

Minutes

The Minutes of the 123rd Meeting of the Expert Appraisal Committee for Building/Construction Projects/Township and Area Development Projects, Coastal Regulation Zone, Infrastructure Development and Miscellaneous projects held on 15th - 16th April, 2013 at Conference Hall, IOC, Core- 6, 5th Floor, Scope Complex, New Delhi.

1. Opening Remarks of the Chairman.

The Chairman welcomed the members to the 123rd meeting of the Expert Appraisal Committee.

2. Confirmation of the Minutes of the 122nd Meeting of the EAC held on 25th – 26th March, 2013 at Mumbai.

Minutes of the 122nd Meeting of the EAC held on 25th – 26th March, 2013 at Mumbai were confirmed.

In item No. 4.7 “Amendment to carrying out mining operation with the help of power and machineries at Tirunelveli, Kanniyakumari and Tuticorin district by M/s V.V. Minerals (F. No. 10-6/2004-IA.III)” the following conditions shall be inserted.

“To further examine the proposal Rapid EIA and Public Hearing as per the provision of CRZ Notification, 2011, shall be carried out.”

In item no.5.4 “Environmental Clearance for proposed common hazardous waste management facility including incineration at Industrial Growth Centre, Phase-II, Samba, Mandhera Village, Jammu & Kashmir by M/s APR Projects Pvt. Ltd [F.No. 10-43/2012-IA-III]” the topic the project shall be read as “Integrated common hazardous waste management facility including incineration at Industrial Growth Centre”

3. Consideration of old Proposals

3.1 Amendment in ToR granted for development of Shipyard cum Captive Jetties including a LNG Terminal at Layia, Kutch District, Gujarat by M/s Gujarat Integrated Maritime Complex Pvt. Ltd. (F.No. 11-87/2011-IA-III)

As presented by the project proponent, ToR was finalized in February, 2012 for the development of Shipyard cum Captive Jetties with 2.5 MTPA capacity LNG Terminal at Layia, Kutch District, Gujarat. M/s Gujarat Integrated Maritime Complex Pvt. Ltd. As per the LNG Policy 2012, additional LNG requirement is to be reserved for Government of Gujarat, therefore is proposed to enhance LNG terminal capacity from 2.5 to 5 MTPA. There will be basic change in design but there will no addition to number of jetty.

During the discussion, the following points emerged:

- (i) Committee noted that the approach channel alignment is changed, hence there will be reduction in dredging. Details shall be submitted on the original and proposed channel, dredging etc.*
- (ii) Submit the details of trees required to be cut for the project along with nos, type and grith size etc.*
- (iii) The distance between the coal jetty and LNG terminal is about 500 m, the risk assessment should cover the risk due to any accident in coal storage to LNG terminal vis-a versa.*

The Committee recommends the amendment in ToR with the above.

3.2 CRZ Clearance for establishment of shore based Ocean Research Laboratory at Visakhapatnam by M/s NIO (F. No.11-87/2011).

The proposal was discussed by the EAC in its meeting held in Dec, 2011 and Committee deferred the proposal and sought following additional information.

- (i) The Committee noted that the HTL/LTL demarcation has been carried out by NIO itself, which it may lead to conflict of interest, hence it was suggested to get HTL /LTL demarcated by another authorized agency and superimpose the proposed layout and submit through APCZMA.*
- (ii) Submit the details of waste (solid, liquid and gaseous) generation if any from the laboratory and its method of treatment and disposal.*
- (iii) Details of the sea water intake and disposal facility.*

The details submitted and presented by the proponent was examined by the Committee.

There are many representations against the projects. Major allegation are the site is in CRZ-I, no where, the Oceanography laboratory is within 500 mts from shore and requested to refer to HTL map of M/s Indo American Hotels Pvt Ltd (BAY PARK) and Karthikavanam (F.No. 11 -12/ 2013-IA.III). The NCZMA has deferred the reclassification and suggested to shift the facility beyond CRZ since it is not permissible. The NIO has submitted its response to each of the points made in the complaint.

During the discussion, the following points emerged:

- (i) *The Committee noted that the pipe line is not shown on CRZ map of CESS and shown on other map, hence suggested to superimpose the pipeline on map of CESS and submit along with co-ordinates of the project site.*
- (ii) *The NCZMA has not examined project. Earlier proposal considered by NCZMA was only reclassification of the area from CRZ-III to CRZ-II for the purpose of constructing laboratory. Neither there was detailed scientific project proposal before the NCZMA nor any project appraisal by NCZMA. Since the issue was only for reclassification, the NCZMA has not called the NIO for discussion and or any presentation on the project.*
- (iii) *The proponent explained justification why the laboratory should not be located beyond 500 m and to be located close to sea. The facility is needed for continuous monitoring of both air and water characteristics to investigate the air-sea exchange processes, especially concerning climatically important gases and aerosols, and for understanding the physical and biological processes in coastal waters, and how they are being impacted by human activities. In the case of atmospheric sampling, the intake point must be located as little inland as possible because both terrestrial vegetation and human activities will greatly alter/dilute the marine signature. Considering the topography and relatively little development in the area, the proposed site for NIO Regional Centre is ideally suited for this purpose. Moving the sampling point from 200 m to 500 m from the HTL may lead to over 2 ppm contamination in the carbon dioxide content, but it will be variable depending upon the wind direction. A several fold increase in aerosols is similarly expected. The pipeline should be as short as possible. This is because growth of fouling organisms occurs inside the pipeline that will lead to enhance respiration (causing consumption of oxygen, and release of CO₂ and nutrients), so that the characteristics being measured will be different from those at the intake point. These effects are expected to increase non-linearly with the length of the pipeline. Therefore, extending the length of the pipeline from ~300 m, as being planned now, to more than 500 meters will introduce errors much in excess of a factor of 2, in addition to making the servicing a lot more cumbersome.*

Proponent further informed that contrary to what has been stated in the “representation” submitted to the MoEF by G. Padma, Secretary, VRFA*, Visakhapatnam, a similar pipeline supplying seawater has been existing in NIO headquarters at Dona Paula, Goa since the 1980s. An Internet search as well as local inquiries made by us did not succeed in identifying this organization, which in all probability is fictitious.

The Committee recommends the proposal for CRZ Clearance with

the above condition in the Clearance letter for strict compliance by the project proponent.

3.3 Extensions of validity of clearance dated 29.07.2008 granted for 4th container terminal and marine container terminal by M/s JNPT (F.No. 10-81/2008-IA.III).

As presented by the project proponent the Environment clearance was granted on 29.07.2008. Implementation is delayed due to certain court cases against the project. The existing liquid berth will be kept as it is and 200m mts. Container berth will be constructed in single phase only to compensate the delay. Now, the construction is proposed to commence after July, 2013 hence project proponent requested for extension. M/s APM Terminals filed WP in July, 2009 in High Court of Bombay against the denial of participation in tender process. The petition dismissed in March, 2010.

The committee recommended the extension of EC for another five years.

4. Consideration of New Proposals:

4.1 CRZ Clearance for the proposed CNG filling station at plot No. 153-A BBR scheme Block III, Fort Division on free press journal road Mumbai by M/s Mahanagar Gas Ltd. [F.No. 19-104/2012-IA-III]

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

4.2 CRZ clearance for entire complex of R.N. Shety Trust at Murudeshwar by M/s R.N. Shety Trust and M/s Naveen Hotles Ltd. (F.No. 11-77/2011-IA-III)

The proposal was discussed by the EAC in its meeting held in January, 2012. The Committee deferred the proposal and sought additional following information:

- i) There is no application and HTL demarcation on the project. The proponent has to prepare the HTL/LTL map through an authorized agency in 1: 4000 scale, superimpose the layout plan of the project and submit through KCZMA.
- ii) The EIA is for the period of 2007 which need to be updated taking into consideration the recent circulars of the Ministry.

The details submitted and presented by the proponent was examined by the Committee.

During the discussion, the following points emerged:

- (i) *The Committee noted that the KCZMA has only forwarded the proposal hence suggested the proponent to get recommendation of Karnataka CZMA. The KCZMA shall make specific recommendation on the project*
- (ii) *The project attracts the EIA Notification, 2006, hence EC shall be obtained from SEIAA, Karnataka.*

In view of the foregoing observations, the committee recommend to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.

4.3 CRZ Clearance for laying of 20 “underground Gas Pipeline along with OFC and 10” effluent disposal pipeline passing through CRZ area of Yanam-Puducherry by M/s Gujarat State Petroleum Corporation Ltd. (F.No.11 -21/2013 - IA.III)

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4.4 CRZ Clearance for onshore gas terminal at Mallavaram and setting up of process cum living quarter platform at offshore in KG-OSN-2001/03, Andhra Pradesh M/s Gujarat State Petroleum Corporation Ltd.(F.No.11 -22/2013-IA.III)

M/s Gujarat State Petroleum Corporation Ltd informed that the both the above proposals are component of a single project hence, the Committee considered as a single project.

“CRZ Clearance for onshore gas terminal at Mallavaram setting up of process cum living quarter platform at offshore in KG-OSN-2001/03, Andhra Pradesh and laying of 20 “underground Gas Pipeline along with OFC and 10” effluent disposal pipeline passing through CRZ area of Yanam-Puducherry by M/s Gujarat State Petroleum Corporation Ltd.(F.No. 11-21/2013 -IA.III)”

As presented by M/s Gujarat State Petroleum Corporation Ltd (GSPC), Gandhinagar (A Govt. Of Gujarat Undertaking) has signed a production sharing contract with Govt. Of India on 2nd February 2003 for carrying out exploration and production activities in the Offshore Block (KG-OSN-2001/3) KG Basin, East Coast of India. After discovery of Gas in well KG #8, GSPC has decided to develop the field as “Deendayal Development Field”.

