Minutes of 165th meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction, Industrial Estate and Miscellaneous projects held on 16-17 January, 2017 at Ministry of Environment, Forest and Climate Change, New Delhi - 3

Day 1: Monday, 16th January, 2017

1. Opening remarks by the Chairman

2. Confirmation of minutes

The EAC was apprised about the last meeting held on 1st December, 2016, and the follow up actions taken accordingly.

3. Consideration of Proposals

3.1	Kop	roli,	ction of Holiday Home re Tal. Alibag, District Ra – CRZ Clearance – [F.No	aigad (Ma	harashtra) k			•
3.1.1	The project proponent did not attend the meeting, and as such the proposal was not considered.							
3.2	Laying of treated effluent disposal pipeline from their plant to final disposal point in the Gulf of Kutch at Mithapur in Gujarat by M/s Tata Chemicals Ltd - CRZ Clearance - [F.No.11-34/2016-IA-III]							
3.2.1	 3.2.1 During the meeting, the project proponent made a presentation and profollowing information to the Committee:- (i) The project involves laying of treated effluent disposal pipeline from the final disposal point in the Gulf of Kutch at Mithapur in Gujarat promo Tata Chemicals Ltd. (ii) The proposal involves up-gradation of existing treated waste water system by installation of trestle mounted pipelines and diffuser discharge point at marine outfall point suggested by NIO beyon Sanctuary and its Eco-sensitive zone. (iii) The total length of proposed treated waste water disposal pipeline 3756 m. The length of pipeline in Non CRZ area is 318.75 m and the pipeline in CRZ area is 3437.25 m. 			their plar oted by er discha system ond Ma	nt to M/s arge n to arine or is			
			Description	CRZ Ar	` _	of Pipeline corrideter)	dor in	
		Sr. No		500m to 100m	100m to HTL (CRZ- III)	CRZ-1A (Mudflats, Mangroves & Buffers)	CRZ- IV	
		1	Pipeline corridor from pumping station to landfall point	435.20	105.90	223.15	-	

2	Pipeline corridor from Landfall point to Marine outfall disposal point to landfall point	-	-	-	2673
3	Total Pipeline Corridor	435.20	105.90	223.15	2673
The length of pipeline in Non CRZ area is 318.75m					
The total length of proposed treated waste water disposal pipeline is 3756					

(iv) The details of land use pattern are given below:

m.

S. No.	Location	Area (ha)
1	Pumping System and Pipeline corridor in notified Eco-sensitive zone (Land ward side)	0.711
2	Pipeline corridor in notified Ecosensitive zone (Sea Side)	0.918
3	Pipeline corridor in notified Marine Sanctuary	11.268

- (v) Total water requirement and its source: No additional water is required.
- (vi) Waste water generation, treatment and disposal: The proposal involves upgradation of existing treated waste water discharge system by installation of trestle mounted pipelines and diffuser system to discharge point at marine outfall point suggested by NIO. Treated waste water 240,000 KLD with existing treatment facilities.
- (vii) **Municipal solid waste generated disposal facility**: There will not be municipal solid waste generation due to this improvement proposal.
- (viii) **Power requirement and source:** Power Requirement: 2x 1250 KW (1 Working+01 Stand By Pump), 3.3 KV, which will be sourced TCL Captive supply.
- (ix) Investment/Cost of the project: Rs. 229 Crores.
- (x) **Benefits of the project:** Disposal of treated waste water through pipeline and diffuser system will provide better dispersion.
- (xi) **Employment potential:** The proposed project will be part of existing operations.
- (xii) **Wildlife issues:** Yes, The proposed pipeline corridor in parts would pass through Marine sanctuary.
- (xiii) **Eco-Sensitive Zone in 10 km radius area:** Yes, project is within Eco Sensitive Zone Area.
- (xiv) **Details of Forest land:** Yes, 11.268 ha area of Marine Sanctuary. This area is also declared Mangrove forest as per Draft notification No. GVN/1999(8)/JJM/1692/1652/K. Settlement order No. K/FSO/T-3/1548/2013-14 of FSO, Junagadh, dated 11/05/2013 is yet to be finalized by Government of Guiarat.
- (xv) Tata Chemicals' proposal for Diversion of 11.268 Ha Marine Sanctuary area is approved by NBWL in the 39th Meeting dated 23rd August, 2016.
- (xvi) CRZ study has been conducted by Institute of Remote Sensing (IRS), Anna University Chennai.
- (xvii) **SCZMA Recommendations:** Gujarat Coastal Zone Management Authority has recommended the proposal from CRZ perspective.
- (xviii) **Employment potential**: The proposed project will be part of existing operations.
- (xix) **Benefits of the project**: Disposal of treated waste water through pipeline and diffuser system will provide better dispersion.

The EAC, in the first instance, noted that the industrial operations/activities in the plant premises at Mithapur involved manufacturing of Soda ash. The plant also has the captive power generation facility. The proposed pipeline would carry the treated effluent from both the operations/activities at the plant to the disposal point in the Gulf of Kutch in western coast of Gujarat. As such, the proposal remains an integral part of all the industrial operations/activities, including manufacturing of Soda ash, listed separately as the industrial projects/activities in the schedule to the EIA Notification, 2006 and thus requiring prior environmental clearance.

The EAC was informed about the provision contained in para 4(i) (b) of the CRZ Notification, 2011, for the projects listed under this Notification and also attracting the EIA Notification, 2006, provides for clearance under the EIA Notification, 2006 only subject to being recommended by the State/UT CZMA.

The project proponent further informed the Committee that their proposal for expansion of Soda ash plant has been submitted to the Ministry for grant of EC in terms of the EIA Notification, 2006. Considering the provisions of the CRZ Notification, 2011, the EAC suggested the project proponent to revise the said proposal accordingly for consideration under the EIA Notification only by the sectoral EAC.

- 3.2.3 The proposal was, therefore, not taken forward by the EAC with the recommendation to transfer the proposal the concerned sector. However Committee observed that the EIA has glaring gaps especially in the marine biodiversity part. Full EIA report was not presented to the Committee. Executive summery also does not show plume dispersion model. However from the executive summary it is evident that the effluent plume may have serious deleterious effects on the coral reefs of Poshitra, Beyt Dwarka, Paga and Boria islands. Statements made in Wildlife Conservation Plan such as 'The intertidal area of the Gulf of Kutch is muddy and devoid of live corals' are not just misleading but also factually inaccurate. The adjoining areas of the discharge point i.e. Poshitra Bay is last remaining feeding ground of Critically Endangered Dugong whose western Indian population is confined to this part of Gulf of Kutch. Poshitra is also a site of endemism being Point Endemic area for Sakuraeolis gujaratica as well as Type Locality of recently described Anteaeolidiella poshitra both critically endangered molluscs. The Committee therefore suggests indepth assessment of marine biodiversity of the proposed region including Poshitra, Paga, Beyt Dwarka and Boria Islands and impacts of the proposed project on the same before placing for the considering for the concerned sector.
- Laying of standby pipeline parallel to exiting pipeline disposal of treated effluent into the river Par estuary from CETP of Atul, District Valsad (Gujarat) by M/s Atul Ltd Further consideration for CRZ Clearance [F.No.11-24/2016-IA-III]
- 3.3.1 During the meeting, the project proponent made a presentation and pr2ovided the following information to the Committee:-
 - (i) The project involves laying of standby pipeline parallel to exiting pipeline for disposal of treated effluent into the river Par estuary from CETP of Atul, District Valsad (Gujarat) promoted by M/s Atul Ltd.
 - (ii) Components in CRZ area: Laying of 630 mm OD HDPE pipeline.
 - (iii) The proposed treated effluent discharge pipeline is passing through Par river which is a tidal influenced inland water body. Hence, demarcation of HTL, LTL and coastal regulation zone for 4 Km long pipeline for treated effluent discharge in river

Par has carried out by Institute of Remote Sensing, Anna University, Chennai. Comprehensive marine EIA study for release of treated effluent from the company and Bio assay test for treated effluent has been carried in detail from NABET accredited consultant M/s. En-vision Enviro Technologies Pvt. Ltd. Surat. (iv) **SCZMA Recommendations:** The Gujarat Coastal Zone Management Authority has recommended the project vide their letter dated 28th June, 2016. (v) Whether the project is in Critically Polluted area: No. (vi) **Cost of the project**: Rs.10 crore (Approx.) 3.3.2 The project was earlier considered by the EAC in its 162nd meeting held on 29-30 August, 2016 wherein the Committee desired that project proponent may be first asked for status of compliance of conditions stipulated in CRZ Clearance. The proposal was accordingly deferred. 3.3.3 The EAC, in the first instance, noted that no compliance status for the conditions stipulated in the earlier CRZ clearance, was made available through the Regional Office at Bhopal, which was essentially the requirement as per the last deliberations by the Committee. The Committee further observed that the said proposal was to be considered from the same footing as the earlier one listed at Agenda 2.2 above. Accordingly, the relevant provisions of the CRZ Notification, 2011 would be equally applicable in the instant case also. 3.3.4 The proposal was, therefore, not taken forward by the EAC with the recommendation to transfer the proposal the concerned sector. Setting up of an industrial area at Village Kundiya, District Banswara (Rajasthan) 3.4 by Rajasthan State Industrial Development and Investment Corporation Limited -Further consideration for finalization of ToR - [F.No.21-2/2016-IA-III] 3.4.1 The project proponent made a presentation and provided the following information to the Committee:-(i) The project involves setting up of an industrial area at Village Kundiya, District Banswara (Rajasthan) by Rajasthan State Industrial Development and Investment Corporation Limited. (ii) The proposed project is the establishment of industrial area with ancillary units in the industrial area with having an area of 115.80 Acres and categorization of industries are made based on the market survey and demand potential and Classification of industries based on the pollution loads approved by State Pollution Control Board. The proposed industrial estate shares a boundary of 10 Km study area with Madhya Pradesh state. (iii) Justification of Selection of the site: No alternate sites are considered for the development of Industrial area in Kundiya. The proposed site based in Kundiya is selected based on the environmental factors and also the Economic consideration, as the location is located close to National highway 113 and share the boundary with Madhya Pradesh state which supplements the economic growth for Rajasthan and India. (iv) The main reasons for establishing Industrial area at Kundiya are: To improve the Industrial Infrastructural facilities in Banswara district, Rajasthan.

- Availability of skilled manpower at short distance less than 75 km.
- Government's positive attitude towards the industrialization
- (v) The proposal is for the development of industrial area at Kundiya Village, Banswara district, Rajasthan by Rajasthan State Industrial Development & Investment Corporation Limited with a total area of 115.80 Acres. The project component involves Roads, Drainage System, Electrical Lines, Truck Parking, Admin Building, Staff Canteen, Ancillary Units, and Solar Street Lightning. The site is well connected to Ratlam Railway Station 47.2 km E, the main connecting route is through NH-113.
- (vi) **Investment/Cost**: The total cost of the project including infrastructure setup is Rs.30 Crores.
- (vii) Whether project is in critically polluted area: No, the project and area doesn't classify under CEPI and it's not applicable to the proposed project.
- (viii) **Forest land:** No forest land and diversion is involved for the proposed Industrial Area.
- (ix) Court cases if any: Not Applicable.
- (x) **Employment Potential**: The project is going to create some employment. Due to this project activity, some persons in the project area will be recruited as skilled and semi-skilled workers by the company as per its policy. Therefore, some employment and income are likely to be generated for the local people. So, the project will contribute in a positive manner towards direct employment in the project area.
- (xi) **Benefits of the project**: The Company will supply its product to the domestic market which is likely to improve the regional economy.
- (xii) **Peripheral Developments**: RIICO intends to take up developmental work in the periphery area. Different such works include the following:
 - Support existing schools for development of education in the area.
 - Help in imparting vocational training to local eligible youth.
 - Provide health facilities by way of medical check-up, by holding medical camps etc. in the neighbourhood.
 - Thus, the proposed project shall usher in the social and economic upliftment of the persons living in the vicinity of the Project i.e. of society at large.
- The project was earlier considered by the EAC in its meeting held on 28-29 June, 2016 wherein the Committee noted the following:-

The project proponents have themselves admitted that Form-I as submitted does not appropriately reflect the proposed industries. In fact, the description regarding industries in Form-I is vague and not specific. In his oral submission the project proponent mentioned that he would also be lodging pharmaceutical industries in the nature of bulk drug manufacture. As such, Form-I would need to be amended accordingly and re-submitted for consideration of the proposal for Terms of Reference. The proposal was accordingly deferred that time for want of the desired information.

