

The Minutes of the 121st Meeting of the Expert Appraisal Committee for Building Construction, Coastal Regulation Zone, Infrastructure Development and Miscellaneous projects held on 18th -19th February, 2013 Scope Complex, Lodhi Road, New Delhi.

1. Opening Remarks of the Chairman.

The Chairman welcomed the members to the 121st meeting of the Expert Appraisal Committee.

2. Confirmation of the Minutes of the 120th Meeting of the EAC held on 28th –29th January, 2012 at New Delhi.

EAC confirmed the minutes of 120th meeting and made following corrections in the earlier minutes.

In item ‘CRZ clearance for Sea water intake and outfall facilities modified proposals – change in configuration of intake and outfall facilities by M/s Andhra Pradesh Power Development Company Limited (F. No. 11-43/2012-IA.III)’ of the minutes of the EAC held in December, 2012, the word ‘not’ is to be inserted in the following sentence:

“Regarding the requirement of EC in view of the groyne structure, it is noted that the EIA /PH of thermal plant also included the fore shore facilities hence separate EC is not required.’

In item ‘CRZ Clearance for proposed reconstruction of existing school buildings no. 7, 9,10 on plot bearing Sy. No 30 A/B and Sy. No. 57 Hissa NO. 4 and Sy No. 400 A Hissa NO. 1A, Survey NO. 131k of Zadgaon, Tal & Dist Ratnagiri by Ratnagiri Municipal Council. [F.N. 11-99/2012-IA.III]’ following shall be inserted

“(iii) Proponent shall superimpose the site on 1: 4000 scale of HTL/LTL map and submit.

The Committee recommended the above proposals for CRZ Clearance after receipt of the information at (iii) above, with the above condition in the Clearance letter for strict compliance by the project proponent.”

In the minutes of the EAC held in December, 2012, in item ‘Request for waiving the condition No.XVIII- No Blasting - Rehabilitation & strengthening to 4-laning of Jammu-Udhampur Section of NH-1A km.15.000 (Jammu Bypass) to km.67.000 (Udhampur) in the State of J&K. [F.No. 10-4/2010-IA.III]’ following condition shall be inserted replacing condition (ii) as the NHAI informed that as per modeling, the impact Zone of blasting will be about 55 m whereas, families within 250 m distance from the blasting are to be evacuated during blasting.

‘16 or more families within 250 m shall be evacuated to safe location at the time of blasting during 8 controlled blasting days and to be rehabilitated back to own premises. If there is any damage to their properties, or any other properties beyond 250 m, NHAI shall compensate 100 % under the notice of local Authority’

3.1 CRZ for Desalination plant of 336 MLD capacity located at SEZ – Dehej, Dist, Bharuch, Gujarat by M/s Swarnim Dahej Spring Desalination Pvt. Ltd. [F.No.11-92/2012-IA-III]

The proposal was earlier discussed in the 120th meeting of EAC. It came out that amendment to the SEZ clearance may be required in view of the location of present proposal. Proponent produced copy of EC granted for SEZ and clarified that the EC excluded the CRZ area from SEZ purview hence, amendment to the EC of SEZ may not be required. The Committee noted that since the location of desalination plant falls outside the SEZ and also as the desalination does not require EC, the CRZ clearance for Desalination plant can be considered. In this regard proponent informed that the comprehensive EIA is being prepared hence requested to defer the project. The Committee also insisted that a representative of SEZ project shall attend the meeting when the project proposal for Desalination plant will be taken up. It was also suggested that since the water from Desalination plant is to be used in the SEZ and its individual units, all related clearances of SEZ/ relevant individual units wherever required shall be got amended by the respective proponents.

In view of the foregoing observations, the committee recommend to de-list the proposal till the comprehensive EIA studies are completed by the proponent. The proposal shall be considered afresh after the above observations are addressed and submitted.

3.2 EC and CRZ Clearance for the development of Port at Ponnani, Malappuram District, Kerala by M/s Malabar Port Pvt. Ltd.[F.No. 11-81/2011-IA-III]

The proposal was discussed in the 120th meeting held on 28th -29th January, 2013 and sought additional information. The details submitted and presented by the proponent are examined by the committee. The Kerala Coastal Zone Management Authority has recommended the project vide letter dated 17.01.2013. as per the KCZMA, the site is located in low eroding area. The Deputy Director, Fisheries Department of Government of Kerala vide letter dated 16.02.2013 addressed to the Principal Secretary, Fisheries and Port Department , Government of Kerala stated that there are about 2211 fishing crafts operating in the area and about 3000 fishermen are going out for fishing. The fishermen are conducting fishing through out the said area. Though there is no location based specific certified fishing ground, the Kannor and Cochin fishing grounds are the nearest to the proposed Ponnani Port. Proponent informed that the Kannor is about 133 km and Cochin is about 100 km from the proposed project. The proponent also informed that during the Public hearing it was clarified that the project will not affect fishing area and proposed CSR activities taking into the welfare of fishermen.

During the discussion, the following points emerged:

- (i) *Proponent shall obtain necessary permission from concerned authority as applicable.*
- (ii) *The shore line changes shall be monitored and the details shall be submitted once in a year to the Regional Office of the MoEF.*
- (iii) *Alignment of railway line is yet to be finalized In case alignment / portion of alignment passes through CRZ area, PP should seek separate CRZ clearance.*
- (iv) *Shall submit exact co-ordinates of the proposed reclamation*

- (v) *All the mitigation measures submitted in the EIA /EMP & Risk Assessment and Disaster Management report shall be prepared in a matrix format and submitted.*
- (vi) *Submit the measures proposed to prevent impact on fishing activities including CSR activities proposed for welfare of fishermen.*

The Committee recommended the proposal for Environmental and CRZ Clearance after submission of the information (iv), (v) & (vi) with the above condition in the Clearance letter for strict compliance by the project proponent.

3.3 Extension of validity of the clearance granted for container berth and other facilities at JNPT.

This project was granted Environmental Clearance from MOEF in July 2008. As informed by the proponent it was noted that there is delay in award of work due to various court cases related to bidding. The offer of M/s D. P. World Pvt. Ltd. is accepted by the Board of JNPT and Letter of award (LOA) issued on 31st October 2012. Geo-technical investigations have commenced. The project likely to be completed within 24 months.

The Committee recommended to extend the validity of clearance for a period of five years.

3.4 Request for revalidation of EC granted for 4 – lanning of Bhopal-Jabalpur Road(NH-12 section of Jabalpur to Rajmarg (km 10.401 to km 103.20) & Rajmarg Junction to Bareli ((Km 103.20 to Km 201.00) by Madhya Pradesh Road Transport [F. No. 5-7/2007-IA-III]

This project was granted Environmental Clearance from MOEF in 2007. There is delay due to change of mode of execution. The validity had expired hence the project need to be considered as a fresh clearance. The proponent had informed that there is no change in the project design and Public hearing conducted under EIA, Notification, 2006.

During the discussion, the following points emerged:

- (i) *Proponent informed that there is no change in the design features of the project and Public Hearing conducted as per the EIA, Notification, 2006. Proponent shall submit certificate on the above.*
- (ii) *The committee noted that as per the information from PP, Wildlife clearance for the project has been obtained recently.*
- (iii) *The committee suggested the proponent to update the EIA/ EMP as per the new guidelines and OMs and submit.*

The committee recommended to exempt the Public hearing in view of the (i) above.

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. Consideration of New Proposals:

4.1 Environment and CRZ clearance for expansion of JSW port at Jaigad, Ratnagiri, Maharashtra [F.No.10-17/2006-IA.III]

The Committee decided to defer the project, since the project proponent requested to defer the project .

4.2 Environment clearance for development of Bellora airport at Amravati, Maharashtra by M/s Maharashtra Airport Development Co. Ltd. [F. No. 10-74/2010-IA-III]

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

4.3 CRZ clearance for pipe conveyor system at Dahanu Thermal Power Station by M/s Reliance Infrastructure Ltd. (F. No. 11-2/2013-IA-III)

As presented by the project proponent the proposal is to install closed pipe conveyor system so as to eliminate the vehicular transportation. The total length of the conveyor is 2 km. Conveyor route has been superimposed on the HTI/LTL map of 1: 4000 scale prepared by IRS. MCZMA recommended the project vide letter dated 11.01.2013. Dhanu Taluka Environment Protection Authority has granted permission for the proposal.

