Minutes of the 154<sup>th</sup> meeting of Expert Appraisal Committee for projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction and Miscellaneous projects held on 22-23 December, 2015 at Conference Hall (Narmada), Jal Wing, Ground Floor, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-3

1.0	Opening Remarks of the Chairman		
2.0	Confirmation of the Minutes of the 153 <sup>rd</sup> Meeting of the EAC held on 18-20 November, 2015 at New Delhi		
3.0	Consideration of Proposals		
3.1	Improvement of SH-79 from Kollegal to Tamil Nadu Border in the State of Karnataka by Karnataka State Highways Improvement Project Implementation Unit – <b>Finalization of ToR</b> - [F.No.10-30/2015-IA-III]		
3.1.1 The proposal envisages improvement of State Highway (SH-79) from Kollega Nadu Border (total length 119 km) in Chamrajnagar District (Karnataka), Karnataka State Highway Improvement Project-III to be executed by the Pul Department through PPP. The project would include:-			
(a) Upgrade/strengthen Kollegal to Tamil Nadu Border section of SH-79 lane with paved shoulders configuration outside Sanctuary area, and st carriageway without widening and geometric improvement in the Sanctuary			
	(b) Improve the connectivity to Hoganakkal Falls (Palar to Hoganakkal 29 km long), which includes improvement of riding quality by rehabilitation of the existing deteriorated pavement surface and adding parapet/railing to all bridge structures,		
	(c) Out of total 119 km, 80.86 km passess through two Wildlife Sanctuaries namely, Malai Mahadeshwara Wildlife Sanctuary (49.46 km) and Cauvery Wildlife Sanctuary (31.40 km). Agriculture is the main land use with a few industries along the proposed road. Major settlements along the road are Kollegal, Hanur, Kowdhalli, Male Mahadeshwara, Palar and Gopinatham. A part of the stretch (30 km) is in plain terrain, 53 km is in rolling terrain and 36 km is the hilly terrain.		
3.1.2	The EAC, after detailed deliberation, recommended the project for grant of Terms of Reference, specified by the Ministry in April, 2015 as Standard ToR for the said project/activity, and for preparation of EIA/EMP reports after public consultation, with the additional conditions/scope of study as under:-		
	<ul> <li>Study alternative eco friendly modes of vehicle propulsion like electric and solar power vehicles or battery operated vehicles through road stretch passing through the wildlife sanctuary even if it amounts to transhipment over this stretch.</li> <li>Study the effects of speed increase of vehicles in this stretch of wildlife sanctuary and any adverse impacts. Suggest measures to minimize or mitigate this impact.</li> <li>Whether it is possible to take a detour of the wildlife sanctuary area and avoid wildlife sanctuary entirely through diversion route.</li> </ul>		

- 3.2 Proposed Sea Food Park at Deras Village, Bhubaneswar Tehsil, Khurdha District (Odisha) by Odisha Industrial Development Corporation Limited- Finalization of ToR -[F.No.21- 139/2015-IA-III] 3.2.1 The project details given in the documents submitted and the presentation made by the project proponent, are reported to be as under:-(a) The proposed Seafood Park is being promoted by Odisha Industrial Development Corporation Limited (OIDCO) with allocation of land of 152.78 acres to enable fresh investments into the seafood processing sector, increased realization for fishermen and employment generation. The implementation and management for the proposed park would be undertaken by OIDCO only. However, to bring in transparency and efficiency in the management activity of the proposed park, IDCO may consider equity participation from individual exporters, who intend to set up their units in the seafood park, with approval from MOFPI and other necessary statutory bodies. The raw material profile for the project includes brackish water, inland and marine fishery and shrimps. Consideration has been given for preparing a raw material mix of different varieties of fish and shrimps thereby making the raw material basket as a collection of more than 10 varieties of seafood/ marine products. Major raw materials include Croakers, catfish, pomfret, sardine, elasmobranchs, hilsa shad. The major heads under the core processing facility comprises of buildings, plant & machinery and fixed assets. IDCO, the nodal land acquisition agency for the state government, has earmarked about 152.78 acres land near Deras in Khurda district. The identified land patch forms part of 200 acres available with IDCO near Deras farm on the Pitapalli-Chandaka highway. (e) Total water requirement 10 MLD. (f) The total power requirement is 29.9 MW 3.2.2 The EAC, after detailed deliberation, recommended the project for grant of Terms of Reference, specified by the Ministry in April, 2015 as Standard ToR for the said project/activity, and for preparation of EIA/EMP reports after public consultation. The above recommendation of EAC is subject to confirmation of its deliberations on the proposal during the meeting. 3.3 Proposed Naidupeta Industrial Park at Menakuru & Konetirajupalem Villages, Naidupeta Mandal, District S.P.S.R. Nellore (Andhra Pradesh) by Andhra Pradesh Industrial Infrastructure Corporation – Finalization of ToR – [F.No.21-140/2015-IA-III]
  - large scale industries with sufficient provision for future growth and expansion.

    Andhra Pradesh Industrial Infrastructure Corporation Ltd (APIIC) has identified around 1244.02 acres (503.44 ha) of land for this green field project. Although, there is no forest area involved in the project site, yet there are RF/PFs in 10 km radius study area.

The project envisages development of an industrial park near Naidupeta, Sri Potti Sri Ramulu (SPSR) in District Nellore (AP), which would function as an industrial package with all the required facilities to ensure sustainable development of small, medium and

3.3.1

The salient features of the project are reported to be as under:-

- (a) The project site is well accessible from NH-16/15 connecting Chennai with Kolkata. Tirupati Airport is 42.5 km and Krishnapatnam port around 47 km from the site.
- (b) Most of the area has been classified as 'scrub land'. Other land uses are single crop, barren/waste land. The project site is devoid of any human settlements, and there shall be no requirement of land acquisition, resettlement or rehabilitation.
- (c) Total water demand for the proposed park estimated as 6.4 mld, is to be sourced from Telugu Ganga Canal (TGC), nearly 20 km west. APIIC is in the process of seeking approval from I&CAD Department to tap water from TGC.
- (d) Nearly 4.5 mld of effluent will be generated when the IP is fully operational. About 10% (0.45 mld) generated during initial stages of operation shall be sent to CETP of 1 mld capacity proposed for the entire cluster.
- (e) Power demand for different uses is estimated as 48.6 MVA.
- (f) Hazardous wastes shall be disposed off to TSDF as the per MSIHC Rules.
- (g) Total cost of the project is Rs.94.77 crore.
- 3.3.2 The EAC, after detailed deliberation, recommended the project for grant of Terms of Reference, specified by the Ministry in April, 2015 as Standard ToR for the said project/activity, and for preparation of EIA/EMP reports after public consultation, with the additional conditions/scope of study as under:-
  - Different types of industrial units or other auxilliry facilities shall be identified at the earliest for better infrastructure planning.
  - Different environmental parameters shall be firmed up for ascertaining the requirement/adequacy of CETP, TSDF etc, for ensuring environmental safeguards and meeting with the statutory requirements.
- Proposed Industrial Park near Gandrajupalle Village, Gangavaram Mandal, Chittoor District (Andhra Pradesh) by Andhra Pradesh Industrial Infrastructure Corporation Limited Finalization of ToR [F.No.21-141/2015-IA-III]
- The project details according to the documents submitted and the presentation made by the project proponent, are reported to be as under:-
  - (a) The project envisages an industrial park near Gandrajupalle Village, Gangavaram Mandal, Chittoor District (Andhra Pradesh) by Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC) in its owned contiguous land of an area of 195.2 ha.
  - (b) The project will be a multi-sector manufacturing industrial hub such as textiles & apparels, light engineering industry, glass & ceramic, electric & electronics, leather and foot-wear processing, plastic, spinning, agro, food & dairy based, paper, sericulture.
  - (c) The project activity is covered under item 7 (c) 'Category A' of the schedule to the EIA Notification, 2006 Industrial Estates/Parks/Complexes/Areas, Export Processing Zones, Special Economic Zones, Biotech Parks, Leather complexes.

