

Minutes

The Minutes of the 114th Meeting of the Expert Appraisal Committee for Building Construction, Coastal Regulation Zone, Infrastructure Development and Miscellaneous projects held on 9th -10th July, 2012, Scope Complex, Lodhi Road, New Delhi.

1. Opening Remarks of the Chairman.

The Chairman welcomed the members to the 114th meeting of the Expert Appraisal Committee.

2. Confirmation of the Minutes of the 113th Meeting of the EAC held on 4th -5th June , 2012 at New Delhi.

In item No5.5 EC and CRZ clearance for proposed Multi- Product SEZ at Mundra by M/s Mundra Port and SEZ Ltd. (F.No. 10-138/2008-IA.III) It is, interalia, noted that the project involves development of multi product SEZ on a plot area of 18000 ha. of which 8481.2784 ha. is presently notified under Special Economic Zone (SEZ).

The notified area earlier mentioned as 5920 ha is thus corrected as 8481.2784 ha.

The following project details are also added.

The multi-product SEZ will provide plots to various industries and also develop dwelling units, hotels, shopping malls and other related utilities & amenities. For the first phase of development total water requirement will be 150 MLD. Power requirement will be approx. 360 MW. Desalination plant of 150 MLD output capacity is proposed. 11 MLD water will be sourced through Narmada water pipeline. Two CETP each of capacity 50 MLD and 17 MLD as well as STP of 62 MLD is proposed. For final phase of development total water requirement will be 450 MLD, power requirement will be approx. 1000 MW.

The Multi product SEZ at Mundra comprising of various processing zones, non-processing zones, warehousing zones, Road Network (trunk as well as internal), Bridges or culverts over natural drains, Rail Network, IT-Telecommunication network, Electrical Network, Water supply, conservation & drainage Network, Effluent collection network, Desalination Plant with proposed intake & outfall locations, Common Effluent Treatment Plants & Sewage Treatment Plants, Natural

Gas line network, Social Infrastructure, Existing Airstrip, Municipal Solid Waste Disposal site, utilities & supporting infrastructure etc.

The proposed Mundra SEZ will consist of desalination plant of capacity 150MLD output capacity, CETP of 67MLD and STP of 62MLD capacity. This will require 375 MLD of seawater intake and 241 MLD of treated waste water outfall into the sea.

There shall be no development activities in CRZ area other than those permissible under the Coastal Regulation Zone Notification 2011. The Gujarat SCZMA in their 14th meeting held on 27-02-2012 deliberated the Proposal of Mundra SEZ and recommended the same vide their letter no.ENV-10-2010-1601-E dated 27th March 2012. The length of the intake will be approximately 5 Kms. As the sea water intake demand is 15000m³/h, drawl by pipe system is suitable by incorporating a wet well structure at the location. The intake point proposed is within the proposed East Port basin with a depth of 6 m below CD. The projected quantity of water can be transported through a single pipe of 1.3 m dia with a flow velocity of 3 m/ s or with a 1.6 m pipe with flow velocity of 2m/s.

A suitable seawater intake point has been identified on the eastern end of the approved East Port Basin at Latitude 22°48'30.76"N; Longitude 69°46'34.06"E where a depth of 6 m below CD would be available after the port development. As per modelling study the combined discharge is 241MLD which includes 16MLD from CETP and 225 MLD from desalination plant as RO reject is expected of having 57.57ppt of salinity, 14.41 mg / l of BOD and 94.39 mg/l of COD.

The pipe line of approximate length 5.7 km will pass through the back-up area of the East Port and reach the 17.5 m excavated basin in which it would discharge the combined effluent through a suitable diffuser to provide initial near field dilution.

Considering the projected depth of the basin a difference can be designed to attain a minimum dilution of 40-50 times.

After careful consideration of many aspects a suitable outfall location is identified on the west of the Eastern basin taking advantage of the expected 7.5m below CD basin depth. The suitable outfall location for combined effluent from the CETP & desalination plant is identified at Latitude 22°46'44.04"N; Longitude 69°45'5.51"E.

ToR was issued vide letter F.No:10-138/2008-IA.III dated 31st March,2009 including conduct of Public Hearing. Public Hearing was conducted on 5th October,2010.

The proponent has also submitted documents for change of name to M/s Adani Port and SEZ Ltd.

In item no 4.4 Environmental Clearance for development of proposed Common Effluent Treatment and recovery Plant at Kainduwal, Himachal Pradesh by M/s Baddi Infrastructure [F.No. 10-53/2011-IA-II], the points shall be replaced with the following.

During the discussion, the following points emerged:

i) *Treated wastewater is proposed to be discharged in to the River Sirsa. Comments from Irrigation department is required. Further, in the report it was stated that Kalta Nala, Pula Nala, Sandhoil Nallah etc which are tributaries to river Sirsa are polluted with effluent. In view of the above, it is suggested that MoEF may obtain a status report from SPCB and also comments of SPCB on the proposal to review the situation.*

ii) *The details of the existing industries and the consented effluent loads / disposal point as per the consents issued by SPCB shall be submitted. List of industries who are willing to become member in the CETP along with the loads shall be submitted*

iii) *Para 2.19 of EIA report:*

It was reported that 2200KLD of treated pharma effluent will be reused in industry bearing food or pharma sector – submit the list of identified industries, method of conveyance from CETP to identified user industry and commitment of the industry for reuse the treated effluent

It was reported that 2000 KLD of treated textile dye effluent will be reused by the in the textile cotton dyeing process units - submit the list of identified industries, method of conveyance from CETP to identified user industry and commitment of the industry for reuse the treated effluent

It was reported that major part of water will be reclaimed through textile, food, paper and sewerage contributing to 20 MLD under full capacity utilization. This could be reused in the Paper and Textile Sector other than Food and Pharmaceutical – this is a very generic statement. Submit details

iv) *List of industries identified and their willingness for reuse the*

- treated effluent along with the quantities were not submitted in the EIA report*
- v) *Para 2.20 only the unit sizes of ETP were given in the EIA report but not submitted the design parameters of CETP as per TOR*
 - vi) *Figure 2.10 – it was reported that 180 KLD of treated effluent will be used for irrigation purpose, dust suppressions and for washings. Submit the details*
 - vii) *Pg 42 of EIA report – it was reported that only 20 % of treated effluent say 2000KLD could be recycled in the beginning. – But 20% of CETP works out to be 5000 KLD. Also as per figure 2.10, it is proposed to recycle / reuse the entire quantity of effluent after treatment i.e. without any discharge into river - Submit Clarification as there is a contradiction in these two statements*
 - viii) *Impact due to the discharge of treated effluent from CETP into the river was not discussed in the EIA report. Whether any of the existing industries are consented to discharge the treated effluent into the river by the SPCB? In case, the SPCB has not consented any of the existing industries to discharge the treated effluent into the river, what is the justification for CETP for making proposal to discharge into the river?*
 - ix) *Fig 2.5 of EIA report – for the outlet of CETP only the parameters COD, BOD and SS were mentioned – the CETP shall meet all the norms as notified under EP Act 1986 and submit the details*
 - x) *Table 2.6 of the EIA report the value for the parameters “Appearance” was reported as nil – submit clarification*
 - xi) *Table 2.7 – the Hexavalent chromium is reported as less than zero – submit clarification*
 - xii) *Figure 2.7 and 2.8 – submit details of the rejects from NANO system along with quantities, characteristics and method of disposal and impact*
 - xiii) *Table 2.8 – the COD and BOD values of treated effluent were shown as nil – submit clarification*
 - xiv) *Para 2.21 of EIA report on solid waste generation and its disposal – Submit categorization of HW as per the HW Rules*

and disposal

- xv) Table 2.1 of EIA report – as per the EP Act norms, the maximum hydraulic load of a member industry is limited to 25 KLD only. – Submit the compliance*
- xvi) Table 2.5 of EIA report - the present Sewage load is shown as 2102.4 KLD. An additional provision of 2000KLD for future aspects is kept – submit justification*
- xvii) The MoU made between the member units is not describing any responsibility among member units, treatment etc.*

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

In M/s GMR Hyderabad International Airport Ltd the notes shall be replaced with the following

M/s GMR Hyderabad International Airport Ltd has developed and operates a Greenfield Airport “Rajiv Gandhi International Airport” at Hyderabad. The facilities are spread over an approximate extent of 5492 acres of land. The Ministry of Environment and Forests granted an Amendment to the EC awarded to M/s GMR Hyderabad International Airport Ltd for the aforementioned extent of land vide F.No. 11-1/2010-IA.III dtd. 18.06.2010. The Amendment granted approval to set up an Aviation SEZ inside the premises of the Airport. Further, the grant for this SEZ included permission to develop Four (4 Nos.) assembly Units as a part of the SEZ.

Out of the Four Assembly units that are proposed in the SEZ, two assembly units relating to Helicopter assembly in an extent of 22.1 acres are proposed to be moved out of SEZ, since majority of the business for this unit(s) would be generated with Domestic Demand within the country and they would not be able to become Foreign Exchange positive as per SEZ norms. Also, there is no other alternate Land to offer to the customer with requisite access to Air Side for testing purposes.

In view of the deletion of 22.10 acres of land, it is proposed to add 23.80 acres of extent of land to the existing SEZ, in order to maintain minimum required area of 250 acres for an SEZ. This land parcel completely falls within the GHIAL airport land. No fresh land acquisition is involved in this activity. A Storm water pond is proposed to be developed on this land parcel of 23.80 acres. The movement of 2

Assembly units outside the boundary of the existing SEZ would have no impact on the environment as only the status of the extent of land as mentioned would change.

In Environmental clearance for rehabilitation & upgradation of existing carriageway of Kishangarh, Udaipur, Ahmedabad section of NH-79A, NH-76 and NH-8 for km. 0.830 on NH-79 at Kishangarh and ends near Ahmedabad Km 509.259 on NH-8 including Udaipur Bypass in the State of Rajasthan and Gujarat by NHAI (F.No. 10-37/2011-IA-III). The condition at (i) to be replaced with the following:

(i) *The proposal requires 73.415 ha. of Reserve Forest and 9.45 ha of protected forests in **Rajasthan State and diversion of 173.39 ha protected forests in Gujarat State.** Necessary Stage-I permission for diversion of forest area shall be submitted.*

3. Consideration of Old Proposals:

3.1 Amendment in ToR for widening and upgradation of existing 4 lane to 6 lane of section of NH-2 (starts near Khokhraj about 2 km before the Allahabad Bypass and ends at Varanasi) from Km 628.753 to Km 785.859 by M/s NHAI [F. No. 10-98 /2011-IA-III]

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

3.2 Reconsideration of ToR for 6 lanning of Krishnagiri- Walajapet section of NH- 46 from km 0.000 to km 148.30 in the State of Tamil Nadu by M/s NHAI [F.No. 10-66/2011-IA-III]

The Committee noted that project road is widening of existing 4 lane highway into 6-lane from Krishnagiri – Walhajpet, Section (Km 0.000 to Km 148.000) of NH-46 in Tamil Nadu State. Total length of the project road is 148.000 km. Existing ROW width varies from 35 to 60m generally and 60m right-of-way is proposed. As per the proponent, sufficient ROW is available for six laninig work therefore no land acquisition is requited for the project. Since the additional ROW is less than 20 m, the project does not attract EIA, Notification, 2006. Committee suggested the proponent to submit their statement that sufficient ROW is available for six laning and no additional land is required in affidavit.

3.3 CRZ Clearance for redevelopment and modernization of entire Essel Outdoor location Film Studio at plot bearing CTS No.

114,115,115/1, Village Turbe, V.N. Purav Marg, Chembur by M/s. Essel Group [F.No. 10-41/2009-IA.III].

As presented by the project proponent, the proposal involves redevelopment and modernization of old structures existing in Film shooting studio. The plot area of the studio is 16,064.89 sq.m. and is situated in I2 (industrial zone) as per revised sanction Development Plan of M-ward approved by the Government. Total built up area 10,138.860 sq.m. The proposal is to demolish all the existing old structures (19 structures) and to reconstruct 5 numbers of additional studio buildings accommodating additional 6 studios. All the studios shall be provided with acoustic treatment and shall be Air Conditioned. There will be arrangements for post production facilities also including dubbing, Folly Studio, Stereo Track, Laying background music, premix etc. The studio floors will be attached with computerized control rooms for film shooting along with arrangements for Live Telecast. The total water requirement is 100 KLD. The power requirement will be 203 KW. The estimated cost is Rs. 25.21 crore.

The proposed structures are located in CRZ- II, on landward side of existing structures MCZMA in its 50th meeting held on 22.04.09 recommended the proposal for the issue of CRZ Clearance.

The proposal was put up for consideration in the 77th EAC meeting held on 25th - 26th June, 2009, 78th EAC meeting held on 20th - 22nd July, 2009, 79th meeting held 27th -28th August, 2009 and 88th meeting held on 28th - 29th June, 2010. The EAC has recommended the project, however while processing the proposal for grant of clearance certain additional information were called. The additional information was discussed by the committee.