During the discussion, the following points emerged:

- (i) Dhanu is a declared eco- sensitive area. Proponent informed that the Dhanu Taluka Environment Protection Authority has granted permission for the proposal. Copy shall be submitted to the Ministry.*
- (i) All the recommendation of MCZMA shall be complied with.*
- (ii) Green belt shall be provided along the existing road which was used for transport of coal.*

The Committee recommended the proposal for CRZ Clearance after submission of the information at (i) above, with the above condition in the Clearance letter for strict compliance by the project proponent.

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

As presented by then project proponent the proposal is for laying pipeline for disposal of treated effluent in to the saline water zone of Patalganga River. Lenzing Modi Fibers India Private Limited (LMI) is setting up a Viscose Staple Fiber Plant capacity 80,000 TPA. At Plots M-1 & M-2, 90 acres, at Add. Patalganga MIDC Industrial Chemical zone, Raigad District, Maharashtra. Anhydrous Sodium Sulphate (By-Product), 59,000 TPA and Sulphuric Acid for captive use (from waste gases i.e. CS₂ & H₂S) – 58,400 TPA capacity.

100% steam requirement and approximately 80% - 90% of the plant's power requirement shall be met through a 16 MW Captive Cogeneration Power Plant based on Coal/ Gas / Oil. Rayon grade wood pulp (84,000 TPA), principal raw material will be imported. Other chemicals required in the process will be caustic soda (47,200 TPA) Sulphuric acid (58,400 TPA) Zn SO₄.7H₂O (240 TPA) and CS₂ (13,600 TPA).

Effluent treatment plant will be installed to treat the effluent 13,200 M³/day through primary and secondary Treated effluent will be discharged into the saline water zone of Patalganga River at a disposal point recommended by National Institute of Oceanography (NIO). Domestic sewage 150 M³/day will be treated in STP and zero discharge principle adopted.

The project has obtained Environmental Clearance from MOEF for the Industry. The project site MIDC Additional Patalganga is not in the CRZ Area. The proposed effluent disposal point location which is about 6.50 kilometers downstream from the project site. Only a small portion of the pipeline will be in the saline zone of Patalganga river, will fall in the CRZ area. MCZMA has recommended vide letter dated 10th January 2013. MPCB has granted consent to discharge.

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 result of outfall hydraulics may be submitted.*

The Committee recommended the proposal for CRZ Clearance after receipt of the information at (iv) above with the above condition in the Clearance letter for strict compliance by the project proponent.

4.5 Finalisation of ToR for Development of Nargol Port at Valsad District, Gujarat by M/s Cargo Motors Pvt. Ltd. (F. No. 11-4/2013-IA-III)

The committee noted that the proponent is not clear about the activities proposed in the CRZ area and port limit. Also the port area notification is not available.

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 Finalisation of ToR for development of integrated common HW Treatment, Storage, Disposal and Recycling facilities at Mahui Mauza, near Chandrapur Village, distt. Bhojpur, Bihar by M/s Ramky Enviro Engg. Ltd (F. No. 10-6/2013-IA-III)

The Committee noted that the project was earlier rejected with the following observations.

‘Proponent has not justified selection of the site and also there is a habitation at about 200 m from the site which is not advisable for this type of Hazardous waste handling and incineration activity’. However, it was noted that instead of submitting the revised proposal or justification, the proponent submitted as new proposal. Committee took a serious note on the above.

Proponent clarified that the site was visited and the data submitted earlier regarding the location with respect to habitation and river are wrong hence submitted the fresh proposal. The committee recommended to defer the proposal and suggested the Ministry to issue a warning letter to Ramky for such activity. If any justification or re-opening to be done, should be submitted to the Ministry properly.

In view of the foregoing observations, the committee recommended to defer the project.

4.7 Finalisation of ToR for development of integrated common HW Treatment, Storage, Disposal and Recycling facilities at Saltora, Bankura distt. West Bengal by M/s Ramky Enviro Engg. Ltd (F. No. 10-7/2013-IA-III)

The Committee noted that the project was earlier rejected with the following observations.

‘Proponent has not justified selection of the site and also there is a habitation at about 200 m from the site which is not advisable for this type of Hazardous waste handling and incineration activity’. However, it was noted that instead of submitting the revised proposal or justification, the proponent submitted as new proposal. Committee took a serious note on the above.

Proponent clarified that the site was visited and the data submitted earlier regarding the location with respect to habitation and river are wrong hence submitted the fresh proposal. The committee recommended to defer the proposal and suggested the Ministry to issue a warning letter to Ramky for such activity. If any justification or re-opening to be done, should be submitted to the Ministry properly.

In view of the foregoing observations, the committee recommended to defer the project.

4.8 Finalisation of ToR for Solid waste Management facility (new land fill cell)at Village Magnad District Bharuch, Gujarat M/s Suarashtra Enviro Project Ltd [F.No. 10-9/2013-IA-III]

As presented by the project proponent, the proposal is for development of integrated common hazardous waste management facility with common incinerator at Village: Magnad, Taluka: Jambusar, District: Bharuch, Gujarat. The capacity of 10 Million Kcal/hour (Two incineration each having capacity of 5 M Kcal/hour.), Forced evaporation system (Stand alone and waste heat recovery system) with capacity of 500 KL/day, secured landfill cells with capacity of 7.5 Million Metric Tons and other additional facilities of neutralization plant, Blending unit, pyrolysis, laboratory, weigh bridge etc at Village: Magnad, Taluka: Jambusar, District: Bharuch, Gujarat. The total land area is 116.65 Acres. The total project cost is Rs 369.75 crores. The site is well connected with road and rail network. There is no national park or sanctuary in surrounding 10 Km radius. Source of water for the proposed project is groundwater. The water consumption for industrial purpose is 95m³/day. In addition to this, water requirement for the proposed green belt area will be 200m³/day and the major waste water generation will be from washing, scrubber bleed, leachate generation and domestic waste water which will be 40m³/day approximately. The industrial waste water generated will be discharged through forced evaporation. The domestic waste water generated will be discharged in septic tank and soak pit. Air quencher, liquid quencher, cyclone, multi cyclone, Booster ID fan, 1st Stage scrubbing-water, 2nd stage scrubbing – alkaline, Mist Eliminator and ID Fan are the air pollution control equipment attached to the incinerator stack with height of 32 m, Cyclone -2 nos and Scrubber will be installed to the stacks of forced evaporation system with height of 30 m. Ash from incinerator process, ETP sludge and salt generated from forced evaporation system are the source of hazardous waste generated from the proposed project. Ash from incineration process, ETP Sludge and salt from the forced evaporation system shall be disposed off to captive landfill site whereas containers shall be sold to approve recyclers.

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

- (i) *Submit the details of the site selection criteria,*
- (ii) *Submit the detailed land use plan of the site*
- (iii) *Submit the details of Green belt*
- (iv) *Submit the inventorisation of the types and quantities of the wastes including the Industrial waste.*
- (v) *Submit the MoU made with the member industries*
- (vi) *Submit the details of Air pollution control systems*
- (vii) *Submit the details of the compliance to the regulation/ guidelines relating to Solid Waste Management*
- (viii) *Submit the details of Post closure monitoring and reporting along with roles and responsibility*
- (ix) *Submit the details of Transportation arrangements and precautions*
- (x) *Submit the details of handling during the Rainy days.*

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

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

Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual>".

4.9 Finalisation of ToR for development of Integrated Municipal Waste Management and handling facility at Village Patavi, Shahjadpur, Dist, Ambala, Haryana by M/s Municipal Corporation , Ambala [F.No. 10-79/2012-IA-III]

As presented by the project proponent, the proposal involves development of Integrated Municipal Waste Management and handling facility at Village Patavi, Shahjadpur, Dist, Ambala, Haryana. The total Land Requirement is 17.09 Acre, Water requirement is 40 KLD, Power requirement is 150 KW. Total cost of the project is 12.02 Crores. No National Parks, Wild life sanctuaries, Wild Life Corridors, Biosphere Reserves, Migratory routes for Birds exist within 10 km radius of the project site.