- (d) Total cost of the project is Rs.96.5 crores, which includes basic infrastructure facilities like water (storage and supply), power, roads, street lights, environment infrastructure facilities like Greenbelt development, storm water drainage system, solid and liquid waste collection, treatment and disposal facilities, air pollution control measures, other infrastructure like fire fighting facilities, security, social infrastructure like transportation, banks, post-office, canteens, primary health centre with an Industrial Area Local Authority for maintenance of the above said facilities.
- (e) The water requirement for storage and supply is 3.5 MLD which will be sourced from nearby Kowndinya River.
- (f) Power requirement is 16.5592 MW for industrial area, common area and street lighting.
- (g) As the project would be established on APIIC land, it will not attract the Rehabilitation and Resettlement (R&R) Plan. The project, especially at locally, brings benefits in terms of socio-economically and environmentally; and also it generates employment to skilled and semi-skilled of 900 persons by the company as per its policy. The resident companies supply its products to the domestic market which will improve the regional economy and also, regionally, it boosts the state's industrial sector in the form of export revenues and raising the living standards of the industry workers and also the local area and its people.
- The EAC, after detailed deliberation, recommended the project for grant of Terms of Reference, specified by the Ministry in April, 2015 as Standard ToR for the said project/activity, and for preparation of EIA/EMP reports after public consultation, with the additional conditions as under:-

There shall be no category 'A' or Red Category industries in the industrial estate.

- 3.5 Proposed combined development of Harohalli Phase II & Phase III Industrial Area at Kanakapura Taluk, Ramanagara District (Karnataka) by Karnataka Industrial Areas Development Board Finalization of ToR [F.No.21-142/2015-IA-III]
- **3.5.1** The project details according to the documents submitted and the presentation made by the project proponent, are reported to be as under:-
  - (a) The proposal is for combined development of Harohalli Phase II & III Industrial Area at Kanakapurs Taluk, Ramanagara District (Karnataka) ny Karnataka Industrial Area Development Board.
  - (b) Total area required for the development is Phase II-919.01 Acres & Phase III-1316.90 acres, land use of the project is Industrial land, provided by KIADB. The project components include, industrial, civic amenities, parks, residential, commercial, parking for vehicles, roads, CETP, STP.
  - (c) The project is well connected by various means for movement of raw materials to finished products. Nearest Highway is NH 209 adjacent to the site, Bidadi Railway Station 12.7 Km North West and Bengaluru International Airport 36.4 Km (NE).
  - (d) No alternate sites were considered for the development of Industrial area in Harohalli. The proposed site is selected based on the environmental factors and economic considerations.

The main reasons for establishing Industrial Area at Harohalli areTo improve the Industrial Infrastructural facilities in Ramanagara district of

 Availability of world class business groups at the nearest city Bangalore (around 36.4 Km).

- Availability of skilled manpower at short distance less than 75 km.
- Government's positive attitude towards industrialization.

Karnataka.

- (e) No forest land and diversion is involved for the proposed Industrial Area. The project does not come under eco sensitive area.
- (f) The proposed industrial area will have a provision of treating effluents from the industries and the MoU with the industrial units will be done for proper disposal of the effluent, and also ensuring Zero Liquid Discharge (ZLD).
- (g) The proposed project will have an STP, for efficient treatment of the sewage, and treated water shall again be used for mechanical unit operation. The sludge from the STP contains high nutrient value and will be mainly used as manure for horticulture purpose.
- (h) The total power required for the proposed project is tentatively 4 MW, and will be taken from Bengaluru Electricity Supply Company Limited (BESCOM). Total water required for the facility is 30 MLD, (Source is Vrushabhavathi treatment plant (BWSSB).
- (i) The total cost of the project including infrastructure setup is Rs.1171.6944 crore.
- (j) The project activity is covered under item 7 (c) 'Category A' of the schedule to the EIA Notification, 2006 Industrial Estates/Parks/Complexes/Areas, Export Processing Zones, Special Economic Zones, Biotech Parks, Leather complexes.
- 3.5.2 The EAC, after detailed deliberation, recommended the project for grant of Terms of Reference, specified by the Ministry in April, 2015 as Standard ToR for the said project/activity, and for preparation of EIA/EMP reports after public consultation, with the additional conditions as under:-
  - The different types of industrial units or other auxiliary facilities shall be identified at the earliest for better infrastructure planning and effluent treatment.
  - An overall pollution load should be firmed up for ascertaining the requirement/adequacy of CETP, TSDF etc, for ensuring environmental safeguards and meeting statutory requirements.
- 3.6 Construction of 2-lane Bridge over Middle Strait Creek (at km 107) of NH-223 connecting South Andaman Island & Baratang Island by M/s Andaman Public Work Department Finalization of TOR [F. No. 10-38/2015-IA.III]
- **3.6.1** The PP did not attend the meeting, and as such the proposal was not considered.
- 3.7 Construction of 2-lane Bridge over Humphrey Strait Creek (at km 130) of NH-223 connecting Baratang Island & Middle & North Andaman Island by M/s Andaman Public Work Department Finalization of TOR [F. No. 10-39/2015-IA.III]
- **3.7.1** The PP did not attend the meeting, and as such the proposal was not considered.

- 3.7 (a) Setting up of 20 MLD SWRO Desalination Plant inside ONGC Uran Plant, Uran, Maharashtra by M/s ONGC Ltd Finalization of ToR [F.No.10-37/2015-IA-III]
  3.7 (a) The proposal seeks finalization of terms of reference for preparation of EIA/EMP reports to obtain CRZ Clearance as required under the CRZ Notification, 2011 for setting up of 230 mld SWRO Desalination plant inside ONGC Plant at Uran in Maharashtra by M/s ONGC Ltd.
  - It was clarified that there was no requirement of TOR, but the recommendation of the SCZMA is a pre-requisite for obtaining CRZ Clearance under the CRZ Notification, and as such, the instant proposal was not maintainable.
- 3.7 The proposal was not considered by the EAC, and the project proponents were asked to approach to SCZMA for the present.
- Development of an Industrial Estate at Sy.No.176-191 and 194 to 256, Pedamanasanpally Village, Thogutta Mandal, Medak District (Andhra Pradesh) by M/s Honour Infraestates Ltd Environmental Clearance [F.No.21-11/2013-IA-III]
- **3.8.1** The project details as per the documents submitted and the presentation made by the project proponent, are reported to be as under:-
  - (a) The project involves development of an industrial estate for active pharma ingredients (API's) manufacturing units, 30 MW co-generation power plant (CPP) and secured landfill at survey nos. 169 171, 174 186, 186(P), 187 188, 188(P), 189 191, 191(p), 192, 194 204, 204(P), 205, 206(P), 217(P), 221(P), 222, 222(P), 223 231, 231(P), 232, 232(P), 233 242, 242(P),243 245, 245(P), 246, 248 256, Peddamasanapally village, Thogutta mandal, Medak district (Telangana), at  $18^0$  00' 44.3" (N) latitude and  $78^0$  47' 50" (E) longitudes.
  - (b) The proposed industrial estate is spread over an area of 120.82 ha consisting of 34.04 ha for manufacturing zone, 37.62 ha for services, and 35.81 ha green belt area.
  - (c) Land Allocation for the proposed Project:

S.No	Name of the Feature	In Sq.mts	In ha
1	Manufacturing Zone	340400.0 0	34.04
2	Roads	133554.3 6	13.36
3	Common Facilities	17177.00	1.72
4	Water Reservoir	54030.20	5.40
5	Raw material Storage	30000.00	3.00
6	Fire Station and Occupational Health Centre	8449.06	0.84
7	Co-generation plant	74557.85	7.46
8	Wastewater treatment systems and Hazardous waste storage	58168.14	5.82
9	Solvent recovery system	30000.00	3.00
10	Secured Landfill	81568.24	8.16
11	Parking with Toilets, Rest, Service Station Rooms and Wash Area	22250.00	2.22

	12	Green Belt	358086.3 8	35.81
Total Area		1208241. 23	120.82	

## (d) Utilities

S. No	Utility	Description
1	Boilers (Coal Fired Boilers)	3 x 50 TPH
		1 x 20 TPH
		3 x 10 TPH
2	DM Plant	40 kl/hour
3	DG sets	12 x 1000 KVA
4	Zero Liquid discharge system	Contains stripper, Multiple effect evaporator and ATFD, Biological treatment system and reverse osmosis system.

- (e) Total water requirement during construction phase is nearly 200 KLD, and the total water requirement during operation phase (for domestic, process, utilities, and facilities) is in the order of 2300 KLD consisting of 1400 KLD fresh water and 900 KLD of recycled water. The project shall obtain water from bore well/stored storm water/surface water from Sripada Sagar Lift Irrigation Project during operation and from bore well during construction. Storm water runoff shall be stored in the water reservoir and reused after treatment.
- (f) Solid wastes during occupation are generated from the process plants, solvent distillation, wastewater treatment and utilities. The effluent treatment system generates stripper distillate, ATFD salts and ETP sludge. The process operations/plants generate process residue, filter media, used catalysts, activated carbon and inorganic residue. The recycling operation of distillation generates solvent residue and spent mixed solvents. The utilities i.e., coal fired boiler generates ash while DG sets generate waste oil and used batteries. The other non hazardous wastes are container, packing material, empty drums etc. The containers and drums are detoxified before disposing to authorized buyers. The hazardous wastes of process residue, stripper distillate, solvent residue, and activated carbon are sent cement plants for co-incineration, thereby reducing the load on TSDF facility and consumption of non renewable resource of coal in cement plant kilns. Mixed solvents shall be sent to authorize recyclers/cement plant for co-incineration while spent solvents are recovered within plant premises. The inorganic wastes, filter media, used catalysts, salts from ATFD, and ETP sludge are sent to captive TSDF facility. The waste oil and used batteries will be sold to authorized recyclers.
- (g) It is proposed to develop a green belt with width ranging from 10-20 m all along the site boundary in addition to avenue plantation. The area of greenbelt is 35.81 ha (29.63%). The individual units shall develop a minimum of 12% of plot area for greenery.
- (h) There are no national parks, sanctuaries and ecologically sensitive areas within the impact area of 10 km.
- (i) Total cost of the project is Rs.500 crores.

- (j) The project was issued terms of reference vide letter No. 21-11/2013-IA.III dated 5<sup>th</sup> December, 2013. The public hearing for the project was held on 19<sup>th</sup> November, 2014.
- **3.8.2** The EAC, after deliberation, recommended the project for grant of environmental clearance, subject to all the generic conditions applicable for building and construction projects, along with the additional conditions as under:-
  - There shall be a continuous green belt along the plant premises, except at the designated entry and exit points.
- Proposed Multi product Special Economic Zone (SEZ) at Naidupeta, Nellore Dist, Andhra Pradesh by Andhra Pradesh Industrial Infrastructure Corporation Limited Environmental Clearance- [F.No.21-61/2010-IA-III]
- **3.9.1** The project details according to the documents submitted and the presentation made by the project proponent, are reported to be as under:-
  - (a) The project involves Multi product Special Economic Zone (SEZ) at Dwarakapuram, Palepolam, Manakur, Konetirajupalem villages of Naidupeta Mandal & Pallakur Mandal, SPS Nellore District, Andhra Pradesh by Andhra Pradesh Industrial Infrastructure Corporation Limited.
  - (b) The total land area is 1032.27 ha (2550.79 acres). The major components of the proposed project are development of basic infrastructure (industrial plots, internal roads, water supply lines, storm water drains, power supply, street lighting), environmental infrastructure (sewage & industrial effluent collection and treatment, solid waste management, rainwater harvesting, common greenbelt development) and social infrastructure (bank extension counters, post office, canteen, food courts, first aid center, fire-fighting systems, etc.)
  - (c) Water requirement 13205 m³/day (Fresh 9905 m³/day; treated 3300 m³/day. Source of water are filter points along Mamidikalava, infiltration wells in Swarnamuki River near Kappaguntal and Murthireddypalem villages and water from Telugu Ganga industrial (water allotment is 0.5 TMC).
  - (d) Waste water quantity 3470 m³/day (industrial 1986 m³/day& domestic 1485 m³/day) Treatment capacity CETP of 2.5MLD and STP of appropriate capacity.
  - (e) The treated water from CETP and CSTP will be reused for greenbelt, flushing, floor washing, dust suppression, etc and excess if any will be discharged into nearby nalla after meeting discharge standards of MOEFCC and State PCB.
  - (f) The industrial solid waste generated at various industrial units will be segregated into hazardous and non-hazardous wastes, recyclable etc and stored within their premises and will be send to the nearest approved TSDF. If feasible, TSDF will be setup at park level at appropriate time.
  - (g) The estimated cost of the project is about Rs.114 crores.
- **3.9.2** The EAC, after deliberation, recommended the project for grant of environmental clearance, subject to all the generic conditions applicable for building and construction projects, along with the additional conditions as under:-