During deliberations, the project proponent were unable to clarify the details of industrial units/activities to be housed in the proposed industrial area. It was noted that the area falls under Semi Critical Ground Water Areas, and thus permission from Central Ground Water Authority would also be required. .The EAC noted that categorisation of industries remains an essential criteria/parameter to arrive at its jurisdiction for considering the proposal. The revised Form-I submitted by the project proponent was again found deficient, and differing from the presentation during the meeting.

3.4.4	In view of the above, consideration of the proposal was deferred.
3.5	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 (Andhra Pradesh) by M/s Coromandel International Limited - Further consideration for CRZ Clearance - [F.No.11-35/2015-IA-III]
3.5.1	While deliberations on the proposal, the EAC was informed about the observations in its earlier meetings and the response of the project proponent, as explained below: (i) The project was first considered by the EAC in its 154 th meeting held on 22-23 December, 2015, wherein the Committee desired for a comprehensive Distaster/Environmental Management Plan to ensure safe and eco-friendly handling of the hazardous chemicals. The project proponent were asked for exploring best practices on risk management and spillage plan, and also to find out if any permission
	In response, the Disaster/Environment Mangement Plan was submitted by the project proponent. Regarding Best Risk Management Practices, it was informed that well designed pipelines with exapnsion loops would be used. Storage tanks are designed to withstand worst weather conditions, good engineering practices, National standards and applicable codes would be adopted. With regard to permission from Indian Coast Guard, it was reported that thier facility was examined by the Commandant & Dist. Pollution Response Officer for COMDIS-6 (AP) along with his team. It has been recommended to comply with Tier-I capability for ship berthing as per NOS-DCP (National Oil Spill Disaster Contingency Plan).
	(ii) The EAC in its 157 th meeting held on 27-28 April, 2016, was not satisfied with the Disaster Response Plan for acid spillage. The Committee desired that the project proponent shall resubmit the proposal with a provision of dyke spill hold equal to the entire tank capacity within the dyke area, collectively or individually, depending upon the dyke design. This was done in the interest of industrial and public safety.
	(iii) Further, in its meeting held on 30-31 May, 2016, the EAC took objection to the contents of the letter dated 15 th April, 2016 submitted by the project proponent, and observed that the facts therein were misinterpreted and wrongly recorded, directing the proponent to follow the best available international practices. On their request to consider the proposal in the light of the standards prescribed by the BIS and OISD, the Committee opined that standards prescribed by OISD are applicable to Oil Industries, whereas, standards prescribed by BIS are voluntary. The failure of all sulphuric acid storage tanks is possible during natural calamities, or an explosion or mischief, and in that case, it would result huge spillage of harmful and highly hazardous chemicals. Therefore, the Committee was of the firm view that in larger public interest and safety, dyke capacity is to be increased to the total storage capacity of Sulphuric Acid of all the tanks in the tank farm area.
	During the meeting, the EAC made it categorical that the safety provisions should cover the entire tankage and not just the one tank even if it is the largest tank, and that public safety should not be compromised at any cost, while storing this hazardous chemical, keeping in view some recent accidents and heightened security concerns.

3.5.2 The EAC, in the first instance, observed that the proposal is similar to the earlier one listed at Agenda 3.2 above, and should have been considered under the EIA Notification, 2006 only by the sectoral EAC based on the recommendations of the State CZMA. However, in view of the earlier deliberations, the Committee agreed to consider the proposal from CRZ perspective and send its comments to the concerned sector for further action. The Committee further noted that neither EIA/EMP reports for the proposal nor the detailed response to their earlier observations, were timely circulated and made available to the members. As such, the proposal could not be considered on merits within the jurisdiction of the EAC. In view of the facts stated in para 3.5.2 above, consideration of the proposal was 3.5.3 deferred. 3.6 Conversion of Aviation SEZ to Multi sector SEZ at Rajiv Gandhi International Airport, Shamshabad, District Rangareddy (Telangana) by M/s Hyderabad International Airport Limited - Finalization of ToR - [F.No.21-77/2016-IA-III] 3.6.1 During the meeting, the project proponent made a presentation and provided the following information to the Committee:-The project involves conversion of Aviation SEZ to Multi sector SEZ at Rajiv (i) Gandhi International Airport in Shamshabad, District Rangareddy (Telangana) promoted by M/s Hyderabad International Airport Limited. (ii) The proposed conversion is within the approved aviation SEZ. Land has already been in possession and converted to industrial use. Justification for selection of the site: GMR Aerospace & Industrial Park layout of 253.85 acres, was established within the airport premises abutting existing airside as the envisaged aviation related activities like MRO, aircraft assembly, etc. mandated airside access to facilitate corresponding processing activities. The said project is an upgradation of the existing sector specific SEZ to Multi sector SEZ to meet the business feasibility and industrial interests received from prospective SEZ customers. The present proposal is for the change of Aviation SEZ to Multi Sector SEZ that will have industrial units/activities relating to aviation, Pharma, Gems & Jewellery, electronic, etc. No addition land is required as part of the proposed conversion. Entire development will take place within the approved SEZ area of 253.85 acres. Rajiv Gandhi International airport is serving the metropolis of Hyderabad located at Shamshabad, about 22 km south of Hyderabad. The airport is about 40 km from Secunderabad railway station. 11.6 km PV Narasimha Rao Expressway from Mehdipatnam to Rajendranagar provides dedicated high speed travel to the airport and Nehru outer ring road serves as a controlled access highway. (vi) Cost of the project: No additional cost is involved. (vii) Whether the project is in Critically Polluted area: No (viii) If the project involves diversion of forest land, extend of the forest land: No. (ix) If the project falls within 10 km of eco- sensitive area, Name of ecosensitive area and distance from the project site: No. CETP: All units will be design as per the Zero discharge concept. For Domestic (x) waste water treatment, state-of-the-art STP has been established. (xi) Domestic water requirement is 672 KLD and the industrial water requirement is 4771 KLD, proposed to be met from the existing water supply.

(xii) **Power Requirement:** Power requirement for the proposed modernization would be 43 MW which will be met from Telangana Power Transmission Corporation Limited (TSTRANSCO). (xiii) Water bodies, diversion if any: No. (xiv) Court cases if any: No. (xv) **Employment Potential:** The proposed project will enhance direct & indirect employment for both skilled and non-skilled jobs. (xvi) Benefits of the project: GHIAL's SEZ has seen limited growth during lasts 6 years and is presently operating at just 11% occupancy. With the revised sector focus & the business interests received from various related industry segments in the identified sectors, it is perceived that GHIAL would be able to capitalize upon the opportunities in next 3-5 years to make the SEZ fully operational with diverse but coherent industrial units, that will in long run will provide requisite impetus to develop the region as an economic hub of Hyderabad with Airport City as it core. 3.6.2 The EAC noted that the proposal is for development of Multi Sector SEZ in place of earlier proposed Aviation Sector SEZ in the same area of 253.85 acres at Rajiv Gandhi International Airport in Shamsabad, District Rangareddy (Telangana). The proposed Multi-Sector SEZ would be housing industrial units/activities relating to aviation, Pharma (formulation only), gems & jewellery, electronic, etc. During deliberations, the project proponent clarified that none of the units/activities in the proposed Multi Sector SEZ, would be covered either under category A or B as specified in the schedule to the EIA Notification, 2006. As such, since the area involved is much less than 500 ha, the proposal may not be requiring prior EC. The Committee desired that the Ministry may take a view in this regard, if so required. The Committee also felt that bird hazard is a serious concern for aviation sector and comprehensive study must be done by a reputed institution such as SACON, not just for airport, but also for SEZ areas, especially due the fact that multi-sector SEZ can become heaven for birds and if not planned well, can have serious risks to aircrafts. 3.6.3 In view of the deliberations, the EAC was not inclined to consider the proposal any more, and asked the project proponent to withdraw the same. 3.7 Development of Petroleum, Chemicals and Petrochemical Investment Region (PCPIR) at Paradeep encompassing parts of Jagatsinghpur and Kendrapara districts in Odisha by Odisha Industrial Infrastructure Development Corporation -Finalization of ToR - [F.No.21-78/2016-IA-III] 3.7.1 During the meeting, the project proponent made a presentation and provided the following information to the Committee:-The project involves development of Petroleum, Chemicals and Petrochemical (i) Investment Region (PCPIR) at Paradeep encompassing parts of Jagatsinghpur and Kendrapara Districts in Odisha promoted by Odisha Industrial Infrastructure **Development Corporation.** (ii) The geographical co-ordinates of the project site are Latitude 20°13'31.76"N to 20°24'40.65"N and longitude 86°26'35.96"E to 86°43'14.71"E. The study area mainly comprises of agricultural land with settlement areas. It (iii) also covers coastal mangrove swamps of Mahanadi & Devi river delta region. There are a number of Casuarina, Cashew nut and Eucalyptus plantation blocks in the non-mangrove areas and coastal sand dunes. A good number of aquaculture areas exists in and around the mangrove swamps. Six to seven forest blocks of Mahanadi & Devi river wetland areas exist towards the bay face of the project area. Forest Department of Odisha is involved in the conservation of coastal mangrove. In the marine zone, diversity of fish is being conserved and other commercial resource exploitation is also being properly regulated.

- (iv) **Justification for selection of the site:** Some of the key advantages of locating the PCPIR at the said site at Paradeep are:
 - Existing petrochemical hub with IFFCO-Fertilizer unit, Paradeep Phosphates Limited, Paradeep Carbons Limited (Goa Carbons), Coal to Liquid Project (M/s. SASOL & M/s. Tata Steel), IOCL plant, etc.
 - Feedstock sourcing and sea connectivity
 - ➤ Proximity to Refinery-cum-Petrochemical Complex, the anchor project of IOCL, proposed as the feedstock source for downstream units
 - Proximity to Paradeep Port and potential proximity to upcoming Dhamra Port and proposed Astranga Port
 - Hinterland connectivity
 - Proximity to NH-5A: Connectivity to Golden Quadrilateral
 - ➤ Proximity to SH-12: Connectivity to Bhubaneswar-Cuttack Metropolitan Region
 - Proximity to Cuttack-Paradeep and Haridaspur-Paradeep links of East Coast Railway connecting to Chennai-Howrah Trunk Line
 - ➤ Biju Patnaik Airport at Bhubaneswar: proposed to be upgraded to international airport and Greenfield airport proposed in the region
 - Proximity to water sources in the region: Taladanda and Kendrapara Canals
 - Land availability
 - Proximity to coast for marine disposal of treated effluents
 - Proximity to Central Institute of Plastics Engineering and Technology (CIPET) at Bhubaneswar.
 - Proximity to urban centres of Paradeep and Bhubaneswar-Cuttack Metropolitan Region
- (v) PCPIR includes Refinery cum petroleum complex; primary and secondary petrochemical parks; petroleum product parks; Integrated waste management site; multi project SEZ, R&D complex; allied and fine chemicals park; plastic park; commercial hub; captive power plant; township; logistic hub, etc.
- (vi) Paradeep PCPIR is proposed to be developed in a total area of about 284.15 sq km (28415 ha) falling in Jagatsinghpur and Kendrapara districts. Processing Area is 123.01 sq km, Non-processing Area: 161.14 sq km.
- (vii) The PCPIR shall cover 26 villages of Ersama Block, 63 villages of Kujang Block, Paradeepgarh town and Paradeep Municipality in Jagatsinghpur district and 52 villages of Mahakalapada Block, 12 villages of Marsaghai Block in Kendrapara District (Odisha).
- (viii) Paradeep is well connected by roadways to all major cities of the state and the country. The National Highway-5A connects Paradeep to Bhubaneswar. Paradeep is also connected to Cuttack via State Highway-12. A Greenfield road corridor connecting Paradeep to Bhubaneswar is being taken up as a dedicated link to the state capital.
- (ix) Paradeep Port is the major port in the state of Odisha situated 210 nautical miles south of Kolkata and 260 nautical miles north of Visakhapatnam. Paradeep port has an annual cargo handling capacity of 108.50 MMTPA.
- (x) Total investment for total infrastructural development is Rs.13,634 crores.