As per EIA Notification dated 14.09.2006, as amended on 01.12.2009, this project falls under Category "B" but shall be treated as Category "A" as General Condition (GC) is applicable as the Project site falls within 10 kms of Haryana – Punjab state boundary.

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

- (i) *Submit the Flood history data*
- (ii) *Submit the details of the site selection criteria,*
- (iii) *Submit the detailed land use plan of the site*
- (iv) *Submit the details of Green belt*
- (v) *Submit the inventorisation of the types and quantities of the wastes.*
- (vi) *Submit the details of Air pollution control systems*
- (vii) *Submit the details of the compliance to the regulation/ guidelines relating to Solid Waste Management*
- (viii) *Submit the details of Post closure monitoring and reporting along with roles and responsibility*
- (ix) *Submit the details of Transportation arrangements and precautions*
- (x) *Submit the details of handling during the Rainy days.*

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

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

Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual>".

4.10 CRZ Clearance for construction of additional guest rooms in Resort at Aravali, Taluk, Vengurla, Dist. Sindhudurg Maharashtra by M/s. Fomento Resort & Hotels Ltd. [F.No.18-6/2005-IA.III (Pt)]

The committee noted that the proposal is in Sindhudurg District where there is moratorium for consideration of projects. The project was included since it doesn't not clearly mention the location as Sindhudurg.

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.

4.11 Environment Clearance for International Airport at Keezhallur & Pazhassi Panchayat, Thalassery, District Kannur, Kerala by M/s Kannur International Airport [F.No. 11-90/2011-IA-III]

As presented by the project proponent, the project involves construction of International Airport at Keezhallur & Pazhassi Panchayat, Thalassery, District Kannur, Kerala. The total land area of the airport is 525.50 ha. The proposed runway length or area related to the aircraft movement is 3,400 mtr. The proposed built-up area is 50,000 sq.mtr. The runway of 3400 m x 45 m proposed. The proposed passenger capacity expected is 3,200 (international, arrival – 1,600 and departure – 1,600) and 1,200 (domestic, arrival – 600 and departure - 600). The proposed flight operation per day is 27 arrivals and 27 departures. The estimated water requirement will be 110 KLD (fresh water requirement – 68 KLD) and waste water generation will be 46.00 KLD. The waste water will be treated and about 42.00 KLD recycled. The solid waste generated is 517 Kg/day. Total power requirement is 2,500 KW. Three number of 750 KVA DG sets are proposed. The expected project cost is Rs. 1,130 Crores.

The proposal was examined by the EAC in its meeting held in February, 2012 and finalized ToR including conduct of Public Hearing. The Public Hearing conducted on 18.12.2012 at Mattannur Municipality. The issues raised are connectivity, source of water for the project, solid waste treatment etc. The responses submitted by the proponent were examined by the Committee.

During the discussion, the following points emerged:

- (i) *Clearance shall be obtained from Central Ground water Board for the ground water drawl as applicable.*
- (ii) *It is indicated that about 30421no of trees are required to be cut. Necessary permission from competent authority shall be obtained for tree cutting. Compensatory tree plantation of at least 1: 3 ratio shall be carried out and cost provision should be made for regular maintenance. In addition, minimum 3 rows of the trees in canopy formation – about 15 m width along the boundary shall be provided.*
- (iii) *Shall obtain approval of Forests Department/ wildlife warden for the proposed Peacock Conservation Plan.*
- (iv) *Shall have proper Traffic circulation plan to avoid conflict at the entry and exist in view of the proposed connectivity to the present 12 m wide road which is expected to be widened to 24 m.*
- (v) *There shall be no open dumping or storage of Solid waste*
- (vi) *Rehabilitation and resettlement for the reported 123 families shall be as per the local norms.*
- (vii) *CSR activities viz. Medical schemes, education, infrastructure facilities shall be carried out as committed.*
- (viii) *All the recommendation of the EMP shall be complied with letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.*
- (ix) *Submit the intersection plan of the proposed second approach to the Airport.*
- (x) *Shall submit the energy and water conservation measures along with the details of % saving.*
- (xi) *Submit the details of earth cutting and filling for the project.*

The Committee recommended the proposal for EC Clearance after submission of the information (ix), (x) & (xi) with the above condition in the Clearance letter for strict compliance by the project proponent.

4.12 Environment and CRZ clearance for construction of residential cum commercial complex (DLF bay view) at plot no. N5A & N5B Marine Drive Cochin, District Erakulam Kerala [F.No 21-287/2008-IA.III]

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

4.13 Environment clearance for construction of ‘Senior Living Project’ at Dehradun by M/s Antara Purukul Senior Living Pvt Ltd [F.No. 21-73/2012-IA-III]

The "Senior Living Project" Institutional - Community Facilities & Services – Social & Cultural Facility – Other Community Buildings (Old Age Home) by M/s. Antara Purukul Senior Living Private Limited involves construction on a plot area of 52,328 m² (or 12.9305 acres). The project aims to provide comprehensive services that enrich the lives of our residents, offering easy access to outstanding facilities and exceptional service delivery for their life post 60. There will be 11 Blocks and with Basement having total built up area of the project is 83,597.629 Sqm. Green area of 15,827.85 Sq.m. which is 30.69% of Net Plot Area will be provided. Parking of 1185 ECS is proposed. The total water requirement is 216 KLD (Fresh water requirement is 114 KLD). The source of the water is through Private water tankers during Construction Phase and Municipal Supply during Operation Phase. The sewage generation is about 123 KLD and capacity of STP is about 150 KLD. Treated water will be used for flushing/horticulture and DG cooling & HAVC Cooling and Recreational Purpose. The total power requirement is 2504 kVA which shall be supplied through Uttarakhand Power Corporation Limited (UPCL). 2 no. of DG sets of 2500 kVA total capacity (2 X 1250 kVA) for power back up in the Project. Total solid waste generation will be 415 kg/day. The total cost of the project is about Rs. 430 Crores.

During the discussion, the following points emerged:

- (i) *The excess storm water should be collected and disposed using the existing natural drain present at the site*
- (ii) *The proponent shall ensure that the project fulfills all the provisions of Bio-medical Waste (Management, Handling and Transboundary) rules,2008 as amended including segregation collection, treatment and safe disposal etc*
- (iii) *The health care component proposed for the project shall be integrated with the facilities available at Max Hospital which existing near the project site, as committed by the proponent*
- (iv) *The effluent discharge levels shall be maintained at the discharge points as committed by the proponent, i.e. the MPN should be < 5 per 100 ml.*
- (v) *The proposed peripheral roads should be used only for the fire vehicles and not for the routine vehicular movement.*

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

4.14 Environment for Two lanning with paved shoulder of Suratgarh-Sri Ganganagar section from Km.173/0 to Km.248/650 of NH-15 by Superintendent Engineer, PWD, NH-Circle, Bikaner, Rajasthan . (F. No. 10-111/2011-IA-III)

The proposed project Suratgarh-Sriganganagar Section of NH-15 (Km 173.000 to Km 248.650) of Two Laning with paved shoulder is in the State of Rajasthan. The existing length

of the road is 75.650 km. The proposed designed length is 78.100 km. The project road traverses through two districts viz. Sriganganagar, Hanumangarh in the state of Rajasthan. There are no environmental sensitive areas within 15 km. Project road does not pass through National park/Sanctuary/ Wildlife corridor/ eco sensitive zone. The project road passes through Notified Protected Forest area as road side plantation was declared as protected forest and total 23.430 ha of forest land is to be required for widening purpose. The proposal for diversion of reserved forest land has been submitted to forest division and Forest clearance is in process. The total land required for the project is 468.60 ha. and total available land is 407.97 ha therefore only 60.63 ha. land need to be acquired. The existing carriageway is 2 lane and it is proposed to widen NH-15 on Suratgarh -Sriganganagar Section (Km 173.000 to Km 248.650) by Two Laning with Paved shoulder .The existing ROW varies from 8 m to 45 m, whereas the proposed ROW is 45-60 m. There is only one bypass proposed at Sriganganagar (Existing km 238+000 and ends at km 248+600). There are two no. of Major Bridges, 10 Minor Bridges, 140 Culverts ,2 ROB, 3 flyovers, 6 VUP, 5.685 km Service/slip Road, 02 Truck laybye, and 01 toll plaza have been proposed in the section.