During the discussion, the following points emerged:

- i) Submit commitment for the disposal of debris generated during the operation of studio.*
- ii) Submit undertaking for construction on landward side of existing structure*
- iii) Submit comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster and fire fighting arrangements.*

The Committee recommends the proposal for CRZ Clearance after submission of the information at (i), (ii) & (iii) above, with the above condition in the Clearance letter for strict compliance by the

project proponent.

3.4 CRZ clearance for setting up of bulk oil storage facilities at Kavaratti Island by Lakshadweep Administration.

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

3.5 Environmental Clearance for the construction of commercial-cum-residential complex at R.G. Baruah Road, Guwahati, Assam by M/s Kamrup Ice and Cold Storage Company Limited [F.No. 21.27/2012-IA.III]

As presented by the project proponent, the proposal involves construction of commercial-cum-residential complex at R.G. Baruah Road, Guwahati, Assam on a plot area of 10278 Sq.m. The Total Built-up Area of the project is 34497 m². The construction work will involve construction of (G+8) stories building with 64 numbers of flats (Block B-C area ~13817sqm). Block A will be developed for commercial purpose which include Hotel facility with area of 20626 sqm. Green area of 2400 Sq.m. will be provided. Parking of 268 ECS is proposed. The total water requirement is 136 KLD (Fresh water requirement = 92 KLD). The source of the water is through Groundwater abstraction during operation and construction phase. The sewage generation is about 110 KLD and capacity of STP is about 135 KLD. Treated water will be used for flushing/horticulture/DG cooling and HVAC Cooling. The total power requirement is 4112 KVA. 2 number of DG sets of 500 KVA and 1 DG Set of 125 KVA capacity each are proposed. Total solid waste generation will be 405 kg/day.

The EAC considered the project and after detailed discussions, the following have been emerged:

- i) Re-submit the drawing showing area for loading unloading in commercial area by reduced parking adjacent to exit point*
- ii) Submit Ground water details along with evaluation of seepage control measures for proposed 3 story basement.*
- iii) The outer roads shall be of 9 meters throughout*
- iv) Peripheral plantation width should be 1 meter minimum*

The Committee recommends the proposal for Environment Clearance after submission of the information at (i) & (ii) above,

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

3.6 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)

As presented by the project proponent, the proposal involves construction of Sea water intake and outfall facilities modified proposals – change in configuration of intake and outfall facilities. The EAC in its 112th meeting held on 10th -11th May, 2012 sought the details of alternative technologies considered for sea water intake system for their 2 x 800 MW SDSTPS near Krishnapatnam SPSR Nellore Dist Andhra Pradesh. Following options were considered

1. Caisson connected by open sea jetty with off shore pump house.
2. Caisson connected by submarine pipe line with on shore pump house.
3. Open Channel connected by groyens

Based on the geo technical investigations, and the recommendations of the Consultants M/s WAPCOS, it is finally opted to go with option (3). However in view of the observation of the CRZ Committee during the 112th meeting, APPDCL requested Dr Sundaravadivelu, Prof. in Dept. of Ocean Engineering, IIT Madras, to examine the studies carried out by APPDCL and to suggest any alternative intake system. The Dept. of Ocean Engg, IIT Madras examined the above three options plus the following two options along with the documents submitted by APPDCL.

1. Caisson connected by Horse shoe shaped tunnel.
2. Floating intake well connected by Submarine pipe line.

After critical review of the above five options, the Dept. of Ocean Engg., IIT Madras, in their report dt 16.06.12, recommended that open channel protected by Groyens is the best alternative in view of the poor soil and the severe cyclonic conditions with a return period of 5 years in this location.

In addition to the above 5 options APPDCL had also seriously considered to share the break waters of M/s Coastal Andhra Power Ltd.,(CAPL),the neighboring Power Developers. An identical system as being requested by APPDCL has been approved by MoEF, GoI, to M/s

CAPL for the same reasons of poor soil conditions. However the Project of M/s CAPL is not progressing whereas the erection works of APPDCL are in advanced stage and the water requirement is in critical path leaving no option to APPDCL but to go with an Independent intake system.

Regarding observation (2) of the CRZ Committee i.e., Measures to prevent marine life getting in to intake system, it is to submit that APPDCL has envisaged traveling Screens, Trash rack Screens with Stop log gates to prevent entering of marine life. APPDCL also incorporates "Floating pontoons with fishing nets hanging below the pontoons" stretching between the groynes, an additional precaution as recommended by IIT Madras.

The EAC considered the project and after detailed discussions, the following points have been emerged:

- i) APPDCL shall resolve the issue of latitude/longitude with the State Government and submit clarification letter issued by the State Government in this regard.*
- ii) APPDCL shall respond to the representation received from Reliance. A copy of the representation has been provided to APPDCL in the 114th meeting.*
- iii) After receipt of all the details, a sub-committee of EAC shall visit the site and also discuss the issues/apprehensions with the KUMPP.*
- iv) Design and specification of intake channel structure along with design for net should be submitted.*
- v) Submit Public hearing document for Thermal Power Project.*
- vi) EC is also required as structure is to be constructed.*

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

3.7 Environmental Clearance for construction of Academic-cum-Residential Campus for Indian Institute of Technology (IIT), Bhubaneswar in the village of Aragul, Jatni, Dist. Khurda, Bhubaneswar, Odisha [F.No. SEIAA-19/2012-IA.III]

As presented by the project proponent, the proposal involves construction of Academic-cum-Residential Campus for Indian Institute of Technology (IIT), Bhubaneswar in the village of Aragul, Jatni, Dist. Khurda, Bhubaneswar, Odisha. Indian Institute of Technology Bhubaneswar came into existence in July 22, 2008, inheriting the brand name IIT. It is going to establish its Academic cum Residential campus at Aragul, Bhubaneswar of Khurda District, Odisha. For this project 516.955 Acres of land is required, which has already been acquired. Govt. land has been allotted to IIT Bhubaneswar on Dated 10/02/2009. The daily power requirement for the proposed academic complex is preliminarily assessed as 5000 KVA. The power will be entirely supplied by 11KV source of CESU, Odisha. Also, in case of power cut, 100% power backup generators will be provided for common uses only. Fresh make up of 1000 m³/day will be required for the project which will be sourced from PHED supply of Govt. of Odisha.

The EAC in its 112th meeting held on 10th – 11th May, 2012 sought the various details. The proponent had submitted the details.

The EAC considered the project and after detailed discussions, the following points have been emerged:

- i) Review the treatment technology for STP and ETP and submit details for the same.*
- ii) Submit the revised parking drawing showing the provision of bus parking.*
- iii) Submit revised parking drawing showing details for physically challenged persons.*
- iv) Battery powered busses should be promoted*

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

3.8 Environmental Clearance for establishment of Industrial estate at Sompura, Karnataka by M/s. Karnataka Industrial Area development Board [F. No. 21-26/ 2009 - IA.III]

As presented by the project proponent, the proposal involves development of Industrial Park on a plot area of 550 ha. Out of which

137.65 ha is for residential and social infrastructure purpose. The total water requirement is 5 MLD (domestic requirement-3520 KLD + industrial requirement-800 KLD). The solid waste generation will be 15.5 T/day. Power requirement is 15.3 MVA. The total truck terminal handling is about 300-400 vehicles and a total land of 2,05,494 Sq.m is provided for traffic. Total cost of the project is about Rs. 106.84 Crores. TOR for the project was issued on 9.9.2009. The Public Hearing was conducted on 9.1.2012

The EAC considered the project and after detailed discussions, the following points emerged:

- i) Proponent shall provide 20% green cover including green buffer of 15 meters all around the boundary and green belt for chemical block.*
- ii) The revised Layout map should be submitted after incorporating 15 meter buffer all around the boundary.*
- iii) Consents shall be obtained from the state pollution control board*
- iv) An Environmental Management Cell with appropriate lab facility shall be created as the project starts. It shall monitor all necessary parameters and activities during construction and operational phases from day one.*
- v) Sewage shall be treated and the treated sewage shall be used in dual plumbing system / cooling makeup / green belt etc The disposal of treated water shall confirm the regulation of State Pollution Control Board.*
- vi) There shall be no disposal of solid or liquid wastes on coastal area. Solid waste Management shall be as per Municipal Solid (Management and Handling) Rules, 2000.*

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

4. Consideration of New Proposals:

4.1 Environmental Clearance and CRZ clearance for the establishment of Captive Jetty for the proposed Ultra Mega Thermal Power Project at Cheyyur, Kancheepuram, Tamil

Nadu by M/s Coastal Tamil Nadu Power Ltd (F. No. 10-18/2009-IA.III)

As presented by the proponent the proposal involves establishment of Captive Jetty for the proposed Ultra Mega Thermal Power Project of 4000 MW at Cheyyur, Kancheepuram, Tamil Nadu. The power project would be using coal to be imported through a marine coal handling facility (at Panaiyur) located at a distance of approximately 5 km to the east of the main power plant location (at Cheyyur). The Coal from the port would be transported from the port to the main plant through a closed conveyor system. The total coal import is estimated at 12 to 14 Million Metric Tons per annum and the estimated daily consumption is 40,000 to 45,000 MT. The Port Location is at Paramankeni Village, Tamil Nadu, 7 km away from plant site

The proposal was considered earlier by the EAC in its meeting held on 20th - 22nd July, 2009. The land has been identified for marine facilities and transit stack yard. The EAC, while examining the project, noted that the Jetty is placed at the mouth of the lagoon which is very close to the Buckingham Canal and there are sand dunes which will be affected by the Jetty. The lagoon and the fresh water body are of considerable ecologic significance. In view of above, the EAC found that the earlier location proposed for the project was not suitable and suggested to examine alternative locations for the jetty.

Accordingly, the proponent identified three alternative sites, out of which Pannaiyur village was found to be the most suitable location. The site for the marine facilities lies in Panaiyur village (off Cheyyur). The total land area is about 83 acres and lies between Panaiyur Chinnakuppam and Panaiyur Periakuppam hamlets. The water front is about 650 m long. The water front is completely free from any activity. The land area identified is abutting the water front and is predominantly vacant land with some coconut plantations of recent origin and some fenced private houses also of recent construction. TNSCZMA has considered the project in its meeting held on 28th October, 2009 and suggested to go ahead for further studies.

The Committee in its meeting held on 21st - 23rd December, 2009 examined the project for alternative site and finalized the following TOR for further study in addition to the TOR suggested in the 78th meeting held on 20th - 22nd July, 2009 including conduct of public hearing. The Public Hearing was conducted on 20.12.2011 at the site.

National Institute of Ocean Technology (NIOT) has carried out the detailed Feasibility study and the CEIA for the project. Summary of the modelling & CEIA studies indicate the following;

- Wave heights at the berthing areas conform to tranquillity requirements specified in IS: 4651 (Part V) for bulk cargo operations.
- Wave heights at the entrance is within 1.0 m for most part of the year except for one month during southwest monsoon when predicted waves range from 1.5 m to 2.0 m
- Results of navigation simulation studies indicate that with tug assistance manoeuvring of cape size vessels are possible.
- Capital dredging of 7.8 million m³ is required, while maintenance dredging is negligible (0.04 million m³/year) possibly due to orientation and location of breakwaters
- Littoral transport modelling studies with detached breakwaters indicate that there is negligible accretion behind the breakwaters. Annual sand bypassing is negligible quantity is expected.

The project activities would result in a medium-short-term-reversible impact but its environmental significance would be low because:

- Benthos present in this location are common groups like copepods, nematods, polychaetes, gastropods etc, which have widespread distribution not only in the proposed channel but also in all other locations sampled.
- The proposed Port area channel and basin is devoid of threatened /endangered /endemic species; Sensitive phytoplankton like sea grasses or aquatic fauna are not present in this location;
- The location is not a spawning or breeding ground. This is not a notified turtle nesting ground even though there are occasional instances of sporadic turtle movement during the breeding seasons (Jan to March).
- The operations of the Port are restricted to offshore berths and coal transfer through closed/pipe conveyor to the main plant. The emergency stackyard is a contingency arrangement to handle emergencies only.
- The area is not a significant fishing ground or feeding ground for fisheries. The fisheries in this area are confined to artisanal fishing Any impact to fisheries would be local and shall not affect the fisheries production of the state;
- Dredging is expected to be straight forward as it would involve removal of soft clayey and fine sandy sediments without blasting requirement and therefore there shall be no threat to marine life
- The impacts from increased turbidity from dredging and dumping on productivity, phytoplankton and zooplankton would have low

significance due to the absence of endangered or threatened species in and around the vicinity of the channel.