- Investment potential in the project is Rs.2,77,734 Crores.
- (xi) Whether the project is in Critically Polluted area: No.
- (xii) **Diversion of forest land, extend of the forest land:** No forest land exists within the project area.
- (xiii) If the project falls within 10 km of eco-sensitive area: There is no eco-sensitive area within 10 km. radius area of the project.
- (xiv) No new port is proposed.
- (xv) The generated effluents are proposed to be treated in a CETP, followed by disposal to the sea at 3 km away from the shoreline.
- (xvi) As per the estimation, Process/ industrial solid wastes during the Phase I is about 1500 TPD and during the Phase II, it is about 1100 TPD. The municipal / domestic solid wastes generated are proposed to be subjected to composting and land filling in a sanitary landfill. Hazardous solid wastes will be treated in a common hazardous waste treatment, storage and handling facility (CHWTSDF) consisting of secured land fill, incinerator, etc.
- (xvii) Total water demand has been estimated at about 620 MLD (Phase 1 water demand: 300 MLD, Phase 2 water demand: 320 MLD). The water demand includes industrial water, domestic water, fire extinguishing and for green area development. Such water will be sourced from Taldanda and Kendrapara canals (River Mahanadi and river Chitrapola). Clearance shall be obtained from the Competent Authority.
- (xviii) Power (around 2000 MW) will be sourced from the captive gas based power plant (1000 MW) and the balance from the grid.
- (xix) No ground water will be used in the proposed project.
- (xx) The Paradeep PCPIR has an average elevation of 3 m above Mean Sea Level and the ground level varies from 1 m to 8 m. The area is quite flat with few undulating depressions and is sloping from North-West to South- East.
- (xxi) There will be some minor rehabilitation issues in the project, which will be addressed following Nation/ State R&R Policy.
- (xxii) Water bodies, diversion if any: The river Mahanadi, Brahmani and Baitarani along with their distributaries form the drainage system of the Kendrapara district. River Mahanadi flowing from west to east is main water body, forming the northern boundary of Jagatsinghpur district. The river Devi, a tributary to Kathajori and flowing north-northwest to south-southeast with a meandering course also forms a drainage system in Jagatsinghpur district. Together with the rivers Brahmani and Baitarani, river Devi forms a large delta before emptying into the Bay of Bengal at Dhamra. Mahanadi River flows through a vast stretch with numerous perennial and non-perennial streams in the Paradeep area and forms a network of large and small rivers before joining the Bay of Bengal.
- (xxiii) Court cases if any: No.
- (xxiv) **Employment potential**: 6,48,000 (direct employment 2,27,000; indirect employment 4,21,000).
- (xxv) **Benefits of the project:** The proposed investment region is one of the PCPIRs approved by the Central Government under the PCPIR Policy. The PCPIR is expected to reap the benefits of co-siting, networking and greater efficiency through the use of common infrastructure and support services. IOCL's 15 MMTPA oil refinery at Paradeep has been identified as the Anchor tenant, which will provide feedstock support to the downstream industries in the value chain. The PCPIR is expected to attract investment to the tune of Rs.2.78 lakh crore with employment potential of 6,48,000 (direct employment 2,27,000; indirect employment 4,21,000).

3.7.2 While deliberations, the EAC noted that the IOCL refinery of 15 MMTPA is already in operation as the Anchor Tenant in the proposed PCPIR covering a total area of 28415 ha. In such a case, and in terms of the EIA Notification, 2006 mandating prior environmental clearance to the identified industrial projects/activities, the proposal for grant of Terms of Reference for the proposed PCPIR needs to be revised at the reduced area (excluding the IOCL complex already in operation). 3.7.3 The Committee desired that the Ministry may take a final view on admissibility of the proposal in terms of the provisions of the EIA Notification, 2006. 3.8 Construction of 6 laning of Bangalore - Chennai Expressway from Bangalore (km 0.000) to Chennai (km 258.800) including spur alignments in the States of Karnataka, Andhra Pradesh and Tamil Nadu by National Highways Authority of India - Extension of validity of ToR - [F.No.10-44/2013-IA.III] 3.8.1 During the meeting, the project proponent informed the Committee that the proposal for 6 laning of Bangalore - Chennai Expressway from Bangalore to Chennai covering the States of Karnataka, Andhra Pradesh and Tamil Nadu, is presently under revision, and a new alignment is being planned. As such, the instant proposal stands in fructuous. In view of the above, the project proponent decided to withdraw the proposal and to apply afresh after finalization of the project profile. 3.8.2 The EAC desired that the above proposal for grant of ToR may be declared null and void, and to be delisted. 3.9 'Chamarajanagara Industrial Area' at Badanakuppe & Kallambelli Village, Chamarajanagara Taluk & District, Karnataka by Karnataka Industrial Areas Development Board (KIADB) - Environmental Clearance - [F.No.21-58/2015-IA-III] 3.9.1 During the meeting, the project proponent made a presentation and provided the following information to the Committee:-(i) The project involves setting up of Chamarajanagara Industrial Area at Badanakuppe & Kallambelli Village, Chamarajanagara Taluk & District, Karnataka promoted by Karnataka Industrial Areas Development Board (KIADB). The project is located at 11° 58' 55.70" N Latitude and 76° 52' 59.35" E longitude. (ii) project is covered under category A of item 7 (c) Estates/Parks/Complexes/Areas, Export Processing Zones, Special Economic Zones, Biotech Parks, Leather complexes in the schedule to the EIA Notification. 2006. Total area required for the development is 591.04 ha. (1460.47 Acre). (iii) (iv) During construction phase, total projected water requirement of 20 KLD is proposed to be met through ground water sources/tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force. (v) During operational phase, total water demand of the project is expected to be 10068 KLD and the same will be met by the 6117 KLD fresh water & 3951 KLD recycled water. Wastewater generated (4158 KLD) uses will be treated in 2 STPs (2*0.6=1.2MLD capacity) & 1 CETP of 5 MLD capacity. 3951 KLD of treated waste water will be recycled (395 KLD for Industrial use/flushing & 3556 KLD for gardening). After usage remaining treated water (if any) will be disposed in to

municipal drain. (vi) It is proposed that the industrial park will stick to the Zero Liquid Discharge policy to avoid contamination of the nearby areas and so the groundwater. A systematic CETP and STP are operational 24 Hours to treat the wastewater generation from different systems. Wastewater treated from these facilities will be used as a secondary purpose in the industries and also for the landscape development. (vii) About 9 TPD solid wastes will be generated in the project. The biodegradable waste (6 TPD) will be processed in OWC and the non-biodegradable waste generated (2.8 TPD) will be handed over to authorized local vendor. (viii) Total power requirement during construction phase is 100 KVA and will be met from KPTCL/other sources and total power requirement during operation phase is 6 MW and will be met from KPTCL. (ix) An area of 33% will be left for development of greenbelt from the total project area (including 20% of Individual Industries). 15 m wide along the boundary, 2 m along the internal roads and along the internal boundary of individual industries, and in open areas. Plantation will be taken up immediately after obtaining necessary statutory clearances. Local species of 2 to 3 years old will be used for plantation. Over all RHH from Rooftop rainwater of buildings, roads & greenbelt will be collected in RWH tanks of total with a flow of 65957 m³/hr capacity for harvesting after filtration. (xi) Truck Parking facility is proposed in 73 acres of industrial area. (xii) Proposed energy saving measures would save about % of power (as per the procedure). (xiii) Wildlife issues: It is not located within 10 km of any Eco Sensitive areas. (xiv) There is no court case pending against the project. (xv) Investment/Cost: The total cost of the project is Rs.91 Crores, cost towards environmental mitigation measure is about Rs.26.56 Crores and for CSR activities Rs.1.96 Crores. (xvi) Employment potential: Around 17,000 jobs will be generated due to the proposed project. Employment will be given based on the qualifications and minimum pre requisite conditions will be placed before the selection of candidate based on the nature of the job. (xvii) Benefits of the project: To development Industrial development in the region, Local employment improvement & Infrastructure & amenities will be developed. (xviii) ToR Details: ToR was granted by the MoEF&CC vide letter No.21-58/2015-IA-III dated 19th June, 2015. (xix) Public Hearing: Public Hearing was conducted on 20th July, 2016 at the project site i.e. Chamarajanagara Industrial Area, Badanakuppe & Kallambelli Village, Chamarajanagara Taluk & District, Karnataka. During deliberations, the EAC observed that no details were available regarding industrial units/activities including their categorization (whether A or B), to be housed in the proposed industrial area, and as such, there was partial compliance of the terms of reference issued for the project on 19th June, 2015. The Committee further noted that details are essentially required to justify the efficacy of the proposed CETP, disposal of hazardous waste and also to stipulate the conditions accordingly. The proposal was, therefore, deferred for want of the desired inputs from the project proponent. Development of SEZ for Pharmaceutical and Chemical manufacturing units

intake and outfall and for desalination plant at Narasapuram village, Nakkapalli

3.9.2

3.9.3

3.10

Mandal, Visakhapatnam District (Andhra Pradesh) by M/s Hetero Infrastructure SEZ Ltd. - Amendment in Environmental and CRZ Clearance - [F.No.21-641/2007-IA-III]

- 3.10.1 The project proponent made a presentation and provided the following information to the Committee:-
 - (i) Earlier, the Environmental and CRZ Clearance was granted on 25th October, 2010 to the project 'Development of SEZ for Pharmaceutical and Chemical manufacturing units intake and outfall and for desalination plant' at Sy. No. 215, 286/1, 286/2, 283/1, in Ch. Lakshmi Puram, 312/1 to 312/5, 312/10 to 312/12, 313/1 to 313/7 of Rajaiahpet, 19(part) in Pedda Teernala, 117/1 to 117/3, 119/1, 119/2, 120/1, 120/2, 125, 126, 129/1 to 129/9, 138, 142, 150, 512 at Narasapuram village, Nakkapalli Mandal in Visakhapatnam District (Andhra Pradesh) promoted by M/s Hetero Infrastructure SEZ Ltd.
 - (ii) The project site is located at 18^o 08' 21" N Latitude and 83^o 39' 25" E Longitude.
 - (iii) Now, the proposal is for amendment in the Environmental/CRZ Clearance dated 25th October, 2010 due to installation of turbine to generate 6.1 MW power utilizing steam from existing 45 TPH coal fired boiler in existing SEZ.
 - (iv) Total land area is 138.51 ha. No additional land required for proposed installation of turbine in existing SEZ.
 - (v) The details regarding present water requirement and waste water generation are as under:-

Description	As per EC	Utilized	Balance
Water Consumption (KLD)	1674	546.15	1127.85
Wastewater Generated (KLD)	1132	264.15	867.85

As such, there shall be no additional usage of water and wastewater generation on account of installation of turbine in existing SEZ, and could be adequately met with the existing arrangement.

- (vi) No solid waste would be generated due to installation of turbine to generate 6.1 MW power.
- (vii) The proposed installation of turbine will generate 6.1 MW and same will be utilized for API Units located in Hetero Infrastructure SEZ limited.
- (viii) **Wildlife issues**: There are no ecologically sensitive areas like national parks, sanctuaries within 10 km radius of the site.
- (ix) **Cost/Investment**: Rs.11.45 crores for installation of turbine and other accessories for transfer of power.
- (x) **Employment potential:** No additional employment.
- (xi) **Benefits of the project:** The project is a net gain, as power is generated with the envisaged utilities only.
- (xii) There is no court case pending against the project.
- 3.10.2 The EAC noted that the proposal is for amendment in the Environmental/CRZ Clearance dated 25th October, 2010 due to installation of turbine to generate 6.1 MW power utilizing steam from existing 45 TPH coal fired boiler in existing SEZ. To take forward such proposals, compliance status of earlier EC/CRZ Clearance conditions is essentially required.