- There shall be no manufacture of automobile parts, only assembly.
- After perusing the pollution load modelling exercise, the Committee suggested that the
  use of the DG sets for industrial operations should be eliminated as far as possible,
  and to be used only with the specific permission from the State Pollution Control
  Board.
- A mechanism shall be put in place to ensure that the industries planned initially, and the substitution which might follow in later years, shall conform to the statutory standards, for the pollution loads to remain within the limits as estimated.
- The State Pollution Control Board shall do continuous post project monitoring o ensure that the cumulative pollution loads are not exceeded beyond permissible limits.
- 3.10 Mumbai Trans Harbour Sea Link (MTHL) by Mumbai Metropolitan Region Development Authority –CRZ Clearance [F. No.11-65/2012-IA-III]
- **3.10.1** During presentation, the submissions made by Mumbai Metropolitan Region Development Authority (MMRDA), the project proponent, were as under:-
  - (a) The Project 'Mumbai Trans Harbour Sea Link' (MTHL) envisages construction of 6 lanes road bridge across the Mumbai harbour, which aims at facilitating decongestion of Mumbai by improving connectivity between the Island City & main land (Navi Mumbai). The project involves construction of a bridge across the Mumbai harbour between Sewri on the island city side (in the Mumbai Port Trust area) and Chirle on the Navi Mumbai side. The link is about 22 km long with a 16.5 km bridge across the sea and a 5.5 km long viaduct on the land. The exit and entry into the six and freeway would be through interchanges at the end points and at the intermediate points on the Navi Mumbai side.
  - (b) As per the Coastal Zone Management Plans (CZMP) of Mumbai and Navi Mumbai, the proposed alignment of 22 km MTHL project passes through CRZ-I, CRZ-II, CRZ-IV. The Sewri end of 1.5 km alignment (chainage 1.0 to 2.5 km) passes through mud flats, sparse mangroves and abuts the flamingos breeding site. The Nhave end of the 0.6 km alignment (chainage 16.98 to 17.5 km) also passes through mudflats and sparse mangroves.
  - (c) As per the report, 14.48 km (66%) alignment falls in creek water, 2.1 km (12%) passes through mudflats and 4.92 km (22%) alignment is on land. CRZ-I areas particularly Sewri mudflat and shivaji nagar mudflat are ecological important. The mangroves area affected at Sewri end is 576 sqm and is 9306 sqm at Chirle side of the proposed Sea link.
  - (d) For navigational spans, a minimum vertical clearance of 2.5 m below the bridge above the highest HTL, whereas it is 9.1 m elsewhere is envisaged.
  - (e) The project was accorded Environmental Clearance under CRZ Notification, 2011 by this Ministry vide letter dated 19<sup>th</sup> July, 2013, based on the recommendations of MCZMA communicated vide their letter dated 15<sup>th</sup> June, 2012.
  - (f) Rapid EIA studies were carried out for preparation of EIA/EMP reports wherein, mitigation measures were proposed to ameliorate the impacts due to the proposed construction/operation of the project, especially addressing the issues of mudflats/migratory birds.
  - (g) Since the entire sea link is proposed on viaduct, area occupied by piers only will be affected. Compensatory mangrove plantation in area of 30 ha in Nhave side is proposed

for loss of 0.1776 ha of mudflats/mangroves due to piers.

- 3.10.2 Hon'ble National Green Tribunal (WZ) at Pune, vide their order dated 15<sup>th</sup> October, 2015 in Appeal No.4/2013 has set aside the CRZ clearance dated 19.07.2013 accorded to the said project by the Ministry with the direction to remit the matter to MoEFCC to consider it afresh. The Hon'ble Tribunal has ordered to examine the impacts of the project on mangroves eco-system, habitat of flamingos, mudflats besides other impacts. They have also directed to ascertain whether provisions of the EIA Notification, 2006 are applicable to the said project. Directions have been given to MoEFCC to take decisions independently on merit in eight weeks, and CRZ clearance given to the project by MoEFCC has been kept in abeyance for six (6) months.
- 3.10.3 During appraisal of the proposal, the Committee observed/noted the following:-
  - (a) The project was first accorded Environmental Clearance under the CRZ Notification, 1991 and the EIA Notification, 1994, vide letter dated 11<sup>th</sup> March, 2005. However, the project could not take off within the validity period of 5 years of the EC due to irrational offers received from bidders. Subsequently, the CRZ clearance dated 19.07.2013 was issued under CRZ Notification, 2011 after taking into consideration the submissions of the project proponent that the proposal is to construct sea link and it does not attract the provisions of EIA Notification, 2006.
  - (b) A presentation was made by the project proponents and the consultants on the construction methodology and the Environment Management Plan. The committee noted that the PP had taken the help of expert bodies like the BNHS for environment management, particularly related to migratory birds and other co-related issues.
  - (c) The Committee took note of the construction methodology on mud flats through construction of temporary jetty as well as pile driving in the portion of the sea. The Committee directed the project proponent not to undertake any blasting/construction activities during night hours and also asked the PP to re-work Rs.320 crores Environment Management Plan with greater emphasis on environment management, disaster management and rehabilitation, if any. The PP agreed to do the same by the next hearing.
  - (d) The Committee also noted the observations of the MCZMA, while recommending the proposal on 26<sup>th</sup> November, 2015 after deliberations during their 107<sup>th</sup> meeting held on 7<sup>th</sup> November, 2015, stipulating many conditions for compliance by the project proponent, along with additional mitigation measures now proposed by the PP.
- 3.10.4 The project proponents were asked to bring para wise comments on the objections and issues raised by the Tribunal. On receipt of the same, the EAC examined the proposal in the context of the judgement dated 15<sup>th</sup> October, 2015 of Hon'ble National Green Tribunal (WZ) at Pune in Appeal No.4/2013.

The Committee observed that the issue involves two broad aspects. Firstly, the procedural aspect of the case relating to application of various laws and notifications thereunder relating to environment clearance, CRZ clearance and the requirement of applicability of the EIA, Notification, 2006. Secondly, the impact as well as mitigation measures relating to mudflats, mangroves and migratory/resident birds and marine life have to be examined.

The EAC after detailed interaction with the PP decided that:-

- The legal and procedural aspects of the case may be examined by the Ministry and appropriate directions given to the Committee. However, the Committee will examine environmental impacts of the project and their management and mitigation aspects.
- The project proponent will revise the environmental management plan with greater emphasis on environment management, disaster management and rehabilitation, if any.

In view of the above mentioned observations, the Committee deferred its decision

- 3.11 Marine disposal of treated effluent from ETP pipeline route at Kesanapalli, Andhra Pradesh by M/s Oil and Natural Gas Corporation Ltd CRZ Clearance [F.No.11-38/2015-IA-III]
- **3.11.1** The project details as per the documents submitted and the presentation made by the project proponent, are reported to be as under:-
  - (a) The proposal involves laying of 8" GRE pipeline of 1.85 km from Effluent Treatment Plant (ETP) at Kesanpalli Group Gathering Station (GGS) to seashore, and 8" HDPE pipeline of 1.5 km from seashore to disposal point in the sea.
  - (b) The raw effluent is treated in ETP to remove oil and grease and suspended solids employing treatment process of aerobic biological decomposition in Sequential batch reactor.
  - (c) The existing capacity of ETP is 750 cum/day which is proposed to be enhanced to 1500 cum/day, and thus the marine disposal is designed for 3000 cum/day to meet future requirement.
  - (d) At present, the expected generation of effluent is 1500 cum/day into sea at 1500 m offshore in water depth of 6.7m CD.
  - (e) The outfall will have multiple ports of (8Nos. of 225 dia) oriented at 45° to the horizontal. The estimated dilution is expected to be 163 times initially within 50 m during spring tide.
  - (f) IRS, Chennai has carried out the required survey and demarcation of LTL, HTL and CRZ. The terrain is plane and marine sandy clay in nature.
  - (g) The proposed pipeline crosses the creek carrying tidal water. The surrounding area of the Kesanapalli GGS is covered with vegetation, patches of mangroves and sand humps of 3-4 m height on the Southern parts of the pipeline route.
- **3.11.2** During appraisal, the Committee noted the following:-
  - The proposal is for marine disposal of treated effluents from ETP Pipeline, to be discharged at a distance of 1500 m from the HTL. As per the modelling exercise, the dispersal is found to be well within safe limits of coast line.
  - No mangroves plantation would be disturbed by developing pipeline.
  - The APCZMA has examined the proposal and forwarded the proposal for CRZ Clearance to MoEF&CC vide letter dated25th June, 2015, subject to the implementation of safety regulations, guidelines issued by Ministry of Petroleum and Natural Gas, MoEF&CC, and also fulfilment of certain conditions,