- Air quality impacts from construction activities shall be short term and reversible once construction is complete.
- Since coal is carried through closed conveyors straight into the UMPP, generation of SPM would be negligible. Especially with present day technological developments for closed conveyors, this is justified.
- The conveyor shall be supported on trestles at the ECR and Buckingham Canal crossings to ensure adequate clearance and negligible obstruction to water flow.
- The trees removed along the coal corridor shall be rehabilitated with the help of the Forest Department.
- Modelling of the discharge with representative seasonal conditions and locations (for current velocity, temperature and salinity) was carried out using CORMIX and MIKE21. The temperature for the offshore diffuser reduces to 0.1°C above ambient within 500 m of the diffuser. The salinity decreases to 0.4 ppt above ambient within 500m of the diffuser, which is well within the natural variation in ambient temperature and salinity values.

The EAC considered the project and after detailed discussions, the following points have been emerged:

- i) As per the letter dated 06.09.2011 from Environment and Forest department Chennai – “As per the report various organisations have recorded turtle eggs near Panaiyur Chinnakuppam during 2008. Review of literature on survey and turtle nesting / movement between and Pondicherry and Chennai coast indicates that these coastal areas are considered to be Olive Ridley Turtle nesting sites between January to March every year. However the report filed by the applicant indicated that the port area is not a notified turtle nesting area” – The PP shall obtain specific comments from the EIA consultant i.e. NIOT Chennai on this point and submit*
- ii) As per recommendations of State CZMA, - “the unit shall construct the coal stack yard for temporary storage and to use the same only in case of emergency as assured by the project proponent. Further the unit shall provide Bubble Top over the temporary coal storage yard instead of wind screen proposed, to control dust emissions”. – The PP shall submit the maximum capacity of the coal stack yard and under what circumstances it is proposed to use this coal stack yard as an emergency stack yard. Also, submit the details of the proposed Bubble Top along with estimated cost. Suggested to explore other alternatives of storage such as closed silos, depending upon the feasibility*

iii) Storm water run off from the coal stack yard and its impact shall be discussed

iv) The EIA consultant at table 6.2 had given incremental increase in the levels of particulate matter. The following are the predications:

8 - hour average concentrations of PM ($\mu\text{g}/\text{m}^3$) for	Distance (m)					
	50	100	250	500	700	1000
<i>D stability class</i>	0	3.5	4.7	1.2	1.2	0.7
<i>F stability class</i>	0	0.03	11.1	14.6	12.8	8.6

The above predictions are not realistic as it is not possible to achieve zero incremental level of PM at distance of 50 meters from the coal handling i.e. coal stack yards. The PP and EIA consultant shall submit clarification with complete details i.e. emissions factors considered, pollution load without EMP and with EMP, data inputs given to the modeling.

v) The EIA report shall cover the baseline data for land environment also along with identified impacts and mitigation planning

vi) Design should consider 1 m rise in the water level.

vii) Detailed design of intake and outfall structures, detailed design of submerged pipeline along with drawings, design for the port berth and other component should be freeze before applying for CRZ and EC.

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

4.2 CRZ clearance for proposed construction of additional Tankage project at Paradeep Terminal, Orissa by M/s Indian Oil Corporation Ltd. (F. No. 10-39/2007-IA.III)

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

4.3 CRZ clearance for Yatching Centre, Rushikonda, Chinagadili Mandal, Greater Visakapatnam Municipal Corporation by Sport Authority of Andhra Pradesh[F.No.11-52/2012-IA-III]

The committee noted that the proposal involves constructions viz. toilet blocks, café etc in NDZ i.e within 200 m from HTL which is not permissible under CRZ Notification, 2011. Therefore the committee recommend to reject the project proposed.

4.4 CRZ clearance for Pneumatic conveying System of Cement Bulk Terminal at Cochin, Kerala by M/s Ultra Tech Cement Ltd. (F. No. 11-55 /2012-IA.III)

As presented by the project proponent, the proposal involves providing Pneumatic conveying System at Cochin Bulk Terminal. Cement in bulk will be transported through 10,000 to 20,000-ton specially designed bulk carriers from Gujarat Cement Works/Narmada Cement Jafrabad Works. UTCL proposes Bulk Cement Terminal of 1.0 MTPA capacity. Cement will be pumped pneumatically from ship and will be transported directly to the cement silos through pipe conveying system. Cement will be stored in storage silos of capacity 6000 M.T. each. Cement will be bagged through electronic packer machines. Of the total 110m long pipe conveying system of the Bulk terminal, 50 m falls under CRZ II. The proposal was considered in the Kerala Coastal Zone Management Authority's (KCZMA) 50th Meeting held on 11.06.2012 and the Authority has recommended the proposal under the clause 4 (ii) d: laying of pipeline, conveying systems, of the CRZ Notification, 2011, to the Ministry of Environment & Forests (MoEF). Consent to Establish (CTE) has been obtained from the Kerala State Pollution Control Board (KSPCB). The allotment of land on lease has been obtained from Cochin Port Trust. Height clearance from Indian Navy have also been obtained for our Silo

During the discussion, the following points emerged:

- (i) *The conveying system shall be fully closed, dust control shall be provided at junction points.*

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

- (ii)

4.5 CRZ clearance for construction of Resort at Survey No. 186, Kadikkattu Village, Chavakkad Taluk, Thrissur, Kerala by M/s Pavis Resorts P. Ltd [F.No. 11-56/2012-IA-III]

As presented by the project proponent, the proposal involves construction of a Ayurvedic Resort Project at Survey No. 186, Kadikkattu Village, Chavakkad Taluk, Thrissur, Kerala. The proposed project site is measuring an area of 1.4736 ha. (14,730.65 sq.m.) at Survey No. 186, Kadikkattu Village, Chavakkad, Thrissur District, Kerala. Total built-up area is 2655 sq.m. The proposed project is located within the Panchayat limits of Punnayurkulam Gramapanchayat. The project proposed to construct 29 guest rooms, 5 villas, restaurant with a capacity of 85 seats and a banquet hall with a capacity of 100 seats. F.A.R. proposed is ... and maximum height of the building is 9.0 m. The total fresh water requirement shall be 12.06 kl/day. STP is proposed with a capacity of 17 kl/day.

CESS, Trivandrum has demarcated the HTI/LTI for the site. The Kerala Coastal Zone Management Authority (KCZMA) has recommended the project for CRZ Clearance vide letter no. 304/A2/12/KCZMA/S&TD dt. 31-05-2012. As per Coastal Regulation Zone categorization, the proposed activity is within CRZ – III.

During the discussion, the following points emerged:

- i) The site has many coconut trees it shall be designed such a way to minimize the tree cutting. – details of the number of trees,, nos to be retained shall be submitted.*
- ii) Submit the details of the location and survey number of the site where the ground water is to be extracted along with permission.*
- iii) Dual plumping shall be provided for recycling the wastewater.*

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

4.6 Environmental Clearance for the proposed development and operationalization of existing Tezu Airport in Lohit district of Arunachal Pradesh by M/s Airport Authority of India [F.No.10-81/2010-IA.III]

As presented by the project proponent, the proposal involves development and operationalization of existing Tezu Airport in Lohit

district of Arunachal Pradesh. Ministry of Development of North East Region (DoNER), Government of India has entrusted Airports Authority of India (AAI) for Development and Operationalisation of existing Airport at Tezu Town in Lohit district of Arunachal Pradesh. Tezu airport is located at 4.7 km away from Tezu Town. Airport was being used by the State Government for helicopter services. The project does not involve utilization of forest land. Existing Airport covers an area 30.19 ha with additional 40.32 ha handed over to AAI for proposed development. Terminal Building will be constructed on 50 m x 100 m area for 200 passengers. An area of 0.374 ha land has been kept for landscaping and green belt development and 67.1 ha land will be kept ---as open area within airport after development. Parking facilities have been provided for 75 cars, five buses with an area of 4,800 m².

Development and Operationalization of existing Airport will comprise of 1500 m x 30 m runway with 60 x 30 m blast pad at each end for Code 3C operations (ATR 72-500); preparation of basic strip of 75 m on either side of the center line of the runway, runway end safety area of 60 x 90 m on either end of the runway; apron 106 m x 76 m for parking two ATR 72-500 and existing apron to be upgraded for isolation bay; terminal building 50 m x 100 m; (for 200 passengers), technical block cum ATC Tower having an area of 400 m² and height of 15 m; parking for car and bus having an area of 4800 m²; DVOR system; and allied development, etc. After development and operationalisation of airport, 3 flights of ATR 72 – 500 will be operated per day.

Two crash fire tenders (CFTs) of water capacity 6000/ 7000 liters with aqua film forming foam (AFFF), One CFT as stand-by for replacement, one ambulance and dry chemical powder fire extinguishers will be provided at the Airport. In terminal building, fire-fighting facilities will be provided as per National Building Code 2005.

Total water required for the airport will be 56 KLD, out of which 18 KLD for domestic purpose, 14 KLD for crash fire tenders and 24 KLD for HVAC. Water requirement will be met through ground water using deep bore well. 24 KLD waste water/sewage will be generated from airport and same will be treated in FAB based STP of 30 KLD capacity. Treated water from STP will be reused for flushing, HVAC and horticulture.

75 kg/day domestic solid waste will be generated from airport, which will be collected and disposed as per provisions of Municipal Waste Management Rule, 2000.

At the Tezu Airport, energy conservation measures will be taken in-line with the 'Energy Conservation Building Code 2006' and 'National Building Code 2005', which will comprise compact fluorescent lamps

(CFL), energy efficient discharge lamps/ LEDs. It is proposed to get 3 Star GRIHA rating for the airport. Automatic lighting on/off control system will be provided in the airport area for optimum utilization of energy;

During the operation phase, power requirement is estimated as 1000 KW, which will be provided by the Arunachal Pradesh Electricity Department. Two (2) Diesel Generator (DG) sets, of 500 kVA capacity each, will be provided to meet the power requirement in the event of failure of supply from the grid.

Budget for implementation of EMP has been kept as Rs. 275.8 Lakhs and environmental monitoring budget for construction and operation phases have been kept as Rs. 12.5 Lakhs and Rs 23 Lakhs, respectively.

The EAC considered the project and after detailed discussions, the following have been emerged:

- i) Shall provide the rain water harvesting to recharge the ground water.*
- ii) To reduce the generation of solid waste in the form of pet bottles, the PP shall provide drinking water at convenient places for the passengers and also at the cafeteria.*
- iii) The treated sewage shall be recycled for flushing/ gardening , proper dual plumbing shall be provided.*
- iv) All the recommendation of the EMP shall be complied with letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to Ro, MoEF along with half yearly compliance report.*

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

4.7 Environmental Clearance for extension of runway and allied works at Agatti Airport, Lakshdweep Island by M/s. Airport Authority of India (F.No. 10-70/2009-IA.III).

As presented by the project proponent the proposal involves extension of runway and allied works at Agatti Airport, Lakshdweep. The

area is 18.56 ha. with a runway of 30 m wide and 1204 m. length. There is no parking area available within the airport complex. The runway is proposed to be extended towards the Kalpadi Island where there is no habitation. A fly over of 250 m is proposed to connect both the islands. The existing terminal building is close to the runway which is disturbing the operation; hence it is proposed to shift further opposite to the runway. The existing building will be demolished.

The proposal was examined by the EAC in its 80th meeting held on 17th –18th September, 2009. The Committee deferred the proposal and suggested to examine the possibility of extending the runway only on one side by relocating the resort and other activities. If not possible then examine the possibility of extending the runway on both sides without connecting two islands as is presently being contemplated in view of the marine ecology, disturbance to the natural habitat and eco-sensitive nature of the area and also examine the details of presence of corals and affect on the fishing activity in and around both the Islands.

The proponent has submitted the proposal relocating the terminal building and extending the runway on both sides without connecting other island.

The proposal was examined by the EAC in its 90th meeting held on 18th – 20th August, 2010 and finalized the additional TOR for further study including conduct of Public Hearing.

The EAC considered the project and after detailed discussions, the following emerged:

- i) Submit authenticated CRZ map from an authenticated agency on 1:4000 scale superimposing HTL-LTL and layout plan on the map*
- ii) To reduce the generation of solid waste in the form of pet bottles, the PP shall provide drinking water at convenient places for the passengers and also at the cafeteria.*

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

4.8 Finalization of ToR for development of barge handling facility in Chennai Port by M/s Chennai Port Trust. (F. No. 11-45/2012-IA.III]

As presented by the project proponent the proposal involves development of barge handling facility in Chennai Port. The Chennai Port has an existing barge jetty in the extreme northern end of Bharathi Dock. It has a length of around 30 metre and the draft is about 2.5 - 3.0 metre. This jetty is currently being used exclusively by Indian Oil Corporation Limited (IOCL) for bunkering purpose of navy, coast guard, bulk carrier, container ships etc. The bunkers cater to both coastal and foreign ships.

On account of the increasing trend of traffic in the port, the demands of the bunkering facility have increased. The current suppliers are finding it extremely difficult to meet the bunkering requirements with the existing facilities. Thus, it is felt that the supplier require additional space / facility for barges to meet the growing demand. Hence, Chennai Port Trust (ChPT) is planning to develop an additional Barge handling facility in Bharathi Dock under PPP mode.