Environmental Clearance from Ministry of Environment and Forest (MoEF) was obtained for above field development which consists of following:-

1. Setting up of Well Head Platform (WHP) at Offshore (KG#8 location)
2. Drilling of 15 development wells from Well Head Platform

3. Laying of Multiphase produced fluid pipeline from Offshore (WHP) to Land Fall Point (LFP) and from LFP to Onshore Gas Terminal (OGT) at P. Mallavaram.
4. Laying of pipeline for disposal of treated effluent from OGT at identified marine outfall location.
5. Processing Facilities for 240 MMSCFD Gas and associated condensate at Onshore Gas Terminal at P. Mallavaram Andhra Pradesh

Subsequently with receipt of CFE from the State pollution Control Board, physical construction work for the above field development has already commenced. In the mean time, with availability of additional well test data, capacities of some of the already envisaged facilities were required to be enhanced and also some new facilities were required to be added in the Development Scheme so that it continues to remain effective and optimum. As per the directives of MoEF, GSPC has submitted application for obtaining CRZ clearance for below mentioned facilities:-

1. Process cum Living Quarter Platform connected to Well Head Platform (With gas dehydration, Produced water treatment, Living Quarter facility) located at Offshore
2. Enhancement of processing capacity of Onshore Gas Terminal (Natural Gas – 240 MMscfd to 300 MMscfd and condensate to 1344 MTPD)
3. Enhancement of capacity of Captive Power plant (CPP) (4 to 24 MW)
4. Evacuation of process sale gas from OGT through (~500 m long) sale gas pipeline to east West pipeline (EWPL) of M/s RGTIL
5. Raw water pipeline (~74 Km) to draw raw water from upstream of Dowlaiswaram barrage.

This proposal was considered by AP state Coastal Zone Management Authority (APCZMA) on 7th November 2012 and recommended the project o MoEF. The expected cost of the project is 203000 Lakhs.

During the discussion, the following points emerged:

- (i) Submit the details of the critical environmental issues identified during laying of pipeline.*
- (ii) The Committee noted that the EC for enhancement of captive power plant is under consideration of EAC of Thermal committee which has also sought examining the requirement of wildlife clearance in view of Coringa Sanctuary located in 2.5 km distance.*
- (iii) The pipeline of about 150-200 m length of pipeline is passing mangroves and the pipeline is proposed to be laid through HDD.*

In view of the foregoing observations, the committee recommend to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.

4.5 CRZ Clearance for replacing LPG and POL pipelines and associated facilities for existing storage terminal at Port Exim Park area, Visakhapatnam, Andhra Pradesh, M/s East India Petroleum Pvt. Ltd. (F.No. 11 -17/2013 - IA.III).

As presented by the project proponent, M/s East India Petroleum Pvt. Ltd., is one of the storage terminal in private sector located at Visakhapatnam, Port Exim Park area, Andhra Pradesh, to set up the Port Based world Class facility for receipt, storage and handling of POL products and LPG. The proposal involves laying one additional pipeline of 10” and 5.315 KM length to transport POL products from OR-1 & OR-2 Berths Situated on the Western Arm of Inner Harbour of Visakhapatnam Port to the Existing EIPL terminal and associated receipt facilities

Laying a pipeline 14” dia and 8.334 KM length to transport LPG from the existing LPG Jetty located in the Outer Harbour of the Visakhapatnam Port to the existing EIPL terminal and associated receipt facilities pig receiving station, Heat exchanger. The proposed lines shall be laid in the corridor obtained from Visakhapatnam Port Trust on long term lease vide VPT land allotment letters Estate/EIPL/7054.50sq.m/1787 & Estate/EIPL/way-leave/SA/260. The entire alignment of the proposed lines shall be underground at 1.50m depth in VPT premises and no private land acquisition is proposed.

EIPL has carried out Technical Feasibility study, Risk Analysis and Disaster Management Plan for installation of LPG Blending Facility by PDIL (Project Development India Ltd., a Government of India undertaking company). EIPL has carried out Risk Analysis and Disaster Management Plan by the reputed organization DNV (Det Norske Veritas) for LPG pipeline and associated facilities. EIPL has carried out Risk Analysis and Disaster Management Plan for laying 10” POL pipeline.

The APSCZMA has recommended the project vide letter No. 4907/CZMA/2012, dated 02-03-2013

During the discussion, the following points emerged:

- (i) The committee noted that there is moratorium in Vishakapatnam however, the proposal is only laying additional pipeline to decrease the operation loads on existing pipelines for improved reliability of operation of pipeline without any enhancement of storage capacity, the committee decided to consider the project. Proponent shall submit an undertaking to the effect that there will be no enhancement of storage facility.*

- (ii) *The proponent shall superimpose the pipeline on CRZ map and submit along with the details along the pipeline route.*

In view of the foregoing observations, the committee recommend to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.

4.6 CRZ Clearance for development of 4.0 Ha of Forest land in Visakhapatnam Division for “Karthikavanam” in S.No.106 of Yendada Village, Greater Visakhapatnam Municipal Corporation. Urban development, Department (F.No. 11 -12/ 2013 - IA.III)

As presented by the project proponent the proposal involves development of ecotourism activity including construction of 84 cottages, Sampradaya Vedika- to showcase Art and Culture of the region (open air auditorium), traditional Indian house, Youth activity Centre, Restaurant and ethnic food court. The total plot area is 10. Acres and the build up area is 9569.11 acres. The water requirement will be 70 KLD and will be met from Public Supply. The waste water generation of about 56 KLD will be treated in a modular STP of 60 KLD capacity. The treated wastewater will be used for greenbelt. Forests clearance has been obtained vide letter dated 30.09.2010 from Regional Office, MoEF. Parking facility is proposed in 5191.33 sqm. Green belt of 19,627 sqm is proposed. D.G set of 250 KVA has been proposed with acoustic enclosure.

During the discussion, the following points emerged:

- (i) *Submit the details of landscape plan, drainage plan, parking and circulation etc*
- (ii) *Explore the possibility to retain existing trees and submit the detail of trees along with types, girth size etc.*

In view of the foregoing observations, the committee recommend to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.

4.7 CRZ Clearance for installation and operate a conveyor belt (92 M) at Gut No.221, Kokmandle village, Taluka Shrivardhan Distt. Raigad M/s Sun Rise Marine Enterprises. (F.No. 11 -13/ 2013 - IA.III)

As presented by the proponent, the proposal involves installation and operate a conveyor belt (92 M) at Gut No.221, Kokmandle village, Taluka Shrivardhan Distt. Raigad on the bank of Savitri river for loading of bauxite in barge so that the bauxite ore can be transported through barge to the existing jetty at Sakhri village from where it will be transported through

large barge to the vessel for transport. Presently, the ore is transported to the existing jetty at Dhighi by road of 60 km.

The MCZMA has recommended the project vide letter No. CRZ-2012/CR-217/TC-2 dated 18.01.2013.

During the discussion, the following points emerged:

- (iii) *Proponent has not submitted the route of transport, storage etc on the CRZ map, hence suggested to submit the CRZ map showing the above along with the land features.*

In view of the foregoing observations, the committee recommend to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.

4.8 CRZ clearance for carrying out mining operation with the help of poser machineries at Tuticorin Districts by M/s Industrial Minerals India (P) Ltd. (F.No.J-17011/32/2003-IA.III(P))

Clearance for mining rare earth beach minerals in Tuticorin District of Tamil Nadu on 23.08.2004 to total extend of 36.66. ha. The proponent has submitted recommendation of TCZMA and letter of Radiological Safety Officer (RSO)- its own employee suggesting to go for mechanical mining.

During the discussion, the following points emerged:

- (i) *The legal requirement/instruction of Atomic Energy Regulatory Board regarding mechanical mining shall be submitted.*
- (ii) *Submit the compliance report of the existing project.*
- (iii) *The monitoring report shall be obtained from Regional Office.*
- (iv) *Submit the latest Google maps for the sites.*
- (v) *Submit the details of the refilling and the time requirement.*

The further examination including the requirement of Rapid EIA and conduct of Public Hearing as per the provision of CRZ Notification, 2011, shall be decided.

In view of the foregoing observations, the committee decided to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.

4.9 Finalisation of ToR for establishment of common Hazardous Waste Management Facility in Bharuch Gujarat, M/s Aarti Specialties Ltd. (F.No.10-11/2013-IA-III)

As presented by the project proponent, 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.

During the discussions, the Committee finalized the following additional TOR for further study:

- (i) Submit the site along with the land use of up to 10 km radius.*
- (ii) Submit the justification of the Project, location and technology, project components and capacities shall be submitted.*
- (iii) Site lay out plan clearly showing various units, green belt, laboratory, roads, vehicle parking, office building etc to be submitted.*
- (iv) Submit the details of the compliance with respect to the provisions of Hazardous Wastes (Management, Handling and Trans-boundary movement)) Rules, 2008 including collection and transportation. design etc. All the applicable rules shall be listed and mitigation plan to comply the applicable rules shall be submitted in detail.*
- (v) Submit the details of the waste generated, present mode of disposal as per the State PCB authorization etc.*
- (vi) Submit the MoU made between member units along with responsibilities.*
- (vii) Examine the details of monitoring of Dioxin and Furan, online monitoring if any with details .*
- (viii) Submit a copy of MoU for disposal of ash through the TSDF.*
- (ix) Submit the details of Air Pollution Control Measures.*
- (x) Environmental Management Plan should be accompanied with Environmental Monitoring Plan and environmental cost and*

benefit assessment. Regular monitoring shall be carried out for odour control.

- (xi) Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.*
- (xii) Submit the copy of the notification declaring the area as industrial area of Jhagadia.*
- (xiii) Submit the details of drainage, collection of run off and its disposal etc.*

Proponent requested for exemption of Public hearing since it is located in notified industrial area. Committee

A detailed draft EIA/EMP report should be prepared as per the above additional TOR and should be submitted to the Ministry as per the Notification.