- In the approved CZMP, the entire terrestrial area is classified as CRZ-III.
- The discharge of treated effluent is a permitted activity under para 3 (v) (a) and the activity is regulated under para 4 (ii) (d) & 4 (ii) (e) of the CRZ Notification, 2011, and the proposal requires clearance from MoEF&CC.
- **3.11.3** The EAC, after deliberations recommended granting CRZ clearance to the project subject to the following conditions:
  - There shall be online monitoring of the effluents at the diffuser points at the two extremes of the plume during North East Monsoon period and South West monsoon period. There should also be an online pollution monitoring at the corresponding landing points of the waves on the shore line during this season.
  - The PP shall undertake periodic inspection and maintenance to avoid spillages, wear and tear of the proposed conveying system.
  - Adequate safe guards including Alarm and Emergency shutdown system shall be provided for the proposed conveying system.
  - Proper fire hydrant and file extinguishers shall be provided at appropriate locations conforming to prevailing norms or fire safety.
  - There shall no destruction of the mangroves during construction as well as he operation phase.
  - The top soil of excavated area during the construction shall be kept separately and will be used for vegetation.
  - The labour camps, storage of material and machinery during construction phase shall be away from the CRZ.
  - Crossing of creek shall be on trestles with adequate clearance thereby having negligible impact on the flow.
  - During construction, solid waste generated will include packaging and wrapping material, stubs of spent welding electrodes, used rags and housekeeping etc. The PP shall ensure disposal of such wastes at approved sites. There shall be no disposal in CRZs.
  - There shall be no ground water withdrawal within CRZ limits.
- 3.12 Eco-friendly Resort at Village Manjeri (Badabalu), Tehsil Ferrarganj, Andaman & Nicobar Island by M/s Smartspace Infrastructure Pvt. Ltd. & M/s Surya Chidiya Tapu Resorts Pvt. Ltd. CRZ Clearance [F.No.11-39/2015-IA-III]
- **3.12.1** The project details according to the documents submitted and the presentation made by the project proponent, are reported to be as under:-
  - (i) The Eco-friendly Resort having 65 cottages is proposed in an area of 19 ha (192185 sqm) with a built up area of 11264 sqm with a setback of 50 m, at Bada Balu, Manjeri Village, Ferragunj Tehsil, South Andamans, Andaman & Nicobar Islands. The other facilities include gym, spa, restaurant and adequate parking space.
  - (ii) The project would have one STP of 75 kld capacity, rain water harvesting system and solid waste management system.
  - (iii) The project site is on the shoreline of Bada Balu, Chidya Tapu in South Andamans, and falls under ICRZ-III.
  - (iv) Total water requirement is 160 kld, includes 104 kld od fresh water requirement.
  - (v) Nearly 59 kld of waste water shall be generated from the complex, which shall be treated in a STP of 75 kld capacity based on MMR technology.
  - (vi) Treated waste water of 56 kld shall be reused for flushing, gardening and other purposes, and there shall be no discharge from the complex.

- (vii) A creek is running adjacent (50-100 m away) to two land parcels within the project site. No water shall be discharged into the creek.
- (viii) Green belt shall be developed along most of the periphery of the project area, as well as along roads. Green area shall be approximately 70% of the plot area.
- (ix) The project is located outside the Mahatma Gandhi National Marine Park (approx distance 400 m).
- (x) The Andaman and Nicobar Coastal Zone Management Authority in its meeting held on 2nd November, 2015 has recommended the proposal.
- (xi) The proposal seeks approval of the proposal in terms of the ICRZ Notification, 2011.
- 3.12.2 The EAC, after deliberation, desired that the project proponent shall prepare a layout plan indicating contours based on the ITS maps prepared during the present financial year. This map will indicate the highest Tsunami levels attained as well as the proposed ground level of the building/structures to be located at the sites. The object of this exercise is to ensure that no portion of the public facility is disaster prone.

The proposal was deferred for want of the inputs as above.

## Wednesday 23<sup>rd</sup> December, 2015

- 3.13 Development of Delhi Meerut Expressway and other connecting roads including 6/8 laning of NH 24 from km 0.000 to km 49.923 (Hapur Bypass), NH-58 from km 6.800 (Delhi-UP Border) to km 52.528 (Meerut Bypass) and NH-235 from Km 0.360 to Km 8.800 in the States of Delhi and Uttar Pradesh (Design length 150.147 km) by NHAI Environmental Clearance [F.No.10-63/2013-IA-III]
- **3.13.1** The project details as per the documents submitted and the presentation made by the project proponent, are reported to be as under:-
  - (i) The project envisages development of Delhi-Meerut Expressway and other connecting roads including 6/8 laning of NH-24 from km 0.000 to km 49.923 (Hapur Bypass), NH-58 from km 6.800 (Delhi-UP Border) to km 52.528 (Meerut Bypass) and NH-235 from km 0.360 to km 8.800 in the States of Delhi and Uttar Pradesh, promoted by NHAI, with total length of service roads as 55.876 km.
  - (ii) The new alignment of Delhi-Meerut Expressway from Dasna to Meerut (km 27.500 to 64.552 km i.e.37.052 km) and connector (km 0.000 to 9.004 km) in UP shall be executed as an independent project.
  - (iii) The entire road stretch passes mainly through plain terrain, with no National Park, Wildlife, Eco-sensitive Zone or CRZ area coming across.
  - (iv) The project would cover one major bridge and 4 minor bridges. Also, 19 nos. of culverts shall be improved/widened to 4 lane, and additional 626 nos. to be newly constructed.
  - (v) Land use pattern along the road stretch is mainly agricultural, followed by homestead areas and some barren land. The total land required includes 15.053 ha of forest land (14.018 ha of Chudiyala RF and 1.035 ha of PF at Upper Ganga Canal location. For diversion of forest land, the proposal has been submitted to the State Government.
  - (vi) Total 78 nos of residential commercial structures shall be completely/partially

affected. The affected families/structures shall be compensated as per the National Rehabilitation Policy.

- (vii) Dadri thermal power plant is located within 100 km radius of the proposed alignment. The fly ash from this TPP of the estimated amount of 22,82,831 cum shall be utilized for construction purposes.
- (viii) Total cost of the project is Rs.1657 crore, and the cost proposed for EMP is Rs.1.046 crore.
- 3.13.2 During appraisal, the EAC noted that the object of this expensive project is to speed up traffic movement, decongest the existing traffic, and thus to provide faster traffic movement between Delhi and Meerut. As such, the objective of the project is laudable. However, care has to be taken that the new alignment is not misused as an opportunity for real estate development by providing frequent puncturing and access to this highway as has been done same on the existing National Highway and there shall be proper access control on the highway.

The committee felt that old norms of minimum distance from the highways relates to a period of time when construction did not exceed four floors. As such, the Committee advised the NHAI and MoRTH to re-evaluate the minimum distance between National Highway and construction of 10 storey and above, densely populated construction along the highway. If this is not done urgently, the very purpose of having the highway/expressway would be defeated as has been happened within the NCR in Delhi, Gurgaon, Noida, Faridabad and Kundli.

- 3.13.3 The EAC, after deliberation, recommended the project for grant of environmental clearance, subject to all the generic conditions applicable for building and construction projects, along with the additional conditions as under:-
  - There shall be no frequent puncturing, and proper access control to be provided all along the proposed NH.
  - The expenditure towards EMP has to be proportionately increased to comply with the green belt development plan, and for exigencies, if any.
  - The project proponent shall obtain the required permission for diversion of 808.619 ha of forest land, before start of the project in that area.
  - NHAI and MoRTH shall revaluate the minimum distance between NH and urbanization, industrialization or commercialization of stretches along the NH to avoid congestion.
  - All entry/exit/access points on this highway shall be appropriately designed and preferably frozen to avoid traffic congestion and pollution, defeating the very purpose of this expensive project.
- 3.14 Development of Vadodara- Mumbai Expressway (Phase-I) from km 104.700 (km.390.864 of NH-8) to km 378.722 (km 80.00 of NE-1) in the States of Gujarat, Dadra & Nagar Haveli and Maharashtra by NHAI- Environmental and CRZ Clearance- [F.No.10-57/2013-IA-III]
- **3.14.1** The project details as per the documents submitted and the presentation made by the project proponent, are reported to be as under:-
  - (i) The project envisages construction of new 6/8 lane expressway (phase-I) from km 104.700 (km 390.864 of NH-8) to km 378.722 (km 80 of NE-I) i.e. 274.022 km long stretch in the states of Gujarat, Dadra & Nagar Haveli and Maharashtra, promoted by

NHAI.