The EAC asked the project proponent to submit the desired compliance status through 3.10.3 the concerned Regional Office of this Ministry for further consideration of the proposal. 3.11 150 MLD Sea Water Reverse Osmosis Desalination Plant at Nemmeli, Thiruporur Taluk, District Kancheepuram (Tamil Nadu) by M/s Chennai Metropolitan Water Supply and Sewerage Board Desalination Plant - CRZ Clearance - [F.No.11-36/2016-IA-III] 3.11.1 The project proponent made a presentation and provided the following information to the Committee:-The project involves 150 MLD Sea Water Reverse Osmosis Desalination Plant at Nemmeli, Thiruporur Taluk, District Kancheepuram (Tamil Nadu) promoted by M/s Chennai Metropolitan Water Supply and Sewerage Board Desalination Plant. (ii) The objective of the project is for augmentation of drinking water supply in the Southernparts of Chennai city with per capita water supply of 135 LPCD as per norms. Chennai is the water stressed city with no perennial source of surface water. Hence to bridge the supply demand gap, CMWSSB resorted to desalination source. (iii) Is on eastern side of East Coast Road (ECR) at 12° 42' 08" North, 80° 13' 29" East and is approximately 40 km south from the city. (iv) Intake and Outfall system: The intake and outfall system includes as follows: * One intake structure in sea with depth of 10 m. * One no. of 100 mm opening Duplex screen to exclude larger marine life. * One intake pipe each of 2300 mm (OD) dia PN 6.4 bar and one 1600 mm (OD) PN 6 outfall HDPE * A shock chlorination system in form of Hypo dosing is proposed to minimize marine growth in intake pipes Lot of HDPE diffuser. * Travelling Band Screens before the Pumps to trap floating materials, sea shells, diatoms etc. * Vertical shaft pumps in Super Duplex Construction for sea water intake (v) Reverse Osmosis involves 7 nos individual trains single stage/single pass RO each having dedicated pumping system and Energy Recover Devices (ERDs), Ppermeate storage tanks, RO Clean-In-Place (CIP) system includes all tanks and pumps, All high pressure valves are of Super Duplex with PERN>41 and RO feed water storage tank 1 no. (vi) Treated Water Sump and Pump Sets: Treated water sump of 1 no. of 6,800 cum capacity, and 3W+2S Horizontal Centrifugal Split Casing pumps in each of 2100 m3/hr o pump product water. (vii) Plant Electrical Sub-station: 110/11 KV indoor sub-station with two incoming lines of 110 KV. (viii) For the Phase III (150 MLD Product Water) plant to be developed in future, the seawater of 18958.33 m³/hour will be drawn from the sea and about 12708.33 m³/hour of brine reject will be released into the sea. The seawater intake head will be located at a distance of about 1050 m from the shoreline at 10 m depth. The outfall diffuser will be located at 650 m distance from the shoreline at 7.5 m water depth. The diffuser will have the multiple ports of 10 nos. x 500 mm diameter. This project involves construction of the following activities:

- Laying of seawater intake pipeline
- Laying of outfall pipeline
- Construction of seawater intake head
- Construction of outfall diffuser
- Construction of seawater sump with pump house
- (ix) The main objective of the study is to ensure that the rejected water does not unduly alter the marine ecosystem by way of changes in salinity levels, chlorine effects and above all temperature variation exceeding the admissible levels. These are studied by simulating the situation in numerical models developed by various institutions, the most popular one being CORMIX model and MIKE 21.
- (x) It is informed that a diffuser outfall located at 650 m distance into the sea at 7.5 m depth, with 10 ports of 500 mm dia. each, projecting above the bed by 1.5 m with orientation of 30 deg horizontal is adequate to ensure proper mixing and dilution which will not induct any major alteration to the existing marine ecosystem and consequently on marine life. The study on CORMIX model shows the mixing zone will extend for 65 m to achieve 22 times and extending further till 200 m distance to achieve to dilution of 27 times from the disposal location.
- (xi) **SCZMA Recommendation:** The Tamil Nadu Coastal Zone Management Authority has recommended the project vide their letter No. 845/EC.3/2016- 1 dated 14th January, 2016.
- (xii) Investment/Cost: Rs.1089.48 Cr (2013-14 Price Level) and Rs.1258.88 Cr (2015-16 Price level).
- (xiii) Components in CRZ area: The project is falling under CRZ-III, CRZ –I (Inter Tidal zone) and CRZ IV (sea water area). As per CRZ Notification, 2011, vide para 4 (i) (a), para 8 I CRZ I (i) (b) and para 8 III CRZ IIIA (h) & B (v) the desalination is permitted.
- (xiv) The marine facilities for the desalination plant will consist of:
 - (a) laying of seawater intake pipeline on the seabed but buried below seabed to a distance of 1050 m into the sea till 10 m water depth (CD),
 - (b) laying of outfall pipeline on the seabed but buried below the seabed to a distance of 650 m into the sea till 7.5 m water depth(CD),
 - (c) construction of seawater intake head, iv) construction of outfall diffuser
- (xv) The demarcation of LTL/HTL/CRZ along the project shoreline was carried out for the existing operational plant; hence the same has been taken, as the proposed plant is within the premises of the existing operational 100 MLD.
- (xvi) **Location of intake/outfall and Quantity:** 1 No. Intake at 12⁰41'41" N, 80⁰14'1.6"E and 1 No Outfall at 12⁰41'53.07" N, 80⁰13'52.10"E.
- (xvii) **Employment Potential:** The primary benefit of the proposed Desalination Plant is that it will assist in securing the supply of drinking water to the metropolitan population well into the future. It can continue to deliver high quality drinking water for consumption, even during periods of drought. It also provides an alternative source of water that will make our overall supply more diverse and less vulnerable to interruption. The provision of a secure water supply for residents and industry within the Chennai metropolitan area which will assist in maintaining living standards and the amenity of the urban area.
- The EAC noted that the proposal is for establishment of Desalination Plant of capacity 150 MLD at Nemmeli. It is further observed that same PP is requesting for establishment of another desalination plant of capacity 400 MLD at a distance of 600 m

approximately. EAC also observed that there is considerable space available at the Perur, East Coast Road, Chennai (proposed site for 400 MLD) which can accommodate both the desalination plants at same location. Also it is noted that there is significant erosion occurred in Nemmeli beach previously while commissioning the desalination plant.

3.11.3 EAC has deferred the project for the want of following information:
(i) As stated by the PP, both the desalination plants of 150 MLD and 450 MLD are situated at a distance of 600 m. EAC has raised a query why the both plants cannot be installed at the same location. The Committee also wanted to know financial as well as

- (i) As stated by the PP, both the desalination plants of 150 MLD and 450 MLD are situated at a distance of 600 m. EAC has raised a query why the both plants cannot be installed at the same location. The Committee also wanted to know financial as well as environmental implications of two separate units against one single unit with 600 MLD capacity
- (ii) Impact of shoreline change needs to be performed.
- (iii) Fresh recommendations from the TNCZMA after examining all the documents as mentioned para 4.2 of CRZ notification 2011 including NOC from concern state PCB.
- 3.12 400 MLD capacity Desalination Plant based on sea water Reverse Osmosis at Perur, East Coast Road, Chennai (Tamil Nadu) by M/s Chennai Metropolitan Water Supply and Sewerage Board Desalination Plant CRZ Clearance [F.No.11-37/2016-IA-III]
- 3.12.1 The project proponent made a presentation and provided the following information to the Committee:-
 - (i) The project involves 400 MLD capacity Desalination Plant based on sea water Reverse Osmosis at Perur, East Coast Road, Chennai (Tamil Nadu) promoted by M/s Chennai Metropolitan Water Supply and Sewerage Board Desalination Plant.
 - (ii) The total area of the proposed site is 87.915 acre out of which the two burial grounds have a combined area of 2.01 acre, therefore net area available is 85.51 acre. The proposed plant shall be spread over approx. 50 acre and rest of the area has been left for future expansion.
 - (iii) The objective of the project is for augmentation of drinking water supply in the Southern and Western parts of Chennai city with per capita water supply of 135 LPCD as per norms. Chennai is the water stressed city with no perennial source of surface water. Hence to bridge the supply demand gap, CMWSSB resorted to desalination source.
 - (iv) The Site is located at Eastern side of East Coast Road (ECR) at 12° 42′ 44″ North, 80° 14′ 26″ East and is approximately 40 km south from the city.
 - (v) Intake and Outfall system: The intake and outfall system includes as follows:
 - Two intake structure into the sea at depth of 10 m.
 - Two no. of 100 mm opening Duplex Frame screen to exclude larger marine life
 - * Two intake pipe each of 2500 mm (OD) dia PN 6.4 bar HDPE
 - * A shock chlorination system in form of Hypo dosing is proposed to minimize marine growth in intake pipes
 - * One no of 2500 mm (OD) HDPE, PN 6.4 bar pipe conduit for outfall.
 - Lot of HDPE diffuser.
 - * Travelling Band Screens before the Pumps to trap floating materials, sea shells, diatoms etc.

- 6W+1S Vertical shaft pumps in Super Duplex Construction for intake of sea water
- (vi) Pre-Treatment involves pH correction unit, Coagulation & flocculation unit, 24 nos of Lamella clarifier for removal of large amount of relatively coarse material, 32 nos of Dissolved Air Flotation (DAF) to skim off, the lighter material with desired SDI, 40 nos of Dual Media Gravity filters with blowers and back wash pumps and all valves in pre-treatment are with MOC of Body DI with Ebonite Lining/GGG-40; Disc and Shaft of ASTM-A-890Gr.5A/UNS 32750/254 SMO.
- (vii) **Reverse Osmosis** involves 17 nos individual trains single stage/single pass RO each having dedicated pumping system and Energy Recover Devices (ERDs), two permeate storage tanks, RO Clean-In-Place (CIP) system includes all tanks and pumps, All high pressure valves are of Super Duplex with PERN>41 and RO feed water storage tank.
- (viii) **Treated Water Sump and Pump Sets** involves Treated water sump of 1 no. of 35,000 cum capacity and 6W+2S Horizontal Centrifugal Split Casing pumps in each of 2800 m3/hr @ 65 m head to pump product water.
- (ix) Plant Electrical Sub-station: 110/11 KV outdoor sub-station with two incoming lines of 110 KV.
- (x) For the proposed 400 MLD Product Water plant, the seawater of 47791.66 m³/hour will be drawn from the sea and about 31125 m³/hour of brine reject will be released into the sea. The seawater intake head will be located at a distance of about 1150 m from the shoreline at 10 m depth. The outfall diffuser will be located at 750 m distance from the shoreline at 8 m water depth. The diffuser will have the multiple ports of 18 nos. x 600 mm diameter. This project involves construction of the following activities offshore:
 - Laying of seawater intake pipeline
 - Laying of outfall pipeline
 - · Construction of seawater intake head
 - Construction of outfall diffuser
 - Construction of seawater intake sump with pump house
- (xi) It is informed that a diffuser outfall located at 750 m distance into the sea at 8 m depth, with 18 ports of 600 mm dia. each, projecting above the bed by 1.5 m with orientation of 30 deg horizontal is adequate to ensure proper mixing and dilution which will not induct any major alteration to the existing marine ecosystem and consequently on marine life. The study on CORMIX model shows the mixing zone will extend for 75 m to achieve 57 times and extending further till 200 m distance to achieve to dilution of 65 times from the disposal location.
- (xii) Investment/Cost: Rs.2891.70 Crores.
- (xiii) **Components in CRZ area:** The project is falling under CRZ-III, CRZ –I (Inter Tidal zone) and CRZ IV (sea water area). As per CRZ notification 2011, vide para 4 (i) (a), para 8 I CRZ I (i) (b) and para 8 III CRZ IIIA (h)& B (v) the desalination is permitted. The marine facilities for the desalination plant will consist of: i) laying of seawater intake pipeline on the seabed but buried below seabed to a distance of 1150 m into the sea till 10 m water depth (CD), ii) laying of outfall pipeline on the seabed but buried below the seabed to a distance of 750 m into the sea till 8 m water depth (CD), iii) construction of seawater intake head, iv) construction of outfall diffuser.
- (xiv) **Location of intake/outfall and Quantity:** 2 Nos. Intake at 12⁰42'39" N, 80⁰14'20.69"E, & 12⁰42'30.24" N, 80⁰14'17.10"E and 1 No Outfall at