4.10 Finalisation of ToR for establishment of common Municipal Solid Waste Management Facility (CMSWMF) projects at Dibrugarh M/s Dibrugarh Municipal Board, Dibrugarh (F.No.10-14/2013-IA-III)

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

4.11 Finalisation of ToR for the development of Industrial Growth, Centre, Phase-II, Saha, Ambala, Haryana by M/s Haryana State Industrial and Infrastructure Development Corporation Ltd. (F.No. 21-3/2013-IA-III)

As presented by the project proponent, the proposal involves development of Industrial Growth Saha, Centre, Phase-II, Ambala, Haryana on a total plot area of 250.94 acres (101.55 hectare). The area under acquisition of Vill. Jawahargarh (9 acres-3 Kanal-8 Marla), Vill Tepla (48 acres-5 Kanal-16 Marla), Vill Saha (65 acres-19 Kanal-11 Marla) and Vill Dhakoula (92 Kanal-18 Marla). The project does not pass through any Reserve Forest and Wildlife Sanctuary. The total water requirement is 1000 KLD. Total energy requirement is 25 MW. The Punjab State Boundary lies within 9.69 Km of the project boundary.

As the project area is 661.3 acres (267.62 Ha) which has been divided into two phases. Phase –I is of 410.36 acres (166.07 Ha) and phase- II 250.94 acres (101.55 Ha).

The project attract Category 'B' 7 (c) under EIA, Notification, 2006 – area is less than 500 ha and having a CETP- category 'B'. However, since the State boundary is less than 10 km, it is treated as Category 'A'.

During the discussions, the Committee finalized the following additional TOR for further study:

- (i) *Justification for the selection of site with the details of alternative sites evaluated.*
- (ii) *Examine in detail the proposed site with reference to impact on infrastructure covering water supply, storm water drainage, sewerage, power, etc., and the disposal of treated/raw wastes from the industrial estate on land/water body and into sewerage system.*
- (iii) *Study the socio-economic situation of the project area and its surroundings and their impact on the project design and operation.*
- (iv) *Study the existing flora and fauna of the area and the impact of the project on them.*
- (v) *Study the hydrological and geo-hydrological conditions of the project area. Include a contour plan indicating slopes and showing drainage pattern and outfall.*
- (vi) *Examine and submit details about the resettlement and rehabilitation of project-affected persons in the nearby villages, in accordance with the National Resettlement and Rehabilitation policy.*
- (vii) *Ensure that the land is not in the flood plain of the river.*
- (viii) *Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximise recycling of water and utilisation of rain water.*
- (ix) *Examine soil characteristics, topography, rainfall pattern and soil erosion.*
- (x) *Application of renewable energy/alternate energy, such as solar energy, wind energy may be described. Provide for conservation of resources, energy efficiency and use of renewable sources of energy in the light of ECBC code.*
- (xi) *Management of wastes discharged by the industrial units and the service facilities, especially the CETP may be described.*
- (xii) *Identification of recyclable wastes and waste utilisation arrangements may be made.*

- (xiii) *Explore possibility of generating biogas from decomposable wastes.*
- (xiv) *Arrangements for hazardous waste management if any may be described.*
- (xv) *Traffic management plan including parking and loading/unloading areas may be described. Traffic survey should be carried out on week days and week end.*
- (xvi) *Examine and submit details of Air quality monitoring as per latest National Ambient Air Quality standards as notified by the Ministry on 16th November, 2009.*
- (xvii) *Odour mitigation plan may be described. Also make provision of green belt as a measure for mitigation of dust and noise and buffer between habitation and industry.*
- (xviii) *EMP should include technical and institutional aspects for pre-treatment by constituent units.*
- (xix) *Use of local building materials should be described. The provisions of fly ash notification should be kept in view.*
- (xx) *Landscape plan, green belts and open spaces may be described. Examine and submit the details of the Green Belt.*
- (xxi) *Environmental Management Plan should be accompanied with Environmental Monitoring Plan and environmental cost and benefit assessment.*
- (xxii) *Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan.*
- (xxiii) *The facilities to be provided in the industrial estate should be detailed out.*
- (xxiv) *Make assessment of any regulatory measure in view of the environmental and social impacts of the project (such as unauthorised development around the estate).*
- (xxv) *Submit the details of CSR activities.*
- (xxvi) *Obtain and submit approval of central ground water board for withdrawal of ground water*
- (xxvii) *Breakup of the landuse and provision of green buffer to the extent of 30% also provide details for road.*

(xxviii) Details of the existing road and the proposed road.

(xxix) Google map and the sight photographs would be provided.

(xxx) Model MoU between member industries and the developer.

(xxxi) Parking/schools/gardens etc.

(xxxii) Other details as indicated in Appendix III of EIA Notification 2006 should also be attended.

Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 (as amended in 2009) in all the districts separately and the issues raised by the public should be addressed in the Environmental Management Plan.

A detailed draft EIA/EMP report should be prepared as per the above additional TOR and should be submitted to the Ministry as per the Notification.

4.12 52 Projects for CRZ clearance for Kharland Scheme- Kharland Development Circle, Govt. of Maharashtra (F.No.11-72/2013-IA.III)

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

4.13 Environment and CRZ clearance for setting up of LNG terminal at Ennore, Tamil Nadu by M/s Indian Oil Corporation [F.No. 11-30/2011-IA.III]

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

4.14 CRZ Clearance for replacement of existing 8 inch LPG Pipe line from ONGC Terminal, Urban to BPCL, LPG Bottling plant, Uran by M/s Bharat Petroleum Cor. Ltd (F. No. 11-23/2013-IA.III)

As presented by the project proponent the proposal involves replacement of existing 8 inch LPG Pipe line from ONGC Terminal, Urban to BPCL, LPG Bottling plant, Uran. Bharat gas LPG Bottling Plant at Uran receives LPG for bottling of LPG cylinders, Bulk loading etc through a 7.2 km underground piggable LPG pipeline of size 200 mm NB from ONGC Terminal at Uran. The Pipeline has been laid in the 5 m RoU allocated to us by CIDCO. The existing pipeline is 24 year old and it is proposed to be replaced with same 8 inch thickness pipeline in the same allocated corridor. The pipeline will be supported by Leak detection System and Cathodic

Protection System with OFC cable provision for communication and signals, interlock systems through PLC.

Out of 7.2 km length, 43.8 meters of then pipeline is to be laid inside ONGC premises, which falls under CRZ-II and remaining length i.e 7.156 km do not fall within CRZ area. MCZMA recommended the project vide letter dated 19.01.2013.

During the discussion, the following points emerged:

- (i) The committee noted that only 43.8 m length of pipeline is passing through CRZ area and it is also within the premises of ONGC in the existing corridor.*
- (ii) In view of the above the proponent shall obtain necessary statutory clearances as applicable and comply with all the recommendation of risk assessment report.*
- (iii) The old pipeline shall not be disposed into the CRZ areas/ mangrove area.*
- (iv) All the recommendations of MCZMA shall be complied with.*

The Committee recommends the proposal for CRZ Clearance with the above condition in the Clearance letter for strict compliance by the project proponent.

4.15 CRZ clearance for construction of vented dam for supply of drinking water at Malavoor Village across Gurupura River by M/s Executive Engineer, Rural Water Supply and Panchayat Raj Engineering Division (F. No. 11-31/2012-IA.III)

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

4.16 Environment Clearance for the establishment of Industrial Growth Centre at SIDCO Industrial Complex, Ghati Kathua, Jammu & Kashmir by M/s State Industrial Development Corporation Pvt. Ltd (F. No. 21-22/2010-IA.III)

As presented by the project proponent, the proposal is for establishment of Industrial Growth Centre at SIDCO Industrial Complex, Ghati Kathua, Jammu & Kashmir. Jammu & Kashmir State Industrial Development Corporation (JK SIDCO), has proposed to set up Industrial area at village Ghati (Kathua district) about 3.5 km northwards of Jammu-Pathankot National Highway (NH 1A). The area lies between latitude 75° 26' 30" E to 75° 25' 50"E and longitude 32° 27' 30" N to 32° 29' 04"N and falling under toposheet no. 43 P/7 (Restricted). Type of land is unproductive (Banjar) land and small chunk of rain-fed agriculture land. The nearest

village is Ghatti at 1.0km in NE, nearest railway station is Budhi Rly Station 2.0 km S, nearest highway is NH-1A at 3.3 km SW. Predominant wind direction is North-east. The total project area is 182.29 ha and cost of project is Rs.81.15 crores.

Owing to proximity of eco-sensitive receptors - Jasrota Wildlife sanctuary (2km NW), and Ujh wetland (0.7km W and HFL 0.5km W) - the project is falling under category A. As suggested by State Board for Wildlife, only green and orange category industries are proposed, rezonation of the industrial area has been done and red category industries have been excluded from the proposal. The project is recommended for National Board for Wildlife. Public hearing for the project as held on 18-12-2010.

Water requirement of the project is 1245 KLD out of which only 795 KLD freshwater would be pumped from 6 tube-wells and remaining 450 KLD would be treated water. Industries would be using water for manufacturing activities (Process activities) and for operating utilities viz., DM plant, boilers etc.

Ambient Air Quality Monitoring was carried out within 10 km peripheral of the project site. AAQ locations were selected in downwind, cross wind and upwind directions of the proposed plant location. AAQ levels recorded are PM_{2.5} (Min: 12 µg/m³ & Max: 28 µg/m³); PM₁₀ (Min: 24 µg/m³ & Max: 52 µg/m³); SO₂ (Min: 6.1 µg/m³ & Max: 11.6 µg/m³); NO_x (Min: 8.1 µg/m³ & Max: 13.9 µg/m³). Noise levels are within the Residential prescribed limits.