- (ii) The road stretch passes through plain and rolling terrain of districts namely, Vadodara, Bharuch, Surat, Navsari and Valsad in Gujarat (260.4 km), UT of Dadra & Nagar Haveli (5.5 km), and District Thane in Maharashtra (8.1 km).
- (iii) The configuration includes 15 m carriageway, 3 m paved shoulder and 3 m earthen shoulder on either side, and 12 m depressed median for 8-lane.
- (iv) The road stretch falls outside the ESZ area of Dadra & Nagar Haveli Wildlife Sanctuary. There is no other National Park, Wildlife or Eco-sensitive Zone coming in its way.
- (v) Land use pattern along the road stretch is mainly agricultural (90.38%), followed by settlements (3.74%), barren land (3%), water bodies (2.16%) and vegetation (0.5%). The total land required of 3444.8529 ha (3229.8739 ha in Gujarat, 77.891 ha in Dadra & Nagar Haveli and 136.988 ha in Maharashtra) includes 96.403 ha of forest land (52.48 ha in Maharashtra, 43.38 ha in Gujarat and 0.543 in Dadra & Nagar Haveli). For diversion of forest land, the proposals have been submitted to the respective State Governments/UT.
- (vi) The project would cover 27 major bridges (including canal bridges), 115 minor bridges (including canal & utility bridges), 623 culverts, 53 VUPs, 18 flyovers, 102 pedestrian, etc.
- (vii) A stretch of 1.273 km (km 283.800 to km 285.166) of the proposed alignment passes through CRZ across Narmada river in Bharuch (Gujarat). Area falling in CRZ-IB is 1.639 ha, in CRZ-III 4.434 ha and in CRZ-IV 9.050 ha. There is no mangrove area affected within CRZ areas.
- (viii) Total 39 religious and 109 community properties, 92 Government and 1109 private properties are likely to be affected. The project affected families/persons shall be compensated as per the National Rehabilitation Policy.
- **3.14.2** During appraisal, the EAC noted that the project has been recommended by GCZMA vide their letter dated 7<sup>th</sup> December, 2012 subject to compliance of certain conditions.
- **3.14.3** The EAC, after deliberation, recommended the project for grant of environmental clearance, subject to all the generic conditions applicable for building and construction projects, along with the additional conditions as under:-
  - The development shall strictly be as per the provisions of CRZ Notification, 2011. The project shall not affect the coastal ecology of the area including flora and fauna.
  - The PP shall ensure that there is no destruction of mangrove near the project site during the construction as well as the operation phase of the project.
  - There shall be no dressing or alteration of the sand dunes, natural features including landscape changes for beautification, recreation and other such purpose.
  - All the conditions stipulated by GCZMA while recommending the proposal, shall be strictly complied with.
  - There shall no ground water drawl within CRZ.
  - The PP shall obtain necessary permission from concerned authorities for their proposed construction.
  - Rehabilitation of project affected families shall be carried out as per the extant policy of the Central/State Government, as provided under the law,

The project proponent shall obtain the required permission for diversion of 96.403 ha of forest land in the states/UT of Maharashtra, Guiarat, and DNH, before start of the project in that area, 3.15 Installation of Proposed Sulphuric Acid (2\*12500 MT) and Phosphoric Acid (2\*10000 MT) storage tanks along with unloading facilities and pipelines at the existing fertilizer Wharf of Coromandel International Limited, Visakhapatnam by M/s Coromandel International Limited- CRZ Clearance - [F.No.11-35/2015-IA-III] 3.15.1 During the presentation, the details were reported to be as under:-Presently, Sulphuric and Phosphoric acids are stored in the leased storage tanks in Vishakapatnam Port Trust (VPT) premises, and transportation to the plant by road through tankers. In order to avoid risks during transportation, it is proposed to install storage tanks in their own premises at wharf and fertilizer berth area. Sulphuric acid storage tank will have unloading facility connected to the plant premises through pipeline. Whereas, Phosphoric acid storage tank shall have unloading by trucks through dedicated road from wharf area to the plant. 3.15.2 It was clarified by the project proponent that the instant proposal is not for isolated storage of both the acids. Also, given the quantum of the acids/chemicals proposed to be stored/handled being more than the threshold ones (as per the statutory provisions), the proposal is covered under category A of the schedule to the EIA Notification, 2006, and thus requires appraisal by the EAC. The committee noted the submissions made by the project proponent. 3.15.3 The EAC, after deliberation, desired a comprehensive Distaster/Environmental Management Plan for the proposal, ensuring safe and eco-friendly handling of the hazardous chemicals. They were requested for exploring best practices regarding risk management and spillage plan, and also to find out if any permission is required from the Indian Coast Guard in this regard. 3.16 Laying of Asia Africa Europe One (AAE-1) Submarine Cable System at Versova Beach, Mumbai, Maharashtra by M/s Reliance Jeo Infocomm Ltd- CRZ Clearance - [F.No.11-40/2015-IA-III] 3.16.1 The project envisages Submarine Cable System landing at Versova beach in Mumbai by M/s Reliance Jio Infocom Ltd. The project is a part of Asia Africa Europe One (AAE-I) Submarine Cable System, spanning around 25,000 km and linking South Asia to Africa and Europe via the Middle East with connections reaching out to 18 countries. The cable will terminate in Mumbai at a Beach Man Hole (BMH) proposed to be located at a beach road connecting JP road to Versova Beach, infront of Harshvardhan Society. Size of the BMH proposed is 4m X 2m X 2m. **3.16.2** During appraisal, the EAC noted the following:-The proposal has been recommended by MCZMA vide their letter dated  $7^{\text{th}}$ December, 2015 subject to compliance of certain conditions. As per CRZ map (scale 1:4000) and report dated 12.2.2015 prepared by IRS, Chennai, the proposed BMH lies in CRZ-II. The shortest distance between inner side (seaward side) of the proposed BHM and the boundary of CRZ-1(B) area is 26.51 m and the shortest distance between centre of proposed BMH and the boundary of CRZ 1(B)

