity of the clearance for another five years. 3.5 Extension of Environmental Clearance for the project of two new riverine multipurpose jetties at Haldia Dock Complex by Kolkata Port Trust (KoPT) [10-41/2007-IA.III] The Committee decided to defer the project, since the Project Proponent did not attend the meeting. 3.6 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 project, since the Project Proponent did not attend the meeting.

3.7 EC Clearance for construction of New International Arrival Block at Calicut Airport by M/s KITCO [F.No.10-72/2011-IA.III].

The project was examined by the EAC in its meeting held in September, 2013. After deliberation the Committee sought detailed information in respect of response / action plan on the issues raised during the PH, Consent, EC compliances and Solid Waste Management.

Project Proponent submitted and presented the additional information before the EAC in its meeting in December, 2013. The EAC after deliberation recommended the grant of EC stipulating following conditions:

- (i) The transportation of soil/building materials and the wastes shall be done in closed trucks and not by covering with tarpaulin.
- (ii) The Rain water Storage area as shown in the presentation was not maintained properly, shall be upgraded
- (iii) Committee noted that the sanitation in the Airport needs to be improved with no open disposal of garbage.
- (iv) The compliance to EC granted in 2005 was presented by the PP, Committee noted that the STP was commissioned only in 2011. Till then the sewage was treated in septic tanks and being discharged outside the airport. The EAC suggested that Ministry to examine the matter.

3.8 CRZ Clearance for laying new submarine pipeline within Visakhapatanam Port Trust premises from OSTT jetty to SS jetty by M/s Hindustan Petroleum Corp. Ltd [F.No 11- 81/2013-IA.III]

Chairman Shri Anil Razdan recused himself and Shri. M.L Sharma Vice-Chairman chaired the meeting.

As presented by the Project Proponent, Visakha Refinery of Hindustan Petroleum Corporation Limited is operating a partially sub- sea crude pipeline of 36" dia. from OSTT jetty (Offshore Tanker Terminal, located at about 700 mts. from shore) of Visakhapatanm Port Trust (VPT) to HPCL refinery for discharging Crude oil from Ocean tankers. This pipeline has been in operation since 1986. It is now proposed to lay one more partially submarine pipeline of 24" diameter from the same jetty for discharging finished Petroleum Oil Products (HSD/ SKO/ MS). This pipeline will be laid parallel to the existing 36"dia. crude oil pipeline. The above pipeline will be connected to the existing 24"dia. product pipeline between the onshore SS Jetty and Visakh Refinery. Total length of proposed pipeline will be 1090 mts, out of which 700 mts. will be submarine portion and the balance 390 mts. will be onshore underground portion.

The proposed 24" dia pipeline connectivity from OSTT to SS Jetty will lead to decongestion of existing Onshore jetties (SS Jetty, OR1 & OR2 Jetties) which are presently overloaded and also constrained by lesser draft. Above proposal will result in less idle time for Ocean tankers berthing at Visakh port for discharge and thereby

better turnaround of Ocean Tankers. This will also augment the capacity utilization of OSTT Jetty. The proposed pipeline to be protected against external corrosion with Impressed Current Cathodic Protection (ICCP) to ensure its continued safe operation. The project cost is estimated at Rs.28.33 crores.

The EAC after deliberation recommended grant of clearance stipulating following conditions:

- (i) All the conditions stipulated by the CZMA shall be complied with.
- (ii) 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.
- (iii) Oil Contingency Management Plan shall be put in place.
- 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]

The EAC deferred the project to the next meeting since the Project Proponent requested to postpone the project to the next meeting.

3.10 Finalization of ToR for proposed construction of dedicated berth and other infrastructure facilities for the administration of the Union Territory of Lakshdweep at Beypore, Calicut, Kerala by M/s CPWD, Calicut Central Circle. [F.No. 10–64/2013-IA.III]

As presented by the project proponent, the project involves construction of dedicated berth and other infrastructure facilities for the administration of the Union Territory of Lakshdweep at Beypore, Calicut, Kerala. The project involves in following components:

- (i) Construction of dedicated berth structure of size 200 x 20 Metres.
- (ii) The Passenger amenities hall in two storeyed (G+1) RCC frame structure of 20x20 Metres.
- (iii) Two warehouses each of size 70 x 20 Metres.
- (iv) The existing land area covers only 3600 Sqm. Out of the total required area of 10000 sqm, reclamation with earth will be required with RCC retaining wall along the perimeter for the construction of buildings in the presently water covered area.
- (v) Provision for dredging for 200 x 20 Metres in front of the wharf.
- (vi) Provisions for bulk services and development works.

The geographical location of Beypore coastal site is 11 9'48.96"N and 75 48'27.74"E. Kadalundi Bird Sanctuary is situated at an aerial distance of 4.2 KM from the proposed project. The proposed land is owned by Government of Kerala. No R & R issue involved. Presently, the existing facility at Old Beypore Port is being used for passenger and domestic transport to Lakshadweep. The Project is

being developed by CPWD Based on the Memorandum of Understanding between the Secretary, Port Shipping & Aviation, Union Territory of Lakshadweep and CPWD. Dredging for 200 x 20 Metres in front of the wharf will be carried out. The dredge material will be used in the landfilling activities. 2 Nos. of warehouses each of size 70 x 20 Metres for storing the cargo is proposed. Solid waste will be handled as per the Municipal solid waste management and handling rules. Sewage treatment plant for the disposal of Sewage for the proposed jetty shall be constructed. The expected cost is to be Rs. 49.24 crore.

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

- (i) Kadalundi Bird Sanctuary is about 4.2 km from the site, clearance from NBWL shall be obtained.
- (ii) HTL/LTL map to the prepared by an authorized agency on 1:4000 scale superimposed with the project site. Recommendation of Keraka CZMA to be submitted.
- (iii) Details of the dredging, disposal and reclamation.
- (iv) Details of solid waste and management.
- (v) Details of water requirement, source, waste water treatment and disposal.
- (vi) Details of the project components, channel, jetty.
- (vii) Details of the ships / boats to be handled.
- (viii) Details on traffic study/road connectivity and impact.
- (ix) Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.
- (x) Submit details of Risk Assessment, Disaster Management Plan including emergency evacuation during natural and man-made disaster like floods, cyclone, tsunami and earth quakes etc.
- (xi) The General guidelines indicated in annexure-I to this Minute 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 after addressing issues raised during Public hearing be submitted to the Ministry as provided in the Notification.

3.11 Finalization of ToR for the proposed expansion of the Dharamtar Jetty facility by M/s JSW Dharamtar Port Ltd. [F.No.11–79/2013-IA.III]

As presented by the project proponent, the project involves expansion of the Dharamtar Jetty facility. JSW Dharamtar Port Limited (JSWDPL) is a Special Purpose Vehicle under the aegis of JSWIL, to handle the cargo of the JSW Steel Limited, Dolvi works. JSWDPL has proposed to expand the existing 431.5m jetty to 1740 m to handle the cargo from existing 9.69 MTPA to 40 MTPA. The increase in the cargo is envisages as JSW Steel Limited Dolvi works proposes to increase its production capacity from 3.2 MTPA to 10 MTPA in the coming years in phases. The main commodities to be handled at the facility include IBRM, CBRM, Fluxes, clinker and iron and steel as import cargo and export cargo such as Cement, slag and HR.

Presently the cargo is being handled with a 431.5 m jetty using 2 barge unloaders and 2 LHM 250 cranes. The expansion of the cargo receipt facility is expected in three phases. Phase-I consists of the rehabilitation of the existing Jetty. Refurbishing of the unloading equipment and MHS would also be undertaken. The new material handlers (2 nos) would be reinforced to improve the efficiency and overall productivity of the berth.