Ground Water & surface water sampling was done in winter season and analyzed for important physical and chemical parameters. In ground water samples the pH was varying from 7.08 to 7.87; TDS are in the range 186 mg/l to 298 mg/l; Hardness is in between 119 mg/l to 212 mg/l; Chlorides are in between 18 mg/l to 23 mg/l and Fluoride is ranging from 0.16 mg/l to 0.22 mg/l/. In surface water samples the pH was varying from 7.73 to 7.75; TDS are in the range 223 mg/l to 226 mg/l; Total Hardness is in between 118 mg/l to 119 mg/l; Chlorides are 42 mg/l and Fluoride is ranging from 0.16 mg/l to 0.18 mg/l/.

Around 469 KLD of wastewater will be generated from the proposed industrial area. The sources of wastewater would be industrial wastewater 305KLD and domestic wastewater 165KLD. Individual units will be treating wastewater at their respective units to meet inlet standards of 2 CETPs of capacities 200KLD and 150 KLD. 100% effluent will be treated and reused within the industrial area for various activities viz, flushing, washing, gardening, cooling, greenbelt development and boiler makeup, etc.

The domestic wastewater will be treated in sewage treatment plant (STP) of capacity 200KLD. The STP consists of pre treatment, secondary treatment (MBBR) and tertiary treatment of activated carbon/sand filter and disinfection. The treated water will be used for greenbelt.

Proper Solid waste management plan has been developed and all management practices related to industrial waste, hazardous waste, domestic waste and bio-medical waste would be placed.

In order to comply with the environmental protection measures, a budgetary provision Rs. 17.63 crores with 10% recurring costs for Environmental Protection and Safety measures is made. Amount allocated for CSR activities is Rs. 4.02 crores.

ToR was issued vide letter dated 06/08/2010. As per OM dated March 22, 2010 and EAC in its meeting held in October, 2012 and recommended for extension of ToR for one year. Public hearing for the project as held on 18-12-2010. The issues raised during the public hearing are objections to the red category industry because of its location near the river.

During the discussion, the following points emerged:

- (i) Green belt of 15 meters should be provided all along the boundary of the site. The land (Green belt) should not be allotted for any unit holder and land will not be diverted to any other usage. Submit the revised layout map for the same*
- (ii) The internal circulation road should not be left open at the boundary, open ended and should be shown with proper turning points.*
- (iii) Provide layout map for the proposed parking including parking for trucks and facilities for the drivers. Details regarding intersections of the roads should be provided*
- (iv) Landscape plan should be submitted along with the existing vegetation and the proposed green areas.*
- (v) Existing major nalas/drains should not be diverted and green buffer should be provided on both the sides of the nalas/drains. Provide details regarding the capacity of the drain and whether the drains carry the entire runoff water.*
- (vi) Provide details with respect to the road which is connecting the project site with the highway. Also provide details regarding the intersection of the highway with the connecting road.*
- (vii) Examine and submit details regarding whether the STP can be combined with the CETP along with the cost details*
- (viii) As committed during the public hearing, proponent should follow the zero discharge norms and submit details regarding the management of effluent during monsoon period.*

In view of the foregoing observations, the committee decided to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.

4.17 Environmental Clearance for construction of Passenger Ropeway project at Jammu between Mubark Mandi to Mahamaya &

Mahamaya to Shahbad by M/s J&K State Cable Car Corporation Ltd. (F.No. 10-15/2012-IA-III).

As presented by the project proponent, the proposal is for construction of Passenger Ropeway project at Jammu between Mubark Mandi to Mahamaya & Mahamaya to Shahbad. Section-I is across Tawi River from Peerkho near Mubarak Mandi to Mahamaya for 1.2 km. long. Section-II from Mahamaya to Shahabad (Bahu Fort) is for 0.45 kms long. 6 seater Monocable Pulsated Gondola System for 600 passengers/hour with imported cabins, rope, grips and other critical components.

Land required are 1.404 ha for Peer Kho, Terminal-I, 2.83 ha of land for Mahamaya, Terminal-II and 0.725 ha of private land at Shahabad, Terminal-III. Out of 4.959 ha, 4.234 ha of Forest land required. Terminals will have 2 floors with ticket counter, waiting hall, queue area, boarding and de-barding area for passengers, Toilets and other basic amenities, office rooms, 1st aid room and Staff room.

The site is within 10 km from Ram Nagar Sanctuary hence the project is treated as Category 'A'. Terminal II and III ailing in Bahu conservation reserve.

The project was examined by the EAC in its meeting held in March, 2012 including conduct of Public Hearing. Public Hearing was conducted on 21.07.2012 at Peerkho. The public in general supported the project and the major issue raised was measures to avoid pollution on River Tawi.

The proposal requires for land use of 1.04 ha at Pheer kho and 2.83 ha at Mahamaya area and it was considered the 57th Forests Advisory Committee and committee had agreed in principle. State Wild Life Board has given its consent for utilization of 2.83 hectares of Bahu Game Reserve area for construction of the project. The Standing Committee of National Board for Wild Life has also recommended the proposal in its 26th meeting held on 31st October 2012 in the Ministry of Environment and Forests, New Delhi.

During the discussion, the following points emerged:

- (i) All the conditions stipulated by the NBWL shall be complied with.*
- (ii) The total number of trees to be affected are 217 (106 in section-I and 111 in Section-II). Necessary permission shall be obtained and compensatory plantation of at least 1.3 time shall be carried and cost provision should be made for regular maintenance.*
- (iii) The existing road connectivity shall be widened and improved to take care the additional pedestrian movement. Emergency vehicle movement plan along with the route details shall be prepared and put in place prior to commencement. Copy shall be submitted to the Regional Office, MoEF.*

- (iv) *The responses/commitments made during public hearing shall be complied with letter and spirit.*
- (v) *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.*

The Committee recommends the proposal for Environment Clearance with the above condition in the Clearance letter for strict compliance by the project proponent.

4.18 Environment Clearance for Development for Birsi Airport Gondia, Maharashtra by M/s Airport Authority of India. (F.No. 10-143/2007-IA.III).

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

4.19 Environment Clearance for rehabilitation and upgradation of the existing carriageway to 4/6 lane of Cuttack-Angul (Jn with NH-5 in Cuttack of NH-42) Section of NH-42 from km. 0.000 to km 112.00 in the State of Orissa by M/s NHAI. [F. No. 10-76/2011-IA-III].

As presented by the project proponent, the project road starts at km 0.000 near Mungli Chawk (Jn with NH-5 in Cuttack with NH-42) and ends at proposed Angul bypass (km 112.000) which is a section of NH-42. Total length of the road is 112 km. The project road traverses through three districts viz. km 0 to 29 in Cuttack, km 29 to 89 in Dhenkanal and km 89 to 112 in Angul. The entire project road passes mostly through plain/rolling terrain. The existing highway has generally 7 m wide carriageway and 1 to 2.5 m wide shoulder on either side with about 10 m roadway . The existing road would be up graded to 4-lane with paved shoulders configuration with provision of capacity augmentation. Existing ROW ranges from 22 m to 60 m. The proposed ROW is 60m. The proposed road does not pass through any Natural Sanctuary or ecological sensitive areas. It passes through Reserve Forest and one Elephant corridor at km 19.200 (Khuntani Range under Athgarh Division). About 321.4 ha of agricultural land has been proposed to be acquired (including 129 ha land for Angul bypass and 1.4 ha for 2 nos. toll plazas). Forest land of about 101 ha also has to be diverted. Out of 112, Km of the project road 42.5 km of the road passes through forest land i.e. about 37% of the total road length and under agricultural area for about 20%. Besides, there are built-up areas for a considerable stretch (10%).

There are major intersections with NH-5, NH-6, NH-23 and SH, Municipal roads/town roads. All junctions will be improved. One bypass of 22.1 km has been proposed at Angul and another bypass at Indipur for 3.3 km length. There are 3 nos Major bridges out of which reconstruction/widening of 2 nos. proposed for 2-laning and 1 nos. as 4 laning. Out of total 22 nos of existing Minor bridges reconstruction/widening of 13 nos. proposed for 2- laning and 9 nos. to 4 lane bridges. Improvement/widening of existing 113 nos. culverts and Reconstruction of 100 nos. culverts are proposed.

There is 1 existing ROB. and one RUB, which will be widened to 4-lane. Three flyovers at km.25.080, km. 38.800 and km 48.900 have been proposed. The proposed lengths of Service Road are 21.42 km. One animal underpass at km. 19.200 and seven Vehicular-cum-Pedestrian underpasses are proposed at km.3.065, km.23.674, km.91.551, km.95.196, km.101.474, km.104.223 and km.108.014. Two Toll plazas have been proposed at Km 22+000 and Km 85+000. 2x32 nos of Bus bays on both sides with bus shelter and one truck lay-bye at km 23+000 have been proposed.

About 2550 trees which are on existing ROW are proposed to be felled and for which about 7500 trees will be planted as avenue plantation. About 2045 temporary structures (both kachha, pacca and semi-pacca); 50 religious structures; 8 nos of educational institutional buildings and 2 nos of Health Centers which are on the proposed ROW will be affected completely/ partially. Effort will be made to change in design and alignment to minimize the impact and to relocate the religious structures in consultation with local people. Affected families will be compensated as per NHAI Policy. There are 35 water bodies (fishing pond, community pond, canal, ditches, streams and river) along the project road. 750 KL of water per day is proposed to be extracted from surface sources (75%) and ground water (25%). The estimated cost is Rs.1109.97 Crores.

The project was considered by the EAC in its meeting held in September, 2011 and finalized ToR including conduct of public Hearing. The public hearing was conducted on 31.07.2012 at DRDA, Angul, on 17.10.2012 at Sadbhabana Hall of Collectorate, Dhenkanal and on 01.12.2012 at Radhanath Rath Vigyan Mahavidyalaya, Khuntuni. Major issues are rehabilitation, acquisition lands tree plantation, usage of ground water provision for elephant corridor, under passes, fly ash utilization. The committee examined the information submitted and presented by the proponent.