In addition to bunkering, there are other liquid cargoes like vegetable oils, molasses and non-hazardous chemicals which could be potential for the new barge jetty. Additionally, coastal movement of petrochemicals by barges can also be considered. In line with this objective, the engineering surveys to identify suitable location of the facilities to be provided are conducted. The traffic study carried out includes an understanding of the Oil industry based in Tamil Nadu, identification of the hinterland of the proposed facility with respect to the presence of Oil industry requirements. Based on the requirements and traffic forecast the Preliminary design of Barge handling jetty is carried out.

Considering the requirements of bunkering, the barges length has been considered about 75 m to 100 m with carrying capacity of 1000 to 3000 MT. The length of jetty required is 150 m to satisfy the above criteria and hence the same is adopted and for functional requirement, width of the berth proposed as 15m. The proposed barge jetty to need the minimum draft as arrived -9.0 m CD. The top level of the proposed barge jetty is +3.0m CD.

ChPT has identified a location along the existing old pipeline trestle. Based on the engineering survey the location is suitable for the proposed development and hence the same location is maintained. An approach trestle has been proposed to connect the proposed barge jetty and land. This trestle will be utilised for laying the pipelines of the proposed barge jetty and also for small cargo movement purpose. It is proposed to provide a 5 m width single pile trestle.

The present available depth at the proposed jetty area is varying from -7.0 to -9.0m. So it is proposed to dredge the basin area

nearer to the proposed berth to - 9.0 m CD. The total area to be dredged is estimated as 1,800 sqm and the dredging quantity is about 10,000 m³. The entire substructure has been considered as a system of bored cast in situ concrete piles. Berthing face will be provided with adequate fenders at adequate spacing for safe berthing of vessels and bollards at adequate interval for mooring of vessels. A vessel size of 4000 DWT is considered for the design of berth.

The cost estimate was worked out for construction of Barge handling jetty including dredging and Construction of approach trestle is Rs.25.98 crores.

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

- (i) Examine the likely impacts due to increase in number of barges*
- (ii) Project specific oil contingency plan shall be prepared. Infrastructure requirement shall be assessed.*
- (iii) Submit details of Disaster Management Plan including emergency evacuation during natural and man-made disaster like floods, cyclone, tsunami and earth quakes etc.*
- (iv) Submit the different types of bunkering oil proposed to be handled, along with the storage arrangement pumping details.*
- (v) Submit the details of Fire safety & Risk analysis taking in to consideration of oil berth in the same dock system.*
- (vi) Examine the cumulative impact taking in to consideration of the developments in the vicinity.*
- (vii) Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.*

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/ Port & Harbour](http://moef.nic.in/Manual/Port%20&%20Harbour)".

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.

4.9 Finalisation of ToR setting up of recycling facility near Mundra in Kutchch , Gujarat by M/s Adani Ports and Special Economic Zone Ltd [F.No. 11-7/2012-IA-III]

As presented by the project proponent the proposal involves setting up of recycling facility near Mundra in Kutchch , Gujarat adjacent to existing West Port, Mundra in Kachchh District Gujarat. The project area covers approximate 41 ha reclaimed land created by dumping dredge spoils. Ships will be raised on to dry land on air bags and cut up by LPG – Oxygen torches. For ships too large to be hauled up on air bags, partial demolition on beach will be done; process will be completed on dry land.

The annual consumption of LPG and Oxygen are expected to be 1000 t and 6450 t respectively. The project will directly employ 1000 workers & 500 office staff of whom most will be housed in Mundra Port's colony. The project will require 60 m³/day of industrial water and 100 m³/day of potable water. Treated sewage and sea water will be used for dust suppression & horticulture. The potable water will be supplied from desalination plant in the West port. Power will be required only for illumination and in the offices. The power will be drawn from the grid.

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

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

- (i) Submit the details of the processes for each activity, generation of wastes, types quantity and methodology for collection, storage, treatment and disposal of wastes.*
- (ii) MoU with authorized agency for disposal of hazardous wastes if any,*

- (iii) *Submit the site details with latest Google map*
- (iv) *Submit the details of base line marine water quality and likely impact due to ship breaking and mitigation proposed.*
- (v) *Submit the details of personal prospective equipments (gas masks, dust masks, hand gloves, safety shoes, safety goggles, etc) for workers engaged for cutting, dismantling, isolation and segregation process.*
- (vi) *The coastal water area opposite to the plot of cutting operation should cordoned off with appropriate measures. Submit the details of measures. to prevent escape of any from ship breaking process and to prevent pollution of Coastal waters.*
- (vii) *Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.*
- (viii) *Submit details of Risk Assessment, Disaster Management Plan including emergency evacuation during natural and man-made disaster like floods, cyclone, tsunami and earth quakes etc.*

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.

2nd Day: 10th July, 2012:

4.10 Environmental Clearance for setting up of Integrated Municipal Solid Waste management Facility at Jainpur, Ludhiana, Punjab by Municipal Corporation, Ludhiana [F.No.10-31/2012-IA-III]

&

4.11 Environmental Clearance for setting up of Integrated Municipal Solid Waste management Facility at Jamalpur Ludhiana, Punjab by Municipal Corporation, Ludhiana

These projects were examined by the EAC in its meeting held on 10th -11th May, 2012 and recommended for the grant of EC. However, in a WP filled by the nearby residents of the proposed site against the proposed activity at Jamalpur, the Hon'ble High Court of Punjab directed the EAC to hear the petitioners.

Accordingly, the EAC considered the project and the petitioners, presented their views in the meeting. As per the petitioners the basic objections are, site selection was not in accordance to the Rules, 2000-clause 8 and 10 not fulfilled, airport is 6.5 km from the site, habitation is close -200 yards from site, Public hearing took place 1-2 km from away the site.

The EAC advised them to submit the views in writing and suggested the Ministry to communicate the same to the Municipal Corporation of Ludhiana for their comments.

4.12 Environmental clearance for the development of Solid Waste Management Facility at Jhuriwala, Panchkula, Haryana by M/s. Executive Engineer, Huda Division (F.No.10-7/2009-IA-III)

The projects was earlier recommended by the EAC for the grant of EC. However, in a WP filled by the Joint Action Committee Panchkula against the project. the Hon'ble High Court of Punjab directed the EAC to hear the petitioners.

Shri Hemant Sarin Advocate, Resident of Sector- 23, Shri Subbash Kapoor, General Secy, JAC attended the meeting and presented their views. They highlighted the following points:-

- (i) HUDA has not brought all facts before EAC
- (ii) Sectors came up in 1990---Sec -23, 30, Habitation within 200m – EIA says it is 1 km
- (iii) No alternate site considered.
- (iv) Site is adjacent – to NH-73- as per the EIA -90m away. Due to the proposal for 6 laning – 90 m gab will come down – CPHEEO- min 200m
- (v) Site is part of Kholi Hi raitan Wildlife Sancturay
- (vi) Site is about 8 km from airport, No mention of Airport in EIA, No permission from Civil aviation has been obtained.
- (vii) HT line is passing across the site
- (viii) PH conducted about 7-8 km away in Sec -21. No summery of EIA Executive was made available.
- (ix) Site is in Seismic Zone –IV

- (x) Baseline data not collected in 10 km radius.
- (xi) Consultant – not accredited

The EAC noted that during the consideration of project in.... the accreditation of consultant was not mandatory. Regarding the objection on seismic zone –IV, it is noted that the entire area is seismic zone IV and it shall be considered while designing the project. The EAC suggested the Ministry to communicate the same to the Municipal Corporation of Panchkula for their comments.

4.13 Environmental clearance for proposed Residential Complex Prestige Bella Vista at Ayyappanthangal Village, Sriperumbudhur Taluk, Kanchipuram District by M/s. Prestige Estates Projects Pvt. Ltd. [No.SEIAA/F430/2011]

As presented by the project proponent the proposal involves development of residential Complex Prestige Bella Vista at Ayyappanthangal Village, Sriperumbudhur Taluk, Kanchipuram District. Prestige Estates Projects Pvt. Ltd. proposes to construct a residential township at survey nos. 1/1, 1/2, 2, 3/1, 5/1, 8/2A, 42/1, 46/3, 48/1A, 50/1A, 50/4 etc. of Ayyappanthangal Village, Sriperumbudhur Taluk, Kanchipuram District in Tamil Nadu. Total land area of the project proposal is 1,00,199 Sqm (24.76 Acres). The proposal involves construction of 20 blocks of residential buildings and 1 block of club house with a total built up area of 4,58,341 Sqm.

The project site is located at 13° 02' 29.12" North Latitude and 80° 7' 53.31" East Longitude. The project location in Ayyappanthangal Village is adjacent the State Highway 55 connecting St. Thomas Mount and Poonamallee Town. The national highway (NH4) is at an aerial distance of 2 Km North West of the project site. The project site is falls within a distance of about 2 km from the Chennai metropolitan city limits.

The total water requirement during operation phase of the project is estimated to be 1,524 KLD and the fresh water requirement is about 806 KLD which will be sourced from bore wells and metro water supply. The wastewater generation from the project is estimated to be about 1,133 KLD, which will be treated in a sewage treatment plant of capacity 1,610 KLD. The treated wastewater is proposed to be partly recycled for flushing and gardening. The excess wastewater is proposed to be disposed through the municipal sewerage collection system.

The quality of water that is prevailing at site is used as basis for the Water Treatment Plant (WTP) design. Water sample obtained from a

bore well at site was tested and the characteristics observed were used for designing the WTP. It was noticed from the test results that the TDS of the water was on the higher side of 1100 ppm. Apart from TDS, TSS, Iron and Hardness were also found to be slightly on the higher side of the potable limits. The treatment scheme comprises of a multi-media sand filter followed by activated carbon filter and a reverse osmosis membrane filter treatment. The RO treatment is proposed only for the portion of the water that is used for drinking and cooking. Other domestic applications will be provided with the raw water subjected to filtration and treatment for iron.

It is estimated that the solid wastes (garbage) comprising of 4.24 Ton/day of biodegradable wastes and 2.83 Ton/day of non-biodegradable wastes to be generated from the development. Wastes from individual households will be collected on daily basis and taken to a centralized collection facility. Final segregation of solid waste into biodegradable, and non-biodegradable will be done and the Bio degradable waste will be treated on Organic Waste Converter and used as manure within the premises. The non bio degradable/recyclable wastes will be handed over to authorized recyclers.

The power requirement during operation is about 16 MVA which will be sourced from the nearby TNEB grid. For emergency power back-up, 26 nos. of 750 KVA DG sets are proposed. The emissions from the DG sets will be let out through stacks of adequate heights as per CPCB norms. The increase in the ambient noise levels due to the operation of DG sets will be controlled by providing acoustic enclosure. Thick greenery is proposed to be developed all along the boundary of the project site which will attenuate ambient noise levels and other pollutants.

A total of 3,769 car parks (ECS) are provided in the proposed project. This is in line with the maximum requirement in terms of parking estimation done using all the applicable parking norms. Storm water drainage for the proposed development is adequately designed with rainwater harvesting arrangements to augment ground water table. Energy conservation measures proposed for the project includes use of energy efficient fixtures & equipments and solar lighting features partly for external areas. Fire fighting measures are proposed as per the applicable norms. All necessary environmental parameters are proposed to be monitored periodically during construction and operational phases as per the guidelines of MoEF/CPCB and Tamilnadu Pollution Control Board.

The EAC considered the project and after detailed discussions, the following points have been emerged:

- i) *Energy Conservation should be more than > 20%*
- ii) *Suitable toilet fixtures for water conservation shall be provided*
- iii) *Ensure smooth turns or straight road instead of 90^o turns at no of places.*
- iv) *Ensure 9.0 m wide road excluding space for plantation.*
- v) *Zebra crossing for pedestrians should be provided on the main road*
- vi) *Effluent discharge pipe should be at ground level and of different color and type*
- vii) *Ensure 450-500 m³ water tank for rain water harvesting*

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

4.14 Environmental Clearance for proposed Multi- storeyed Residential Apartment, Lake View Height construction project at Mouza Madhusudan Nagar and Nayapalli, Tehsil Bhubaneswar, Dist Khurda in the State of Odisha. F.No. SEIAA/32/Odisha

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

4.15 Finalization of ToR for industrial area at Karoli Area at Village Karoli (Tapukara Extension) distt Alwar, Rajasthan. M/s Rajasthan Industrial Development and Investment Corporation Ltd. F. No 21-28/2012-IA.III

Under the Bhiwadi Unit II of RIICO, RIICO has planned to add new industrial areas in Alwar District. The proposed Industrial Area Karoli is one of them, which is planned to be developed as a hub for General Manufacturing Industries such as Automobiles, Textile parks and cable industries, which will be less polluting in nature. Infrastructure development and allocation of the plots will be responsibilities of RIICO. Infrastructure Development by RIICO will include Road, Drainage System, Street Lighting, Power supply, Fire Fighting Systems, Effluent Conveyance system, Green Area development etc.