In Phase-II, 600 m long Jetty would be constructed to the north to handle the cargo of about 17 million tons per annum. This would be accomplished by deploying 4 new barge unloaders with average capacity of 1000 TPH (each). A new cross country conveyor would be provided, stock yards created with 2 nos. stacker cum reclaimers.

In the Phase-III, the existing berths shall be dismantled and new berths of 450 m would be constructed. This new Jetty would be provided with 2 new barge unloaders. With 6 barge unloaders, 32 million tons of import and 5 million tons of export cargo could easily be handled. The new material handlers requisitioned in the Phase I to bolster the output would then be used at the 7th berth (southernmost berth) for export cargo. 2 material handlers with suitable support can handle the required export cargo.

The area behind the berth would be reclaimed for enabling local behind the berth storage.

The total power requirement of about 8 MW for the proposed expansion is proposed to be supplied through MSEDCL or power supply from JSW captive power plant of the steel plant. The total water requirement for the Jetty will be about 800 m³/d that includes water required for drinking and domestic purpose, sprinkling at material handling yard and gardening. This water requirement shall be met from the existing allocation to JSW Steel Ltd. Adequate arrangement for sewerage and storm water drainage has been made for rapid drainage and treatment of the generated sewage.

Dredging shall be carried out. The dredged material shall be used for reclamation. The proposed facilities are located at latitude 180 42' 19". North and 730 1' 42" East.

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

- (i) Submit the details of compliance of conditions of Environmental Clearance.
- (ii) Submit HTL/LTL map prepared by an authorized agency on 1:4000 scale superimposed with project layout. Submit recommendation of Maharashtra CZMA.
- (iii) Submit the details of the mangroves area, along with conservation/protection measures. No reclamation /construction activity shall be carried out within 50 m of mangroves.
- (iv) Submit the likely impact on marine flora and fauna due to the enhanced traffic / bringing higher capacity barges in the creek.
- (v) Submit the details of the likely impact on the creek adjacent to the facility
- (vi) Details of the project components, channel, jetty.
- (vii) Details of the ships / barges to be handled.
- (viii) Details of the dredging, disposal and reclamation.
- (ix) Submit the Oil Spill Contingency plan
- (x) The port shall ensure that the ships under operation follow the MARPOL convention regarding discharge or spillage of any toxic, hazardous or polluting material like ballast water, oily water or sludge, sewage, garbage etc.
- (xi) Details of solid waste and management.
- (xii) Details of water requirement, source, waste water treatment and disposal.
- (xiii) Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.
- (xiv) Submit details of Risk Assessment, Disaster Management Plan including emergency evacuation during natural and man-made disaster like floods, cyclone, tsunami and earth quakes etc.
- (xv) The General guidelines as per the annexure-II to this Minute 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 after addressing issues raised during Public hearing and be submitted to the Ministry as required in the above Notification.

3.12 Finalization of ToR for Kandla Port Trust Vadinar (Ship repair, Single point mooring, Liquid bulk facility) by M/s Kandla Port Trust [F.No.10-25/2013-IA.III]

Kandla Port Trust envisages augmenting its capacity at Offshore Oil Terminal, Vadinar, Dist Jamnagar covering the following:

- 1. Setting up of Ship Repairing Facility at Vadinar
- 2. Single Point Mooring Facility at Vadinar
- 3. Liquid Bulk Facilities at Vadinar

Vadinar is located at latitude 22⁰ 28' N, longitude 69⁰ 39' E. The traffic handled at Kandla Port in past years has been in excess of the existing handling capacity of the port. In this context, the authority has envisaged to setting up Ship repairing facility, SPM (Single Point Mooring) and Liquid Bulk facilities at Vadinar.

The proposed capacity of the proposed project is 38 MMTPA and involves dry dock 90m long and 18m width on pile foundation for ship repairing and total length of Liquid Bulk Terminal is 600m split into two halves of 300m at Vadinar. The project cost 68.82 Cr for Ship repairing facility, 635.83 Cr for SPM and 405.15 Cr for Liquid Bulk facility at Vadinar.

The CRZ map for the proposed projects at Vadinar has been prepared by Institute of Environmental Studies and Wetland Management, Kolkata, West Bengal in terms of CRZ Notification, 2011.

The EAC noted that the proposed facilities appear to be located in CRZ-I (A) hence it suggested the submission of a clear CRZ map prepared by an authorised agency, superimposing the existing and proposed facilities, on the same for a correct assessment of the proposed project.

4.1 Revalidation of Environmental Clearance for Optimizaion 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]

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 nos of Shallow draught Berths including dredging instead of 3 nos of berths planned earlier. The backup areas of the proposed 2 nos 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 nos of Shallow Draught Berth 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 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 births instead of three shallow draft births) 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.

4.2 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 requested to postpone the item to the next meeting.

4.3 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]

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

4.4 CRZ Clearance for construction of major bridge across Bankot creek between Kolmandla in Raigad District and Veshvi in Ratnagiri Distirct on Revas reddy Road by Public Works Department, Mahad, Maharashtra. [F.No.11-34/2013-IA-

As presented by the project proponent, the project involves construction of major bridge across Bankot creek between Kolmandla in Raigad District and Veshvi in Ratnagiri Distirct on Revas Reddy Road. The proposed bridge is at Bankot creek joining Raigad and Ratanagiri district in Konkan division, Maharashtra State. It involves construction of 1800mt length bridge across the creek with 2 connecting approach roads on both the sides. The bridge with 2 cable stayed spans of 100m. Each with single pylon and rest of the structure with 50m. Spans with cantilever box PSC box girders. The proposed site falls in CRZ-I and IV. Total three alignments have been proposed across the Bankot creek viz, Alignment A, Alignment B and Alignment C. Out of these, Second alignment is not suitable for bridge construction as the villages like Bagmandala and Vesavi are situated on northern and southern bank. Hence, land acquisition could be major hindrance. In case of third alignment major mangroves are observed along the approach roads. The length including approaches 1.8 km, is width 7.5m with 2 footpaths of 1.50m each. The organic solid waste from the labor camp will be used, after composting, for greenery as manure. The project cost is Rs. 260 Crores.

The MCZMA has recommended the project vide letter no.CRZ-2011/CR-48/TC-4 dated 28.05.2013.

The EAC felt that there could be a better alternative alignment for the bridge having lesser environment impact.

The EAC after deliberation recommended to defer the proposal with the following suggestions:

- (i) Re-evaluate and submit the alternate alignments as discussed during the presentation in terms of cost, tentative area of mangroves which is going to be affected, connectivity with the road etc.
- (ii) A Senior officer of the level of Chief Engineer shall be deputed for the meeting for the appraisal of the project.

4.5 Finalization of ToR for development of all weather deep water port in Hugli Estuary, West Bengal by M/s. Amma Lines Pvt. Ltd. [F.No.11-58/2013-IA.III]

The project was examined by the EAC in its meeting held in November, 2013. The EAC after deliberation advised the PP to submit the justification for site selection, the alternatives considered, connectivity to main land and the likely impacts on the estuary and neighbouring areas, to present a comprehensive scenario which can be examined before finalising the ToR.

Project Proponent presented justification for the site selection and presented three alternatives for consideration. The three alternative sites involved development of facility north of the Rasulpur river, development of facility immediately downstream of the river mouth and on the shallow region off the coastline. From the analysis of the options the third option i.e. on the horse shoe shaped under sea island the development would be most optimum and hence it is proposed to be adopted.

The Committee noted that the proposal appeared to be a very innovative one and could be of extreme strategic and economic value.