Fly ash proposed to be used from Suratgarh Thermal Power Plant which is within 20 Km. Approx. 2246 numbers of trees are to be affected and minimum three times i.e. 6750 trees will be planted. The average water requirement are 350 KLD. Total Project Cost is Rs. 261.53 Crore (Including Civil cost Rs. 224.03 Crore, R&R Cost 36.96 Crore ,Utility Shifting Cost 0.32 Crore, and EMP cost Rs. 0.91 Crore).

The project was examined by the EAC in its meeting held in December, 2011 and committee finalized ToR including conduct of Public Hearing. The Public Hearing conducted on 07.12.2012 at Sriganganagar and on 10.12.2012 at Pilibanga, Hanumangarh. The major issues raised during the public Hearing are land acquisition, widening to prevent accident. The responses submitted by the proponent were examined by the Committee.

During the discussion, the following points emerged:

- (vi) *Project road does not passes through any eco- sensitive area and within 10 km from eco- sensitive area.*
- (vii) *The proposal indicates about 24 ha forest land is to be acquired. Necessary stage –I forestry clearance shall be submitted as per OM dated 31.03.2011.*
- (viii) *It is indicated that 2246 .nos. trees to be felled for the project. Necessary permission from competent authority shall be obtained for tree cutting. Compensatory tree plantation of at least 1: 4 times as agreed by the proponent shall be carried out and cost provision should be made for regular maintenance.*
- (ix) *Project road crosses Ghaggar river, there shall not be any disposal of debris into the water bodies. It shall be ensured that the drainage/catchment of the ponds shall not be disturbed during construction.*
- (x) *Explore the possibilities of using cold mix technology wherever possible.*
- (xi) *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.

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

4.15 Environment and CRZ clearance for augmentation in capacity of existing LNG Terminal of 5 MMTPA to 10 MMTPA along with pipeline of 13.9 km with suitable tap at S.No. 319, Village - Hazira Tal - Choryasi District- Surat, Gujarat by M/s Hazira LNG Pvt. Ltd [F.No. 11-88/2011-IA-III].

As presented by the project proponent, the proposal involves augmentation in capacity of existing LNG Terminal of 5 MMTPA to 10 MMTPA along with pipeline of 13.9 km with suitable tap at S.No. 319, Village - Hazira Tal - Choryasi District- Surat, Gujarat. Hazira LNG Pvt. Ltd. Is located at notified area S. No. 319 (touching to shoreline), Village : Hazira, Ta. : Choryasi, Dist. : Surat. The location is at 38 Km away from Surat city. The co-ordinates of the site is 21°05'39.99"N and 72°37'33.71"E. HLPL intends to expand the storage and handling capacity of LNG from 5 MMTPA to 10 MMTPA by construction of storage tanks as well as ancillary facilities for the same in the existing premises having total area of 22 hectors. There will be one more send out pipeline of 13.9 Km length parallel to existing send out pipe line for distribution of LNG to grid. No land acquisition for laying of additional pipeline. The detailed study has shown that at a few location diversion of forest land of approx. 4.2 ha will be required. The cost for proposed expansion has been estimated to be Rs. 2800 crores.

Present potable water requirement is 122 KLD which will be increased upto 500 KLD for proposed expansion phase. Sea water requirement for recirculation for re-gasification will be increased from 26,470 KL/hour to 41,600 KL/hour.

The CESS demarcated HTL/LTL for the project. The project has been recommended by GCZMA during the meeting held on 1st January, 2013 for CRZ clearance.

The project was examined by the EAC in its meeting held in February, 2012 and committee finalized ToR including conduct of Public Hearing. The Public Hearing conducted on 09.11.2012 at Hazira. The major issues raised during the public Hearing are employment, land acquisition and compensation. The responses submitted by the proponent were examined by the Committee.

During the discussion, the following points emerged:

- (i) *The proposal indicates about 4.2 ha forest land is to be acquired. Necessary stage –I forestry clearance shall be submitted as per OM dated 31.03.2011.*
- (ii) *The compliance conditions of prior clearances presented. Noted that the conditions are complied with.*
- (iii) *Committee noted that the maximum damage distance in case of accident is about 800 m where no habitation exist.*
- (iv) *All the mitigation measures submitted in the EIA /EMP & Risk Assessment and Disaster Management report shall be prepared in a matrix format and submitted.*

The Committee recommends the proposal for EC and CRZ Clearance after receipt of the Stage-I FC, with the above condition in the Clearance letter for strict compliance by the project proponent.

4.16 Finalisation of ToR for Mega Industrial Park in Bidkin, Maharashtra by M/s Delhi Mumbai Industrial Corridor Development Corporation LTd [F.No. 21-69/2012-IA-III]

As presented by the project proponent, the proposal is for development of Mega Industrial Park in Bidkin, Maharashtra. The total area is 7310 Ha spread over 25 villages in Aurangabad and Paithan Tehsils, Aurangabad District. No forest Land is involved. The proposed MIP has connectivity from SH-148, SH-178, and NH-211.

The project falls within Category ‘A’ under 7(c) of EIA Notification, 2006 since it is proposed to accommodate Category “A” & “B” type of industries.

Construction Phase: The project will be developed in three phases spanning over 10 years each. Construction materials will be sourced from authorized quarries in and around the region. Domestic water consumption will be 80-320 m³ /day for each construction camp per phase. Source of water is MIDC approved private water tankers. Waste water generated is 70-300 m³ /day for each construction camp per phase. Adequate soak pits and septic tanks will be provided. Power requirement - 1500-2500 KW will be met from D.G sets. Construction waste will be used as a filling material for low lying areas and for construction of roads in all three phases. Hazardous waste -waste oil from machines handed over to the authorized recyclers/agencies.

Operation Phase: The total population for the Bidkin MIP is estimated to be 2, 07,617 persons by year 2042. Total water consumption is 292 MLD. Source of water will be partially met from the Jayakwadi Dam Reservoir and remaining demand will be met by groundwater with suitable rain water harvesting measures. Waste water generated will be ~229.4 MLD. Three STPs are proposed for treating domestic waste water and Two WWTPs are proposed in for treating industrial effluent.

The Municipal waste of ~158 TPD ; Sludge of ~141.8 TPD, Hazardous waste of ~167 TPD and Non Hazardous waste of ~2019 TPD are expected from the operation phase. An integrated solid waste management facility will be set up to accommodate these treatment plants (Compost plant, bio-methanation and plasma arc gasification plants are proposed). Hazardous waste: waste oil from machines handed over to the authorized recyclers/agencies.

Transport Infrastructure: well-connected transportation system consisting of roads, pedestrian and bicycle paths, public transit, and rail access is proposed.

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

- (i) *Project boundary does not pass through any eco- sensitive area and within 10 km from eco- sensitive area.*
- (ii) *The proponent informed that the proposal does not involve any forests land. Confirmation to this effect shall be submitted.*
- (iii) *Reasons for selecting the site with details of alternate sites examined/rejected/selected on merits with comparative statement and reason/basis for selection. The examination should justify site suitability in terms of environmental damages, resources sustainability associated with selected site as compared to rejected sites. The analysis should include parameters considered along with weightage criteria for short-listing selected site.*
- (iv) *Submit the details of the trees to be felled for the project.*
- (v) *Submit the details of the infrastructure to be developed.*
- (vi) *Submit the details of the road/rail connectivity along with the likely impacts and mitigative measures*
- (vii) *Submit the present land use and permission required for any conversion such as forest, agriculture etc.*
- (viii) *Submit details regarding R&R involved in the project*
- (ix) *Zoning of the area in terms of 'type of industries' coming-up in the industrial park based on the resource requirement.*
- (x) *Submit the details of Water management studies*
- (xi) *The project boundary area and study area for which the base line data is generated – submit through a suitable map. Justification of the parameters, frequency and locations shall be discussed in the EIA.*
- (xii) *Submit Legal frame work for the implementation of Environmental Clearance conditions - to be clearly spelt out in the EIA report.*
- (xiii) *Submit Roles and responsibility of the DMIC/developer etc for compliance of environmental regulations under the provisions of EP Act.*