The proposed project site is situated in Villages of Kamalpur, Ladamka, Tapukara, Karoli & Dhiriawas of Tehsil: Tijara, District Alwar (Rajasthan). The co-ordinates of the project site is 28°6'14.66"N, 76°48'19.43"E.

The total Area of the proposed project site is 393.008 ha. Industrial as well as Commercial plots are planned to be developed. A total of 256 industrial plots will be developed along with commercial plots for services.

There will be water requirement of approximately 110 KLD including 27 KLD domestic water requirements for construction workers (90 lpcd for 300 workers) during the construction phase based on construction activity requirement. The water requirement during this phase will be met from the existing ground water sources outside the proposed industrial area. Drinking water at construction sites will be provided by RIICO.

Based on the data collected from RIICO of its operational industrial areas, the water requirement in the proposed project during operation phase will be about 1,000 m³/day. The water requirement during operation phase will be met through ground water abstraction. RIICO will obtain prior permission from Central Ground Water Authority (CGWA) for abstraction of ground water.

During operation phase of the project, power requirement will be approximately 10 MVA, which will be provided by Jaipur Vidyut Vitran Nigam Limited (JVVNL). Therefore, total municipal waste generation due to the project during operation phase will be about 1,850 kg/day. The total approximate cost of the project is estimated to be Rs.630 Crores.

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

- (i) Submit the details on the type of proposed industries in the industrial area*
- (ii) Submit the details of the site selection studies with justification with particular focus on environmental issues,*
- (iii) Details of green belt development.*
- (iv) Details of solid waste and management.*

- (v) *Details of the layout plan.*
- (vi) *Details of land breakup along with land use plan.*
- (vii) *Water requirement, source, impact on competitive users.*
- (viii) *Details on the wastewater treatment.*
- (ix) *Submit the details of the eco-sensitive areas, if any.*
- (x) *Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water.*
- (xi) *Submit the details of anticipated impact due to the growth scenario/ induced developments because of the green field Port SEZ. Impact due to influx of people due to port and all other associated activities or otherwise may be carefully projected and estimated. Commitments for environmental and ecological protection shall be made quantitatively and chronologically.*
- (xii) *Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.*
- (xiii) *Submit details of Risk Assessment, Disaster Management Plan including emergency evacuation during natural and man-made disaster like floods, cyclone, tsunami and earth quakes etc.*
- (xiv) *Submit the details of study on connectivity and its carrying capacity (both road and railway).*
- (xv) *Confirm that the proposed development does not involve court cases.*
- (xvi) *Quantitative and chronological CSR plan shall be delineated in detail.*
- (xvii) *Master Plan should clearly demarcate wastewater conveyance lines, internal & approach roads, green cover, and a separate drainage map will be incorporated in the EIA report.*

- (xviii) Submit complete details regarding water supply, storm water drainage, effluent collection and disposal, solid/hazardous waste management etc.*
- (xix) Submit proposed base line studies plan, impact analysis, proposed coverage of mitigation measures and EIA reporting structure.*
- (xx) The EIA document shall be printed on both sides, as far as possible.*
- (xxi) 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.*
- (xxii) 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).*
- (xxiii) 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.*
- (xxiv) All the TOR points as presented before the Expert Appraisal Committee (EAC) shall be covered.*
- (xxv) Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.*

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.

4.16 Finalisation of ToR for development of two additional coal berths at Ennore Port, Tamil Nadu by M/s Ennore Port Ltd [F.No. 11-51/2012-IA-III]

As presented by the project proponent the proposal involves development of two additional coal berths at Ennore Port, Tamil Nadu. Ennore Port is the 12th Major Port and the only Corporate Major port in the country. It is located on the East coast of India in the State of Tamil Nadu:

Phase-I

Development of Ennore Port Project at a cost of Rs.1058.52 Crores was completed and commissioned in June 2001. Two Coal Berths were constructed in Phase-I and are dedicated to handle thermal coal for the Thermal Power Stations of Tamil Nadu Electricity Board (TNEB) located at North Chennai (630 MW), Ennore (450 MW) and Mettur (840 MW).

Phase -II

Ministry of Environment and Forests had accorded clearance No. 10-28/2005-IA-III dated 19th May, 2006 and 10th September, 2007 for the following facilities for:

- (i) Marine Liquids of 3 MTPA capacity to handle POL, LPG, Chemicals, Edible oils and other liquids.
- (ii) Coal of 8 MTPA capacity for users other than Tamil Nadu Electricity Board (TNEB).
- (iii) Iron Ore of 12 MTPA capacity for the export of iron ore.
- (iv) Container terminal of 1.5 MTEU capacity (18 MTPA) for the export and import of containers at an estimated cost of Rs.1300.00 crores, The project is expected to be commissioned during 2013-14.
- (v) Associated Capital dredging of 15.5 million cu.m..

General Cargo Berth

A General Cargo Berth with Car parking area has been developed for the export of Cars and handling project cargo, etc. The berth will have a capacity to handle 2 lakh cars besides 0.5 MT general cargoes per annum. Ministry of Environment and Forests had accorded clearance vide Letter No. 11-21/2009-IA-III dated 23.7.2009.

Proposed project

Recently, Tamil Nadu Electricity Board (TNEB) has started work on the second phase developments of NCTPS with 2 x 600 MW. Moreover, it is setting up 3 x 500 MW thermal power station at Vallur in the vicinity of Ennore port through a joint venture with NTPC. Further expansions 600 MW each are also being implemented at Ennore Thermal Power Station and Mettur Thermal Power Plant. Consequently, there is need for additional coal berths at Ennore Port to handle the coal imports for these power plants and TNEB has requested EPL to take appropriate steps to create these additional facilities in tune with the commissioning of these plants. The total requirement of coal to be handled through Ennore Port will come to about 35 MTPA when all the projects are commissioned.

With the capacity of the present berths created during 2001 was of 16 MTPA and to meet the future demand and to fulfill the shortfall of about 19 MTPA, two coal berths each having a capacity of 9 MTPA is proposed to be constructed. Port will construct two coal berths dedicated to TNEB. Top side facilities like gantry cranes, conveyor system and stackyard etc. will be executed by TNEB. However, Ennore port has also planned to develop a coal stock yard adjacent to the existing coal/iron ore stack yard and single closed conveyor directly connecting the proposed one of the coal berth and the stack yard. The proposed stockyard will be designed to have a capacity of about 0.30 million tones and consider all the environmental parameters. The existing coal/iron ore stockyard already having rail/road connectivity, hence evacuation of coal from the proposed stack yard is easier.

A blue print of the future developments was also presented. The committee suggested to seek TOR for the ultimate capacity of the port so that a comprehensive EIA is carried out. However, the proponent stated that for the at least next five years they do not envisage any other requirement and thus are seeking TOR for the present proposal only

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

- i) *Submit the details of compliance of the conditions of EC/Consent orders for the existing activities.*
- ii) *Submit the details of the proposed activities on the CRZ map of 1:4000 scale prepared by an authorized agency. Submit the Recommendation from state CRZ,*
- iii) *Hydrodynamic studies to ensure that the proposed expansion does not have any significant impact to the shoreline abutting the project must be carried out.*
- iv) *Additional impact arising out of handling, transporting additional cargo at the berth and at storage /evacuation zones must be identified and the system must be augmented to meet the present requirement in terms of risk assessment, EMP, DMP etc.*
- v) *A comprehensive EIA shall be prepared for the port as a whole including the proposed expansion and submitted to the ministry- showing construction phase and operational phase.*
- vi) *Submit the details of the measures proposed for minimizing possible airborne fugitive emissions inherent with the latter system.*
- vii) *An overall review of the existing handling methods and the proposed ones for the expansion facilities may be made keeping in view the environmental requirements vis a vis the productivity parameters.*
- viii) *The impact of the dredging material and disposal of the dredged material should be studied in-depth depending upon the toxic metal contents of this material and the location of its disposal, using modelling studies.*
- ix) *The EIA should include the environmental status in the context of the compliance by the existing port activities.*

In addition to the above, the TOR already contained in Annexure 1 of Ports and Harbours Guidance manual shall also be referred and the details shall be included in the EIA/EMP accordingly. The project proponent can refer to the model ToR and EIA guidance manual available on Ministry website "<http://moef.nic.in/Manual>".

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 development of Outfitting Jetty at Hazira Manufacturing complex, Surat by M/s Larson and Toubro Ltd [F.No. 11-53/2012-IA-III]

As presented by the project proponent the proposal involves development of Outfitting Jetty at Hazira Manufacturing complex, Surat. Larsen & Toubro (L&T) is a USD 12.8 billion technology, engineering, construction, manufacturing and financial services conglomerate, with global operations. It is one of the largest and most respected companies in India's private sector. A strong, customer-focused approach and the constant quest for top-class quality have enabled L&T to attain and sustain leadership in its major lines of business for over seven decades. L&T has sufficient expertise in heavy engineering works core competencies include heavy fabrication, engineering & design capabilities, programme management, etc. With this synergy L&T now proposes to enhance the capabilities of ship-building.

Existing Ship-building Facility -

The materials from the storage area undergo pre-treatment process where straightening and surface treatment of plates is carried out. The plates are then taken to Hull/Block fabrication area where signing/marketing/cutting of plates is required to be done as per the specifications. After the necessary painting and surface treatment of various Blocks is done, these blocks are assembled into a ship. These blocks are approximately 68 in numbers having various sizes/tonnages (starting from 150 MT & above). The fabricated ship is launched from the slipway into water and berthed at the Outfitting Jetty for necessary outfitting of various piping/electrical & engineering equipment/accommodations/deck equipment etc.

Proposed Outfitting Jetty -

After launching; further outfitting is done at the proposed Outfitting Jetty. The proposed Outfitting Jetty will be mainly used for outfitting of ships - which includes piping, electrical, engineering equipment, accommodation, deck equipment. Subsequent to the outfitting, the ship goes for sea-trials for an approximate period of one

week. Then after the ship is brought back to the Outfitting Jetty for completion of final activities before it is dispatched to the customer.

The proposed project is located in the Hazira Notified Area (Survey No : Survey No. 148/A, 230, 241, 230/P, 231, 231/1, 233/2, 235, 446/A, 498/1, Village Mora, Ta. Choryasi, Surat) in the land already in possession of L&T. Common infrastructural facilities of the existing plant (ship building) such as Power supply, Water supply, Storm water drainage, Common STP etc. will be used for the proposed project. The proposed Outfitting Jetty will not be utilized for cargo handling.

The Project has been appraised in the Gujarat Coastal Zone Management Authority (GCZMA) meetings dtd. 16-08-2011, dtd. 27-02-2012 & dtd. 30-03-2012 at Gandhinagar. Dept. of Environment & Forest (DoEF) has subsequently recommended to the Ministry of Environment & Forest (MoEF), GoI to approve the project, vide their letter no. ENV-10-2010-180-E dtd. 11-05-2012.

The Committee noted that the proposed activity is an outfitting jetty and there is no cargo handling hence, EIA notification does not apply to the project.

During the discussion, the following points emerged:

- (i) Submit the details of compliance of the conditions of EC/Consent orders and also the recommendations of the State GCZMA*
- (ii) Submit the details of the proposed activities on the CRZ map of 1:4000 scale prepared by an authorized agency.*
- (iii) Shall use only precast material for construction purposes*
- (iv) There shall be no painting and sand blasting activities*

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

4.18 Finalisation of ToR for construction of Municipal Solid Waste Management facilities at Village Kaladur district, Gurdaspur, Punjab.

The committee noted that there is objection for the project from the residence of kalanar. The proponent was asked to

examine and submit their response to the compliant. The proposal shall be considered after the receipt of above.

4.19 Environmental clearance for widening and improvement of existing 2-lane to 4/6 laning of Ranchi-Rargaon-Jamshedpur section of NH-33 from km.114.00 to km.277.500 in the State of Jharkhand by M/s NHAI [F.No. 10-58/2009-IA-III]

As presented by the project proponent the proposed project starts at NH33 at chainage km 113.730 and ends at chainage km 198.300 including Ranchi Bypass which starts at Neori Bikas ends at Rampur. Total length of the project is 84.533 km of which existing alignment is 59.007 km and Bypass is 25.526 km. Project highway passes through mainly plain land and few stretches passes through rolling terrain in hilly area. The predominant land use pattern of the area is agriculture, vegetation and built up area. Important settlements are Neori, Chatra, Rampur, Bundu, Tamar and Rargaon in Ranchi District of the state of Jharkhand. The Project Road does not pass through National Park and Wildlife Sanctuary. However some stretches of the road passes through notified protected forest and jungle Jhari. Proposal for diversion of 38.80 ha forest land (30.50 ha protected forest and 8.30 ha jungle jhari) with R.O. MoEF. The existing Right of Way varies from 25 m to 45 m. The proposed Right of Way is 60m. 69 ha of land are being acquired for improvement of existing alignment and 153.16 ha for bypass.