Committee noted that Shri.Bijay Kumar Mohanty, Advocate has sent a Legal Notice dated 12.04.2013 through mail stating that his client has attended the public hearing held for the project and made certain objection regarding safeguard of the forests area, safety of wildlife and their protection and steps taken for pollution of Air and Water. All these matter should be

published in the news paper but it was not done. Since there was no response, he filed a W.P (c) No. 20516 of 2012 in the Hon'ble High Court of Orissa and the matter is pending, hence requested not to consider the project.

Copy of the notice produced to the proponent and sought the response. The project proponent referring to the Public hearing minutes informed that Shri. Bijay Kumar Mohanty, Advocate attended the Public Hearing and raised the issues regarding safeguard of the forests area, safety of wildlife and their protection and steps taken for pollution of Air and Water, project should not start before the grant of EC/ FC etc. Though the project proponent informed that the regulation will be followed and required clearance and safeguards will be carried as applicable. However, it is noted that the minutes does not cover the response of project proponent. Therefore, the committee suggested the project proponent to reply to the Advocate and submit a copy to Ministry along with proof.

During the discussion, the following points emerged:

- (i) *The project does not pass through any eco- sensitive areas,*
- (ii) *The proposal indicates about 9.85 ha of Reserve forest and 18.60 ha village forests land is to be acquired. Necessary stage -I forestry clearance shall be obtained.*
- (iii) *It is indicated that 920 nos. trees falls within proposed RoW, however, bare minimum, however bare minimum trees to be cut. Necessary permission from competent authority shall be obtained for tree cutting. Necessary green belt shall be provided on both side of the highway with proper central verge and cost provision should be made for regular maintenance.*
- (iv) *Project road passes a elephant corridor at km 19.2000, Khuntani Range under Athgarh Division. An underpass in Elephant corridor shall be provided.*
- (v) *Fly ash shall be used for the project as committed.*
- (vi) *Permission for ground water drawl shall be obtained from competent Authority.*
- (vii) *Explore the possibilities of using cold mix technology wherever possible particularly near wildlife sanctuary.*
- (viii) *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.*

- (ix) R&R shall be as per the guidelines of State/ Central Government.
- (x) IRC guidelines shall be followed for widening & up-gradation of road.
- (xi) The responses/commitments made during public hearing shall be complied with letter and spirit.
- (xii) 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.

The Committee recommended the proposal for Environmental Clearance with the above condition in the Clearance letter for strict compliance by the project proponent

4.20 Environmental clearance for 4-lane with paved shoulder of the Sidhi-Singrauli road NH-75E (km 83/4 to km 195/6) under NHDP-IV program, total length 102.6 km in the State of Madhya Pradesh by M/s Madhya Pradesh Road Development Corporation Ltd. (F.No. 10-11/2012-IA-III).

The existing project highway starts from Sidhi near Sidhi bypass i.e. Km 83/4 at NH-75E and ends at Singrauli near MP/UP Border at Chainage 195/6 on NH-75E. Length of Existing road is 112.2 km. The project road passes through two district Sidhi (length 31km) and Singrauli (length 130 km). The existing carriageway having two lane carriageway of 7.00 m and proposed paved carriageway will be 17.5 m excluding the median. The Proposed length of project highway is 102.60 km. The existing ROW is varies from 22 to 35 m and the proposed ROW is 60 m on bypass section and 30m on existing alignment.

There are five bypasses proposed having length 10.00 km which are (i) Kuchwahi Bypass- 0.95 km length (ii) Behri bypass – 2.8 km (iii) Karthua bypass- 2.1 km (iv) Bargawa bypass – 2.25 km (v) Gorbi bypass – 1.9 km. 03 New ROBs at Km 155+700, 167+550 & 175+900, 14 nos. Vehicular Underpasses have been proposed. 2 number toll plaza and 05 nos. truck lay byes (Both side) and 17 nos. bus bays (Both Side), 4 Major and 33 Minor Bridges have been proposed. There are no environmental sensitive areas within 15 km. Project road does not pass through National park/Sanctuary/ Wildlife corridor/ eco sensitive zone. The total land required for the proposed project is 582 ha. (94 ha is Government land, 405 ha is Private land and 83 ha is forest land)). The average water requirement during construction period is 450 KLD

About 2034 numbers of trees are likely to be felled mostly babool & neem and minimum 10 times i.e. 20340 trees proposed to be planted. The R&R cost including land cost is 135.40 Crores and EMP cost is 107.39 Lakhs.

The project was considered by the EAC in its meeting held in March, 2012 and finalized ToR including conduct of public Hearing. The public hearing was conducted at Sidhi on 31/10/2012 and Singrauli on 30/01/2013 as per provision of EIA Notification, 2006. Major issues are acquisition lands and compensation, quality of roads. The committee examined the information submitted and presented by the proponent.

During the discussion, the following points emerged:

- (i) Project road does not passes through any eco- sensitive area and within 10 km from eco- sensitive area and no diversion of forests land.*
- (ii) The proposal indicates about 82.525 ha (21.468 ha in Sidhi and 61.057 ha in Singrauli Districts) forest land is to be acquired. Necessary stage –I forestry clearance shall be obtained.*
- (iii) It is indicated that 2034 nos. trees likely to be felled for the project. Necessary permission from competent authority shall be obtained for tree cutting. Compensatory tree plantation of 20340 trees proposed. Cost provision should be made for regular maintenance.*
- (iv) Fly ash shall be used for the project as committed.*
- (v) Controlled blasting shall be carried out at few places in hilly areas as committed.*
- (vi) There project road passes a river Gopad at ch. 113.7 km, there shall not be any disposal of debris into the river. It shall be ensured that the drainage/catchment of the river shall not be disturbed during construction.*
- (vii) Permission for ground water drawl shall be obtained from competent Authority.*
- (viii) 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.*
- (ix) R&R shall be as per the guidelines of State/ Central Government.*

- (x) *IRC guidelines shall be followed for widening & up-gradation of road.*
- (xi) *The responses/commitments made during public hearing shall be complied with letter and spirit.*
- (xii) *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.*

The Committee recommended the above proposals for Environmental Clearance with the above condition in the Clearance letter for strict compliance by the project proponent.

4.21 Finalisation of ToR for setting of Kuduthini Industrial Area, Kuduthini village, Bellary District, Karnataka. M/s Karnataka Industrial Areas Development Board. (F.No. 21 -2/2013- IA.III).

As presented by the project proponent the proposal involves setting of Kuduthini Industrial Area, Kuduthini village, Bellary District, Karnataka. Karnataka Industrial Areas Development Board (KIADB) is a wholly owned infrastructure Agency of Government of Karnataka, set up under Karnataka Industrial Areas Development Act of 1966. This Board functions as per statutory provisions, rules and regulations enacted there under. The Board comprises of senior Government Officers in their ex-officio capacities. The Board of members meet regularly to take decisions and monitor the functions. KIADB holds pride in being the first Government Organisation in Karnataka to obtain ISO 9001 Certification in the year 1997.

It is a site development meant for establishment of industries mainly “B” Category that have very little “Pollution issues” and less water and power requirements in comparison to the large scale projects. The main Industries that can be developed in the Proposed Industrial Area are Sponge iron and iron rerolling mills, etc (All Category B industries only). The proposed project envisages developing an Industrial Area spread over 1654.10 acres (669.35 Ha) of land. The entire land belongs to KIADB. The estimated project cost which covers the development along with the common waste handling and disposal facility is approximately Rs. 300 Crores.

The major development would be Industrial Area with Plots based on Size of Industry planned to be developed. The industrial plots would be distributed based on the following Sizes, i.e., 0.00-0.49 acres, 0.5-0.99 Acres, 1.0-1.99 Acres, 2.0-2.99 Acres, 3.0-3.99 Acres, 4.0-4.99 Acres, 5.0-5.99 Acres, 10.0-10.99 acres, Civic amenities, Commercial, Public utility, Residential and Solid waste disposal. KIADB proposes to develop the Green belt in 33% Area within the project site as Green Area. Besides, individual

industries will also develop green area in their own plot as per KSPCB Consent Conditions.

During the discussion, the following points emerged:

- (i) *The proponent could not be able to provide the land use of the proposed site, justification for the selection of the site etc.*

In view of the foregoing observations, the committee decided to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.

4.22 Finalisation of ToR for product Specific (Mineral Based) SEZ project over an area of 166.66.5 hectare in village-Thiruvambalapuram, Taluk – Radhapuram, District – Tirunelveli, State – Tamilnadu. M/s V.V. Mineral. (F.No. 21-72/2012 - IA.III).

As presented by the project proponent, the proposal involves development of product Specific (Mineral Based) SEZ in village-Thiruvambalapuram, Taluk – Radhapuram, District – Tirunelveli, Tamil Nadu over an area of 166.66.5 hectare. The proposed project area is an unclassified non agricultural patta land situated within and outside the CRZ. The major part of the area is dry covered by few thorny bushes. Production capacity includes: Mineral processing plant-3.5 million TPA, Port activities-4.9 million TPA cargo handling capacity, Cogeneration plant, wind turbine and solar power plant – 600 MW, Desalination Plant-100 MLD (sea water intake-244 MLD, reject water-141.67 MLD and disposal of reject water is into the sea) and CETP-75 MLD. The purpose of the proposed project is processing of Garnet, Ilmenite, Rutile, Zircon, Sillimanite and other associated heavy minerals and production of Rare Earth Oxide, Titanium Pigments, Synthetic Rutile, Slag, Scandinium, cracking of Monazite for production of magnets, solvent extraction etc. The total power generation is 250 MW both for industrial and domestic usage. Radhapuram Taluk is rain shadow area. There is no enough groundwater. Hence, proponent proposed to met the fresh water requirement by its own source by desalination of sea water, harvesting of rain water and treated water as per demand into stages. 1.2 MLD domestic sewage water is expected to discharge which will be treated in septic tank and soakpits. Domestic waste water generated will be used for green belt development.