- (xiv) *Site justification of the identified industry sectors from environmental angle and the details of the studies conducted if any.*
- (xv) *Ground water classification as per the Central Ground Water Authority.*
- (xvi) *Adequate buffers to separate industries to be located away from one another and from residential neighbourhoods – Specific details like buffer distance and this will be enforced with role and responsibilities, the act provisions shall be submitted.*

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

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

4.17 Finalisation of ToR for environment clearance for rehabilitation and upgrading to 2 lane/2 lane with paved shoulder configuration and strengthening of Daringibadi-Sorada section (km.375/0 to 439/365) of NH-217 in the state of Odisha.” (Package No:SP/C/7) by M/s Ministry of Road Transport and Highways.(F.No. F.No. 10 –5/ 2013 - IA.III)

The project road NH-217 (New NH No. 59) starts from km 375 near Daraingbadi and ends at km 439.365 near Mundamarai village, beyond Saroda town is entirely in the State of Odisha having length of 64.365 km. The Project road falls in two Revenue Districts viz. Kandhamal from km 375.000 to 377.000 and Ganjam from km 377.000 to 439.365. This road is an important link of NH-217 connecting M.P. border towards west and Gopalpur-On-Sea towards east direction. About 20 km of the road passes through hilly terrain and the rest through rolling terrain with intermittent small stretches of plain terrain. Approximately 28 km of the road passes through forest land i.e. about 43% of the total road length. The nature of the forest is mainly Reserve Forests viz. Pandakhol Reserved Forest, Pipalpanka RF, Hukuma RF, other types are dense mixed jungles and mixed forest. Available ROW in the forest stretches varies from 12 to 30 m. Rest of the stretches it ranges from 15 to 20m. Forest land of about 12.5 ha has to be diverted for the widening of the road to 2 - lane configuration. Also 28.0 ha of non-forest/agricultural land have to be acquired the widening of this road.

The road does not pass through any Natural Sanctuary or ecological sensitive areas. It passes through Reserve Forests. Few small built-up stretches exists along project road with one semi-urban settlement at Saroda at km 412 to 415. There are also some tribal settlements along the project stretch. Three major intersections are within NH 217. There are as many as 95 numbers of small roads (earthen/metal/BT) connecting different villages.

In the project road there are 9 minor bridges ,1 major bridge and 117 nos. of culverts . 8 new, 2 lane bridges have been proposed mainly due to poor structural condition of existing bridges

There are about 548 trees which are on existing ROW are proposed to be felled . About 10 times of felling trees will be planted as avenue plantation. About 284 structures

(kachha, pacca and semi-pacca), 2 religious structures and 2 nos of educational institutional buildings which are on the existing ROW will be affected completely/partially. Effort will be made to change in design and alignment to minimize the impact. Religious structures will be relocated in suitable location in consultation with local people.

There are some water bodies in the form of fishing pond, community pond/reservoir, canal, ditches, streams and rivers along the project road. However the road will be design to minimize the impact on these water bodies. About 435 KL of water per day is required for construction purpose would be extracted mainly from surface sources (75%) and ground water (25%). The budget for environment management is approximately Rs.108.5 Lakhs.

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

- (i) *The project doesn't not passes through eco-sensitive area/Wild Life Sanctuary.*
- (ii) *The proposal indicates the acquisition of 12.5 ha Forest land. Necessary stage –I forestry clearance shall be obtained as per OM dated 31.03.2011 and submitted along with final EIA report.*
- (iii) *It is indicated that 548 nos. trees falls within the proposed RoW, however, bare minimum trees to be cut, the information should be provided about their species and whether it also involved any protected or endangered species.*
- (iv) *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.*
- (v) *Explore the possibilities of cooled mixed technology instead of hot mixed technology*
- (vi) *The additional ToR and General Guidelines as per the annexure-I and Annexure-II respectively to this Minutes shall also be considered for preparation of EIA/EMP.*
- (vii) *Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual/Highways>".*

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

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

4.18 Finalisation of ToR for rehabilitation and upgradation of 2 lane/ 2 lane paved shoulders of section Lalsot-Karanli in the state of Rajasthan [F.No. 10-8/2013-IA-III]

The project road starts from Lalsot at km. 0.000 and terminates at Karauli at km. 85.000. Total length of existing road is 85 km whereas total project length is 87 km . The existing road would be upgraded to 2-lane/ 2-lane with paved shoulders configuration and strengthening with provision of capacity augmentation. The project road traverses through three districts viz. km 0.000 to km. 17.250 in Dausa, Km. 17.250 to km. 55.000 in Sawai Madhopur and km. 55.000 to km. 85.000 in Karauli in state of Rajasthan. The project road passes through plain terrain. The existing RoW varies from 9m to 25.6m. Improvements of the project road are accommodated within existing RoW except in the stretches of bypasses and small realignments. RoW of 30m is proposed for bypasses and realignments. Existing road is not passing through forest. No National Park/ Wildlife Sanctuary/ Biosphere Reserve are falling within 10 km radius of project road. About 22 ha land is proposed to be acquired which includes 4.3 ha of government land. There is one major bridge which is in good condition and hence retained. Out of 6 nos. existing minor bridges, 4 nos. are to be reconstructed of which one is converted to major bridge and 02 nos. to be retained. Existing 14 nos. culverts are retained 25 nos. to be reconstructed and 43 nos. of new culverts are proposed. There are 13 major intersection with NH and SH. All intersections will be improved. Two bypasses namely Gangapur bypass and Salempur bypass and small realignments at 5 locations have been proposed. Major settlements along the project are Lalsot, Mandavari, Dabar, Khedali, Piplai, Thali, Gangapur, Salempur, Kudgoan , Mahmampur and Karauli.

About 449 nos. trees are proposed to be felled for which compensatory afforestation will be done. Social structures along the project road contains 28 nos. religious structure/ places, 25 nos. hospital/primary health centers and 30 nos. school buildings exist along the road and few of them will be affected. About 70 nos. of residential/commercial structures (Pucca, Semi-Pucca and Kuchcha) are partially affected along the project road. Efforts will be made to minimize the impacts. Affected families will be compensated as per World Bank policy. Total project construction cost is 338 crores. The budget for environment management has been worked out approximate 3.46 crores.

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

- (i) The project road does not pass through any ecologically sensitive area/national park/wildlife century.*
- (ii) It is indicated that 449 nos. trees falls within the proposed RoW, however, bare minimum trees to be cut, the information should be provided about their species and whether it also involved any protected or endangered species.*
- (iii) 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) Explore the possibilities of cooled mixed technology instead of hot mixed technology*
- (v) The additional ToR and General Guidelines as per the annexure-I and Annexure-II respectively to this Minutes shall also be considered for preparation of EIA/EMP.*
- (vi) Submit details on borrow areas as per OM dated 18/12/2012*

(vii) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual/Highways>".

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

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

4.19 Proposals for ECs / ToRs for NHAI/Highway projects

A. Finalization of TOR for 4 lane bypass on NH-1A road to Jammu city in the state of J&K by M/s NHAI [F.No. 10- /2013-IA-III]

The project road starts from km 86.000 (Raya Morah) of NH-1A and ends at km 14.700 of Nagrota bypass on NH-1A. The terrain along the project road is plain from km 0.000 to km 46.450 and hilly from km 46.450 to km 57.800. The proposed length of the project road is approx. 57.800 km. The project road passes through tehsils of Sambha, Jammu, RS Pura and Bishna. The proposed ROW width is 60 mtrs in plain section and 45 m in hill section. The project road is passing through Reserve/ Protected Forest (both sides) for approximately 6 km length. Approximately 9975 trees are likely to be affected due to the proposed project.