There are major bridges (2 existing & 2 new proposed), minor bridges (10 existing & 5 new proposed) and culverts (99 existing & 166 proposed) in the project road. There are existing 5 major junctions. Major junctions shall be improved as per the IRC Code. 13 vehicular underpasses, 3 cattle cum pedestrian underpasses, 34 bus bays, 1 truck lay bye, service roads of 16.85 km have been proposed. The proposed Ranchi Bypass designed by State Govt. of length 25.526km.

20558 nos. of trees fall within 60 m ROW and about 20% trees likely to be saved during construction. Avenue plantation shall be carried out as per SP -21-2009 apart from the statutory requirement. The raw material like earth/local soil 45.50 lakhs cum approx, Murrum/Gravel 11.80 lakh cum, Sand 22.50 lakh cum and Aggregate 40.00 lakhs cum proposed to be procured from the adjoining area of the alignment. 930 Kl / day water for construction period shall be required for construction and other purposes including plantation and dust suppression. 80% water shall be abstracted from perennial sources like Subernarekha, Sapahi, Karkari, etc and 20% from the groundwater. 1.5 lakh cum fly ash proposed to be used for construction of embankment from Patratu Thermal Power Station located 82km away from the project road. 798 nos. of PAFs are being compensated as per NHAI Act. Environmental

management cost has been estimated to Rs 6.56 crores. R & R cost is 21 crores. Total project cost: Rs 747 crores.

The project has been examined by the EAC in its meeting held on 27th -28th August, 2009 and finalised ToR including conduct of Public Hearing. The Public Hearing was conducted on 10.1.2011 at Bundu, Ranchi. The project was discussed in the EAC meeting held on 13th -15th July, 2011 and sought additional information. The information submitted by the proponent was discussed by the EAC.

During the discussion, the following points emerged:

- (i) The proposal indicates the acquisition of 38.80 ha protected forest land. Necessary stage –I forestry clearance shall be obtained as per OM dated 31.03.2011 and submitted along with final EIA report.*
- (ii) It is indicated that 20558 nos. trees are lying in 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. 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.*
- (iii) Fly ash shall be used in the project.*
- (iv) Rain water harvesting including oil and grease trap shall be provided. Water harvesting structures shall be located at every 500 mts along the road. Vertical drain type rainwater harvesting structures shall be set up to minimize surface runoff losses of rainwater.*
- (v) R&R shall be as per the guidelines of State/ Central Government.*
- (vi) IRC guidelines shall be followed for widening & up-gradation of road.*
- (vii) The responses/commitments made during public hearing shall be complied with letter and spirit.*
- (viii) All the recommendation of the EMP shall be complied with letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.*

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

4.20 Environmental clearance for widening and up gradation of existing carriageway 2-lane with paved shoulders in Jhalawar - Biaora section of NH-12 in the State of Rajasthan by M/s NHA [F.No. 10-70/2010 - IA-III]

As presented by the project proponent the project road starts at km 346.540 at Teendhar Junction and continues up to the Rajasthan/Madhya Pradesh Border at KM 412. The existing length of the project road is 63.240 km. The project road runs through one district – Jhalawar and 2 tehsils Aklera & Jhalrapatan. Existing ROW varies from 16-60m. The widening of the road will be restricted within the available ROW in Aklera, Asnawar settlement and in rural areas. Proposed ROW is 45m in realignment and 60m in Ghat section. The project road stretch mainly passes through plain terrain. Only 3 km passes through ghat section. Settlements present along the project road include Asnawar, Aklera, Dungargaon, Ametha, Kholi. About 58% land use along the project road is agriculture land, settlements make up about 21%, barren land comprises 15% and forest comprises about 6%. There is no wildlife sanctuary or national park along the project road. Total land required for the project is 99.80 ha, of which 12.6 ha is forest land & 87.2 ha is non forest land. The project passes through Protected Forests (for a length of 3.85 km). Proposal for diversion of 12.6 ha of protected forest is with the CCF, State Government. River Kalisindh crosses the project road just before the project road section. Apart from this river, many streams cross the project road. Kalisindh is the chief river of the project area. Four realignments are proposed along the project road for a total length of 5.275 km. Apart from realignments, 9.500 km existing road is proposed for reconstruction and raising due to submergence and poor pavement condition. There are 3 major bridges along the project road, 2 will be retained with minor repair and 1 will be newly constructed. 8 minor bridges are present, 4 will be retained, 2 widened, 1 reconstructed and 1 will be newly constructed. There are 76 culverts along the road, of which 8 will be newly constructed, 9 will be reconstructed, 10 will be widened and 49 will be retained with repair. The existing road has no flyovers, underpass, service roads, truck lay byes or Toll Plaza. One Toll plaza proposed at km 377/300, 1 truck layby proposed near Ghatoli (km 402/300), 6.40 km of service roads (at Asnawar & Aklera) and 64 bus stops (both sides combined) are proposed.

569 trees are to be cut along the project road. Species mainly include Chole, Tendu, Khejri, Neem, Babool, Mahua. There are 13 educational institutes & 2 hospitals along the project road. Two schools are partially affected. 25 religious structures are affected. 19 no of tube wells and 55

wells are affected due to widening. These will be relocated. About 751 structures will be affected, of which 396 are residential, 250 commercial, 25 are religious, 80 are mixed. Surface water required is 464696 KLD, Ground Water Required IS 11700 KLD. There is no thermal power plant within 100km of the project road. The environmental cost is about Rs 30.03 million & the social cost is 220.78 million. Total capital cost for the project is Rs 2152 million.

The proposal was considered by the EAC in its meeting held on 20th – 22nd October, 2010 and finalised additional ToR including conduct of public Hearing. The Public Hearing was conducted on 28.03.2011 at Jhalawar, Rajasthan.

During the discussion, the following points emerged:

- (i) The proposal indicates the acquisition of 12.6 ha protected forest land. Necessary stage –I forestry clearance shall be obtained as per OM dated 31.03.2011 and submitted along with final EIA report.*
- (ii) It is indicated that 569 nos. trees are lying in 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. 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.*
- (iii) 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.*
- (iv) R&R shall be as per the guidelines of State/Central Government.*
- (v) IRC guidelines shall be followed for widening & up-gradation of road.*
- (vi) The responses/commitments made during public hearing shall be complied with letter and spirit.*
- (vii) All the recommendation of the EMP shall be complied with letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.*

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

4.21 Environmental Clearance for Widening and Improvement of existing 4 lane to 6-lane from Etawah to Chakeri (km.323.475 to km.483.687) section of NH-2 in the State of U.P by M/s NHAI [F. No. 10-99 /2011-IA-III]

As presented by the project proponent the project road starts from km 323+475 (the end of Etawah bypass) and ends at 483+687 (Chakeri-Kanpur). Total length of existing project road is 160.212 km and proposed road is same. Terrain of the project road is plain and it passes through 98 villages, 8 tehsils and 4 districts namely Etawah, Auraiya, Ramabai Nagar & Kanpur Nagar. There are no new bypasses and realignment in proposed road. The existing ROW is 37 to 60 m and proposed is 40 -60 m (115 m is at toll plazas). The total land requirement is 808 ha , 667 ha is available and remaining 141 ha land will be acquired. 48.288 ha of notified protected forest land (Road side plantation) requires diversion.

9,449 trees in the proposed ROW will be felled for the proposed widening activity. There is no wild life sanctuary and national park within 10 km radius. Approx 600 KLD water shall be required for 400 days (100 KLD for 80 days from Rhinds River, 200 KLD for 150 days from Sanger River, 100 KLD for 90 days from Pandu River and 200 KLD from ground water for 400 days). There are 3 numbers of existing major bridges , 2 bridges shall be widened and rehabilitated with addition of new parallel lane bridges with footpath to meet 6 lane requirement. Existing 17 minor bridges will be repaired. Inclusive of both sides, 30 new minor bridges of 3 lane width with footpath will be constructed on main carriageway/ service road. There are 279 existing culverts on the road, out which 17 will be reconstructed, 238 will be widened and repaired and 24 to be repaired only. 2 numbers of existing ROB are proposed to be repaired and rehabilitated. No new ROB is proposed. There are 18 new vehicular underpasses, 25 pedestrian/ cattle underpasses and 4 foot over bridges have been proposed for 6-lane road. In addition, 2 existing pedestrian/ cattle underpasses have been proposed for widening by providing additional lanes. There are about 1440 properties/ structures shall be affected due to the widening of the existing road. Out of the total number of properties which are likely to be affected, there are 11 schools and 47 religious structures. The Fly ash from Panki Thermal Power Plant (Kanpur) shall be utilized in road construction works. The total Environment budget is approx 9.20 crore ₹

. R&R cost of the project is 124.95 crore ₹ and Total project cost is 1573 crores .

The proposal was considered by the EAC in its meeting held on 17th -18th October, 2011 and finalised additional ToR including conduct of public Hearing. The Public Hearing was conducted on 31.1.12 at Kanpur, on 13.3.12 at Etawa, 23.3.12 at Ramabai Nagar, on 3.5.12 at Auraiya.

During the discussion, the following points emerged:

- (i) The proposal indicates the acquisition of 48.288 ha protected forest land. Necessary stage –I forestry clearance shall be obtained as per OM dated 31.03.2011 and submitted along with final EIA report.*
- (ii) It is indicated that 9449 nos. trees are lying in 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. 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.*
- (iii) Fly ash shall be used*
- (iv) Re-plantation in the median shall be carried out where plants dried*
- (v) Underpass may be reassessed in view of the IRC/MORTH norms*
- (vi) As far as possible, no construction camp should be allowed on the agricultural land*
- (vii) 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.*
- (viii) R&R shall be as per the guidelines of State/ Central Government.*
- (ix) IRC guidelines shall be followed for widening & up-gradation of road.*
- (x) The responses/commitments made during public hearing shall be complied with letter and spirit.*

- (xi) *All the recommendation of the EMP shall be complied with letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.*

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

4.22 Environmental Clearance for widening and improvement of existing 2-lane to 4/6 lane of Gomati Chauraha to Udaipur of NH-8 in the State of Rajasthan by m/s NHA I [F.NO. 10-108/2011- IA-III]

As presented by the project proponent the project road starts from Gomit Choraha at km 177.000 and ends at km 260.100 at Udaipur in the State of Rajasthan. Total length of the road is 83.100 km. The project road alignment traverses through mostly through plain terrain and partly through rolling terrain & hilly terrain. The land along the project road comprises barren land cultivated land with few built-up areas and forest land. There is no national park and wildlife sanctuary within 10 km from the project road. Declared protected forests exist at three locations on the project road. The proposal for diversion of 16.44 ha forest land is at advance stage with State Govt. The existing Right of Way is 45m. The proposed Right of Way is 45m in built-up section, 50 m in forest block, 60 m in bypass and 100m at two toll plaza and in tunnel section. The project road has been bypassed/realigned in the total length of 17.01 km at Padasali (Km 183.350 to Km 186.200), temple location (Km 190.295 to Km 191.255), Delwada Eklingji (Km 239.010 to Km 248.210) and Chirwa Ghat (Km 250.715 to Km 254.715) 173.83 ha of land is proposed to be acquired for the improvement of the project road, out of which 33.4 ha land is government land and 140.23 ha land is private land.

There are existing 2 major bridges, 14 minor bridges and 256 culverts. Existing 2 major bridges and 11 minor bridges are proposed to be strengthened and widened. New 32 culverts, 2 major bridges and 3 minor bridges are proposed to be constructed during up-gradation. There are existing 11 major junctions and 70 minor junctions in the project road. All major junctions and 69 minor junctions will be improved as per IRC guidelines. 2 Vehicular underpasses and 4 cattle underpasses and 4 flyovers and 1 overpass are proposed in the project road. 10 bus bays and 3 truck lay byes have been provided on the project road. 6617 trees exist along the project road, however, 3508 trees are likely to be cut for four laning. For construction of project road, 400 kl/day water shall be required will be met through new bore wells to be constructed at camp

locations after obtaining necessary permissions. On the project road, large pond exists in Nathdwara Town from km 220.300 to km 220.640. Half carriage way on left side will be constructed as elevated corridor along the bank in the pond. At Km 203.00 to Km 204.00 the existing road traverses near the catchment area of Rajsamand Lake. At this location overlay with concentric widening is proposed after considering HFL with in existing RoW. There would be 322 people and 74 structures likely to be impacted due to project road. The budget for environment management plan during construction and operation phases works out to be Rs. 4.46 Crores. R&R cost of the project is Rs. 19.65 Crores. The total construction cost of the project is Rs.731.6 Crores.

The proposal was considered by the EAC in its meeting held on 15th - 16th December, 2011 and finalised additional ToR including conduct of public Hearing. The Public Hearing was conducted on 20.03.12 at Rajsamand, 27.03.2012 at Udaipur.