	12042'48 823" N_80014'08 05"F
	 12042'48.823" N, 80014'08.05"E. (xv) SCZMA Recommendation: The Tamil Nadu Coastal Zone Management Authority has recommended the project vide their letter No. 844/EC.3/2016- 1 dated 14th January, 2016. (xvi) A Sewage Treatment Plant is proposed in the facility to treat Sewage generated within the facility and reuse treated sewage for non-potable usages. (xvii) Power requirement and source: 85 MVA, Source is TNEB substation. All Street lights and building lights to best possible extent are Solar lighting proposed. (xviii) Benefits of the project: The primary benefit of the proposed Desalination Plant is that it will assist in securing the supply of drinking water to the metropolitan population well into the future. It can continue to deliver high quality drinking water for consumption, even during periods of drought. It also provides an alternative source of water that will make our overall supply more diverse and less vulnerable to interruption. The provision of a secure water supply for residents and industry within the Chennai metropolitan area which will assist in
	maintaining living standards and the amenity of the urban area.
3.12.2	The EAC noted that the proposal is for establishment of Desalination Plant of capacity 150 MLD at Nemmeli. It is further observed that same PP is requesting for establishment of another desalination plant of capacity 400 MLD at a distance of 600 m approximately. EAC also observed that there is considerable space available at the Perur, East Coast Road, Chennai (proposed site for 400 MLD) which can accommodate both the desalination plants at same location. Also it is noted that there is significant erosion occurred in Nemmeli beach previously while commissioning the desalination plant.
3.12.3	EAC has deferred the project for the want of following information:-
	(i) As stated by the PP, both the desalination plants of 150 MLD and 450 MLD are situated at a distance of 600 m. EAC has raised a query why the both plants cannot be installed at the same location. The Committee also wanted to know financial as well as environmental implications of two separate units against one single unit with 600 MLD capacity
	(ii) Impact of shoreline change needs to be performed.
	(iii) Fresh recommendations from the TNCZMA after examining all the documents as mentioned para 4.2 of CRZ notification 2011 including NOC from concern state PCB.
	Day 2 nd : Tuesday, 17 th January, 2017
3.13	Construction of Beach Resort at R.S. Nos.205/4, Manapet Revenue village, Bahour Commune Panchayat in Puducherry by M/s Trishul Buildtech and Infrastructures Pvt Ltd – CRZ Clearance – [F.No.11-35/2016-IA-III]
3.13.1	During the meeting, the project proponent made a presentation and provided the following information to the Committee:-
	(i) The project involves construction of Beach Resort at R.S. Nos.205/4, Manapet Revenue village, Bahour Commune Panchayat in Puducherry promoted by M/s Trishul Buildtech and Infrastructures Pvt Ltd.

(ii) The total plot area of 66773.19 sqm, built up area will be 7957.18 sqm. The proposal involves construction of 35 nos of villa block, quest rooms, spa, Ball room and pre function area, arrival court, Business centre and all day dining, BOH and staff quarters. The proposal involves G+1floors within CRZ region and G+ 5 Floors outside CRZ region. The maximum building height will be 6 m. (iii) Project cost: Rs.20 Crores. Whether the project is in critically polluted area: No. (iv) If the project is for EC under EIA Notification: No. (v) (vi) Components in CRZ area: Development zone (area 200 – 500 m of HTL) is 36170 sq.m and No Development Zone (NDZ) area is (0-200m of HTL) 19424 (vii) **SCZMA Recommendations:** The Puducherry Coastal Zone Management Authority has recommended the project vide letter dated 18 July, 2016. (viii) If the project involves diversion of forest land: No. If the project falls within 10 Km of eco sensitive area: No (ix) (x) Waste Management: 167 KLD of which fresh water is 108 KLD which will be sourced from authorised private tankers. Quantity of sewage generated is 151 KLD which will be treated in STP of 160 KLD. The treated sewage is 151 KLD of which 59 KLD is to be used for flushing and 92 KLD for gardening. **Solid waste Management:** The organic waste, 1076 Kg/day will be treated in (xi) Biometanation plant. Inorganic waste of 1315 kg/day is to be disposed to authorized recyclers. STP sludge 45 kg/day is to be used as manure for Gardening and Landscaping purpose. (xii) The total power requirement for the project is 500 kVA which will be sourced from EB and Power back up through DG sets is 2 x 250 KVA. (xiii) Energy conservation measures propose: Solar panels proposed on roof top for all villas - power generated 513.45 kVA. Solar panels for guest rooms power generated - 47.25kVA. (xiv) **Green belt development**: Proposed in No development area. (xv) Parking requirement with provision made: 200 Nos. of car. (xvi) If the project involves foreshore facilities: No. (xvii) Employment potential: The proposal is for beach Resort and will provide employment in the nearby areas. 3.13.2 While deliberations on the project, the EAC found mismatch of details in respect of location of project site as reflected in the Form-I against that mentioned in the proposal forwarded by the Puducherry CZMA. The project proponent was asked to rectify the same either on their own or through the Puducherry CZMA for further consideration of the proposal. 3.13.3 The EAC deferred the proposal for want of clarifications. 3.14 Shifting of Extra High Voltage Transmission (EHVT) lines for the proposed Navi Mumbai International Airport in Navi Mumbai (Maharashtra) by City and Industrial Development Corporation of Maharashtra Limited - CRZ Clearance -[F.No.11-38/2016-IA-III] 3.14.1 During the meeting, the project proponent made a presentation and provided the following information to the Committee:-(i) The project involves shifting of Extra High Voltage Transmission (EHVT) lines for

the proposed Navi Mumbai International Airport in Navi Mumbai (Maharashtra)

promoted by City and Industrial Development Corporation of Maharashtra Limited. The proposal is to shift the existing EHVT lines by underground cables along the boundary of the airport and terminate both the ends to the existing overhead lines outside the airport area by installing terminal gantry. These lines belong to Maharashtra State Electricity Transmission Company Ltd. (MSETCL) and Tata Power Ltd. (TPL).

(ii) As per CRZ Notification 2011, the proposed project falls under CRZ-I, II and III categories. The total CRZ area involved is 13.17 ha consisting of CRZ I- 10.79 ha, CRZ II- 2.08 ha and CRZ III- 0.3 ha. Out of total, 2.65 ha is mangroves area. Following are the details of cable route:

The underground cables of MSETCL of 15 Km would be passing through:

- a. Underground ducts: length 11.38 Km
- b. **On Stilts**: length 2.2 Km (1.7 Km + 0.5 km)
- c. **On Bridge**: length 1.42 Km (1.3 Km + 0.12 km)

The underground cables of TPL of 9.5 Km would be passing through:

- a. Underground ducts: length 7.14 km
- b. **On Stilts**: length 1.7 Km
- c. On Bridge: length 0.66 Km

Details of the underground cables (MSECTCL & Tata Power)

- a. **Along road**: Duct length (11.5m wide road- 11 km &Airport periphery road- 7.7 km), Duct width- 2 m
- b. On stilt: Length 2.2 km, Deck width- 25.3 m, Duct width- 2 m
- c. On bridge: Length 2.08 km, Deck width- 13.2 m, Duct width- 2 m
- (iii) The foundation work of stilt will require some dredging but it is very negligible.
- (iv) Water Requirement: Domestic water requirement will be 3 KLD /day (Flushing 4 KLD/day). Total water requirement will be 7 KLD/day. The water will be sourced through CIDCO.
- (v) SCZMA Approval: The Maharashtra Coastal Zone Management Authority (MCZMA) recommended the project vide their letter No. CRZ-2016/CR-152/TC 4 dated 27th September, 2016.
- (vi) **MSW**: The debris generated from the Construction activities will be reused and remaining waste will be handed over to authorize vender for further disposal.
- (vii) **Power requirement and source**: Power from Generator.
- (viii) Investment/Cost of the project: Cost of the project: Rs. 1560.87 Crores.
- (ix) **Benefits of the project**: Re-routing of EHVT lines will enable the development of the proposed international airport activities and make it operation safe.
- (x) **Employment potential**: Generation of employment opportunity will be provided to local people. 150 workers during construction.
- During deliberations, the EAC noted that the instant project involves shifting of EHVT lines from the present alignment along the boundary of the Navi Mumbai International Airport (NMIA) to the underground cabling with switching stations outside the airport area to ensure safe aircraft landing and takeoff operations.

Other salient features of the project from CRZ perspective noted by the EAC were as

under:-

- (i) The project 'Navi Mumbai International Airport' was granted Environmental and CRZ Clearance by this Ministry vide letter dated 22nd November, 2010 for only airport area of 1160 ha. One of the conditions stipulated therein states that Environmental and CRZ Clearance needs to be separately obtained for airport related activities and other offsite infrastructure project.
- (ii) One of the airport related activities is shifting of utility services such as Extra High Voltage Transmission (EHVT) Lines, presently running through the airport area. These transmission lines are owned by M/s Tata Power Company Ltd (TPCL) and M/s Maharashtra State Electricity Transmission Company Ltd (MSETCL).
- (iii) The transmission lines infringe the various surfaces i.e. the inner, outer transition, approach, take-off and conical surfaces, and thus require shifting by the most feasible and cost efficient way to meet the operational requirement of the airport.
- (iv) CIDCO has proposed to construct a bridge over the creek portion and stilt along the route passing on mangroves. The route of the proposed underground cable would require laying of EHVT cable for a length of 15 km for M/s MSETCL and 9.5 km for M/s TPL lines. The entire underground cabling shall be carried out along and abutting the periphery of the airport boundary, and further on the stilts and bridges to join the existing overhead lines through sub/switching stations.
- (v) Total CRZ area involved in the project would be 13.17 ha, consisting of CRZ I 10.79 ha, CRZ II 2.08 ha and CRZ III 0.3 ha. Total area of mangroves falling in the route is 2.65 ha.
- (vi) The MCZMA has recommended the proposal vide their letter dated 27th September, 2016, subject to strict compliance of certain conditions.
- (vii) The Committee expressed its concern over minimal physical progress achieved, and that too, when the validity of the EC for the NMIA is to expire shortly.
- (viii) The Committee also took cognizance of the representation from one NGO namely, Conservation Action Trust, sent to the members through mail, alleging destruction of mangroves and no proportionate compensatory afforestation. The Committee desired for the project proponent to respond to the same.
- 3.14.3 The EAC, after deliberations and to take the proposal forward, desired inputs and clarifications in respect of the following:-
 - Compliance status of the conditions stipulated in the EC dated 22nd November, 2010 for the MMIA by the Regional Office of MoEF&CC.
 - Diversion of forest land and the compensatory afforestation of the mangroves.
 - Permission required, if any, from the Power Discoms for shifting of EHVT lines.
 - Parawise response on the issues raised in the representation referred above.

The proposal was deferred for the needful on the above lines.

3.15 Construction of pipeline for carrying treated effluent from Tarapur MIDC to Deep Sea at Navapur in Maharashtra by M/s Maharashtra Industrial Development

Corporation - CRZ Clearance - [F.No.11-39/2016-IA-III]

- 3.15.1 During the meeting, the project proponent made a presentation and provided the following information to the Committee:-
 - (i) The project involves laying 1000 mm OD HDPE Marine outfall pipeline from Landfall point to outfall point (Diffuser) in Arabian Sea from MIDC Tarapur to Deep Sea at Navapur in Maharashtra.
 - (ii) Total length of the pipeline from the Landfall Point to the suggested Offshore Point works out to be 7.1 km. Geographical Coordinates: 19°48'21".59"N; 72°37'25".35"E.
 - (iii) Project components: The components of the project are as follows:
 - Pipeline (HDPE) of 1000mmdiameter to release 75 MLD treated effluent from Tarapur Industrial area into Arabian Sea(Navapur)
 - Construction of 3.5 m wide temporary approach road using initial lining of 2mm Geo textile film
 - Conducting marine Hydro-graphic (Bathymetry) survey
 - 1000 mm dia Polyethylene Pipes with 6 kg/cm² design pressure. 7.1 km (0.9 km intertidal) long line will be laid using 12 m long PP pipes sections, 2.5 m below the sea bed.
 - Providing erecting and placing RCC primary and secondary blocks as per design
 - Deploying suitable dredging equipment and carrying out in-water dredging in the open sea
 - Stringing, Block fixing, floating, aligning and sinking on the pre-excavated trench bed/sea bed
 - (iv) To cater for the present needs and also the expected expansion two different quantities of effluents (80 MLD & 120 MLD) were considered for modeling purpose. The location was selected in the coastal waters off Tarapur with the geographical co-ordinates19°48′21″.59″N; 72°37′25″.35″E with a depth of 12m below CD. The model was run for 10 days by introducing BOD concentration of 100mg/l at proposed Disposal Point by considering ambient BOD is 1 mg/l. The maximum BOD concentration at 100m distance from proposed outfall would be around 1mg/l above ambient for 80 MLD & 1.5 mg/l above ambient for 120 MLD. At the edge of 200 m near ambient conditions would prevail.
 - (v) **Water requirement:** Water will be required for construction phase. Same will be made available through tankers.
 - (vi) Solid Waste Management: Total excavation of sea Floor shall be about 2, 50,000 Cubic Meters. Within the Intertidal zone, the trench will be excavated by Earth moving Machines. Interlocking Sheet Piles will be driven on the Sea Bed to prevent collapse of the Trench up to a length of 900 Meters from the HTL. The excavated material shall be temporarily stored on the Sea Floor in an evenly distributed manner and the same material shall be used for refilling the trench after laying pipeline. Surplus excavated material (sand-about 7,000 Cubic Meters) after Backfilling, will be disposed in to the nearby sea area in an evenly distributed manner to avoid obstruction to navigation.
 - (vii) Cost of the project: Rs.105.45 Crores.
 - (viii) Whether the project is in Critically Polluted area: No.
 - (ix) **Components in CRZ area**: CRZ IB and CRZ IVA. Layout on CRZ map of 1: 4000 scale prepared by Institute of Remote Sensing, Anna University, Chennai.
 - (x) SCZMA Recommendations: The Maharashtra Coastal Zone Management Authority (MCZMA) recommended the project vide their letter No. CRZ 2016/CR 197/TC 4 dated 27th October, 2016.