There are two wildlife sanctuaries (Nandani and Ramnagar) within 10 km distance from the project road. Approximately 330 ha land will be acquired for the proposed bypasses. Out of this, agricultural area is approx. 284 ha, barren & waste land approx. 20 ha and forest land approx. 26 ha. The project road is crossing Nikki Tawi River (Km 20.500) and Wadi Tawi River (Km 26.300) and around 42 seasonal streams and nallahs. There will be 8 nos. of major bridges and 101 minor bridges and 308 culverts in the project road. In the 4 laning of the project road, 2 flyovers, 5 vehicular underpasses and 8 pedestrian/cattle underpasses have been proposed. In addition, animal under passes shall be proposed as per site requirement. Trumpet interchanges have been proposed both at start and end of the project alignment. Tentative length of service road shall be 28 km. Exact length shall be finalized during design of plan and profile of alignment. 35 Major and minor cross-roads intersect the project alignment. 2 flyover, 5 VUPs and 8 PUPs have been proposed as per requirements of traffic. Minor junctions shall be improved as at-grade as per requirement given in IRC SP:41:1994 Toll plaza are proposed at 2 locations(km 8.00 near Bisnah village and km 47.50 near Kangar village) along the project road. About 66 structures (55 structures are private, 7 utilities, 1 religious and 2 government are likely to be affected due to proposed bypass. 3353 family are likely to be affected. Affected families will be compensated as per NHAI Act 1956. Raw material requirement for construction of bypass. Details regarding quantity and location of raw material is attached as annexure-I. The budget for environment management and monitoring has been earmarked as approximately Rs. 6.49 Crores. The estimated cost for Resettlement & Rehabilitation is approximately Rs. 147.45 Crores. The capital cost of the project is Rs. 1100 Crores.

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

- (i) *The project road falls within 10 km radius from 2 wild life sanctuaries- Nandani and ramnagar. Necessary prior clearance from NBWL shall be obtained.*
- (ii) *The proposal indicates the acquisition of 26 ha ha Forest land. Necessary stage –I forestry clearance shall be obtained as per OM dated 31.03.2011 and submitted along with final EIA report.*
- (iii) *It is indicated that 9975 nos. trees falls within the proposed RoW, however, bare minimum trees to be cut, the information should be provided about their species and whether it also involved any protected or endangered species.*
- (iv) *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.*
- (v) *Explore the possibilities of cooled mixed technology instead of hot mixed technology*
- (vi) *The additional ToR and General Guidelines as per the annexure-I and Annexure-II respectively to this Minutes shall also be considered for preparation of EIA/EMP.*
- (vii) *Submit details on borrow areas as per OM dated 18/12/2012*
- (viii) *Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website “<http://moef.nic.in/Manual/Highways>”.*

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

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

B. Finalization of TOR for 6 laning of Chakeri to Allahabad (Km 483.687 to km 630.000) section of NH-2 in the State of Uttar Pradesh by M/s NHA [F.No.10-/2013-IA-III]

The project road starts at Chakeri near Kanpur (km. 483.687) and ends at Allahabad (km. 630.000), in the state of Uttar Pradesh. Total length of the project road is 146.313 km. Project road passes through 3 districts namely Kanpur Nagar, Fatehpur and Kaushambi. Proposed road project involves widening of existing 4 lane divided carriageway to 6 lane divided carriageway with paved shoulder of NH 2 from km 483.687 to km 630.000. The road passes through the plain terrain. The project road passes through 138 villages, out of which 11 villages are located in Kanpur Nagar district, 87 villages are in Fatehpur district and 40 villages are in Kaushambi district. The project road does not pass through any ecologically sensitive area / National Parks/ Wild Life Sanctuaries/ Tiger Reserves etc. Existing Right of Way (ROW) varies from 16 m to 79 m. Proposed ROW varies from 35m to 79m and at toll plaza location it is 150m. The total land proposed to be acquired is 338.5755 ha (Govt land: 66.4971 ha and private land: 272.0784 ha). There are 14 minor bridges and 2 major bridges on project road. 1 new major bridge, widening of existing 12 minor bridges and 7 new minor

bridges on service road have been proposed. There are 176 Culverts (148 box/slab culverts, 28 pipe culverts) on the project road. All the 176 Culverts have been proposed for widening for standard of 6-lane as per requirement of IRC: SP-87:2010. Total length of Service road of both sides is 146.511 km. No ROB exists on the proposed alignment. All major junctions (3) have been grade separated. Total 9 fly-overs have been proposed out of which 6 no. of flyover/elevated corridor has been provided in congested urban areas to avoid further land acquisition and Rehabilitation. 14 VUP and 25 PUP have been proposed. There are 3 Pedestrian and 1 vehicular underpass on the project road. 25 new pedestrian underpasses, 14 new vehicular underpasses are proposed. 18 no. of Bus-Bays and 11 number of Truck lay bye along with Traffic Aid Post & Medical aid post are proposed.

Around 5,056 trees will be affected due to the project. Avenue Plantation shall be carried out as per IRC-SP-21: 2009 apart from statutory requirement. Water requirement is nearly 500 KLD for about 36 months. The construction water will be sourced from surface water from various locations (river/ canal) as well as ground water for drinking purpose after obtaining necessary permission from the concerned departments. Estimated requirement of Borrow Earth - 30,10,000 m³, Stone/Aggregate - 30,00,000 m³, Sand - 4,00,000 m³, RCC - 1,50,000 m³, Steel - 150 MT, Cement – 1,75,000 MT . NTPC Thermal Power Plant is located within 100 km radius of proposed project. Fly ash shall be used for road construction. Civil cost of the Project is Rs. 1044 Crores. Total estimated Environmental Cost is about Rs. 5.75 Crores. Total estimated R&R cost is about 65.00 Crores.

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

- (i) The project road does not pass through any ecologically sensitive area/national park/wildlife century.*
- (ii) It is indicated that 5056 nos. trees falls within the proposed RoW, however, bare minimum trees to be cut, the information should be provided about their species and whether it also involved any protected or endangered species.*
- (iii) 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) Explore the possibilities of cooled mixed technology instead of hot mixed technology.*
- (v) Fly ash shall be used.*
- (vi) The additional ToR and General Guidelines as per the annexure-I and Annexure-II respectively to this Minutes shall also be considered for preparation of EIA/EMP.*
- (vii) Submit details on borrow areas as per OM dated 18/12/2012*
- (viii) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website “<http://moef.nic.in/Manual/Highways>”.*

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

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

4.20 Amendment in the clearance granted for Mangalore SEZ [21-387/2008-IA-III]

As presented by the project proponent the proposal involves, widening of existing public road towards river side adjacent to MSEZ proposed Pipeline cum road corridor in the Reach II area. Mangalore SEZ is developing the Pipeline cum road Corridor between SEZ to New Mangalore Port as part of the infrastructure facilities of SEZ.

Ministry has issued an Environmental Clearance for setting up of Phase-I of Special Economic Zone vide EC No. 21-383/2007-IA-III dated 3rd April 2008. The EC envisages development of a dedicated 70/100 meter wide pipeline-cum-road (Total approx 15km) Corridor for movement of Cargo, Crude and products between MSEZL & New Mangalore Port to provide port connectivity to the units. Since the MSEZ Pipeline-cum-road Corridor development was having interface with CRZ, the proposal of Corridor was recommended by Forest, Ecology and Environment Department, Government of Karnataka vide letter dated 22.01.2008 under the provision of Coastal Zone Notification.

The corridor development is being undertaken by MSEZL in separate stretches in the recent months. In one of the stretches, referred to as Reach II, during the execution of Corridor works parallel to Gurupur river by Mangalore SEZ Ltd, based on certain complaints, the Regional Office of the MoEF have monitored the project on 10th May 2012. The monitoring report states that road widening works are under progress in various reaches of Corridor and preliminary ground strengthening /road widening works are being taken up by the project authorities along the Gurupur river in Corridor Reach II. The report further states that Ministry in the clearance issued has not given any specific reference on the issue of widening the existing road along the riverward of the Gurupur river and SEZ authorities do not have any specific permission from the Ministry.