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

- (i) Submit all the three alternatives sites on the same map showing the KOPT channel also on the same map
- (ii) Approval from Ministry of Shipping, Indian Navy and State Government of West Bengal shall be obtained and submitted
- (iii) No portion of the port should fall within the KoPT channel limits.
- (iv) Submit the details of the connectivity to the main land, along with provision for movement of fishing boats etc
- (v) Marine ecological study should be conducted
- (vi) Space available for passing of the fishing vessels/boats should be clearly shown on the map
- (vii) No Objection Certificate shall be obtained from KoPT as the proposed port appeared to be on the immediate vicinity of the KoPT channel.
- (viii) Submit HTL/LTL map prepared by an authorized agency on 1:4000 scale superimposed with project layout. Submit recommendation of SCZMA.
- (ix) Details of the shore line studies to study the likely erosion and accretion.
- (x) Submit the details of Oil Spill Contingent Management Plan. Existing infrastructure and its adequacy and additional infrastructure, if any shall be discussed
- (xi) 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 of fishes, etc.
- (xii) Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.

 Comprehensive common environmental monitoring by Port Trust and other PPPs located within the port shall be prepared in a scientific way
- (xiii) Submit details of Risk Assessment, Disaster Management Plan including emergency evacuation during natural and man-made disaster 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.
- (xiv) Submit the details of proposed cargo handling along with the dust control measures at different cargo handling stages shall be elaborately discussed.
- (xv) Environmental aspects, mitigation measures and post project monitoring shall be submitted project wise.
- (xvi) Submit the Details of Hazardous Wastes generated, and precautions planned during handling, compliance with Hazardous Waste Rules.

- (xvii) Details of the existing and proposed green belt, with suitable plan.
- (xviii) Submit the details of the fishing activity and likely impact due to the activity.
- (xix) The General guidelines in terms of the annexure-II to this Minute 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 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.

4.6 CRZ Clearance for construction Groynes for protection of 36 pipeline across river Minodla at village Danti, Dist Navsar, Gujarat M/s ONGC [F.No.11–37/2013-IA.III].

As presented by the Project Proponent, the sour Natural Gas produced at South Bassein field (Mumbai offshore) is transported to Hazira Plant through 36" dia gas trunk pipeline for processing and onward transmission to downstream consumers. The pipeline with an offshore length of 214 Km lands at Umbrhat land fall point and further crosses through the east west flowing river Mindola having covered a distance of 14 km from landfall point to Hazira plant. The pipeline is of national importance being carrier of natural gas for many downstream consumers. Its safety is of utmost importance as it carries sour gas.

The pipeline at Mindola river crossing (near Danti village) had developed free span on south bank due to high current and the scouring of the river bed. This led to increase in the unsupported length of the pipeline which resulted in vibrations/oscillation of the pipeline. As a temporary measure, five intermediate supports have been provided to arrest these vibrations/oscillations.

M/s. DHI and EIL proposed to construct two Groynes on either side parallel to the pipeline at south bank for protection of the pipeline and to arrest bank erosion. Groynes shall be constructed using rocks/boulders (stacking) with geo-textile laid beneath the structures.

The proposed scheme consists of two Groynes of approximately 207 M (sea side) and 249M (river side) length located approximately 217 M on either side of the pipeline. The crest has elevation of (+) 7.6 M w.r.t. CD and width of 6.0 M. The Groynes have side slopes of 2.0 H: 1.0 V. The Groynes extend from the south bank and terminate in a round heads. The Groynes consists of a core made up of quarry run rock size of 5-100 kg, a secondary armour layer with rock size of 100 kg and primary layer with rock size of 50 kg. An apron of 1.0 M thickness is provided around the Groynes. A geo-textile is provided below the Groynes.

The above 'Parallel Groynes Solution' was found suitable after a detailed simulation study by M/s. DHI and EIL for various options including 'Angled Two Groynes

Solution'. Four different layouts were tested for the parallel two Groyne solution. According to the PP, the parallel two Groynes solution has the advantage that the Groynes can be gradually extended whenever required without colliding with the location of the pipeline. The scheme has been technically vetted by NIT, Surathkal. SCZMA recommended the project vide letter dated 14.05.2013.

The EAC noted that huge hard structures are proposed in the river and the proposed groynes could solve one problem and create other problem in the river. The Committee after deliberation, suggested that the PP should scientifically analyse the oscillation and resonance aspect and come up with more intelligent and less cumbersome some alternatives after due examination of Root Cause Analysis. The committee advised the PP to come back with the best technology / solution/alternatives urgently.

4.7 Environmental & CRZ clearance for installation of terminal facilities to handle 10 MMTPA of additional NG at PLL, Dahej, Gujarat by M/s Petronet LNG Limited. [F.No.11-63/2011-IA.III]

As presented by the project proponent, the proposal involves installation of terminal facilities to handle 10 MMTPA of additional LNG at Petronet LNG Ltd, Dahej Dahej LNG Terminal is presently operating at its full capacity of 10 Million Tonnes Per Annum (MMTPA). The plant has one jetty, four LNG tanks (each having a gross capacity of 160,000 cubic meter) and regasification facilities along with associated utilities (sized for handling 10 MMTPA of LNG). In view of the market scenario and availability of domestic gas an to meet the increased requirement, PLL has planned to augment the capacity of Dahej LNG Terminal from 10 MMTPA to 20 MMTPA (Phase III expansion). Total installed capacity shall be 20 MMTPA after expansion, with provisions to carry out the same in a phased manner, Phase-IIIa (10 to 15 MMTPA) estimated to be completed by end 2016 and Phase-IIIb (15 to 20 MMTPA) by end 2020. Utilities and other associated facilities shall be installed for 20 MMTPA capacity in Phase-IIIa itself

The Major additional equipment/facilities proposed are LNG Storage Tanks (each of 180,000 cbm gross capacity), In-Tank Pumps, BOG Compressors, BOG recondensor, HP Pumps, STV, STV (cogen), Send out metering, Fuel gas station, Air heaters, Glycol Water pumps, Hot water pumps, GW expansion vessel, GTG, Nitrogen unit etc.

Proposed expansion will be constructed in accordance with the NFPA 59 A-Standard for the Production, storage and handling of liquefied Natural gas, IOSD-194- Standard for Storage and handling of LNG, EN 1473- Installation and equipment for LNG- Design of onshore installations. Existing facilities are in compliance with M.B.Lal Committee report and same will be followed for the proposed project.

The Risk assessment / Hazard analysis has been done for various scenarios of associated risks and the local meteorology. LNG release modelled for gaseous dispersion using the model ALOHA- Area Locations of Hazardous Atmospheres developed by National Ocean Atmospheric Administration-USA(NOAA) and US Environmental Protection Agency(USEPA). In all scenario, the risk contours will remain well within the plant boundary limit. The modelling suggested that maximum

vulnerable heat radiation will not spread beyond 181 m, nearest village is at 1.5 km from the proposed expansion facility. Hence, human habitation will not be affected.

The Forests and Environment Department, Government of Gujarat has granted on 30.10.2013 approval for diversion of 22.62 ha forests land based on the formal approval of MoEF, RO, Bhopal dated 05.08.2013.

HTL/LTL demarcation has been carried out by IRS, Anna University and according to the demarcation, there is no eco-sensitive area in the study area. The Gujarat CZMA has recommended the project .

The ToRs were finalised by EAC in January, 2012 including conduct of Public hearing. Public Hearing was conducted on 19.06.2013 at the site. In general, the public welcomed the project. The issues raised during the PH were infrastructure facilities such as Schools, roads for the nearby villages and employment for the educated and skilled persons. The responses provided by the Project Proponent were examined by the EAC. The Committee was satisfied with the response.

PP informed that compliance of EC are being regularly submitted to the RO,MoEF. The inspection report of Gujarat PCB dated 24.05.2013 submitted shows compliance with the consent conditions. 10m width of green belt on sea side and 50m on other three sides will be developed. PLL committed to plant mangroves in 1050 ha by 2015 and already plantation in an area of 650 ha has been developed in consultation with State Forests Department/ Gujarat Ecological Commission.