- (xi) **Employment Potential**: Workers shall be employed in construction phase.
- (xii) **Benefits of the project**: Site of disposal identified for adequate dispersion of pollutants and proposed pipeline will lead to proper disposal of treated effluent in Arabian sea at Navapur.

3.15.2 During deliberations, the EAC noted the following:-

- (i) MIDC is the nodal agency for providing infrastructural facilities required for smooth operations of different industrial projects/activities in the Tarapur industrial area. These include treatment of industrial effluents and its safe disposal to the recipient water body/sea.
- (ii) The existing effluent treatment facility is through one CETP of 25 MLD capacity followed by disposal into coastal water off Navapur. In order to meet the increased industrial requirements and thus to augment the effluent treatment infrastructure, a new CETP of 50 MLD capacity is under installation/progress. Also, one pipeline 7.1 km long is proposed to carry the treated effluent from the Tarapur MIDC to deep sea at Navapur.
- (iii) The water quality monitoring carried out by MPCB for the presently operational CETP of 25 MLD, run by Tarapur Environment Protection Society, reveals that treated effluents are not meeting the discharge standards in terms of core parameters, and thus defeating the very purpose of CETP, which amounts to violation of the Environment (Protection) Act. 1986. This can have grave consequences on the health of locals and local livelihoods. The EAC desired for a clarification in this regard and asked MIDC to provide the details of individual units operating in the Tarapur MIDC, and whether complying with the prescribed discharge standards. It was also directed to collect data on input and output points of each unit on various pollutants. The Committee also recommended independent study to be conducted by some academic institution on criticality of the pollution levels.
- (iv) The EAC also sought for the compliance status of the conditions stipulated in the EC for the existing CETP of 25 MLD capacity, and also clearances obtained for the proposed CETP of 50 MLD capacity.
- (v) Tarapur industrial area being one of the identified critically polluted areas, it was desired to seek inputs from MPCB on the corrective actions taken at their end to ensure treatment and disposal of industrial effluents in conformity with the statutory provisions.
- (vi) The Committee also observed that as per the CRZ Notification, 2011, MCZMA is to reconsider the proposal and their recommendations after the inputs and the No Objection Certificate from the MPCB.
- 3.15.3 The EAC deferred the proposal for want of clarifications and inputs from the regulatory agencies namely MPCB, MCZMA. Also, the MIDC to coordinate and submit the details as explained above for further consideration of the proposal.
- 3.16 Construction of resort building at Sy.No.701/1, 701/2 of Varkala village, District Thiruvanathapuram (Kerala) by M/s Sea Cliff Resorts Pvt Ltd CRZ Clearance [F.No.11-40/2016-IA-III]

3.16.1 The project proponent did not attend the meeting, and as such the proposal was not considered. 3.17 Setting up of Lidar based offshore structure in an area in territorial waters off the Coast of Jhakhau, District Kutch (Gujarat) by M/s Samiran Udaipur Windfarms Limited - CRZ Clearance - [F.No.11-41/2016-IA-III] 3.17.1 During the meeting, the project proponent made a presentation and provided the following information to the Committee:-The project involves setting up of Lidar based offshore structure in an area in territorial waters off the Coast of Jhakhau, District Kutch (Gujarat) promoted by M/s Samiran Udaipur Windfarms Limited. (ii) Ministry of New and Renewable Energy has identified significant wind potential along coast of Tamil Nadu and Gujarat. MNRE has announced offshore wind policy in 2015 which allows interested Private agencies to get involved in obtaining site specific wind speeds and met-ocean data for feasibility studies for development of offshore projects. In this regard, M/s Samiran Udaipur Wind Farm Ltd (SUWL) along with technical support from NIOT intend to set up data collection platform in Gulf of Kutch, Gujarat coast. (iii) The LiDAR based offshore wind data collection platform is to be erected at 23° 07' 24.42"N and 68° 27' 48.24"E, which is about 16 km off coast of Jakhau. The proposed structure is a 1.2 m diameter monopile with 5m diameter LiDAR support platform on top at about 7.5m above MSL. The 1.2 m diameter monopile is to be driven up to about 25 m below seabed, at a water depth of 10m (CD). (iv) The LiDAR based offshore data collection platform proposed by SUWL is 18 km off coast of Jakhau in Gulf of Kutch. The project site falls under CRZ-IV category based on CRZ Notification, 2011. (v) There will not be any dust emission during pile driving in sea water. There will not be onsite burning of any waste arising from construction activities. As the construction phase is for short period and also the number of workers involved is of less quality impact on water quality is negligible. There are not much commercial fish trawling operations off Jakhau port. The platform is to be erected only for observation and is free from the Navigational route. (vi) **Investment/Cost**: The cost of the project is Rs.4 crore. (vii) **SCZMA Recommendation**: The Gujarat Coastal Zone Management Authority has recommended the project vide their letter No.ENV-10-2016-59-E dated 28th June, 2016. 3.17.2 During deliberations, the EAC noted the following:-The proposal is for setting up of LiDAR based offshore structure for the wind measurement project for survey, investigation, exploration, data acquisition and other related technical studies in territorial waters off the Jhakhau coast in District Kutch (Gujarat). The project site is 18 km from the shore having geographical coordinates Latitude 23^o 07' 24.42" N and Longitude 68^o27' 48.24" E. (iii) The LiDAR based offshore met mast is to be located at a water depth of 10 m with a tidal variation of 5 m on the platform of 5 m dia at about 7.5 m from the MSL. The data collection platform shall consist of instruments for collecting different

parameters required for wind potential studies and design of structure for wind turbine. As per the CRZ map prepared by NIOT, Chennai, the project site falls in CRZ-IV category requiring offshore facility, and thus considered to be permissible in terms of the provisions of the CRZ Notification, 2011. The GCZMA has recommended the project vide their letter dated 28th June, (v) 2016 subject to strict compliance of certain conditions. National Institute of Wind Energy (NIWE) under the Ministry of New and Renewable Energy, is the nodal agency for the project for ensuring single window clearance from all the regulatory and security agencies, before the project is made operational. 3.17.3 The EAC, after deliberations, recommended the project for grant of CRZ clearance subject to strict compliance of all the conditions stipulated by the GCZMA in their letter dated 28th June, 2016, and the additional conditions as under:-• The project shall be taken up only after necessary clearances/permissions are obtained from the Ministry of Defence, Ministry of Home Affairs, Gujarat Maritime Board, etc. • The offshore structure shall be decommissioned after two years of the desired data collection, ensuring adequate safety measures as employed during the construction phase with the minimal impact on noise and marine environment. Laying of 400 kV Double Circuit (Quad Moose) Dedicated Transmission line from 3.18 JSW Energy Generating station at Jaigad-Ratnagiri to JSW Steel Plant at Dolvi in District Raigad (Maharashtra) by M/s JSW Energy Ltd - CRZ Clearance -[F.No.11-42/2016-IA-III] 3.18.1 The project proponent made a presentation and provided the following information to the Committee:-(i) The project is for laying of 400kV Double Circuit (Quad Moose) Dedicated Transmission line from JSW Energy Generating station at Jaigad-Ratnagiri to JSW Steel Plant at Dolvi- Raigad in Maharashtra. JSW Steel plant at Dolvi in Raigad District with existing Plant capacity of 5.0 (ii) MTPA is on verge of expansion up to 15 MTPA by end- 2020-21. The proposed expansion will result in increase of demand of electricity. The JSW steel plant has also acquired a company Amba River Coke Limited (ARCL). (iii) The present power requirement of both existing plants is to the tune of 358 MW. Considering the proposed expansion at Dolvi Steel plant up to 15MTPA, the power demand will substantially increase to around 900MW after exhausting all its captive generation. Since, all steel plants face very high investment costs and electricity represents vital share in production cost. Every brief interruption of power or fluctuations in the quality of power can have grave consequences. This makes reliable and cost effective power supply a key factor in a steel industry economic stability. Thereby, M/s JSW Energy Ltd has proposed to construct a dedicated 400kV D/C (Quad) Transmission line of about 187 kM from existing 1200 MW Thermal Power Plant located at Jaigad, Dist.-Ratnagiri to JSW steel plant located at Dolvi in Dist.-

Raigad.

- (v) In total, 525 towers are proposed for laying of transmission line. Of which, 506 are in Non CRZ area and 19 locations are falling under CRZ zone, categorized as 9 under CRZ I and 10 under CRZ III.
- (vi) Out of 19 locations, 7 towers fall under CRZ IA, 2 under CRZ I B and 10 under CRZ III Zone as per CRZ Notification 2011.
- (vii) Cost of the project Rs.678.89 Crore.
- (viii) Whether the project is in Critically Polluted area No.
- (ix) **SCZMA Recommendations:** The Maharashtra Coastal Zone Management Authority (MCZMA) has recommended the project vide their letter No.CRZ A 2015/CR 427/TC-4 dated 25th October, 2016.
- (x) **Forest land**: Total area of Forest land proposed for diversion is approx. 34.2121 ha.
- (xi) Water required only during construction phase. Water requirement will be met through local tankers.
- (xii) **Solid Waste Management**: A debris generation quantity will be around 21250 m³ during excavation of constructional pits. However, 80% of debris generated during construction will be backfilled after completion of tower foundation. Remaining 20% (4250 m³⁾ debris will be utilized for construction of approach roads. Hence, there will be no impact on air quality or marine ecology due to debris generation.
- (xiii) Hazardous Waste Management: Debris types generated during construction of HT lines may include, Woody and tree material – from cut mangrove stands, Silt and mud excavated for foundations of Towers, Discarded pole material and wires, Civil construction materials – cement bags. Collection of debris material at source forms an effective tool for management. Sites should be designated at nearest possible point of construction site. However, it should be located outside CRZ area.
- (xiv) **Details of tree cutting** Approx. 1700 no of trees (including 617 no. of mature mangrove trees, as mentioned in BNHS report).
- (xv) Employment potential: Total number of workers employed in construction phase will be 105 numbers.
- (xvi) Benefits of the project: It will provide relief to an existing Intra-state transmission network in the tune of 900 MW. It will provide more reliable & stable source of supply. Also power to other connected consumers around Nagothane, both in public & private sectors will be stable due to improved system availability. The power supply through dedicated transmission lines will cause significant saving in transmission charges and hence, economical.
- During deliberations, the EAC noted that the proposal involves laying of 400 kV double circuit (Quad Moose) dedicated transmission line of about 187 km from the existing 1200 MW thermal power plant at Jaigad, District Ratnagiri to JSW steel plant at Dolvi in District Raigad (Maharashtra), to meet the increased power demand due to proposed expansion of steel plant from 5 MTPA to 15 MTPA.