	area is 20.10 m
	area is 28.10 m.
3.16.3	The EAC, after deliberation, recommended granting approval to the project under CRZ Notification, 2011 subject to the following conditions:
	• The activity shall be carried out only in the limited 4-6 hours low tide timings so that there is no water ingress in the excavated area.
	• The PP shall take the help of the local police and Coast Guard Authority and the BMCC while executing this work. It shall be ensured that no excavation is carried out during rising tides or high tide.
	• The excavated area shall be covered after laying the cable, and even the CRZ area shall be cordoned off by floating buoys with warning flasher lights and sound alarm in case of any intrusion into the cordoned area.
	<ul> <li>Labour camps, storage of material and machinery shall be away from the CRZ area.</li> <li>The PP shall obtain all permissions from concerned authorities prior to commencement of the project, and shall observe all safety requirements onshore and offshore.</li> </ul>
3.17	Setting up of 5 MLD Hybrid Desalination Project at IREL complex, Chatrapur, Odisha by M/s Indian Rare Earths Limited - <b>CRZ Clearance -</b> [F.No.11-41/2015-IA-III]
3.17.1	The project details as per the documents submitted and the presentation made by the project proponent, are reported to be as under:-
	(a) The project involves construction of Sea Water Intake Pump House and laying of intake & outfall pipelines (with protecting cables) etc in CRZ area for setting-up 5 MLD desalination plant at Odisha Sand Complex (OSCOM), Indian Rare Earth Ltd (IREL), Matikhalo in Ganjam district.
	(b) The project is one of the sanctioned Department of Atomic Energy {DAE} project titled "Field application of indigenous desalination technology in DAE unit, aimed to meet the fresh water needs of OSCOM as well as to demonstrate the field application of hybrid desalination technology (SWRO-MED) developed by BARC within the Department of Atomic Energy (DAE), Govt of India.
	(c) The project covers 6500 m2 area (130 m2 x 50 m2) to construct the desalination plant with in IREL plant boundary. The proposed activity involves setting up of a 5.0 MLD hybrid sea water desalination plant comprising of 4.5 MLD Sea Water Reverse Osmosis (SWRO) Process and 0.5 MLD Multi Effect Distillation (MED) processes.
	(d) The proposed hybrid desalination plant will receive the chlorinated sea water at the rate of 950m3/hr by installing sea water intake facilities adjoining to OSCOM, IREL and about 500 m away from the plant site. Out of the 950 m3/hr chlorinated sea water, about 750 m3/hr will be processed through SWRO plant to produce 187.5 m3/hr of potable water and balance 200 m3/hr of sea water will be required at the MED plant to produce 20.8 m3/hr of high quality process water. The SWRO plant is a two stage RO (Reverse Osmosis) plant with high efficiency energy recovery device along with membrane.
3.17.2	During appraisal, the EAC noted that the project has been recommended by OCZMA vide their letter dated 25 <sup>th</sup> August, 2015 subject to compliance of certain conditions.

3.17.3 The EAC, after deliberation, recommended the project for grant of CRZ clearance, subject to the conditions as under:-The project/activity shall be carried out strictly be as per the provisions of CRZ Notification, 2011, and shall not affect the coastal ecology of the area including flora and fauna. The PP shall ensure that there is no destruction of mangroves near the project site during the construction as well as the operation phase of the project. There shall be no dressing or alteration of the sand dunes and natural features, including landscape changes for beautification, recreation and other such purpose. • All the conditions stipulated by OCZMA while recommending the proposal, shall be strictly complied with. There shall be no groundwater withdrawal within CRZ areas. 3.18 Improvement of water supply for slum in MbPT area situated at New Tank Bunder Road, Coal Bunder, Lakhri Bunder and Darukhana Mazgaon in 'E' Ward by M/s Municipal Corporation of Greater Mumbai – CRZ Clearance - [F. No. 11-42/2015-IA.III] 3.18.1 The PP did not attend the meeting, and as such the proposal was not considered. 3.19 '400 KV multi circuit Transmission line' for i) Dherand-Negothane ii) Dherand-Palmbeach Road iii) Kharghar-Vikhroli (Maharashtra) by M/s Tata Power Company Ltd.-Amendment in CRZ Clearance - [F. No. 11-17/2014-IA.III] 3.19.1 The proposal seeks amendment in CRZ Clearance to the project '400 KV multi circuit Transmission line' for i) Dherand-Negothane ii) Dherand-Palmbeach Road iii) Kharghar-Vikhroli (Maharashtra) granted in favour of M/s Tata Power Company Ltd, to the extent that the specific condition at para 4 (A) (i) be deleted. The request has been made due to the fact that the said project/activity was not covered under the present consent mechanism for the identified industrial units/activities, as required under the Air Act, 1981 and/or the Water Act, 1974. 3.19.2 The EAC recommended that the Ministry take a view on the request made by the project proponent, in terms of the extant policy in this regard. 3.20 Construction of Groynes in Madhavaram Taluk of Tiruvallur District by Water Resources Department, Govt. of Tamil Nadu - CRZ Clearance - [F. No. 11-44/2015-IA.III] 3.20.1 The proposal seeks CRZ Clearance for construction of groynes in Madhavaram Taluk in District Tiruvallur (Tamil Nadu), proposed by Public Works Department/Water Resource Organization of the State Government of Tamil Nadu. The proposal, after recommended by the Tamil Nadu Coastal Zone Management Authority (TNCZMA) in its meeting held on 17th December, 2014, was placed before the Expert Appraisal Committee (EAC) in the Ministry in its 149<sup>th</sup> meeting held in June, 2015. During the said meeting, the observations of the Committee were as under:-'The EAC took a serious note of the development and expressed the view that the new district wise localized schemes for shoreline protection have potential to cause irreversible damage to adjacent control area and ecology of the area under consideration. Taking this into account, EAC in the past had suggested to the PWD to undertake Integrated Shoreline Management Programme on the basis of a pilot study'

- 3.20.2 In compliance of the directions of Hon'ble NGT, the matter was taken up by the EAC. The committee took note of the report of Advocate Commissioner, as reflected in the NGT order dated 20.10.2015. The Para 4-6 of the same reads as under:
  - "4. The distance from Ernavoorkuppam to Ennore creek is about 3 Kms, is the area under inspection. At Ernavoor Kuppam, the houses of the residents are situated very close to the wall, posing a threat to people living there. There is hardly a 10-20 feet gap between the wall and the houses.
  - 5. At Chinnakuppam, the houses of the residents are situated at a distance of approximately 30 feet from sea wall. And at Periyakkuppam the houses of the resident are situated very close to the sea wall and the distance between the sea wall and houses would be less than 10 feet.
  - 6. At Thazhankuppam, the houses of the residents are situated at a distance about 40 ft. From sea wall and at Nettukuppam the houses are situated at distance of more than 80 ft and few houses were caved in at Nettukuppam."

During the last meeting of EAC, while appraisal of the similar proposal for construction of groynes in Thootikudi District, the observations and recommendations of the committee were as under:-

- (a) The development in CRZ area has been regulated under Coastal Regulation Zone Notification since 19.02.1991. As such the Committee desired to know when the said constructions were done and with whose permission. Further, the Committee felt that such constructions on a sea coast prone to cyclones could be dangerous and not advisable. The report of the Advocate Commissioner does not indicate whether adequate safety measures were undertaken, while allowing such dwelling units in CRZ areas. In an analogous situation, inland constructions on river flood plains are not permitted owing to the potential of the floods, occurring annually or at some intervals, resulting in such constructions get washed away.
- (b) The PP was asked whether any study has been conducted to assess the impact of groynes on adjacent areas. The PP could not provide details on this aspect. The Committee reiterated that the methodology for coastal protection is a subject matter of scientific and technical debate. There are views and counter views on the methodology of construction of groynes in a limited area against that of a comprehensive plan to handle coastal erosion of identified areas.
- (c) The EAC recommended detailed studies not only by one expert, but by one or more expert institutions to ensure a scientifically modelled study on construction of groynes to control the problem of erosion of the coast line of adjacent areas (upstream or downstream of the groynes).
- (d) The EAC was of the considered opinion that a comprehensive view in the matter relating to a substantial stretch could be taken particularly in the jurisdiction of a particular State, and there should not be sporadic/piecemeal solutions to the problems, ensuring that the state authorities do not allow constructions either temporary or permanent in hazardous areas. Otherwise, it would be infructuous expenditure on dwelling units and the groynes. It is the duty of the authorities to ensure that the protection of an area through groynes is not endangering the coastline, as well as people in the immediate vicinity of such protected areas. EAC had already recommended a comprehensive study by expert institutions like NIOT with the objective of studying the problem of the

abovementioned affected areas in entirety. The EAC further suggested that an immediate solution will be to relocate the affected population from the endangered areas during the monsoon period instead of the short term measures suggested in the report, which has not fully examined the impact on the areas in immediate vicinity of the areas proposed to be protected. The EAC also felt that such protection measures should adequately be publicised among the people living in the areas likely to be affected.