The Project Proponent vide letter dated 10th July 2012 have submitted following clarifications in this regard

- (i) The length of said Corridor between NMPT and MSEZ is approximately 11.45kms which has been divided into four reaches.
- (ii) In Reach –II, given the narrow width between the existing KISCO facility on the western side of the Corridor and Gurupur River on the eastern side of the corridor and presence of live Petro Chemical Pipelines already installed on either side of KISCO boundary wall, the corridor configuration in this stretch has been made vertical to economise on the space requirement and fit it into the available space, within the area already designated for the MSEZ Corridor.
- (iii) While MSEZ is developing the corridor on the landward side of the existing public road, due to presence of the existing live hydro carbon pipelines and in order to avoid any safety hazard, the existing public road is getting widened

towards the river side to ensure smooth flow of existing Traffic which connects National Highway to Jokatte village which is the primary route for transportation of LPG trucks to Total GAZ. It was explained that while developing the MSEZ Pipeline corridor on the landward side of this public road, the road is getting narrowed down which necessitated the widening of the Public road towards the riverward side. The project proponent has informed that the development of Public road is in compliance to Specific condition No.iv of the Environment Clearance already issued to Mangalore SEZ.

- (iv) For development of Reach II corridor of approx 1.7kms length running parallel to Gurupur River outside KISCO boundary, MSEZ has obtained approval from Water Resources Department, Government of Karnataka vide GOK Order dated 13.01.2012 for strengthening of river banks to facilitate widening of the existing Public road.
- (v) Comprehensive study conducted by NITK, Suratkal suggests that the temporary earth filling done for approaches for construction activities does not cause any additional effect on the flood flow in the river and will not create any flooding of the adjacent areas.

Principal Secretary, Forest, Ecology & Environment Department, Government of Karnataka vide letter dated 13.09.2012 stated that the alignment of the corridor on the landward side necessitated widening of the existing road towards riverside so as to facilitate easy flow of the traffic, the requirement of which was not explicitly mentioned and hence the Environmental Clearance did not specify the same.

The project was examined by the EAC in its meeting held in November 2012. The committee noted that the widening is up to bank of the river and sought additional information like latest Google to show the existing feature, likely impact due to the proposed widening and Recommendation of SCZMA.

Further as directed, the project proponent has carried out impact assessment study for carrying out the Widening works to the Public road towards the river ward side. The Regional Director, Forest, Ecology & Environment Department, GoK, Mangalore has carried out the site inspection of the Project on 28th December 2012 and submitted his recommendations vide letter dated 31.12.2012. The Regional Director in his letter has stated that the project area falls under CRZ II and 1400mts of the proposed widening is clear of the river bank, 270mts is on embankment ,30mts on elevated road way and the proposed development do not have any impact on river bank and river flow. The latest Google map and CRZ Map with HTL & LTL marked is also submitted with the recommendations.

The Secretary, Environment & Ecology Dept of Forest has recommended the proposal vide letter dated 11th Jan 2013. The letter confirms that the re-engineered proposal of widening of the existing public road towards riverward side do not have impact on river bank & river flow.

The proponent submitted the details and the Chairman Karnataka, CZMA has recommended the project since KCZMA does not exists.

During the discussion, the following points emerged:

- (i) *The project proponent while carrying out the road widening works towards river side should not cause any impact to the river water flow and should be clear of river water way.*
- (ii) *The project proponent to take up the bank protection works like stone pitching etc to avoid soil erosion of the banks.*
- (iii) *The project proponent to take up all adequate measures to mitigate the dust pollution during the road widening works.*
- (iv) *The proponent shall not dump any construction wastes etc in the river portion.*

The Committee recommends the proposal for amendment of Environmental Clearance with the above conditions in the amendment for strict compliance by the project proponent.

4.21 Environment & CRZ clearance for Single Mooring Point (SMP) and allied facilities of Veera in Gulf of Kutch for handling crude oil on BOT basis in the State of Gujarat by M/s Kandla Port Trust [F.No.11-27/2010-IA-III]

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

4.22 Finalisation of ToR for Mega Industrial Park in Shendra, Maharashtra by M/s Delhi Mumbai Industrial Corridor Development Corporation LTd [F.No. 21-69/2012-IA-III]

As presented by the project proponent, the proposal is for development of Mega Industrial Park in Shendra, Maharashtra. The total area is 1090 ha spread over 3 villages in Aurangabad Tehsils, Aurangabad District. No forest Land is involved. The proposed MIP has connectivity from SH-178 and NH-211.

The project falls within Category 'A' under 7(c) and 8(b) of EIA Notification, 2006 since it is proposed to accommodate Category "A" & "B" type of industries and residential colony.

Construction Phase: The entire MIP at Shendra is proposed to be developed by year 2022. Construction materials will be sourced from authorized quarries in and around the region. Domestic water consumption will be about. 80-320 m³ /day for each construction camp and source will be MIDC approved private water tankers. Waste water generated about 70-300 m³ /day for each construction camp will be treated through adequate soak pits and septic tanks will be provided. Power requirement - 1500-2500 KW will be met from DG sets. Construction waste will be used as a filling material for low lying areas and for construction of roads in all three phases. Hazardous waste -waste oil from machines handed over to the authorized recyclers/agencies.

Operation Phase: Total population for the Shendra MIP is estimated to be 45,483 persons by year 2022. Total water consumption is 42 MLD. Source of water will be partially met from the Jayakwadi Dam Reservoir and remaining demand will be met by groundwater with suitable rain water harvesting measures. Waste water generated will be ~22.6 MLD. One

STPs are proposed for treating domestic waste water and Two WWTPs are proposed in for treating industrial effluent.

The Municipal waste of ~32 TPD ; Sludge of ~9.2 TPD, Hazardous waste of ~19 TPD and Non Hazardous waste of ~9 TPD are expected from the operation phase. An integrated solid waste management facility will be set up to accommodate these treatment plants (Compost plant, bio-methanation and plasma arc gasification plants are proposed). Hazardous waste: waste oil from machines handed over to the authorized recyclers/agencies.

Transport Infrastructure: well-connected transportation system consisting of roads, pedestrian and bicycle paths, public transit, and rail access is proposed.

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

- (i) *Project boundary does not passes through any eco- sensitive area and within 10 km from eco- sensitive area.*
- (ii) *The proponent informed that the proposal does not involve any forests land. Confirmation to this effect shall be submitted.*
- (iii) *Reasons for selecting the site with details of alternate sites examined/rejected/selected on merits with comparative statement and reason/basis for selection. The examination should justify site suitability in terms of environmental damages, resources sustainability associated with selected site as compared to rejected sites. The analysis should include parameters considered along with weightage criteria for short-listing selected site.*
- (iv) *Submit the details of the trees to be felled for the project.*
- (v) *Submit the details of the infrastructure to be developed.*
- (vi) *Submit the details of the road/rail connectivity along with the likely impacts and mitigative measures*
- (vii) *Submit the present land use and permission required for any conversion such as forest, agriculture etc.*
- (viii) *Submit details regarding R&R involved in the project*
- (ix) *Zoning of the area in terms of 'type of industries' coming-up in the industrial park based on the resource requirement.*
- (x) *Submit the details of Water management studies*
- (xi) *The project boundary area and study area for which the base line data is generated – submit through a suitable map. Justification of the parameters, frequency and locations shall be discussed in the EIA.*
- (xii) *Submit Legal frame work for the implementation of Environmental Clearance conditions - to be clearly spelt out in the EIA report.*

- (xiii) *Submit Roles and responsibility of the DMIC/developer etc for compliance of environmental regulations under the provisions of EP Act.*
- (xiv) *Site justification of the identified industry sectors from environmental angle and the details of the studies conducted if any.*
- (xv) *Ground water classification as per the Central Ground Water Authority.*
- (xvi) *Adequate buffers to separate industries to be located away from one another and from residential neighbourhoods – Specific details like buffer distance and this will be enforced with role and responsibilities, the act provisions shall be submitted.*

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

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

4.23 Finalisation of ToR for widening and improvement of existing single/intermediate lane to 2 – lane with paved shoulder section of Lambia at Km 163+800 Jaitaran-Raipur at Km 216+600 including Jaitran Bypass of NH-458D in the State of Rajasthan

The Project road starts at 163+800 km of NH 458 at Lambia and terminates at km 216+600 at Raipur in Pali District of Rajasthan. The section of NH 458 has been upgraded from SH 39 (28.6 km), SH 39 (2 km), MDR-24 (24.8km), ODR-48 (12.6 km), VR-238 (5.8 km) and ODR-71 (11.5 km) to National Highway NH 458 in the State of Rajasthan. The existing length of the section is 58.59 km, whereas proposed length after introduction of Bypass is 52.800 km. The road is being upgraded from single/intermediate lane to two lane (7.0 m , width), paved shoulder 1.5m and earthen shoulder 1.0 m on both sides of road. Since the existing road was earlier Major District Road, Other District Road and Village road it is passing through settlements therefore 4 New bypasses has been proposed to locality Jaitaran (4.431 km), Agewa (1.950 km), Chawandia (1.800 km),and Kushapura bypass (2.535 km)and one realignment at Lambia of length 0.535km.