The Committee further noted the following:-

- (i) In total 525 towers are proposed for laying of transmission line of which 506 are in non-CRZ area and 19 locations are falling under the ambit of CRZ.
- (ii) Out of 19 tower locations in CRZ areas, 7 would be under CRZ-1A, 2 in CRZ-1B and the remaining 10 under CRZ-III.
- (iii) The total forest area involved under the project and proposed to be diverted in

terms of the Forest Conservation Act, 1980 is 34.21 ha, including mangrove forest. (iv) Total number of trees proposed to be cut is approx 1700, including 617 matured mangrove trees. The loss of mangrove is proposed to be compensated through plantation of 5000 mangrove saplings at suitable locations. The MCZMA has recommended the proposal vide their letter dated 25th (v) October, 2016 subject to strict compliance of certain conditions. The project proponent has sought approval from the State Government u/s 68 and 164 of the Electricity Act for laying of dedicated transmission lines. 3.18.3 After deliberations, the EAC decided to seek inputs in respect of the following:-Compliance status of the EC conditions through Regional Office of MoEF&CC for the thermal power plant with the present capacity of 1200 MW and JSW steel plant of 5 MTPA. Approval of the State Government or the Ministry of Power as applicable, and as requested by the project proponent in terms of the Electricity Act. Parawise response to the representations from the NGO handed over during the meeting, alleging widespread loss of mangroves due to the project. 3.19 Construction of water supply structure on Gadi River, Navi Mumbai, Maharashtra by M/s City & Industrial Development Corporation - Amendment in CRZ Clearance - [F.No.11-95/2012-IA-III] 3.19.1 During the meeting, the project proponent made a presentation and provided the following information to the Committee:-Based on the recommendations of the Maharashtra Coastal Zone Management Authority (MCZMA) vide their letter No.CRZ-2011/CR-71/TC-2 dated 4th December, 2012, the Ministry of Environment & Forests had granted the CRZ Clearance to the project vide letter No.11-95/2012-IA-III dated 15th March, 2013. (ii) CRZ Clearance dated 15th March, 2013 was for only bridge over Gadi River. However, the proposed pipeline is further passing through CRZ area on North bank of Gadi River for which clearance was not obtained in earlier proposal. Hence, CIDCO intend to obtain amendment in CRZ clearance for entire stretch of pipeline passing through CRZ area. (iii) CIDCO intends to provide 1500 mm diameter water supply pipeline from MBR Vahal to Kalamboli junction. This water supply line will cater to the Navi Mumbai's nodes like Kharghar. Kalamboli, Kamothe, Panvel and to Navi Mumbai International Airport. (iv) Components in CRZ area: CRZ I and CRZ II. Pipeline will be passing through CRZ I, CRZ II and CRZ IV area at Gadi River. There will be no impact on drainage pattern (v) A bridge will be constructed across Gadi river to carry the water supply line. Total length of pipeline will be nearly 12.50 km out of which only 780 m will be passing through CRZ I and CRZ II area at Gadi River. (vi) Total length of bridge will be 300 m, Span over land will be 50 m on each side, there are 9 columns proposed in the total length. The superstructure of the bridge shall be in structural steel with epoxy painting. Two trusses shall be provided on each side of the bridge. Cross members shall be provided between the two

- trusses at top and bottom level of the bridge. Width of the bridge will be 6 m i.e. distance between two trusses is 6 m.
- (vii) Total cost of project (for 12.50 km) will be Rs.81.90 Crores, Cost of bridge across Gadi river will be Rs.8.40 Crores, Cost of the project passing through CRZ area will be Rs.4.50 Crores.
- (viii) **SCZMA Recommendations:** The Maharashtra Coastal Zone Management Authority (MCZMA) has recommended the amended project vide their letter No.CRZ-2016/CR-149/TC 4 dated 29th September, 2016.
- (ix) Whether the project is in Critically Polluted area: No.
- (x) **Forest land** 0.40 ha. Forest application submitted and is under scrutiny at CCF, Thane, Maharashtra.
- (xi) If the project falls within 10 km of eco- sensitive area: Not applicable
- (xii) **Solid Waste Management**: Construction debris can be either sold to waste handlers or disposed in landfill. Site Specific Approach shall be adopted for filling, handling, and management of materials at the construction site.
- (xiii) Hazardous Waste Management: Segregation of wastes at source; Ensure any hazardous wastes (e.g. used oils, lead-acid batteries) are securely stored and transferred to appropriate facilities; Ensure all wastes are properly contained, labelled and disposed of in accordance with National/local regulations; and an inventory shall identify the consumption of products/material, ensuring wastes traceability, and identifying potential wastage and overconsumption.
- (xiv) Energy conservation measures with estimated saving: construction vehicles will be maintained to achieve optimum performance. During operational phase no activity envisaged at site.
- (xv) Employment potential: Total number of workers employed in construction phase will be 20 numbers.
- (xvi) **Benefits of the project**: Proposed pipeline is for basic necessity of drinking water.
- The EAC noted that the proposal is for amendment in CRZ clearance for the project 'Construction of water supply structure on Gadi River' in Navi Mumbai (Maharashtra) granted by this Ministry vide letter dated 15th March, 2013.

The EAC further observed that there was no clarity in the CRZ map presented by the project proponent, in respect of demarcation of CRZ and non-CRZ areas. Also, no details were provided for the proposed alignment of the pipeline in CRZ-I & II areas. Physical progress of the project achieved so far could also not be reported by the project proponent.

3.19.3 The Committee, after deliberations, desired for the following:-

- Layout of the proposed pipeline superimposed on the CRZ map and clearly showing different coastal regulation zones. That should also explain the earlier proposal i.e. the construction of pipeline over the bridge for which CRZ clearance already obtained, and the alignment proposed in the revised proposal.
- Compliance status of the conditions stipulated in the CRZ clearance dated 15th March, 2013.
- Parawise response to the representations from the NGO handed over during the meeting, alleging widespread loss of mangroves due to the project.

The proposal was, therefore, deferred.

- 3.20 Construction of a resort building at Kottukal Panchayath in Thiruvananthapuram (Kerala) by M/s Officina Builders and Realtors Pvt Ltd Further consideration for CRZ Clearance [F.No.11-21/2016-IA-III]
- 3.20.1 The project proponent made a presentation and provided the following information to the Committee:-
 - (i) The project involves construction of a resort building at Kottukal Panchayath in Thiruvananthapuram (Kerala) promoted by M/s Officina Builders and Realtors Pvt Ltd.
 - (ii) The project is located at Chowara (in between Kovalam and Vizhinjam), Survey Nos.- 363/3, 363/1-1, 1-2, 3-2, 364/6, 16,17,20,21,18,16-1, 6-1,18-1,21-1,19 and 17-1, Kottukal Village, Neyyattinkara Taluk, Thiruvananthapuram district and the Latitude and longitude of the site are 80 23' 57" N and 760 58' 54" respectively.
 - (iii) Total plot area is 17118.81 sqm. FSI area is 8499.04 sqm/17118.81 sqm = 0.49 sqm and total construction area of 13220.05 sqm. The project will comprise of 20 blocks. Total 16 villas and 44 rooms shall be developed. Maximum height of the building is 8.9 m from ground level.
 - (iv) During construction phase, total water requirement is expected to be 10 KLD which will be met from water supply system of the Kanjiramkulam Division of Kerala Water Authority and during the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.
 - (v) During operational phase, total water demand of the project is expected to be 17 KLD and the same will be met from the water supply system of the Kanjiramkulam Division of Kerala Water Authority and from Recycled Water. Wastewater generated (14 KLD) uses will be treated in STP of total 25 KLD capacity. 13 KLD of treated wastewater will be recycled (7 KLD for flushing, 6 for gardening).
 - (vi) About 120 kgs of solid waste will be generated in the project per day. The biodegradable waste (about 90 kgs) will be processed in Bio-gas Plant and the non-biodegradable waste generated (30kgs) will be handed over to authorized local vendor (Kudumbashree/ Clean Kerala Mission units).
 - (vii) The total power requirement during construction phase is 20 KVA and will be met from Kerala State Electricity Board and total power requirement during cooperation phase is 200 KVA and will be met from Kerala State Electricity Board and 250 KVA DG Set.
 - (viii)Rooftop rainwater of buildings will be collected in a RWH tank of 105500 liter capacity for harvesting after filtration.
 - (ix) Parking facility for 115 four wheelers and 440 sqm of space for two wheelers is proposed to be provided against the requirement of 92 and 345 sqm respectively (according to local norms).
 - (x) Proposed energy saving measures would save about 24% of power.
 - (xi) Wildlife issues: It is not located within 10 km of Eco Sensitive areas.
 - (xii) There is no court case pending against the project.
 - (xiii) Investment/Cost: The cost of the project is Rs. 15 crores excluding the land value.
 - (xiv) **Employment potential**: Around 150 direct employment and around 200 indirect employment.
 - (xv) **Benefits of the project**: Direct and indirect employment opportunity to professionals, skilled and semi-skilled persons etc. (150 direct employment and 200 indirect employment), propagation of indigenous Indian medical sciences like Siddha Vaidyam and Ayurvedam and health care facility of the highest order

	based on Siddha Vaidyam and Ayurveda for people from all over the world. (xvi) Kerala State Pollution Control Board conducted an enquiry/public hearing on 8 th July, 2013 at the site and no major issues were raised during the enquiry/public hearing. (xvii) SCZMA Recommendation: The Kerala Coastal Zone Management Authority has (KCZMA) has recommended the project vide their letter dated 5 th February, 2016.
3.20.2	The project was earlier considered by the EAC in its meeting held on 28-29 June, 2016, wherein the Committee made the following observations:-
	 i) The contour map of the site with a transpose of the proposed construction plan particularly of basement parking on the contour map, is required to ensure that no excavation takes place in CRZ area. The project proponent may also give a statement that the project would be entirely residential for Siddha Vaidyam, and shall not attract any day visitors as adequate parking for the same is not available. ii) A perusal of the google map indicates thick vegetation on the project site. The project lay out should indicate whether and to what extent the existing vegetation would be damaged due to the project. A tree census of the site may be provided so as to evaluate the extent of damage to the existing vegetation.
	The proposal was deferred for want of the desired information.
3.20.3	During deliberations, the EAC noted the guidelines contained in Annexure-III of the CRZ Notification, 2011, providing that the total covered area on all floors shall not exceed 33% of the plot size.
	In the first instance, the project proponent could not confirm the total covered area proposed under the project and insisted for taking the total plinth area as the covered area. However, the Committee observed that in any case, the project would be exceeding the FSI of 0.33, and may not be allowed.
3.20.4	The Committee asked the project proponent to confirm the project configuration in terms of the provisions of Annexure-III of the CRZ Notification, 2011, and get the same endorsed through the KCZMA.
3.21	Development of New Industrial Area at Salarpur District Alwar (Rajasthan) by Rajasthan State Industrial Development & Investment Corporation Ltd (RIICO) - Further consideration for Environmental Clearance - [F.No.21-1/2014-IA-III]
3.21.1	The project proponent made a presentation and provided the following information to the Committee:-
	 (i) The project involves development of an Industrial Area at Salarpur, District Alwar (Rajasthan) of Rajasthan State Industrial Development & Investment Corporation Ltd. The proposed industrial estate has been envisaged to have 291 nos. of industrial units, 262 nos. of residential and 188 nos. Commercial plots in a total area of 389.696 ha. (ii) The project is located at 28°8'17.77" N Latitude and 76°47'22.49" E longitude. (iii) Maximum area, i.e., 195.820 Ha of land is reserved for development of industrial plots followed by area under roads (80.005 Ha) and 47.23 Ha for H.T. Corridor. Area of 7.920 ha is left along the nallah as buffer and will be utilized for development of green cover. 4.568 ha is reserved for green belt plantation which