The EAC after deliberations recommended the grant of clearance to the project stipulating the following conditions:

- (i) All the recommendations made by the Gujarat CZMA shall be complied with.
- (ii) The facility shall be constructed in accordance with the NFPA 59 A-Standard for the Production, storage and handling of liquefied Natural gas, IOSD-194- Standard for Storage and handling of LNG, EN 1473-Installation and equipment for LNG- Design of onshore installations and M.B.Lal Committee report.
- (iii) Precautionary measures shall be put in place to prevent leakage of LNG due to any disasters including tidal/tsunami wave, seismic and other natural calamities. Disaster Management Plan shall put in place to manage emergencies.
- (i) Oil Spill Contingency Management Plan shall be put in place.
- (ii) Online sensor for load monitoring shall provided as committed.
- (iii) Temperature sensors, gas detectors, spill detectors shall be installed to take care of any type of spillage or leakage of the gas from the plant and the trucks.
- (iv) Project proponent shall explore training the local population with the

help of training institutes like ITI etc, to make them suitable for employment in the facility.

(v) All the recommendation of the EMP, Risk Assessment and Disaster Management Plan shall be complied within letter and spirit. All the mitigation measures submitted in the EMP/DMP 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.

4.8 Environmental Clearance for proposed 12.5 MLD CETP at GIDC Sarigam, District – Valsad, Gujarat by M/s Gujarat Industrial Development Corporation. [F.No.10-17/2012-IA.III]

Gujarat Industrial Development Corporation (GIDC) has developed total 182 numbers of Industrial Estates in 25 districts of Gujarat. It has also developed 7 numbers of Special Economic Zone (SEZ). GIDC is now establishing special investment regions (i.e. PCPIR) also. GIDC decided to develop common effluent treatment plant (CETP) of capacity 12.5 MLD so that effluent can be treated as per the safe disposal norms for marine discharge. The proposed CETP will be located in GIDC Sarigam Estate developed by GIDC in District: Valsad, Gujarat. The site for construction of CETP is located at about 20⁰ 18' 16.20" North Latitude and 72⁰ 50' 58.48" East Longitude. Total area of the site is about 1,00,000 m² and the same has already been allotted. The treated effluent will be discharged to existing effluent discharge pipeline into Arabian Sea near Tadgam, Taluka: Umbergaon, Dist: Valsad through diffusers.

Total water requirement for proposed project during the operation will be 45 KLD. For domestic purpose 5 KLD & for industrial purpose 40 KLD of water will be used during the operation. The water requirement for the proposed project will be met by the GIDC Sarigam water supply Pipeline. Requirement & Source: 3000 KVA &DGVCL (Dakshin Gujarat Vij Corporation Limited) DG sets: 650 KVA x 4 Nos.(May be used in case of power failure/emergency only). FUEL: High Speed Diesel: –480Ltr./hr

Total estimated cost of the project is approximately Rs.77.2 Cr. This cost includes land, civil & structural, equipment, piping, electrical, pollution control, Green belt development & safety equipment. Rupees 0.58 Crores are considered for the environmental management system and recurring cost/annum for EMS will be 5 Lacs appox.

Proposed to develop Greenbelt in about 1,000 Sq. Mtr. area within the premises. CRZ clearance is already obtained for laying of treated effluent disposal pipeline from GIDC Sarigam to disposal of sea near Tadgam, Valsad. CC&A obtained from Gujarat Pollution Control Board.

Since the project is located within 10 kms of Union Territory of Daman and DNH, the project is treated as Category 'A'. EAC finalised ToR in March, 2012. The Committee exempted the conduct of Public Hearing since the site is located within the Industrial Estate.

The EAC after deliberation recommended grant of Environmental Clearance stipulating following conditions.

- (i) The sewage effluent generated from the campus shall be diverted to the CETP instead of creating a separate septic Tank.
- (ii) The limits for inlet effluent characteristic should be in coordination with the permissible limit prescribed for the outlet effluent characteristic. The CETP outlet effluent characteristic shall have to be authenticated by GPCB.
- 4.9 Finalization of ToR for proposed Common Effluent Treatment Plant (CETP) by M/s Pashamylaram Common Infrastructure Pvt. Ltd.[F.No.10-65/2013 IA.III]

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

4.10 Finalization of ToR for sand mining at Undi, Varwade, Reel Villages of Ratnagiri Dist., Maharashtra by M/s Indian Garnet Sand Co. (P) Ltd. [F.No.10-70/2008-IA.III]

The proposal is for sand mining at Goakhandi, Undi, Varwade, Reel Villages of Ratnagiri Dist., Maharashtra. The proposal is for extraction of illiminite at the project site. The proposal involves only manual scrapping upto a depth of 30 cm and then transportation to the pre-concentration unit. At the pre-concentration unit which will be located outside CRZ area, the mineral will be separated by magnetic separators. No water shall be used at the concentration stage. Water requirement will be only for the working personnel. The total cost of the project is Rs 800 lakhs.

The proposal is for mining of mineral occurring as pocket deposits lie between Latitudes of 16°48' to 17°15' (N), Longitudes of 73 °27'30" to 73°28'33" (E) in Undi, Reel and Warvade villages in Ratnagiri district of Maharashtra. The depth of mining is limited to ONE METER. No bench formation is possible considering that it is loose sand. No drilling and blasting is involved.

Mining will be done by suitable methods given below, as warranted by the location and substratum:

- 1. Scrapping using manual labour with the help of shovels and spades
- 2. Using small excavators (for beach areas)
- 3. Using pumps (in water area)

The depth of mining is limited to ONE METER. No bench formation is possible considering that it is loose sand. No drilling and blasting is involved.

In Maharashtra coasts, the accumulation of Ilmenite sand has very high percentage to the tune of around 40%. The sand along with mineral will be sieved manually to separate the heavy fraction around 15% (by vol) or (80% w as Ilmenite) which will be transported to a plant for further processing to be located at MIDC Ratnagiri or on private land near village Kolisare/Agarnala in Ratnagiri District, located outside CRZ. The balance 85% fraction will be sent back to the mined out

area for back filling. The power requirement for pre concentration plant (Mobile Unit at site) is 50 kVA to be sourced by DG and for the final processing plant about 150 kVA - available through MSEDCL grid.

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

- (i) The proponent has to apply separately for Environmental Clearance for Non-CRZ area for the Varwade site.
- (ii) Submit HTL/LTL map prepared by an authorized agency on 1:4000 scale superimposed with project layout. Submit recommendation of Tamil Nadu CZMA.
- (iii) Details of the mining plan indicating the year-wise mining and the phase-wise back filling shall be provided.
- (iv) Submission of soil analysis report and impacts of mining up to a depth of one meter. No machine shall be used for mining activities.
- (v) Mineral processing plant shall be located outside CRZ area.
- (vi) Submit the details of the safety measures for workers to prevent radioactive impact if any.
- (vii) Submit details about transporting the mined sand to processing site and bringing back the residue to the original site.
- (viii) Sand dunes in the area, if any, shall not be mined.
- (ix) The location of the mining site alongwith the survey numbers and the location of the processing factory including the transport network, labour colony, green belt development, Sewage Treatment plant etc., and a composite map shall be provided.
- (x) Details of the water requirement for the project and the source. No groundwater in the Coastal Regulation Zone area shall be tapped for the project.
- (xi) Details of the power requirement for the project.
- (xii) Details of rate of replenishment for the extracted minerals shall be provided.
- (xiii) Details of the land use plan indicating the ecologically sensitive areas such as mangroves, wildlife, forest area etc.
- (xiv) Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.
- (xv) Submit the details of the fishing activity and likely impact due to the

activity.