During the discussion, the following points emerged:

- (i) The proposal indicates the acquisition of 16.44 ha protected forest land. Necessary stage –I forestry clearance shall be obtained as per OM dated 31.03.2011 and submitted along with final EIA report.*
- (ii) It is indicated that ,, nos. trees are lying in 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. 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.*
- (iii) There shall be no disturbance of pond near nath-dwara temple. An undertaking on this regard shall be submitted.*
- (iv) Explore the possibilities for utilizing the unarmful Industrial waste/slag / marble waste of the nearby vicinity viz Hindustan Zinc Ltd in keeping the IRC norms.*
- (v) 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.*

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

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

4.23 Finalisation of ToR for widening & rehabilitation of existing 2-lane to 2-lane paved shoulder of Chhapra – Rewaghat-Muzaffarpur section of NH-102 in the State of Bihar. [F.No. 10-48/2012-IA-III]

As presented by the project proponent the proposal is for up-gradation to two lane with paved shoulder of Chhapra–Rewaghat–Muzaffarpur Section (km 0+000 to km 74+242) of NH-102 in Bihar State. Total length of two lane road will be 74.242 Km. Two lane with Paved Shoulder of the project road, Garkha Bypass (Km 9+950 to Km 13+100) and Maker Bypass (Km 32+080 to Km 34+450). Totaling length of Bypass is 6.02 km Realignment are proposed at (km 14+275 to km 14+605), (km 16+780 to km 17+050), (km 19+750 to km 20+000), (km 21+950 to km 22+400), (km 49+530 to km 49+780), (km 55+480 to km 55+730) and (km 62+930 to km 63+130). Total length of realignments is 2.0 km. The land use along the project road is mostly agricultural land and built-up villages and small towns. The existing Right of Way (RoW) is 15 m to 30 m. The proposed ROW width for Bypass is 45m. 42 ha of land will be acquired for two lane with paved shoulder of the project road for bypasses and realignment. The project road does not pass through Reserved Forest. Only road side plantation has been notified as Protected Forest. However, project road will involve 88.49 ha diversion of protected forest land. Due to two lane with paved shoulder of the project road, 7900 trees are likely to be felled. The project road does not pass through any sensitive area like wildlife sanctuary, national park and bio-reserve. There is no environmental sensitive location within 10 km distance from the project road.

There is 2 major bridge, 24 minor bridges, 117 culverts (pipe, slab and box culverts) on the project road which will be widened. After two lane with paved shoulder, there will be total 2 nos. of major bridge, 24 nos. minor bridges and 117 nos. of culverts on the project road. Bus bay at 11 locations and truck lay byes have been proposed at 1 location. There will 7 major junctions and 70 minor junctions, which are proposed to be improved. Toll plaza is proposed at one location. Due to two lanes with paved shoulder of the project road, about 60 structures (houses and shops) may be affected and compensated as per National Highways Act. Tentative cost of implementation of EMP will be Rs 2.3 Crores. Land Acquisition and R&R Cost is estimated as Rs. 25.5 Crores. The civil construction cost of project is Rs. 264.16 Crores as per 2010-2011 prices.

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

- (i) The proposal indicates the acquisition of 88.49 ha Protected Forest land. Necessary stage –I forestry clearance shall be obtained as per OM dated 31.03.2011 and submitted along with final EIA report.*
- (ii) It is indicated that approximately 7900 nos. trees falls within ROW, however, bare minimum trees shall be cut, the information should be provided about their species and whether it also involved any protected or endangered species. 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.*
- (iii) Design is to be updated as per the latest IRC guidelines/practices*
- (iv) 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.*
- (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 the details of the road safety audit and plans for meeting the IRC safety requirements.*

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.

4.24 Finalisation of ToR for widening & rehabilitation of existing 2-lane to 2-lane paved shoulder of Chas-Bokaro-Gola-Ramgarh section of NH-23 including 4-lane of Chas bypass in the State of Jharkhand. [F.No. 10-49/2012-IA-III]

As presented by the project proponent the project road is two lane up-gradation of Chas – Bokaro – Gola – Ramgarh Section (Km 0+000 to Km 81.225) including Four Lane Chas Bypass (6.9 km) of NH-23 in Jharkhand State. The project road is located in Ramgarh and Bokaro Districts. Total length of project road is 78+315 km. The project road passes through mostly plain and partly through rolling terrain. Existing ROW width varies from 9 to 25 m. The proposed ROW width will 12 m to 25 m for existing alignment, for realignment 30 m and for proposed Chas bypass 45 m. The project road does not pass through any protected area like wildlife sanctuary, national park, bio reserve, etc. There is no sensitive location within 10 km distance from the project road. The project does not pass through Reserve Forest or Protected Forest areas. Within the RoW 4247 trees exist, however, only 3216 trees are likely to be felled for two laning of the project road. The project road is crossing Garga River (Km 4.1), Khanjo River (Km 31.900), Mapahi River (Km 46.800) and Bhera River (Km 62.000). No water body is likely to be affected due to two lane up-gradation of the project road. In the two lane up-gradation of the project road including four lane Chas bypass, 2 existing major bridge, 12 existing minor bridges, 108 existing culverts will be retained and widened/reconstructed, while 4 new culverts, 1 minor bridge will be constructed.

Bus Bays have been provided at 15 locations and truck lay byes at 4 locations. In the two lane up-gradation of the project road, 5 major and 60 minor junctions will be improved in existing alignment while 2 major and 2 minor junctions will be provided in the proposed four lane bypass. Approximate quantity of flyash proposed to be utilized for embankment

on the project road as per IRC-SP-58 is approx. 30000 cum. For construction of the project road, estimated average water requirement is about 225 kl per day, which will be met mostly from surface water resources. Approximately 39.10 ha land will be acquired for two lane up-gradation of the project road. Total 127 structures (residential and commercial structures) are likely to be affected due to two lane up-gradation of the project road. Affected families will be compensated as per National Highways Act.

The budget for environment management and monitoring has been earmarked as approximately Rs. 0.78 Crores. The estimated cost for Resettlement & Rehabilitation is approximately Rs. 14.20 Crores. The capital cost of the project is approx Rs. 198.98 Crores.

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

- (vii) The proposal indicates the acquisition of Protected Forest land. Necessary stage –I forestry clearance shall be obtained as per OM dated 31.03.2011 and submitted along with final EIA report.*
- (viii) It is indicated that approximately 3216 nos. trees falls within ROW, however, bare minimum trees shall be cut, the information should be provided about their species and whether it also involved any protected or endangered species. 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.*
- (ix) Design is to be updated as per the latest IRC guidelines/practices*
- (x) 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.*
- (xi) 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.*
- (xii) 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.*
- (xiii) Submit the details of the road safety audit and plans for meeting*

the IRC safety requirements.

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.

4.25 Finalisation of ToR for widening & rehabilitation of Melli-Nayabazar State (SK 01) from km 17.100 to Nayabazar (length 9.5 km) in the State of Sikkim by the Project Director, Roads and Bridges Department, Government of Sikkim [F.No. 10-50/2012-IA-III]

The committee noted that the proposed expansion of SH is below 1000 m MSL and not located in eco – sensitive area. The Kitam Bird Sanctuary is about 2.25 km from the project road. Therefore the project does not attract EIA Notification,2006. The Committee has also suggested the proponent to certify the above facts.

4.26 Finalisation of ToR for widening & improvement of 6- laning of Chandikole-Paradeep section of NH-5A in the State of Odisha by M/s NHAI [F.No.10-51-2012-IA-III]

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

4.27 Environmental Clearance for proposed SEZ for oil & gas including its (petrochemicals)@ GIDC-Vilayat (Vagra Industrial Estate, Vilayat District Bharauich, Gujarat by M/s Gujarat Hydrocarbons and Powers SEZ limited. [21-16/2009-IA-III]

As presented by the project proponent, the project involves development of SEZ for production of machineries, equipments, oil drilling rigs, special chemicals for Oil & Gas, Petrochemical Sector on a

plot area of 248 ha. The SEZ will have 2 components- Zone-I (210 ha) will have processing zone, utilities, infrastructure corridor etc. and Zone-II (38 ha) will have non-processing (administrative complex, club/guesthouse, training centre, commercial complex to support SEZ activities, greenbelt, roads). The total water requirement is 3 MLD. The capacity of STP proposed is 2 MLD. A total solid waste generation is 1103.95 Kg/day. The power requirement is—6.25 MVA. Total cost of the project is Rs. 1735 Crores.

The ToR for the project was issued on 25th May, 2009.

The revised proposal have 140 ha for Hydrocarbons SEZ and 108 ha for Non SEZ Industrial area. The Hydrocarbon SEZ will have processing area on 72.2 ha which will include Carbon Black Units, PTA Units, Dual Feed Petrochemical complex, Ethylene Oxide derivatives – MEG etc, Polyethylene derivates, n-Butanol, Propylene derivatives, Polypropylene, Xylene & Ortho Xylene, PET, Styrene, Specialty Chemicals/Refinery Catalysts/Synthetic Lubricant/products and R&D/Laboratory Testing Service. The non processing area will be 50 ha and Green belt on 50 ha, CEPT, Common Incinerator on 3 ha. The Non SEZ area will have a power plant (1050 MW) on 90 ha, Green belt on 10 ha and Engineering/ancillary units on 8 ha. The total water requirement will be 3000 KLD and liquid effluent will be 2083 KLD. There will be a CEPT of 1.2 MLD capacity. The final treated effluent will be discharged into deep sea via existing conveyance & disposal system of GIDC drainage. Domestic waste water (750 KLD) shall be used for green belt development.

The EAC considered the project and after detailed discussions, the following points have been emerged:

- i) Submit revised layout plan dropping the component of residential area.*
- ii) The proponent has been requested to give complete presentation including slides on all the studies which are conducted by the proponent for the project. They should also present slides on compliance to the comments provided by the EAC in the previous meetings.*
- iii) The project includes development of SEZ for petrochemical units. Justification for developing a big residential unit just adjacent to the petrochemical plots, where handling of hazardous and explosive materials are anticipated.*

- iv) *DMP and RA presented before the committee was very generally in nature. The PP shall prepare the DMP and RA by considering the proposed type of industries in the SEZ. The details shall cover the plan of action to comply the applicable provisions of MSIHC Rules. The roles and responsibilities and infrastructure to handle the risk of individual units and SEZ developer shall be discussed in the DMP and RA. Frame work for implementation of the roles and responsibilities of individual unit holder and SEZ developer shall also be spelt out*
- v) *As per the map presented, the SEZ area is mostly sloping from north to south direction and the storm water will join river Bhukhi. Mitigation measures to avoid contamination of spillages of oils and chemicals and entering into the storm water drain which ultimately joins river Bhukhi shall be submitted*
- vi) *The PP shall give a commitment that proposal of 18 meters of the green belt around the SEZ area, the land will not be allotted for any unit holder and land will not be diverted to any other usage*
- vii) *MoU between SEZ developer and the occupier of GIDC drain for discharge of treated effluent by the SEZ developer*
- viii) *The PP and EIA consultant were earlier suggested to recalculate the AAQ values and submit. But the PP and the EIA consultant submitted only baseline AAQ data without the prediction of incremental values in the identified critical air pollutants. The PP shall identify the critical air pollutants basing on the type of projects that will be permitted in the SEZ. Details shall be submitted.*
- ix) *The details on energy saving submitted at slide no 20 is not in a scientific way. For instance it is only the development of the SEZ but 7% energy conservation is projected due to machinery with variable speed drive and 4% energy saving due to cooling towers etc. Any commitments submitted by the PP shall be specific, related to the project and verifiable.*

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

4.28 Environmental Clearance for proposed city centre village Asung thana 126, Thana Saraikala, District in

**colony/district/mohalla/bazar /road/Kendra road, city M/s
Forum Infrastructure Limited. [21-42/2012-IA-III]**

Proposed project is a development of a CITY CENTRE at Adityapur over a vacant land having total land area of 87, 849 sq.m (21.7 acres) in Adityapur Industrial Estate (Phase - VII). The land is given by Adityapur Industrial Area Development Authority (AIADA). Proposed city centre will be developed in phases. At present, out of 21.7 acres of land area, 9.5 acres, i.e.38,464.83 sq.m will be developed as Phase - I. Rest area will be developed in future. Phase -1 comprises of two Office Tower, one Hotel Tower, One Hospital Tower, One Specialty Ward Tower and One Retail Tower & multiplex and services. Total built up area of Phase - I development will be 112004.92 sq.m Project site is abutted by Adityapur - Kandra Road (Tata - Kandra Road), which is a 64.0 M (240 ft) wide road. Height of the proposed buildings is 34.50 M (Max) from E.G.L.