- (e) The EAC also noted that there are reports of damage to adjacent areas at locations of the groynes constructed without beach nourishment. No details were made available regarding the measures proposed for beach nourishment along with these proposals. The EAC emphasised that if at all groynes are to be constructed, these should be put in place with provisions for beach nourishment to prevent adverse impact on adjacent coastline areas.
- 3.20.3 The EAC, after deliberation, reiterated its stand as in case of similar proposal for Thoothikudi District, and reiterated that the State Government should prepare an Integerated Shoreline Management Programme and then resubmit the proposal after recommendations by TNCZMA. The project proponent informed that tenders have been invited for the propsed management plan as suggested by the Committee.

The Committee also observed overlapping of the proposals separately by two different Divisions of the same Deptt of the State Govt, thus leading to avoidable confusion. Further, in view of the observations of the Hon'ble NGT, the Committee opined that there has to be an integerated approach by the State Govt for shore management, suitably addressing the concerns, rather than piecemeal solutions in this regard.

With the above observations, the proposal was deferred.

- 3.21 Widening and improvement of the existing highway of 2-lanes with paved shoulder/4lane/6lane of Bhavnagar-Pipavav-Porbandar-Dwarka Section of NH-8E in the State of Gujarat by M/s NHAI Further consideration for EC after site visit [F. No. 10-12/20212- IA.III]
- **3.21.1** The project details as per the documents submitted and the presentation made by the project proponent, are reported to be as under:-
  - (a) The project envisages widening and improvement of the existing 2 lane highway to 2-lanes with paved shoulder/4lane/6lane of Bhavnagar-Pipavav-Porbandar-Dwarka Section of NH-8E, from km 3.200 to km 473.000 i.e. 469.800 km long stretch in the State of Gujarat, promoted by NHAI. It starts at km 3.200 near Adhewada village in Bhavnagar, passes through Talaja, Mahuva, Una, Kodinar, Veravel, Chorwad, Mangrol, Madhavpur, Porbandar, Kalyanpur and ends at Dwarka. The total 468.300 long stretch falls under six districts namely, Bhavnagar, Amreli, Gir-Somnath, Junagadh, Porbandar and Devbhoomi Dwarka.
  - (b) The existing road has 7 m carriageway, shoulder varying from 1 to 2.5 m on either side and ROW from 30-45 m. With the proposed widening/improvement, the ROW would be increased to 30 to 60 m.
  - (c) The road stretch passes mainly through plain/rolling terrain, with no National Park, Wildlife or Eco-sensitive Zone coming across.
  - (d) The project would cover 37 major bridges (16 proposed for widening, 9 for

reconstruction and 12 new construction), and 159 minor bridges. Also, 340 nos. of culverts shall be improved/widened to 4 lane, and additional 626 nos. to be newly constructed.

- (e) The proposed alignment passes through CRZ-IA (340 m), CRZ-IB (3492 m), CRZ-III (23703 m) and CRZ-IVB (896 m) i.e. the total stretch of 28.431 km.
- (f) The total land required includes 653.13 ha of agricultural land and 808.619 ha of forest land. For diversion of forest land, the proposal has been submitted to the State Government.
- (g) Total 2805 nos of residential structures and 1596 nos of commercial structures shall be completely/partially affected. The affected families/structures shall be compensated as per the National Rehabilitation Policy.
- **3.21.2** During appraisal, the EAC noted the following:-
  - (a) The proposal was considered by the Committee in its 149<sup>th</sup> meeting held during 24-26 June, 2015, wherein, it was decided to undertake a site visit by the EAC members for further deliberations.
  - (b) EAC members (Shri M. L. Sharma, Dr. M.V. Ramana Murthy and Shri R. Radha Krishnan) visited the site during 6-9 October, 2015, and submitted their report on 20<sup>th</sup> November, 2015. The sub-committee in its report observed that the alignment of the proposed Highway passes through the CRZ area in two sections namely the Bhavnagar-Veraval and Gadu –Dwarka with a length of about 1.6 km and 27 km respectively. In the Bhavnagr-Veraval section, NHAI has proposed bridges across the creek. The three stretches in Gadu-Dwarka section is of concern are Madhavpur, Porbandar and Dwarka where sparse mangrove are noticed in selected stretches along the Gadu-Dwarka mostly between Porbandar and Dwarka with a length of 130 m, for which NHAI has proposed afforestation.
  - (c) The project has been recommended by GCZMA in its 25<sup>th</sup> meeting held on 10<sup>th</sup> April, 2015 (agenda no.25.2 & 25.3) subject to compliance of certain conditions. However, their recommendations are yet not received in the Ministry.
- **3.21.3** The EAC, after deliberation, recommended the project for grant of environmental clearance, subject to all the generic conditions applicable for building and construction projects, along with the additional conditions as under:-
  - Since roadside trees have to be felled for road widening, adequate compensatory plantation shall be carried out up to the satisfaction of the concerned forest department. A monitoring of the effectiveness of the pollution attenuating barriers will be taken up after 5 years from the planting of roadside trees. The results, of the monitoring programme shall be conveyed to the concerned forest department/ State Pollution Control Board.
  - All mandatory clearances under the applicable law including the Forest Clearance under the Forest Conservation Act, 1980 shall be obtained for diversion of 808.619 ha of forest land and cutting of roadside trees notified as protected forest before starting project work.
  - Blasting shall be carried out during fixed hours (preferably during mid-day) or as permitted by the concerned authority. The timing should be made known to all the people within 1000 m (200m for pre-splitting) from the blasting site in all directions.

- Locations for stockyards for construction materials and labour camps shall be away from the CRZ. Movement of machinery, workforce shall be restricted around the water body and no waste from construction camps or sites shall be disposed into it.
- Cut and fill works shall be carried out strictly in accordance with the design drawings.
- The coastal stretches should be protected with suitable protection measures from coastal erosion.
- The bridge elevation shall be decided based on highest flood level, analysing Tsunami and storm surge.
- Appropriate provisions through pipe/box culvert should be provided to ensure free flow of tidal water. The size of opening shall be decided on the basis of the site conditions.
- The NHAI shall use the fly ash for the proposed project to comply with the Fly Ash Notification, 1999, as amended.
- The development shall strictly be as per the provisions of CRZ Notification, 2011 in the CRZ area. The project shall not affect the coastal ecology of the area including flora and fauna.
- The NHAI shall have to carry out mangrove plantation in consultation with Gujarat Ecology Commission/Forest Department. There shall be no dressing or alteration of the sand dunes, natural features including landscape changes for beautification, recreation and other such purpose.
- All the conditions stipulated by GCZMA while recommending the proposal, shall be strictly complied with.
- There shall no ground water drawl within CRZ.
- The PP shall obtain necessary permission from concerned authorities for their proposed construction.
- Rehabilitation of project affected families shall be carried out as per the extant policy of the Central/State Government, as provided under the law,