During the discussion, the following points emerged:

- (i) *Submit the details of erosion status of the site as per the study conducted by NCSCM, Chennai*
- (ii) *It is noted that the site for the port is at the mouth of river. Proponent shall submit the details of alternative sites considered and justification for the selection of particular site.*

(iii) It is noted that the major SEZ area falls within CRZ area where SEZ is not permissible in CRZ. Proponent informed that only permissible activities viz. Port, wind mill etc will be located within CRZ. Committee suggested to submit the project layout on CRZ map along with the area break up

In view of the foregoing observations, the committee decided to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.

4.23 Finalization of ToR for enhancement of capacity for Treatment and Disposal of Common Effluent and Hazardous Solid Waste Facilities at KIADB Industrial Area, Sompura 1st State Dobaspet, Nelamangala Taluk, Bangalore Rural District, Karnataka by M/s. Bangalore Eco-Park Pvt. Ltd. (F. No. 10-2/2010-IA-III).

As presented by the project proponent the proposal involves enhancement of capacity for Treatment. EC for the incineration of Hazardous waste of 200 kg /hr was granted on 25.10.2010. The project not yet commissioned. It is proposed to enhance the capacity from 200 to 500 kg/hr and evaporate 100 KLD through forced evaporation.

During the discussions, the Committee finalized the following additional TOR for further study:

- (i) Submit the details of the 100 KLD liquid effluent, source, quality and method of transportation, handling including storage etc.*
- (ii) Submit the details of the residue from the evaporation*
- (iii) Submit the details of existing incinerators near the vicinity along with the details regarding co-incineration,*
- (iv) Submit the details of the member units, their effluent quantity, quality and consent details and MoU.*
- (v) Submit the details of mechanism of MEE*
- (vi) Submit the details of location along with the land use around, google map*
- (vii) Submit the critical parameters proposed to be monitored along with the protocol under law*

Proponent requested for exemption of Public hearing since it is located in notified industrial area. Committee exempted the public Hearing.

A detailed draft EIA/EMP report should be prepared as per the above additional TOR and should be submitted to the Ministry as per the Notification.

4.24 Environmental Clearance for rehabilitation and upgradation of the existing carriageway to 4/6 lane of Angul - Sambalpur (Jn. Of NH-6 at Sambalpur) Section of NH-42 from km. 112.000 to km. 265.000 in the State of Orissa by NHAI (File No.10-78/2011-IA-III)

As presented by the project proponent, the project road starts from Angul at Km 112.000 and ends at Sambalpur at Km. 265.000 (Jn. of NH-6 at Sambalpur). Total length of the road is 153 km. The project road traverses through two districts viz. km 112 to 186 in Angul and thereafter till end point in Sambalpur. The entire project road passes mostly through plain/rolling terrain. The existing highway has generally 7 m wide carriageway and 1 to 2.5 m wide shoulder on either side with about 10 m roadway. The existing road would be up graded to 4-lane with paved shoulders configuration with provision of capacity augmentation. ROW ranges from 20 m to 60 m. The proposed ROW is 60m. The proposed road does not pass through any Natural Sanctuary or ecological sensitive areas. It Passes through Reserve Forest and five notified Elephant corridors. About 43.5 km of the road passes through under reserve or protected forest land. Existing land use of the project road indicate that - major part of the project road falls under forest area (29%) and under agricultural area (20%). Besides, there are built-up areas for a considerable stretch. About 320 ha of agricultural land (including 21.6 ha land for Sambalpur bypass and 1.4 ha for. 2 nos. toll plazas) has to be acquired for the widening of this road. Also Forest land of about 173 ha has to be diverted. There are 4 Major bridges out of which reconstruction /widening of 3 Nos. to 2-lane and 1 nos. to 4-laning proposed. Out of total 37 nos of existing Minor bridges 28 nos. proposed reconstruction/widening as 2- laning and 9 nos. to 4 lane bridges. 241 nos. of culverts has been proposed for Construction/widening and Reconstruction of 191 nos. culverts in the project stretch. There are major intersections with NH-5, NH-6, NH-23 and SH, Municipal roads/town roads. All junctions will be improved. Three Vehicular-cum-pedestrian underpasses and three flyovers are proposed at km. 149.000, km.179.780 and km.199.150. There is one existing ROB (at km.147.300) whose widening and improvement has been proposed. Also one RUB is at km. 239+700. Five Animal underpasses are proposed at km 194.400, 243.500, 247+809, 250.241 and 253.500. The proposed lengths of Service Roads 24.50 km. A bypass has been proposed at Sambalpur (length 3.8 km from km. 259.100 to 262.858).

About 4225 nos. trees which are on existing ROW are proposed to be felled and for which about 15,000 trees will be planted as avenue plantation. About 2073 structures (both kachha, pacca and semi-pacca), 24 religious structures, 20 nos of educational institutional buildings and 3 nos of Health Centers which are on the proposed ROW will be affected partially/completely. Effort will be made to change in design and alignment

to minimize the impact. Religious structures shall be relocated in suitable location in consultation with local people. Affected families will be compensated as per NHAI Policy. Toll plaza has been proposed at km 182.000 and km.244.500. 23 nos. of Bus bays on both sides with bus shelters and two truck lay-bye at km 128. 600 and 234.700 are proposed. There are 75 water bodies (fishing pond, community pond, canal, ditches, streams and river) along the project road. 875 KL of water per day is proposed to be extracted from surface sources (75%) and ground water (25%). The total estimated cost is Rs.1273.41 Crores.

The project was considered by the EAC in its meeting held in September, 2011 and finalized ToR including conduct of public Hearing. The public hearing was conducted on 10.07.2012 at DRDA, Angul and on 15.11.2012 at Rairakhol, Sambalpur. Major issues are rehabilitation, tree plantation, bypass at Jeranga Village and Rairakhol and provision of Elephant corridor. The committee examined the information submitted and presented by the proponent.

During the discussion, the following points emerged:

- (i) Project road does not passes through any eco- sensitive area and within 10 km from eco- sensitive area and no diversion of forests land.*
- (ii) The proposal indicates about 49.24 ha (6.28 ha Reserve Forests and 42.96 ha village forests) forest land is to be acquired. Necessary stage –I forestry clearance shall be obtained.*
- (iii) It is indicated that 41,000 no f trees falls within 60m RoW , however, tree felling will be restricted to 45 m RoW and hence 25, 450 nos. trees likely to be felled for the project. Necessary permission from competent authority shall be obtained for tree cutting. Compensatory tree plantation of 2, 54, 500 trees proposed. Cost provision should be made for regular maintenance.*
- (iv) The project road passes through 5 elephant corridors. An underpass in Elephant corridor shall be provided.*
- (v) Fly ash shall be used for the project as committed.*
- (vi) There shall not be any disposal of debris into the water bodies. It shall be ensured that the drainage/ catchment of the water bodies shall not be disturbed during construction.*
- (vii) Permission for ground water drawl shall be obtained from competent Authority.*

- (viii) *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.*
- (ix) *R&R shall be as per the guidelines of State/ Central Government.*
- (x) *IRC guidelines shall be followed for widening & up-gradation of road.*
- (xi) *The responses/commitments made during public hearing shall be complied with letter and spirit.*
- (xii) *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.*

The Committee recommended the above proposals for Environmental Clearance with the above condition in the Clearance letter for strict compliance by the project proponent.

4.25 Environmental Clearance for rehabilitation and up gradation of existing single/ intermediate lane to 4-lane of Haryana-Punjab Border (km.239) to Jind (km.307) section of NH-71 in the State of Haryana by NHA (F. No. 10-4/2011-IA.III)

As presented by the project proponent, the proposal is for rehabilitation and up gradation of existing single/ intermediate lane to 2-lane to lane with paved shoulder from Jind to Jalandhar and up to Himachal Border (NH-70 and NH-71) in the State of Haryana and Punjab. The proposed road starts from Km Hansdahihar at km 239 of NH-71 at Jalandhar and ends at Jind (Km 307/00) and NH-70 starts from Km 0/000 at Jalandhar and ends at Punjab/Himachal Border (Km 59/000) covering about 350 kilometers. The project road falls in Hosiarpur, Jalandhar, Firozpur, Moga, Sangrur & Patiala of Punjab and Jind of Haryana. The road section passes through built-up areas of Jalandhar, Gahiran, Nakodar, Malsian, Shahkot, Jalalbad, Fategarh, Dalah, Buttar, Badhini, Lohran, Bilaspur, Barnala, Sangrur, Patran, Khanuri, Jind in NH-71 and Adampur, Kathar and Hosiarpur in NH-70. Land use pattern within 10 km on either side of project area is agriculture, and built-up. Similarly, land use along the project road (within 60 meter corridor) is predominantly agriculture(54%) followed by built-up and urban area.