(xvi) The General guidelines indicated in the annexure-I to this Minute 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 as per 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 be prepared and submitted to the Ministry as required in the above Notification.

4.11 Finalization of ToR for Ilmenite mining at Goakhandi, Peth Purnagad village of Ratnagiri Dist., Maharashtra by M/s Indian Garnet Sand Co. (P) Ltd. [F.No.10-71/2008-IA.III]

The proposal is for sand mining at Pethupurnagad village of Ratnagiri Dist., Maharashtra. The proposal is for extraction of illiminite at the project site. The proposal involves only manual scrapping upto a depth of 30 cm and transportation to the pre-concentration unit. At the pre-concentration unit which will be located outside CRZ area, the mineral will be separated by magnetic separators. No water shall be used at the concentration stage. Water requirement will be only for the working personnel. The total cost of the project is Rs 250 lakhs.

The mineral occurs as pocket deposits between Latitudes of 16° 48' 42.78" to 16° 48' 32.11" N, Longitudes of 73° 18' 6.68" to 73° 18' 8.81" E – Pethpurngad and Latitudes of 16° 48' 11.14" to 16° 48' 05.32" N, Longitudes of 73° 19' 26.78" to 73° 19' 26.32" E.(Ratnagiri Dist, Maharashtra).

Mining will be done by suitable methods given below, as warranted by the location and substratum:

- 1) Scrapping using manual labour with the help of shovels and spades
- 2) Using small excavators (for beach areas)
- 3) Using pumps (in water area)

The depth of mining is limited to ONE METER. No bench formation is possible considering that it is loose sand. No drilling and blasting is involved.

The two Leases (Pethpurngad & Gaonkhadi) were granted by Government of Maharashtra on 04.10.2007 The Mining plans were approved by the Atomic Minerals Directorate of the Department of Atomic Energy for Exploration and Research, Hyderabad on 28.04.2009. ToR was granted by MoEF in 17.07.2008 – however project studies could not be completed in view of the Moratorium in Ratnagiri and Sindhudurg districts. The case was heard for revalidation of ToR in 128th Meeting of EAC and proponent was asked to apply for grant of fresh ToR.

On Maharashtra coast, the accumulation of Ilmenite sand has very high percentage,

to the tune of around 40%. The sand along with mineral will be sieved manually to separate the heavy fraction around 15% (by vol) or (80% w as Ilmenite) which will be transported to a plant for further processing to be located at MIDC Ratnagiri or on private land near village Kolisare/Agarnala in Ratnagiri District, located outside CRZ. The balance 85% fraction will be sent back to the mined out area for back filling. The power requirement for pre concentration plant (Mobile Unit at site) is 50 kVA to be sourced by DG and for the final processing plant about 150 kVA - available through MSEDCL grid.

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

- (i) Submit HTL/LTL map prepared by an authorized agency on 1:4000 scale superimposed with project layout. Submit recommendation of Tamil Nadu CZMA.
- (ii) Details of the mining plan indicating the year-wise mining and the phase-wise back filling shall be provided.
- (iii) Submission of soil analysis report and impacts of mining up to a depth of one meter. No machine shall be used for mining activities.
- (iv) Mineral processing plant shall be located outside CRZ area.
- (v) Submit the details of the safety measures for workers to prevent radioactive impact if any.
- (vi) Submit details about transporting the mined sand to processing site and bringing back the residue to the original site.
- (vii) Sand dunes in the area, if any, shall not be mined.
- (viii) The location of the mining site along with the survey numbers and the location of the processing factory including the transport network, labour colony, green belt development, Sewage Treatment plant etc., and a composite map shall be provided.
- (ix) Details of the water requirement for the project and the source. No groundwater in the Coastal Regulation Zone area shall be tapped for the project.
- (x) Details of the power requirement for the project.
- (xi) Details of rate of replenishment for the extracted minerals shall be provided.
- (xii) Details of the land use plan indicating the ecologically sensitive areas such as mangroves, wildlife, forest area etc.
- (xiii) Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.

- (xiv) Submit the details of the fishing activity and likely impact due to the activity.
- (xv) The General guidelines as indicated in the annexure-I to this Minute 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 as per 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 be prepared and submitted to the Ministry as required in the above Notification.

4.12 Finalization of ToR for Ilmenite mining at Kalpadevi village of Ratnagiri Dist., Maharashtra by M/s Indian Garnet Sand Co. (P) Ltd. [F.No.10-72/2008-IA.III]

The proposal is for sand mining for extraction of illiminite at Kalpadevi village of Ratnagiri Dist., Maharashtra. The mineral occurs as pocket deposits between Latitudes of 17° 3' 11.55" to 17° 3' 4.55" N, Longitudes of 73° 17' 25.09" to 73° 17' 22.29" E in Ratnagiri district of Maharashtra. Mining will be done by suitable methods given below, as warranted by the location and substratum:

- 1. Scrapping using manual labour with the help of shovels and spades
- 2. Using small excavators (for beach areas)
- 3. Using pumps (in water area)

The depth of mining is limited to ONE METER. No bench formation is possible considering that it is loose sand. No drilling and blasting is involved. The Lease (Kalbadevi) was granted by Government of Maharashtra on 04.10.2007 The Mining plans were approved by the Atomic Minerals Directorate of the Department of Atomic Energy for Exploration and Research, Hyderabad on 28.04.2009. ToR was granted by MoEF in 17.07.2008 – however project studies could not be completed in view of the Moratorium in Ratnagiri and Sindhudurg districts. The case was heard for revalidation of ToR in 128th Meeting of EAC and proponent was asked to apply for grant of fresh ToR. The total cost of the project is Rs 300 lakhs.

On Maharashtra coast, the accumulation of Ilmenite sand has very high percentage to the tune of around 40%. The sand along with mineral will be sieved manually to separate the heavy fraction around 15% (by vol) or (80% w as Ilmenite) will be transported to a plant for further processing to be located at MIDC Ratnagiri or on private land near village Kolisare/Agarnala in Ratnagiri District, located outside CRZ. The balance 85% fraction will be sent back to the mined out area for back filling. The power requirement for pre concentration plant (Mobile Unit at site) is 50 kVA to be sourced by DG and for the final processing plant about 150 kVA - available through MSEDCL grid.

During the discussions, the Committee finalized the following additional

conditionalities and ToRs for carrying out EIA studies:

- (i) Submit HTL/LTL map prepared by an authorized agency on 1:4000 scale superimposed with project layout. Submit recommendation of Tamil Nadu CZMA.
- (ii) Details of the mining plan indicating the year-wise mining and the phase-wise back filling shall be provided.
- (iii) Submission of soil analysis report and impacts of mining up to a depth of one meter. No machine shall be used for mining activities.
- (iv) Mineral processing plant shall be located outside CRZ area.
- (v) Submit the details of the safety measures for workers to prevent radioactive impact if any.
- (vi) Submit details about transporting the mined sand to processing site and bringing back the residue to the original site.
- (vii) Sand dunes in the area, if any, shall not be mined.
- (viii) The location of the mining site along with the survey numbers and the location of the processing factory including the transport network, labour colony, green belt development, Sewage Treatment plant etc., and a composite map shall be provided.
- (ix) Details of the water requirement for the project and the source. No groundwater in the Coastal Regulation Zone area shall be tapped for the project.
- (x) Details of the power requirement for the project.
- (xi) Details of rate of replenishment for the extracted minerals shall be provided.
- (xii) Details of the land use plan indicating the ecologically sensitive areas such as mangroves, wildlife, forest area etc.
- (xiii) Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.
- (xiv) Submit the details of the fishing activity and likely impact due to the activity.
- (xv) The General guidelines as indicated in the annexure-I to this Minute 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 as per 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 indicated in the above Notification.