The widening and Improvement proposal includes concentric widening for a length of 25.260 km, Left side widening for a length of 10.639 km, Right side widening of 4.565 km and realignments and bypasses of length 11.251 and curve improvement of 0.725 km. There is provision of 1 Toll Plaza at km 215.200, 11 number of major and 31 number of minor junctions are proposed. The existing Right of Way varies between 6m to 22m and proposed Right of way is 45 m except at two locations from km 165 + 150 to km 166 + 450 and km 183 + 500 to km 184+100 where it is 12m. 35 New Culverts are proposed which includes 8 pipe culverts, 14 new culverts and 13 causeway. Approximately 137.066 ha. of land is proposed to be acquired which is predominantly agriculture and approximately 141 households requires demolition. The proposed NH 458 is not passing through any Reserve Forest, Protected Forest, National Park and Sanctuary. No Wild life park / Sanctuary exist within 10 km of the Project road. The total water requirement is 9 lacs KL, which is proposed

to be extracted from Ground water. The cost of the project is Rs 548.55 crores and cost per km is Rs 3.92 crores.

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

- (i) The project road does not pass through any ecologically sensitive area/national park/wildlife century.*
- (ii) Submit the details of the trees falls within the proposed RoW, required to be cut including about their species and whether it also involved any protected or endangered species.*
- (iii) 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) Explore the possibilities of cooled mixed technology instead of hot mixed technology.*
- (v) Explore the possibilities of utilising fly ash.*
- (vi) The additional ToR and General Guidelines as per the annexure-I and Annexure-II respectively to this Minutes shall also be considered for preparation of EIA/EMP.*
- (vii) Submit details on borrow areas as per OM dated 18/12/2012*
- (viii) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual/Highways>".*

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

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

5. Recommended projects:

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

The project was discussed by the EAC in its meeting held in December, 2012 and sought additional information viz. NOC from GPCB for discharge in River, Recycle/reuse plan as per TOR point no 17 and details on green belt on the southern side of the project site. Proponent submitted Consent order of GPCB dated 12.11.2009 issued to M/s ATPA Swarman Gujarat Enviro Pvt Ltd.

During the discussion, the following points emerged:

- (i) *Proponent shall submit the information relating to Recycle/reuse plan as per TOR point no 17 and details on green belt on the southern side of the project site.*
- (ii) *Proponent shall submit NOC/ Consent of GPCB issued for their company.*

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.

5.2 CRZ clearance for the Seawater intake & outfall system and Rail line for coal transportation at Palavalasa, Visakhapattinam by M/s Hinduja National Power Corporation Ltd (F. No 11-58/2011-IA-III)

The project was lastly discussed by the EAC in its meeting held in January, 2013 and sought additional information viz details of the original as well as modified railway line, undertaking that there will be no construction in mudflat except part of railway line on stilt and to maintain the existing vegetation cover in the area between HTL and 500m line which is approximately 180 acres, belonging to government, located adjacent to the project area, in consultation with the State Government. Proponent submitted the details and an undertaking.

During the discussion, the following points emerged:

- i) Shall maintain the existing vegetation cover in the area between HTL and 500m line which is approximately 180 acres, belonging to government, located adjacent to the project area, in consultation with the State Government and there shall be no industrial development within this area as committed.*
- ii) The railway line has been shifted from mud flat area and as per the modified line only 160 m is within mudflat area as against the original plan on 1500m. Railway line in CRZ area shall be on stilt.*
- iii) There shall be no construction in mudflat except part of railway line on stilt as committed.*

The Committee recommended the project for grant of CRZ clearance with the above condition in the Clearance letter for strict compliance by the project proponent.

5.3 Environmental Clearance for the construction of Common Effluent Treatment Plant (CETP) at Village JamalpurAwana, PanchayatJamalpurAwana, Taluk Ludhiana East, Ludhiana District, Punjab by M/s. Punjab Dyers Association [F.No.10-92/2010-IA.III]

The proposal was examined by the EAC in its meeting held on 10th – 11st May, 2012 & 8th -9th November, 2012 and committee noted that as per the proponent the irrigation department is working on a proposal to use the treated water for about 33,454 acres of lands

of about 35 villages. Committee sought the supporting documents on this proposal. The details submitted by the proponent were examined by the Committee. It was noted that the irrigation department proposal is for use of treated sewage and not for the treated effluent from the proposed CETP. However, the Punjab Pollution control Board clarified that it is envisaged to use the treated effluent from the proposed CETP as well.

During the discussion, the following points emerged:

- (i) *Consent order shall be obtained from Pollution Control Board. The PCB shall ensure the treatability of Boron, Sodium Absorption Ration (SAR) and phenolic Compounds to meet the standards for agriculture use.*
- (ii) *There shall be no discharge into Budha nallah.*
- (iii) *The farmers shall be made aware that the water is treated effluent.*

The Committee recommended the project for grant of Environmental clearance with the condition suggested in the Clearance letter for strict compliance by the project proponent.

5.4 Environment and CRZ Clearance for the proposed Multipurpose Terminal and Ship Repair Facility at Village Change Dist. Raigad. Maharashtra By M/s. Karanja Terminals & Logistics Private Limited (F.No. 11-59/2010-IA.III)

The project was lastly discussed by the EAC in its meeting held in December, 2012 and sought additional information viz proposed plan for the mangrove protection, buffer zone, development along with map for the existing mangroves available at the site including their GPS coordinates, various issues raised during the public hearing in a tabular form. The details submitted by the proponent were examined in details.

During the discussion, the following points emerged:

- (i) *There shall not be any construction in mangrove areas including 50 mts mangroves buffer area. Mangrove development and conservation plan shall be carried out as committed. The proponent should submit the progress on mangrove development plan along with six-monthly monitoring reports.*
- (ii) *All the responses/assurance made during the public hearing shall be complied strictly.*
- (iv) *Periodical shore line monitoring shall be carried out and details shall be submitted along with six-monthly reports.*
- (iv) *The development and operation of the port shall not cause any disturbance to the fishing activity.*
- (v) *The dredge material shall be used for reclamation /disposed in the identified sites. However, the proponent shall carryout chemical characteristics before disposal / using it for reclamation to ensure its suitability and prevent any likely impact.*
- (vi) *Oil Contingency Management Plan shall be put in place.*

- (vii) *Hazardous materials generated shall be disposed to the hazardous waste management facility. MoU in this regard shall be submitted to the Ministry /Regional Office prior to commencement.*
- (viii) *CSR activities shall cover villages of 10 km radius and include medical schemes, education, infrastructure facilities, welfare of fishermen as committed.*
- (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 MoEF along with half yearly compliance report to MoEF-RO.*
- (x) *Mangrove plantation as proposed shall be carried out in an area of 30 ha. Identified in the vicinity. In addition Mangrove plantation shall also be carried out in an area of 175 [ha.to](#) be identified in consultation with local government in a span of 5 years with budgetary provision of 1 crore as committed..*

The Committee recommended the project for grant of Environmental and CRZ clearance with the condition suggested in the Clearance letter for strict compliance by the project proponent.

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.*

Annexure-II

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

121st Meeting of the Expert Appraisal Committee for Infrastructure Development, Coastal Regulation Zone and Miscellaneous projects held on 18th -19th February, 2013, at Scope Complex. Lodhi Road, 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. Niraj Sharma (Rep. of CRRI)	Member
8. Shri Bala Subramaniam	Member
9. Shri Avinash Kant,	Member
10. Shri Lalit Kapur	Member Secretary

1.

MoEF officials

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