Existing RoW of the project road varies between 20-30 meters. The proposed right of way (RoW) is 45m for widening existing road and 60 m is kept for bypasses and realignments. Approximately 1085 ha. land is

proposed to be acquired for the improvement of project road, out of which agriculture land is about 1050 ha and built-up land is 35 ha. Tree cutting within existing RoW will be required for the construction of 2/4 lane road. The proposal indicates diversion of 101.09 ha protected forest land. The project road does not pass through any eco-sensitive areas. However, Bir Aishwan Wildlife Sanctuaries is about 3 km away from the project road. Approximately 13091 trees proposed to be felled for the improvement of project road. There are existing 8 major bridges, 38 minor bridges, 305 pipe/slab/arch culvert. There are 8 major bridges, 38 minor bridges and 330 culverts have been proposed including existing bridges and culverts. There are 22 major junctions and 292 minor intersections on the project road, which have been proposed for improved under proposed design. Footpaths cum drain have been provided 35 km width of 1.5 m. Service roads have been provided for 25 km. Bypasses have been proposed to avoid congestion for built-up town portion. These bypasses are at Hoshiarpur, Jalandhar, Gahiran, Nakodar, Malsian, Sahnkot, Badhini, Lohran, Bilaspur, Khanuri and Jind. The total length of the project road is 69.650km. Total length of bypass is 74 km. Bus bays have been provided at 120 locations on both sides. 25 Underpasses/ Overpasses have been proposed. Truck lay byes have been provided at 5 locations on both sides of the road. W-beam crash barrier/stone masonry guard wall be proposed. There would be about 1500 project affected families due to the improvement of project road. The entitled persons shall be compensated according to the provisions of the National Highways Act, 1956. Peak demand of water would be approximate 1200 KLD during construction. Fly ash will be used for construction of road from Panipat and Bhatinda power plant. The total cost of the project is approximately Rs. 439 Crores.

The proposal was considered by the EAC in its 97th EAC meeting held on 14th – 15th February, 2011 and finalised additional ToR including conduct of Public Hearing. The public hearing was conducted on 30.01.2013 at Jhanj Kalan. Major issues are Land acquisition and compensation. The committee examined the information submitted and presented by the proponent.

During the discussion, the following points emerged:

- (i) Project road does not passes through any eco- sensitive area and within 10 km from eco- sensitive area and no diversion of forests land.*
- (ii) The proposal indicates about 97.807 ha Reserve Forests land is to be acquired. Necessary stage –I forestry clearance shall be obtained.*
- (iii) It is indicated that 13091 no f trees likely to be felled for the project. Necessary permission from competent authority shall be obtained for tree cutting. Compensatory tree plantation shall be carried out. Cost provision should be made for regular*

maintenance.

- (iv) There shall not be any disposal of debris into the water bodies. It shall be ensured that the drainage/ catchment of the water bodies shall not be disturbed during construction.*
- (v) Permission for ground water drawl shall be obtained from competent Authority.*
- (vi) 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.*
- (vii) R&R shall be as per the guidelines of State/ Central Government.*
- (viii) IRC guidelines shall be followed for widening & up-gradation of road.*
- (ix) The responses/commitments made during public hearing shall be complied with letter and spirit.*
- (x) 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.*

The Committee recommended the above proposals for Environmental Clearance with the above condition in the Clearance letter for strict compliance by the project proponent.

4.26 Finalisation of ToR for establishment of Greenfield Landfill in Vapi, GIDC, Distt. Valsad, Gujarat by M/s Vapi Waste and Effluent Management Co.Ltd [F.No.10-16/2013-IA-III]

As presented by the project proponent, the proposal involves establishment of Greenfield Landfill in Vapi, GIDC, Distt. Valsad, Gujarat. The nearest river is about 3.5 km and nearest habitation is Dadra village of 3.9km. Ground water table is above 6 m. The plot area is 14.5 ha, out of which 7.87 ha is for landfill foot print area, 3.2 ha open area and green belt. Landfill capacity is 13,40,000MT,.

This project attracts category 'B' 7(d) of EIA, Notification, 2006 however, since GC applies (6.2 km Interstate boundary of the U.T of daman & Diu), the project is treated as Category 'A'.

During the discussion, the following points emerged:

- (i) *The proponent could not be able to provide the land use of the proposed site, justification for the selection of the site etc.*

In view of the foregoing observations, the committee decided to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.

5. Extra item

5 Amendment to the Environmental clearance issued for eco textile park located at village-Baleshwar & Palsana, District Surat, Gujarat by M/s. Gujarat Eco-Textile Park Limited [F.No. 10-72/2007-IA-III].

As presented by the proponent, the Environmental Clearance was accorded vide Letter No 10-72/2007-IA-III dated 04/07/2008 for establishing 100 MLD, CETP, 10 million KCal./hour Common Hazardous Waste Incineration Plant and 22.6 MW gas based Power Plant. The CETP was proposed to treat wastewater generated by units situated in the park. Project Proponent requested to amend EC to treat wastewater generated by units situated within the park as well as in adjoining areas outside park.

The matter was examined by the Expert Appraisal Committee (EAC) in its Meeting held on 3rd – 4th March, 2011 and recommended the amendment. Meantime, MoEF has received a representation from New Palsana Industrial Co-operative Society Limited (NPICSL) which objected the proposal of taking wastewater from the industrial units located outside the park. The representation was sent to Gujarat pollution control board for the comments. EAC in its meeting on 17th – 18th August, 2012 after taking into account of the representation received from New Palsana Industrial Co-operative Society Limited (NPICSL), comments from GPCB, decided to change its earlier recommendation and did not recommend to amend the EC of CETP to take effluent outside the Industrial Park.

The applicant preferred an Appeal no. 65 of 2012 before the Hon'ble National Green Tribunal. The Hon'ble Tribunal vide its Judgment dated 6th February, 2013 issued the following directions while quashing the decision of the EAC:

“The net result of the foregoing conclusion is that the impugned decision is unsustainable in the eye of law and will have to be quashed. Hence, the impugned decision is quashed and the respondents are directed to allow the amendment to the EC as sought by the appellant. The respondents may put required conditions while granting amended EC. The Appeal is according allowed. No costs”.

During the discussion, the following points emerged:

- i) *There shall be Flow meters at inlet and outfit to monitor the, flow.*

- ii) *Periodical monitoring shall be carried out for the out let parameters.*
- iii) *The treated water shall be recycled to the maximum extent as committed.*
- iv) *The MoU between CETP and member units shall indicate the maximum quantity of effluent to be sent to the CETP along with the quality.*
- v) *The effluent from member units shall be transported through CETP tankers only duly maintaining proper manifest system. The vehicles shall be fitted with proper GPS system.*
- vi) *Before accepting any effluent from member units, the same shall be as permitted by the SPCB in the consent order. No effluent from any unit shall be accepted without consent from SPCB under the Water Act, 1974 as amended.*
- vii) *Suitable meters shall be provided to measure the quantity of effluent received, quantity of effluent recycled/ reused and discharged.*
- viii) *Hazardous wastes will be generated in the form of Primary treatment sludge (@ 15MT/Day), Solids from MEE concentrate drying and used oil will be handled and disposed as per HWM Rules, 2008.*
- ix) *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 Ro, MoEF along with half yearly compliance report.*
- x) *The CETP is permitted for treating effluent from Textile, dying industries. Proponent shall not accept effluent from other type of effluent as committed before the Committee. An undertaking shall be submitted to the Ministry.*
- xi) *The transportation of effluent shall be through pipeline as committed.*

The Committee recommends the proposal for CRZ Clearance with the above condition in the Clearance letter for strict compliance by the project proponent.

6 Recommended Projects

6.1 CRZ Clearance for effluent disposal in the saline water zone TPA viscose staple fiber plant at additional patalganga, distRaigad, Maharashtra by M/s. Lenzing Modi Fibers India Pvt. Ltd. [F.No.11-3/2013-IA.III]

The proposal was discussed in the 121st meeting held on 18th -19th February, 2013 and sought additional information viz. result of outfall hydraulics. The details submitted by the proponent was examined by the Committee.

During the discussion, the following points emerged:

- (i) The pipeline route is likely to disturb 15 numbers of mangrove plants. Therefore 5 times mangrove plantation shall be carried out. Permission shall be obtained from the High Court of Bombay as applicable for cutting mangrove plants.*
- (ii) All the recommendations & conditions specified by MCZMA shall be complied with.*
- (iii) The disposal shall meet MPCB Norms .*
- (iv) Spacing of diffuser ports may be increased to 20 mts with at least 6 ports in the diffuser.*

The Committee recommends the proposal for CRZ Clearance with the above condition in the Clearance letter for strict compliance by the project proponent.

6.2 Environment Clearance for CETP at Naraol, Ahmedabad, Gujarat by M/s Narol Textile Infrastructure & Enviro Management [F.No.10-84/2012-IA-III]

The proposal was discussed in the 119th meeting held in December, 2012 and sought additional information viz. NOC from GPCB for discharge in River, recycle/ reuse plan and green belt details. The details submitted by the proponent was examined by the Committee.

During the discussion, the following points emerged:

- (i) There shall be Flow meters at inlet and outlet to monitor the, flow.*
- (ii) Periodical monitoring shall be carried out for the out let parameters.*
- (iii) The MoU between CETP and member units shall indicate the maximum quantity of effluent to be sent to the CETP along with the quality.*

- (iv) *The treated effluent from CETP shall be blended with treated sewage prior to its discharge in river.*
- (v) *Domestic water requirement is @ 20 KLD, which will be met through AMC water supply whereas the balance water requirement for chemical solution preparation shall be met through recycled treated effluent.*
- (vi) *Estimated quantity of hazardous waste i.e. ETP sludge to be generated from CETP facility @ 150 MT/day (primary sludge) and @ 120 MT/day (secondary sludge) shall be handled and disposed to nearby authorized TSDF site as per HWM Rules, 2008. The area earmarked for temporary storage of hazardous waste shall be 22,500 sqm.*
- (vii) *The effluent from member units shall be transported through CETP tankers only duly maintaining proper manifest system. The vehicles shall be fitted with proper GPS system*
- (viii) *Before accepting any effluent from member units, the same shall be as permitted by the SPCB in the consent order. No effluent from any unit shall be accepted without consent from SPCB under the Water Act, 1974 as amended*
- (ix) *Suitable meters shall be provided to measure the quantity of effluent received, quantity of effluent recycled / reused and discharged.*
- (x) *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 Ro, MoEF along with half yearly compliance report.*

The Committee recommends the proposal for Environment Clearance with the above condition in the Clearance letter for strict compliance by the project proponent.