4.13 CRZ clearance for extension of Fish Landing Centre at Junglighat, A&N by M/s Directorate of Fisheries, A&N Administration [F.No.11-61/2013-IA-III]

As presented by the project proponent, the project involves extension of Fish Landing Centre at Junglighat, A&N. The location of the project is 11°39'16"N latitude and 92°43'43"E longitude. The site is located on the southern part of Navy Bay within Port Blair Town. The existing fish landing jetty has a total length of 40m (approach jetty 20 m and berthing jetty 20m with uniform width of 6m). In Phase-I, the proposed project envisages extension of existing jetty by 75 m with 10m width and a connecting approach jetty of 20m length and 6m width. The proposed extension will accommodate 15 EFBs of 11 m OAL and 8 Deep Sea Vessels of 20m OAL. Only fishing vessels will operate with manual handling of harvested catch. The water requirement is 40 KLD will be provided by APWD. Waste water will be discharged after treatment. Thrust will be given to re-use/recycle the fresh water waste for watering the green belt. Solid waste generated in the treatment process along with sludge will be segregated for re-use in the nearby agriculture fields. 40m^3 / day waste water from domestic use including fish washing will be generated per day during the operation phase of the FLC. Untreated sewage from Port Blair town is discharged into the Bay. After completion of Phase-I activities, construction of Phase-II activities will be taken up for optimum exploitation of the marine resources and overall uplift of socio-economic environment of A&N Islands. The proposed project envisages only extension of fish landing jetty in Phase-I to avoid the existing over-crowding of vessels at present as well as to accommodate additional fishing vessels.

During discussion following points emerged:

- (i) Submit recommendation of A&NCZMA in a form of formal recommendation letter. The Minutes of the Meeting of A&NCZMA are not acceptable by Ministry.
- (ii) The layout map presented by the proponent shows a plan for phase II, along with proposal for extension of jetty by 75 m, which involve reclamation of some portion of water body and construction of jetty on the stilts. The committee is of the opinion that because of implementation of phase II, a portion of water body will remain unutilized and leads to encroachment and commercial development in future.

In view of the forgoing the Committee suggested to defer the proposal and advised the proponent to revise the layout map with clear plans for the present proposal i.e. extension of jetty by 75 m and also for the future expansion.

4.14 Finalization of ToR for widening and improvement of 6-laning of Rajkot to Bamanbore (km185.258 to km 215.600) section of NH-8B and Bamanbore – Samaikhiali (km.182.500 to km.306.000) section of NH-8A in the State of

Gujarat (km 184.700 to 341.477 of New NH-27) by M/s NHAI [F.No.10-61/2013-IA-III]

The Committee deferred the proposal as the Project Proponent withdrew the project.

4.15 Amendment in ToR for Common Hazardous Waste Management Facility in Bharuch Gujarat by M/s Aarti Specialities Ltd.[F.No.10-11/2013-IA.III]

The proposal involves establishment of common hazardous waste management facility in Bharuch, Gujarat on a total plot area of 21632 sqm. Capacity of 30 TPD of Common Hazardous Waste Management facility components: 10 TPD Plasma Gasification System, 20 TPD Incineration System and 100 TPD MEE. The proposed project is located in Industrial area of Jhagadia GIDC. The total water requirement is 315 KLD (Fresh water - 179 KLD + recovered – 136 KLD). The power requirement is 800 KVA. Out of total land area of 21,632 sqm., approximately 30% will be used for green belt development. The proposed greenbelt area is 7419 sqm. Species like Baval, Kadam, Neem, Bili, Gulmohar, Ashoka, Ambo, Badam, Pipro, Vad etc are suggested for plantation. The total estimated cost of the project is Rs. 51 crores.

The above proposal was considered in the 123rd EAC meeting held on 15th - 16th April, 2013. The details were presented by the project proponents and after discussions, the following "Terms of Reference" were finalized to be suitably added to those furnished by the project proponent.

It was informed by the proponent that the name of the company has been changed and now the name of the company is M/s Innovative Envirocare Jhagadia Ltd. The proponent in the 129th EAC meeting requested to amend the TOR and requested to exempt the Public Hearing.

The committee noted that the Industrial Area itself was Notified in the year 2010 and no Environmental Clearance was obtained neither Public Hearing was conducted for the Industrial Area. The committee noted that since the project is for Common Hazardous Waste Management Facility which involves handling of Hazardous Waste, the proponent should conduct public hearing and no exemption should be provided.

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

The EAC deferred the project to next meeting since the PP requested for postponement.

4.17 Amendment in TOR issued for Integrated Municipal Waste Management and Handling Facility at village Patavi, teh-Shahjadpur, Dist Ambala, Haryana of M/s Ambala Municipal Corporation.[F.No.10-79/2012-IA.III]

Project Proponent informed that they decided not to proceed with the project.

4.18 Finalization of ToR for development of industrial estate of HSIIDC on Refinery Road, Panipat, Harvana by M/s HSIIDC [F.No.21-15/2013-IA.III]

As presented by the Project Proponent, the project involves development of industrial estate of HSIIDC on Refinery Road, Panipat, Haryana on a total area of 373 ha. HSIIDC had invited applications from the prospective entrepreneurs for setting up their units in Industrial Estate, Panipat. The site is located 6 Km from NH-1 and is in close vicinity of Panipat Refinery and is located in Panipat and Karnal districts. With the objective to utilise the product streams from Petrochemical complex to achieve significant value addition through conversion by downstream processing projects, the Corporation has reserved 25% of advertised plots for petrochemical projects viz. Projects primarily using petroleum derivatives like HDPE, LDPE, MEG, PP, PTA, Butadiene, Styrene, Acrylonitrile. Etc. The eligible industry shall include the following:

- 1. Auto components: Plastic components manufactures for automobile applications like trims dashboards, bumpers, ducts, battery cases etc. Using PP, HDPE.
- 2. Bottle grade PET chips: The PET chips segments using MEG and PTA to make bottles and containers.
- 3. Containers: Containers manufacturers for industrial products like lubricants pesticides, pharmaceuticals and paints, Storage of water, chemical and pesticides, waste bins etc, using HDPE.
- 4. Engineering polymers like ABS (Acrylonitrile Butadiene Styrene) Industries using ABS viz. Parts manufacturers for White goods, Consumer electronics & Automobile parts.
- 5. Films & packaging units manufacturing
 - BOPP (Bi-axially oriented polypropylene) film.
 - BOPET (polyster) film
 - Blown film (HDPE and LLDPE based)
 - TQPP (Tubular quenched polypropylene) film
- 6. Furniture & household items Units using PP & HDPE for items like trolleys, tables and tools, Plastic thermoware like bottles, food containers & other household/industrial items.
- 7. Man made fibres
 - Polyster Staple Fibre (PSF)
 - Polyster Filament Yarn (PFY)
 - Other Filament Yarns
- 8. Master batches using LLDPE
- 9. Pipes manufacturers using HDPE LLDPE for irrigation in agricultural sector, transfer of effluents and other chemicals in industrial units, plumbing applications & other industrial applications
- 10. Synthetic Rubber, Units manufacturing tyres, footwear and moulded products

11. Wires & Cables

- Telecom cable (JFTC) insulation.
- Jacketing for fibre optic applications.
- Other wire and cable jacketing.
- 12. Woven sacks (PP & HDPE based) for packaging of cement, polymers, food grains, chemicals, Fertilizer packaging, tarpaulins, packaging food grains, chemicals etc.
- 13. Other Industries primarily using petroleum derivatives.

It is mandatory for all the units discharging effluents/producing toxic waste to provide for independent facility for treatment & disposal of waste/effluents.