The EAC considered the project and after detailed discussions, the following points have been emerged:

- (i) *Submit the Site photograph along with the google map.*
- (ii) *Submit the approved master plan/town plan which include proposed city center having hospital as one of the component*
- (iii) *Re-access the possibility of reusing the hospital effluent for air-conditioning and other uses.*
- (iv) *Road width should be 9 meters throughout*
- (v) *Hospital entry and exit gates should be 18 meters*
- (vi) *Emergency entry and exit points should be separate and no parking should be provided near entry exit points.*
- (vii) *Effluent standards for the hospital waste should be considered for treatment of hospital waste*
- (viii) *Revise the parking requirements as per the MoEF/NBC norms*
- (ix) *Clarify the water requirement and ground water permissions*
- (x) *Submit the details of buffer between hospital and other commercial activity.*
- (xi) *Re-access and submit the groundwater parameters*

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

5. Recommended projects

5.1 CRZ Clearance for Construction of Beach Resort Project at Mararikulam North Village & Panchayat, Cherthala Taluk, Alapuzha District, Kerala by M/s Marari Beach Resort Pvt. Ltd. [F. No. 11-44/2012-IA.III]

As presented by the project proponent, the project involves construction of Beach Resort project on a plot area of 5.299 ha. The total built-up area is 11,138.49 sq.m. It is proposed to construct Guest Rooms (76 Nos.), Restaurant (seating capacity 150 Seats), Banquet Hall (2 Nos.) (total seating capacity 420 Seats) (210 seats each). The total water requirement is 27.517 KLD (fresh water requirement is 19.315 KLD). The capacity of STP proposed is 30 KLD. Treated waste water to be used for flushing of toilets is 8.202 KLD & for horticulture purposes is 14.086 KLD. Total solid waste generation is 147.05 Kg/day. The power requirement is 750 kVA. Total cost of the project is Rs. 25 Crores.

The proposal was put up for consideration in the 113th meeting held on 4th – 5th June, 2012. The EAC after examination had called for additional information. The details submitted by the proponent were examined by the EAC.

During the discussion, the following points emerged:

- (i) There shall be no ground water drawal in CRZ area. Submit the details of source of water and permission for water drawal.*
- (ii) There shall be no disposal of solid/ liquid waste into coastal area.*
- (iii) Trees shall be retained.*
- (iv) There shall be no construction in NDZ.*

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

5.2 Environmental and CRZ Clearance for Multipurpose Jetty within Navalakhi Port, Maliya, Rajkot District, Gujarat by M/s DMCC Oil Terminal (Navlakhi) Ltd. [F.No. 11-45/2011-IA-III].

The proposal involves development of Multipurpose Jetty within Navalakhi Port, Maliya, Rajkot District, Gujarat. The handling capacity will be 4.5 MMT of various types of cargo viz. Coal, Fertilizers, Steel/scrap, Timber& General Cargo. It is also proposed to export Food grains, steel, Salt, DOC & General Cargo. The construction involves a finger jetty 440 x 42 m length at the 1700 m inside the creek, 3 km long (1700 m long in water + 1300 m on land) of approach trestle, Temporary Storage area of about 40 acres and a 288 m long road bridge over Sui creek. The bed level available at the berth is about -12.0 m and the required depth for the vessel to be berthed is 12 m, hence no dredging is required. Total area for the project is 53.53 ha which barren / saline and muddy land is. The water requirement for the project will be about 435 KLD which will be met from GWSSB.

The Gujarat Coastal Zone Management Authority has examined the project and recommended vide letter No. ENV-10-2010-98-E dated 19.05.2011 and provided further information on letter No. ENV-10-2011-98-E dated 30.07.2011. The GCZMA has stated that as per the approved CZMP and the CRZ maps prepared by the Space Application Centre, the proposed site for the development of the Port Terminal and related facilities fall mainly in the inter tidal area, Categorized as CRZ -I (B) and CRZ-IV as well as the CRZ -I (A), (due to existence of some mangrove patches)

The proposal was examined by the 104th meeting of EAC held on 17th-19th August, 2011 and finalized ToR including conduct of Public Hearing. Public Hearing conducted on 17-02-2012. The proposal was discussed in the EAC in its meeting held on 16th -17th April, 2012 and 10th -11th May, 2012 and sought the additional information. The details submitted by the proponent were examined by the EAC.

During the discussion, the following points emerged:

- (i) *There shall be no construction work in buffer zone around the mangroves .It shall be ensured that free flow of water to nearby mangrove patches.*
- (ii) *All the recommendation of EMP including the dust control at storage and handling of cargos shall be strictly implemented.*

- (iii) *All the conditions stipulated by the SCZMA shall be complied with.*
- (iv) *Only activities permissible under the CRZ Notification, 2011 shall be carried out.*
- (v) *It shall be ensured that the activities does not cause disturbance to the fishing activity, movements of fishing boats.*

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

5.3 Amendment to the Environmental and CRZ clearance issued for expansion of Beach Resort at Yarada in Gazuwaka Mandal of Greater Visakhapatnam Municipal Corporation (GVMC) by M/s. Brook Fields & Resorts Private Limited

Environmental and CRZ Clearance was granted vide F. No.11-54/2011-IA.III, dated 21-03-2012 for the expansion of the existing beach resort at Yarada in Gazuwaka Mandal of Greater Visakhapatnam Municipal Corporation (GVMC).

Proponent vide letter dated 05.06.2012 stated that a condition was stipulated at sub-paragraph (ix) of paragraph No.6 under the heading “Specific Conditions that *‘the discourse venue shall be an open venue as informed by the project proponent. Adequate parking shall be provided’*”.

Proponent stated that the EAC was also informed during the appraisal that the proposed ‘Discourse Venue’ needs to be protected from wind and rain in addition to the other naturally occurring abnormal seasonal conditions like cyclones etc. It is felt that minimum protection requires to be ensured to the venue by way covering the structure to the extent required. The structure would be constructed with pre-fabricated structure. Therefore requested to consider the amendment to the EC as follows:

- (ix) *“The Discourse venue shall be an open venue as informed by the project proponent. Adequate parking shall be provided.”*

as

(ix) The Discourse venue shall be prefabricated structure with permanent roof and temporary sidewalls that can be opened and closed as and when required.

The Committee after deliberation accepted the clarification of the proponent that venue need to be protected from wind and rain hence the roof is required. Accordingly, recommended for the issue of an amendment.

5.4 Environmental Clearance for construction project of Pacific Mall & Hotel at Pacific Estate, Khasra No. 540, Village Jakhan, Tehsil Dehradun Sadar, Near Clock Tower, Rajpur Road, Dehradun, Uttarakhand by M/s Pacific Development Corporation Ltd. [SEIAA Gen-01/2011/ 421]

The project involves construction of mall and hotel on a plot area of 12, 686.54 Sq.m. The total built up area of the project proposed is 33,406.18 Sq.m. (2 Basements + LG floor + UG floor + Service floor) and 6 floors. The total water requirement proposed is 560 KLD (domestic water requirement 230 KLD). The capacity of STP is about 250 KLD. Treated water will be used for flushing 30 KLD, horticulture/ gardening 30 KLD, fire fighting 30 KLD and DG cooling 70 KLD. The total power requirement is 5700 KVA. Total solid waste generation will be 22 Kg/day. The total parking spaces proposed are 645 ECS. The total cost of the project is about Rs. 90.28 Crores

The proposal was considered by the State Expert Appraisal Committee for New Construction Projects in its meetings held on 4.6.2011 at UEPPCB, Dehradun and site inspection was also conducted by SEAC, Uttarakhand on 10.6.2011. The SEAC recommended the proposal for environmental clearance after examining the details sent by the project proponent.

The proposal was put up for consideration in the 112th meeting held on 10th – 11th May, 2012. The EAC after examination had called for following additional information.

- i) *The landscape plan shall be submitted*
- ii) *Submit the details of water conservation and energy conservation*

- iii) *Guidelines of CPCB on reuse of treated wastewater shall be followed.*

The details submitted by the proponent were examined by the EAC in 114th meeting.

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

5.5 Environmental Clearance for proposed Construction of the Commercial Complex ‘Bokaro Mall’ at Sector –3,/C, B.S. City, Bokaro, Jharkahnd by M/s Amit Realty Pvt. Ltd. [F. No 21-29/2011- IA.III]

The Commercial Complex “Bokaro Mall” involves construction of on a plot area of 8,025 Sq.m (or 1.98 acres). There will be B+G+6 storied Mall with total built up area of the project is 29,510.55 Sq.m. Green area of 1,610.13 Sq.m. will be provided. Parking of 314 ECS is proposed. The total water requirement is 242 KLD (Fresh water requirement = 142 KLD during Non Rainy Season & 137 KLD during Rainy Season). The source of the water is through Bokaro Steel Plant Authority during operation and private water tankers during construction phase. The sewage generation is about 126 KLD and capacity of STP is about 150 KLD. Treated water will be used for flushing/horticulture/DG cooling and HVAC Cooling. The total power requirement is 3,000 KVA. 3 number of DG sets of 1,000 KVA capacity each are proposed. Total solid waste generation will be 779 kg/day. The total cost of the project is about Rs. 40 Crores.

The proposal was put up for consideration in the 112th meeting held on 10th – 11th May, 2012. The EAC after examination had called for following additional information.

- i) *Submit a map showing the road connecting road to the project site from the main road,*
- ii) *Submit the map showing the parking space for physically challenged persons*
- iii) *Water & Energy Conservation Measures shall be submitted*
- iv) *Guidelines of CPCB on reuse of treated wastewater shall be followed.*

The details submitted by the proponent were examined by the EAC in 114th meeting.

The Committee recommends the proposal for Environment Clearance.

5.6 Environmental Clearance for the Construction of Residential Complex at Avarampalayam Road, Coimbatore, Tamil Nadu by M/s. Coromandel Engineering Company Ltd. [F.No.21-92/2011-IA.III]

Coromandel Engineering Company Limited, propose to construct residential buildings in Ganapathy Village, Coimbatore North Taluk, Coimbatore District in the state of Tamil Nadu. Total land area available is 13142.81 Sqm (3.24 Acres). The proposal involves construction of 10 blocks of residential building with a total built up area of 27,417.47 Sqm. The project site is located at 11° 1` 53.98" North Latitude and 76° 58` 48.22" East Longitude. The location is well connected by roads. The site is situated in Ganapathy Village and it is about 3 km away from the centre of the Coimbatore City. The project does not have any environmentally sensitive area nearby. The environmental settings of the site are given below.

The power requirement during operation is about 1.1 MVA which will be sourced from the nearby TNEB grid which will be distributed through the transformers within our premises. For emergency purposes, 2 No. of 160 KVA capacity DG sets will be used. The emissions from the DG sets will be let out only through the stacks with adequate heights. The increase in the ambient noise levels due to the vehicle transportation will be controlled by the development of the green cover all along the internal roads and by implementing better traffic management plans inside the site premises.

The total water requirement during operation phase of the project is 111 KLD and the fresh water requirement is about 57 KLD which will be sourced from TWAD. The wastewater generation from the project is estimated to be about 80 KLD, which will be treated in a sewage treatment plant of capacity 100 KLD proposed and will be recycled for flushing and gardening. It is estimated that the municipal solid wastes will be generated in the following proportion from the development: Biodegradable wastes : 0.30 Tons/day Non-biodegradable wastes : 0.20 Tons/day Waste from such bins will be collected separately on daily basis and taken to a separate centralized collection facility. Final segregation of solid waste into biodegradable, non-biodegradable, and inert fraction will be done in the centralized collection facility. The Biodegradable waste the inert fractions will be treated on Organic Waste

Converter and used as manure. The non bio degradable recyclable wastes will be handed over to authorized recyclers. Environmental monitoring plan is a vital process of any management plan of the development project. The environmental monitoring will be required for the construction and operational phases. All necessary parameters will be monitored periodically.

The proposal was put up for consideration in the 107th meeting held on 15th – 16th December, 2011. The EAC after examination had called for following additional information.

- (i) Since there will be addition of 500 sqm to the built up area, the form –I shall be accordingly revised and submitted.
- (ii) Parking shall be made as per norms of MoEF and should include for the buses also.
- (iii) Green belt not less than 33 % shall be developed all along the periphery.

The details submitted by the proponent were examined by the EAC in 114th meeting.

The Committee recommends the proposal for Environmental Clearance.

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.
- (xxxii) Accident data and geographic distribution should be reviewed and analyzed to predict and identify trends – in case of expansion of the existing highway and provide Post accident emergency assistance and medical care to accident victims.
- (xxxiii) 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.
- (xxxiiii) Details of the properties, houses, businesses etc. activities likely to be effected by land acquisition and their financial losses 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.

114th Meeting of the Expert Appraisal Committee for Infrastructure Development, Coastal Regulation Zone and Miscellaneous projects held on 9th – 10th August, 2012 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.	Dr. S.P. Bansal	Member
5.	Dr. H.S. Ramesh	Member
6.	Dr. Y. Basavaraju	Member
7.	Dr. Niraj Sharma (Rep. of CRRI)	Member
8.	Shri Bala Subramaniam	Member
9.	Shri Lalit Kapur	Member Secretary

MoEF officials

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

Project Authorities:

Representatives from