6.3 CRZ clearance for construction of sea water intake, pump house, laying of pipelines for intake and outfall of boiler blow down desalination plant reject for 150 MW Thermal Power Plant at Karapidagai Vadakku Village, Nagapattinam by M/s Nagapattinam Energy Pvt Ltd .[F. No.11-49/2012-IA-III]

The proposal was discussed in the 113rd meeting held on 4th -5th June, 2012 and sought the copy of NOC from Pollution Control Board for marine discharge of reject and suggested to extend the outfall location

further way from Break water. NOC of PCB was submitted. The details submitted by the proponent was examined by the Committee.

During the discussion, the following points emerged:

- (i) *The outfall point shall be outfall shall be further extended away from Breakwater.. The effluents shall be discharged through multiple ports at the outfall for proper thermal and salinity dispersion. The total effluent discharge to sea is approx. 2000 cum/hr.*
- (ii) *All the recommendations & conditions specified by Tamil Nadu CZMA shall be complied with.*
- (iii) *The disposal shall meet TPCB Norms .*
- (iv) *The outlet quality as well as the sea water near the outfall shall be monitored especially for Temperature and salinity regularly and report submitted to RO. MoEF along with six monthly monitoring report.*

The Committee recommends the proposal for CRZ Clearance with the above condition in the Clearance letter for strict compliance by the project proponent.

6.4 Environmental Clearance for Common Effluent Treatment Plant at GIDC Industrial Estate, Ankleshwar, Distt Bharuch, Gujarat by M/s. Ankleshwar Cleaner Process Technology Center Ltd. (F.No. 10-96/2010-IA.III).

The project was examined by the EAC in its meeting held on 13th-15th July, 2011 and sought details of the treatment using bio-Topaz during the rainy days along with the filed kinetics, details of the transportation of hazardous materials and treatment to be given by the member industries especially for removal of ammonical nitrogen. The information submitted by the proponent was discussed.

During the discussion, the following points emerged:

- (i) *Consent order shall be obtained from Pollution Control Board and norms of PCB shall be complied with.*
- (ii) *The liability for associated risk of the product - Bio- Topaz, fully rest with the developer and also the product certification from the accredited agency shall be provided prior to the commencement.*
- (iii) *The transportation of hazardous materials shall be as per the Motor Vehicle Act, 1989.*

The Committee recommends the proposal for Environment Clearance subject to the above conditions.

Annexure-I

- (i) *Any litigation(s) pending against the proposed project and/or any directions or orders passed by any court of law/any statutory authority against the project is to be detailed out.*
- (ii) *Submit detailed alignment plan, with details such as nature of terrain (plain, rolling, hilly), land use pattern, habitation, cropping pattern, forest area, environmentally sensitive places, mangroves, notified industrial areas, sand dunes, sea, river, lake, details of villages, teshils, districts and states, latitude and longitude for important locations falling on the alignment by employing remote sensing techniques followed by ground truthing and also through secondary data sources.*
- (iii) *Describe various alternatives considered, procedures and criteria adopted for selection of the final alternative with reasons.*
- (iv) *Submit Land use map of the study area to a scale of 1: 25,000 based on recent satellite imagery delineating the crop lands (both single and double crop), agricultural plantations, fallow lands, waste lands, water bodies, built-up areas, forest area and other surface features such as railway tracks, ports, airports, roads, and major industries etc. and submit a detailed ground surveyed map on 1:2000 scale showing the existing features falling within the right of way namely trees, structures including archeological & religious, monuments etc. if any.*
- (v) *If the proposed route is passing through any hilly area, examine and submit the stability of slopes, if the proposed road is to pass through cutting or embankment / control of soil erosion from embankment.*
- (vi) *If the proposed route involves tunneling, the details of the tunnel and locations of tunneling with geological structural fraction should be provided. In case the road passes through a flood plain of the river, the details of micro drainage, flood passages and information on flood periodicity at least of last 50 years in the area should be examined.*
- (vii) *The projects is located within 10km. of the sanctuary a map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden thereon should be furnished at the stage of EC.*
- (viii) *Study regarding the Animal bypasses / underpasses etc. across the habitation areas shall be carried out. Adequate cattle passes*

for the movement of agriculture material shall be provided at the stretches passing through habitation areas.

- (ix) If the proposed route is passing through a city or town, with houses and human habitation on the either side of the road, the necessity for provision of bypasses/diversions/under passes shall be examined and submitted. The proposal should also indicate the location of wayside amenities, which should include petrol station/service centre, rest areas including public conveyance, etc.*
- (x) Submit details about measures taken for the pedestrian safety and construction of underpasses and foot-over bridges along with flyovers and interchanges.*
- (xi) Assess whether there is a possibility that the proposed project will adversely affect road traffic in the surrounding areas (e.g. by causing increases in traffic congestion and traffic accidents).*
- (xii) Examine and submit the details of use of fly ash in the road construction, if the project road is located within the 100 km from the Thermal Power Plant.*
- (xiii) Examine and submit the details of sand quarry, borrow area and rehabilitation.*
- (xiv) Climate and meteorology (max and min temperature, relative humidity, rainfall, frequency of tropical cyclone and snow fall); the nearest IMD meteorological station from which climatological data have been obtained to be indicated.*
- (xv) The air quality monitoring should be carried out as per the new notification issued on 16th November, 2009.*
- (xvi) Identify project activities during construction and operation phases, which will affect the noise levels and the potential for increased noise resulting from this project. Discuss the effect of noise levels on near by habitation during the construction and operational phases of the proposed highway. Identify noise reduction measures and traffic management strategies to be deployed for reducing the negative impact if any. Prediction of noise levels should be done by using mathematical modeling at different representative locations.*
- (xvii) Examine the impact during construction activities due to generation of fugitive dust from crusher units, air emissions from hot mix plants and vehicles used for transportation of materials and prediction of impact on ambient air quality using appropriate mathematical model, description of model, input requirement and*

reference of derivation, distribution of major pollutants and presentation in tabular form for easy interpretation shall be carried out.

- (xviii) Also examine and submit the details about the protection to existing habitations from dust, noise, odour etc. during construction stage.*
- (xix) If the proposed route involves cutting of earth, the details of area to be cut, depth of cut, locations, soil type, volume and quantity of earth and other materials to be removed with location of disposal/ dump site along with necessary permission.*
- (xx) If the proposed route is passing through low lying areas, details of fill materials and initial and final levels after filling above MSL, should be examined and submit.*
- (xxi) Examine and submit the water bodies including the seasonal ones within the corridor of impacts along with their status, volumetric capacity, quality likely impacts on them due to the project.*
- (xxii) Examine and submit details of water quantity required and source of water including water requirement during the construction stage with supporting data and also classification of ground water based on the CGWA classification.*
- (xxiii) Examine and submit the details of measures taken during constructions of bridges across river/canal/major or minor drains keeping in view the flooding of the rivers and the life span of the existing bridges. Provision of speed breakers, safety signals, service lanes and foot paths should be examined at appropriate locations through out the proposed road to avoid the accidents.*
- (xxiv) If there will be any change in the drainage pattern after the proposed activity, details of changes shall be examined and submitted.*
- (xxv) Rain water harvesting pit should be at least 3 - 5 m. above the highest ground water table. Provision shall be made for oil and grease removal from surface runoff.*
- (xxvi) If there is a possibility that the construction/ widening of road will cause impact such as destruction of forest, poaching, reductions in wetland areas, if so, examine the impact and submit details.*
- (xxvii) Submit the details of road safety, signage, service roads, vehicular under passes, accident prone zone and the mitigation measures.*

- (xxviii) *IRC guidelines shall be followed for widening & upgradation of road.*
- (xxix) *Submit details of social impact assessment due to the proposed construction of road.*
- (xxx) *Examine road design standards, safety equipment specifications and Management System training to ensure that design details take account of safety concerns and submit the traffic management plan.*
- (xxxi) *Accident data and geographic distribution should be reviewed and analyzed to predict and identify trends – incase of expansion of the existing highway and provide Post accident emergency assistance and medical care to accident victims.*
- (xxxii) *If the proposed project involves any land reclamation, details to be provided for which activity land to reclaim and the area of land to be reclaimed.*
- (xxxiii) *Details of the properties, houses, businesses etc. activities likely to be effected by land acquisition and their financial loses annually.*
- (xxxiv) *Detailed R&R plan with data on the existing socio-economic status of the population in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternative livelihood concerns/employment and rehabilitation of the displaced people, civil and housing amenities being offered, etc and the schedule of the implementation of the project specific*
- (xxxv) *Submit details of Corporate Social Responsibility. Necessary provisions should be made in the budget.*
- (xxxvi) *Estimated cost of the project including environmental monitoring cost and funding agencies, whether governmental or on the basis of BOT etc and provide details of budget provisions (capital & recurring) for the project specific R&R Plan.*
- (xxxvii) *Submit environmental management and monitoring plan for all phases of the project viz. construction and operation.*

General Guidelines

- (i) *The EIA document shall be printed on both sides, as far 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)*
- (viii) *Name of the Design Consultant, Name of the EIA consultant, EIA Coordinator, Functional Area Expert and detail of accreditation*

123rd Meeting of the Expert Appraisal Committee for Building Construction, Coastal Regulation Zone, Infrastructure Development and Miscellaneous projects held on 15th -16th April, 2013 at Conference Hall, IOC, Core- 6, 5th Floor, Scope Complex, New Delhi.

List of Participants

Expert Committee

1. Shri Naresh Dayal	Chairman
2. Dr. M.L. Sharma	Vice Chairman
3. Dr. Apurba Gupta	Member
4. Shri V.G.Koshy	Member
5. Dr. S.P. Bansal	Member
6. Dr. H.S. Ramesh	Member
7. Dr. Y. Basavaraju	Member
8. Dr. Neeraj Sharma	Member
9. Shri Bala Subramaniam	Member
10. Shri Lalit Kapur	Member Secretary

MoEF officials

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