One large fertilizer industry is proposed in the industrial estate that falls under the Category 'A', hence entire industrial area will be treated as Category A, irrespective of the area.

The total water demand for the operational phase of the proposed project with area of 373 ha would be $\{921.63ac \times 6000gl/ac \text{ or } (27276 \text{ l/ac})\} = 25.1 \text{ MLD}$ and would be met by ground water sources. The total power requirement will be 75 MW. The total quantity of waste generated per day is in the order of 11.5 tonnes per day (TPD) at a per-capita waste generation of 250 grams per day.

The matter was discussed in the 128th EAC meeting and after deliberation, the EAC sought information regarding administrative boundary of the Panipat municipal limits and the project boundary superimposed on the SOI toposheet of 1:10000. It was also decided that a green buffer of 9 m + 9 m shall be provided all along the proposed industrial area. The Committee also sought baseline information for various critical parameters along with their limits in the study area. It was also observed by the Committee that the area where project is proposed falls under 'over exploited' category as per the stage of groundwater development. It was clarified that HSIIDC has to recharge double the quantity of ground water withdrawal. Therefore a suitable recharge plan would be required.

The proponent provided information on all the four points raised during the 128th EAC meeting. The PP provided authenticated maps and information indicating that the proposed project site is about 5 km away from the Panipat CPA and also a clarification from CPCB and SPCB to satisfy the Committee that the area was outside the Panipat Moratorium area. The EAC after deliberation finalised the following ToR for further study:

- (i) A green buffer of 9 m + 9 m shall be provided all along the proposed industrial area as committed during the meeting
- (ii) HSIIDC has to recharge double the quantity of ground water withdrawal, plans may be submitted for the same. Bazida Minor may be utilized for the recharge purpose
- (iii) It was decided by the committee that since the data was already collected for EIA study for the year October December 2012, the same may be used for preparing the EIA report

- (iv) The ambient air quality monitoring shall be conducted within 5 km radius of the project site to avoid interference with other local activities of Panipat
- (v) No water based industries shall be established within the Industrial Area
- (vi) NOC for proposed Ground Water withdrawal shall be obtained from the Central Ground Water Authority.
- (vii) Submit justification of the project site from environmental angle.
- (viii) Submit the details of the present land use as per the revenue records and present status.
- (ix) Submit water requirement, identified sources and impact on the existing users.
- (x) Submit whether the site falls in semi-critical, critical over exploited zones as per the CGWA classification?
- (xi) Submit Roles and legal responsibilities of Industrial Estate and individual member units for EMP implementation and monitoring as well as effluent discharge.
- (xii) Submit the details of the approach road and its adequacy.
- (xiii) Submit the impacts due to land use change.
- (xiv) Submit the impacts due to liquid waste discharge, air emissions, solvent emissions, handling of hazardous waste & chemicals, odour.
- (xv) Submit the EMP at Industrial Estate level to handle the liquid waste by segregation as per the CPCB document for Bulk drug manufacturing units HCOD, LCOD, HTDS, and LTDS etc. Explore the options for reuse of treated effluent.
- (xvi) 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.
- (xvii) Green cover of minimum 33 % should be provided in all phases of the proposed Industrial Park
- (xviii) Submit the parking arrangements at Industrial Estate level.
- (xix) Submit fire fighting arrangements at Industrial Estate level.
- (xx) Submit the details of effluent collection system at member units level to meet the inlet norms for the CETP.
- (xxi) Submit the effluent conveyance system from the member units to CETP.
- (xxii) Submit on-site and off-site emergency plan and infrastructure requirements at Industrial Estate level to comply MSIHC Rules 1989.
- (xxiii) Submit the details of the CETP with design parameters.
- (xxiv) Site suitability for the development of TSDF, if planned. Submit to comply the Hazardous Waste Rules 2008 as amended.
- (xxv) Submit the common solvent recovery systems planned at Industrial Estate level with anticipated efficiencies.
- (xxvi) Submit VOC monitoring in the ambient air at Estate level.
- (xii) 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.

4.19 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 proponent gave a detailed presentation on the project which is being termed as Phase-II. Adyar River originates from surplus course from Chembarambakkam Lake in Kanchipurum District and flows in the southern parts of Chennai. The river runs about 42 kilometers west to east and meets the Bay of Bengal at Adyar. The Adyar estuary, the point at which the river meets the Bay of Bengal lies between San Thome beach in the north and Elliots Beach in the south. The estuary region from Thiru Vi Ka Bridge to the river mouth and the creek region from Santhome Causeway to river mouth is spread over an area of about 300 acres.

Investigations indicated that the mouth of the estuary remains closed due to formation of sand bar up to the onset of north-east monsoon in October. During this period, water exchange between the sea and estuary takes place only at times of peak tides. During October, the water level in the estuary rises due to fresh inflows and the mouth of the estuary was opened (small opening) to discharge the surplus water from Chembarambakkam Lake). These observations indicate that except for the monsoon and a couple of months thereafter the tidal exchange between the estuary and sea remains very low.

The objective of eco-restoration of Adyar estuary and creek is to achieve and maintain best feasible water quality in its riverine and estuarine stretches, thus providing an opportunity to bring back the natural (endemic) life forms that interact with abiotic elements and create a healthy ecosystem. Improving and maintaining water quality to a level that can support a balanced population of phytoplankton, zooplankton and nektons is the real way forward towards the stated objective.

A onetime cleanup by removing debris, plastics and sludge in the creek region and accumulated sand material in the river mouth of project area has been recommended to improve the flood carrying capacity of the channel and to improve the dilution by increasing the volume of water held in the estuary and creek, specifically during the low tide. The proposed activity broadens the channel to 400 m for tidal exchange.

Enhanced tidal exchange along with the control of organic pollution has been identified as an important aspect of the eco-restoration. This necessitates opening of the mouth of Adyar estuary throughout the year. Sustained opening of the mouth will also facilitate the re-colonization of the endemic aquatic fauna according to the project proponent.

The floral and faunal restoration are two major objectives. The improvement in water quality allows the natural process of regeneration of flora and fauna. The following activities are proposed to improve the habitat by the PP

• Removal of *Prosopis juliflora* from the islands and edges with the gradual replacement by native species,

- Plantation of Mangroves at low level island adjacent to Adyar bridge and
- Regeneration of mudflat vegetation.

The PP was of the view that Bioengineering solution provides long-term benefits to the shoreline, banks and water quality, while improving fish and wildlife habitat. An estuary is a sensitive ecosystem and needs constant monitoring of the project area during the eco restoration process as well as post-restoration, to improve people's interactions with the estuary and the river, so that it does not become the neglected backyard that it is today. A monitoring pathway is proposed for continuous monitoring of the project area.

The proposal was recommended by the State Coastal Zone Management Authority on 08.11.2013.

The EAC after deliberation to recommended to defer the proposal to the next hearing with the following suggestions:

The 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 clean up 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 with the following conditions:-

- (i) Approval from the Chennai Corporation shall be obtained for accepting the excavated soil and debris from the choked Adyar Check.
- (ii) 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.
- (iii) PP shall provide details regarding the sanitation to be provided for the surrounding area along the Adyar river/creek and also provide details of present outfall situation, quantity of sewage coming into the Adyar river/creek, and quality of creek water in terms of total and faecal coliform.
- (iv) An undertaking shall be provided that 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.
- 4.20 Amendment to the Environment Clearance granted for 4/6 laning of Panchkula-Barwala-Saha-Yamunanagar Haryana upto Haryana/U.P. Border of NH-73 in the State of Haryana by M/s NHAI.[F.No.5-12/2009-IA.III]

As presented by the Project Proponent, the environmental clearance was granted by the Ministry on 30.08.2013. During the processing of the forest proposal with Forests Department, it is noted that stretches from km 175.00 to km 179.249 of the road fall within the KHOL-HI-RATAN Wild Life Sanctuary and also fall within 10 km of Sanctuary. However, by mistake this was not informed to EAC / MoEF by NHAI. Therefore, no condition on requirement of clearance from NBWL was stipulated. Hence requested to stipulate the condition in the EC.

The EAC recommended to issue an amendment to the EC stipulating that the clearance from NBWL shall be obtained.

4.21 Environmental Clearance for rehabilitation and up-gradation of existing 2 lane to 4 lane of Yedshi to Aurangabad section of NH-211 from 85.000 to km 290.00 in the State of Maharashtra by M/s NHAI [F.No.10-53/2011-IA.III]

The project road section of National Highway-211 starts from existing Km 100.000 near Yedshi and ends at existing Km 290.200 at Aurangabad and passes through Osmanabad, Beed, Jalna and Aurangabad Districts of the state of Maharashtra. The length of the project road is 190.200 Km. The major settlement enroute are Chausala, Beed, Gevrai, Shahgard, Adul, Pachod, etc. The land use pattern on either side of 10 Km of the project road is predominantly agriculture followed by habitation area. The project road does not pass through any ecological sensitive area / National Park / Sanctuaries etc. Pockets of reserved forest are located along the existing RoW between Km 105.040 to Km 105.750 (RHS), Km 113.400 to Km 113.460 (LHS), Km 113.415 to Km 113.700 (RHS), Km 120.275 to Km 120.350 (RHS), Km 127.800 to Km 127.811 (LHS), Km 160.750 to Km 161.200 (RHS), Km 162.100 to Km 162.350 (RHS), Km 162.175 to Km 162.225 (LHS) and at Km 162.450 to Km 162.500 (LHS)) of NH-211. This project involve 3.384 ha diversion of reserved forest land. The proposed land acquisition is 825.00 ha. This includes 144.201 ha of Government land, 3.384 ha. of Forest land, 628.755 ha. of Private land and rest 48.66 ha. of other land. The existing Right of Way is generally 30 m. The proposed right of way is 60 m except at interchanges, toll plaza and other project facilities. There is proposal for 6 nos. of bypasses/realignments. The existing road has 5 nos. of Major bridges, 49 nos. of Minor bridges and 145 nos. of Culverts. It is proposed to retain with repair and widening 3 nos. of existing Major Bridges, 28 nos. of existing Minor Bridges, 139 nos. of culverts. Apart from these there will be provision of proposed 2 nos. of new Major Bridges, 29 nos. of new Minor Bridges and 63 nos. of new Culverts. All the new structures are proposed in the new bypasses/realignments. There is a proposal of 17 nos. Pedestrian/Cattle underpasses, 13 nos. of Vehicular Underpass, 6 nos. of Flyovers, 1 nos. ROBs and 28 nos. of Bus bays on either side of the road. The project road will have provision of 4 no. of Truck laybyes, 2 nos. of Rest areas cum Wayside amenities, Toll Plazas at 3 locations, High mast light at 3 locations and start and end point of all bypasses, Street Light at 16 locations for 11.400 Km, Service roads of 69.200 Km. A total number of 34050 roadside trees are fall with proposed ROW. Tree loss will be minimized by restricting tree cutting within formation width. Avenue plantation will be carried out as per IRC SP: 21: 2009 on available ROW apart from statutory requirements. Approximately 647.6 KL/Day water will be required for the project during construction stage for the entire project. To meet this requirement about 40 percent will be abstracted from Surface water source and rest from Ground water source with proper requisite permission from concerned department 1663 nos. of structures will be affected due to widening of this section. The NHAI shall compensate to the authorized owner as per NHAI Act, 1956. Approximately 9,89,087 cum of fly ash proposed to be used from Parli Thermal Power Plant depending upon their availability. The proposed safety measures will be provided as per IRC: 67 and 4-laning Manuals. The total estimated Project Civil Cost is approximately Rs. 1407.34 Crores, EMP cost is Rs. 10.62 crores and R & R Cost is Rs. 185.37 crores.

EAC finalised ToR in November, 2012. Ph conducted in four districts on 18.09.2013 at Jalna, on 27.09.2013 at Beed, on 11.10.2013 at Aurangabad and on 22.10.2013 at Osmanabad. Major issues are compensation.

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

- (i) The proposal indicates the diversion of 3.384 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.
- (ii) It is indicated that 27380 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.
- (iii) Pedestrian crossing shall be provided at Khadethanpur village as assured by the PP during the Public hearing
- (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 with letter and spirit.
- (viii) All the recommendation of the EMP shall be complied with 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.

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

EAC in its meeting held in October, 2013 decided to defer the proposal till a report on the issue relating to the Ms Sunita Narain Committee was received by the EAC from the Ministry.

GSPC has stated that the report of Sunita Narain Committee acknowledges presence of LNG project and there is no adverse remark against the proposed LNG terminal project. The GSPC LNG project is about 2.6 km away from the disputed area and creeks. The evacuation pipeline for regasifed LNG shall be routed away from the Baradi Mata creek and mangrove zone. The road connectivity to the LNG terminal shall be from the existing road of South Port and away from the creek/mangrove areas. The PP further stated that GLL has completed all other pre-project activities and was ready to award the lump sum EPC contract for the project facilities. All information and studies required from time to time by the MoEF/ Expert Appraisal Committee of MoEF have been submitted. The Mundra LNG terminal project shall bring additional 5 MMTPA of LNG (Approx 19 MMSCMD of natural gas to consumers) which shall mitigate the growing demand supply gap of natural gas in the country.

The PP also stated that he shall abide by the stipulations and conditions of EIA studies as well as conditions considered pertinent by MoEF to implement the project in a environmentally safe and harmonious manner.

The Committee was informed that the matter has been examined by the Ministry and the de-linking of the project as requested by the PP was considered subject to the submission of action plan to maintain the present mouth of the Baradi Mata creek by the PP/APSEZ Ltd.

The EAC after deliberation, 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.

General Guidelines

- (i) The EIA document shall be printed on both sides, as for as possible.
- (ii) The status of accreditation of the EIA consultant with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.
- (iii) On the front page of EIA/EMP reports, the name of the consultant/consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed TORs (TOR proposed by the project proponent and additional TOR given by the MoEF) have been complied with and the data submitted is factually correct (Refer MoEF office memorandum dated 4th August, 2009).
- (iv) While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through which the samples have been got analysed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the Environment (Protection) Act, 1986 and the rules made there under (Please refer MoEF office memorandum dated 4th August, 2009). The project leader of the EIA study shall also be mentioned.
- (v) All the TOR points as presented before the Expert Appraisal Committee (EAC) shall be covered.
- (vi) Environmental Management Plan presented before the EAC as a part of EIA report, shall be made part of Concessionaire Agreement/ other relevant documents. Proponent shall submit an undertaking in this regard.
- (vii) Since most of the environmental issues are related to design parameters, following additional information should also be sought under Chapter-II (Disclosure of Consultant)

Name of the Design Consultant, Name of the EIA consultant, EIA Coordinator, Functional Area Expert and detail of accreditation.

129th Meeting of the Expert Appraisal Committee for Projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction and Miscellaneous projects held from 26th – 28th December, 2013 in the Fazal Chamber, Scope Complex, Lodhi Road, New Delhi.

List of Participants

Expert Committee

Shri Anil Razdan
 Shri. M.L. Sharma
 Sh. R. Radhakrishnan
 Dr. M.V. Ramana Murthy
 Dr. R. Prabhakaran
 Shri S.K. Sinha
 Shri Y.B. Kaushik
 Chairman
 Wember
 Member
 Member
 Member
 Member

7. Shri Lalit Kapur Member Secretary

MoEF officials

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