- will be done along the project site boundary (wherever possible) & along each road of the Industrial area. It will be mandatory for each industry to maintain green area within the plot. Area of 0.435 ha is reserved for hospital along with 0.484 ha. which is reserved for development of schools.
- RIICO will source water from ground during construction. It is estimated that water requirement for construction phases will be about 1000 KLD including 27 KLD domestic water requirements for workers (90 LPCD for 300 workers). (Basis: Water requirement per acres – 1000 gallons/day) respectively. Industrial zone: During operation phase, one time water requirement of Industrial zone of proposed project would be 3672 KLD and recurring water requirement is 1510 KLD. Water requirement of green area (1260 KLD) will be fulfilled by domestic water treated by STP. CETP having treatment capacity upto reuse level is also proposed in Industrial zone. 900 KLD CETP treated water shall also be recirculated into the system to minimize requirement of fresh water. Separate distribution network shall be provided for recirculation of CETP/STP treated water. Residential zone: Water requirement of residential zone of proposed project is 2360 KLD. Water requirement of green area (110 KLD) will be fulfilled by treated Domestic waste water (treated by STP). Recurring water requirement is 2250 KLD only. Separate distribution network shall be provided for recirculation of STP treated water for use in green area.
- Waste during construction activity relates to excess cement mix or concrete left after work is over, rejection caused due to change in design or wrong workmanship etc. These are normally re-used as filling at the same site after completion of excavation work. Demolition and/or construction waste will be utilized in road construction wherever possible. Excavated earth during the civil works including road construction, fencing, drainage, site 31evelling etc., shall be utilized within the project site. Topsoil shall be conserved and will be utilized in the areas earmarked for greenbelt development. Approximately 70 to 90 kg of municipal solid waste will be generated from the project site during the construction phase. This will be collected and disposed off in a fenced pit dugout at the site and covered properly after completion of construction activity. During the operation phase of the project, waste management would be the responsibility of individual industries. Individual industry will provide system for municipal solid waste collection, storage and disposal. Each industry shall have to comply with the Municipal Solid Waste Management Rules, 2000 and amendments thereof. Approximately 9,000 persons will be involved during the operation phase of the project. Taking into consideration approximately 0.15 kg/person/day of municipal solid waste generation, the total municipal waste generation in the proposed industrial area will be about 1,350 kg/day. In addition to that due to the floating population of about 20,000 people, taking into consideration approximately 0.025 kg/person/day of municipal waste generation, the MSW generation will be about 500 kg/day. Therefore, total municipal waste generation due to the project during operation phase will be about 1,850 kg/day. Individual industry will provide system for safe disposal of non-hazardous waste disposal as per the consent to be provided by SPCB.
- (vi) Total power requirement during cooperation phase is 10,000 KVA and will be met from Grid Sub-Station (GSS) by JVVNL.
- (vii) Rooftop rainwater of buildings will be collected in 22 RWH tanks of total 1474.43.
 KLD capacity for harvesting after filtration.
- (viii) Parking provision for commercial and personal vehicles will be the responsibility of individual occupant.
- (ix) Provision of solar lighting will also be made for street lighting for conservation of

energy. A total 508 solar power street light are proposed to be installed along the roads so that 1/3 of street lights are solar energy based. Provision of these solar street lights will result in saving of energy worth approximately Rs 6.2 lacs per annum.

- (x) The total area has been divided into following zones:
 - Automobiles Industry Zone
 - Commercial & Residential (Khatedars only) zone
 - Areas for S.T.P., C.E.T.P., hospital, waste disposal, water harvesting, D.F.C. Corridor, roads, green area development & other services
 - 4.857 ha of land is reserved for future planning.
 - Roads proposed are of width 45 m, 30 m, 18 m, 12 m and 6 m ROW.
 - 80.05 ha (20.54 % of project area) has been kept as service area which includes parking facility.
- (xi) Wildlife issues: It is not located within 10 km of Eco Sensitive areas
- (xii) There is no court case pending against the project.
- (xiii) **Investment/Cost** of the project is Rs.1036.7629 crore.
- (xiv) Employment potential: 107163 No.
- (xv) **Benefits of the project**: The proposed project is for development of infrastructure for sitting the industrial area with residential and commercial facilities, which will provide a total of 291 industrial plots, with different plot sizes. This infrastructure development will provide a support for the upliftment of the overall area. Hence, due to the project the overall area will get better road connectivity and other supporting infrastructure. It is proposed to develop the Salarpur Industrial Area as a, Automobile, General Engineering and Other Miscellaneous industries which are less polluting industries.
- (xvi) ToR Details: The ToR for the project was granted vide letter No.21-1/2014-IA-III dated 26th May, 2014.
- (xvii) Public Hearing: Public Hearing was conducted on 15th July, 2015 at the Collectorate office, Tehsil Tapukara, Tijara. Major issues raised during the public hearing include compensation and employment. These were addressed by the project proponent.
- (xviii) As per CGWA guidelines, the area falls under over exploited zone for ground water withdrawal. The project proponent has applied for obtaining permission from CGWA for the same. It was also informed they have undertaken hydrological assessment of the area planned for ground water withdrawal and rain water harvesting.
- The project was earlier considered by the EAC in its meeting held on 28-29 March, 2016, wherein the EAC asked the project proponent to clarify/furnish the following:-
 - whether the proposed project/activity is in conformity with the land use notified in the NCR zoning plan.
 - whether the nearest National Highways and connecting roads have been accounted for/upgraded for taking up this extra load.
 - Proper demarcation of adequate green belt between industrial area and the residential area.
 - Ground water availability duly cleared by CGWA.

The proposal was deferred for want of the information.

3.21.3	During deliberations, the EAC noted that the required approval from the CGWA for ground water availability is yet to be obtained, although recommended by the Regional Office of the CGWB at Jaipur. The Committee further observed that more than 70% of the industrial plots (covering 195.820 ha area) would be allotted to automobile industries. Whereas, for rest of the industrial plots it might not be possible for the project proponent to provide the details/categorization of industrial units proposed to come up in the near future. However, the Committee insisted for providing categorization of the proposed industrial units to arrive at its jurisdiction to consider the proposal anymore. The proposal was, therefore, deferred.
3.22	Marine disposal of treated effluent through dedicated pipeline to Bay of Bengal from existing Bulk Drug nit at IDA, Pydibhimavaram (Andhra Pradesh) by M/s Saraca Laboratories Limited - Amendment in CRZ Clearance - [F.No.10-47/2007-IA-III]
3.22.1	The EAC noted that the proposal is for amendment in environmental clearance dated 17 th September, 2007 under the CRZ Notification, 1991 accorded to the project 'Marine disposal of treated effluent through dedicated pipeline' to Bay of Bengal from existing bulk drug unit at IDA, Pydibhimavaram in Hyderabad promoted by M/s Saraca Laboratories Ltd based on the recommendations of APCZMA vide their letter dated 31 st May, 2007.
	It has been claimed by the project proponent that their proposal was for laying of combined pipeline, also catering to their group company/sister unit M/s Andhra Organics Limited, and the same was recommended by APCZMA.
	While deliberations, the Committee observed that the proposal for amendment in the environmental clearance due to the change in treated effluent disposal arrangement, would amount to change in scope of work and thus need fresh recommendations of the State CZMA.
	Further, in view of the provisions of the CRZ Notification, 2011, the Committee desired that the proposal should be considered by sectoral EAC based on the recommendations of the State CZMA.
3.22.2	The proposal was, therefore, deferred.
3.23	4/6 laning of package II, km 43.000 to 96.714 from Kerala/Tamil Nadu Border to Kanyakumari of NH-47 and Nagercoil-Kavalkinaru section of NH-47B by NHAI - Amendment in Environmental Clearance - [F.No.5-59/2007-IA-III]
3.23.1	The project involves 4/6 laning of Kerala/Tamil Nadu Border (km 43.000) to Kanyakumari (km 96.714) Section of NH-47 and Nagercoil (km 0.000) to Kavalkinaru (km 16.376) Section of NH-47 B, promoted by NHAI. After the ToR issued for the project in the year 2007 and the public hearing on 21st August, 2010 at Nagecoil, the environmental clearance for the project was granted by this Ministry vide letter dated 9th September, 2010 for a total length of 70.36 km (50.70+16.60) as new alignment passing through 25 villages in Kanyakumari District.
3.23.2	During land acquisition process, Writ Petitions were filed in Madurai Bench of Hon'ble High Court of Madras during 2010-12, challenging the environment clearance granted by MoEF&CC, which were subsequently transferred to the National Green Tribunal

(South Zone) at Chennai.

NGT vide order dated 14th September, 2016 directed ordered as under:-

'Application No. 104,111, and 112 of 2013 are partly allowed with a direction that the EC granted by MoEF&CC to the project proponent dated 9.9.2010 shall be kept in abeyance for a period of six months within which time the MOEF&CC shall refer the entire matter back to the EAC for reappraisal, which shall, after taking into consideration of the above said facts particularly the objections raised at the public consultation processes and referring to revenue records, as stated in the RTI information elicited above and, if necessary, to depute a team of its members to visit the place before making appropriate recommendations and pass appropriate orders and thereafter the regulatory authority viz. MOE&CC to pass appropriate orders. The entire process shall be completed within six months.'

The project was earlier considered by the EAC in its meeting held on 1st December, 2016. Given the directions of the NGT, the EAC decided for a site visit to be undertaken by a team consisting of one of its members Shri K. Gowarappan and one member from the Regional Office of MoEF&CC of Chennai to assess the ground situation, especially in respect of ensuring protection of water bodies, feasibility of the structures proposed, and minimizing the trees to be cut along the project alignment.

- 3.23.3 During the meeting, the EAC was informed that the proposed site visit by the team has not been conducted so far. As such, the proposal may not be considered for the present.
- 3.24 'Naidupeta Industrial Park' at Menakuru & Konetirajupalem Villages, Naidupeta Mandal of District S.P.S.R. Nellore (Andhra Pradesh) by Andhra Pradesh Industrial Infrastructure Corporation Limited Environmental Clearance [F.No.21-140/2015-IA-III]
- 3.24.1 The project proponent made a presentation and provided the following information to the Committee:-
 - (i) The project involves development of Naidupeta Industrial Park (IP) at Konetirajupalem and Menakuru Villages, Naidupeta (M) in S.P.S.R.Nellore District, Andhra Pradesh.
 - (ii) Total land required for the proposed development of Naidupeta IP is 503.44 ha, with the land use details as under:-

S. No.	Land Use	Area (Acres)	Hectares (Ha)	Percentage (%)
1.	Plotted Area	933.81	377.90	75.07
2.	Road Area	103.56	41.91	8.32
3.	Open Space	124.88	50.54	10.03
4.	CFC Area	15.20	6.15	1.23
5.	Buffer + Green Belt	66.57	26.94	5.35
Total		1244.02	503.44	100

(iii) Total water requirement during the construction phase for the proposed IP is estimated to be 0.5-1.0 MLD, which would be supplied through road tankers/local municipal bodies. During operation phase, water requirement of 6.4 MLD of water

- will be met from Telugu Ganga Canal (TGC). APIIC has already obtained approval from the Irrigation and Command Area Development of the State Government to tap water from the TGC.
- (iv) Naidupeta IP envisages to have mixed industrial use with the total waste water generation estimated as 4.5 MLD (sewage 0.7 MLD and industrial effluent of 3.8 MLD), when fully operational. Nearly 0.45 MLD (10%) of effluent will be generated from proposed IP during Initial stage of operation. 1.0 MLD capacity of CETP is proposed in the initial stage to treat the industrial effluents for the entire cluster. It is proposed that the CETP will be a Zero Liquid Discharge (ZLD) system. A part of the treated wastewater will be used for maintaining the greenbelt within the Cluster and the balance will be reused at the units as non-potable water for various applications.
- (v) Municipal solid waste generated disposal facility: Biodegradable Waste will be 4.84 TPD, part converts will be disposed to bio compost and rest will be disposed to local municipal bins. Total Recyclable Waste will be 19.16 TPD, this will be sold to Authorized recycling vendors.
- (vi) **Power requirement and source**: The power demand estimation for various uses in the Naidupeta IP is 48.67 MVA which will be sourced from APSPDCL 132KV/33 KV substation located in Naidupeta IP through a 33 KV Overhead double line circuit up to 33/11 KV substations in Naidupeta IP.
- (vii) **Proposed energy saving measures**: Solar Power harnessing potential has been estimated for Naidupeta IP. Based available roof tap area it is estimated approximately 28 MW can be harnessed. Individual industries of IP will be installing the Solar PVs to extent possible. In addition, it is expected that individual units in the IP will be installing mechanical equipment's/process/ electrical appliances/ instrumentation systems etc., with inbuilt energy conservation measures.
- (viii) **RWH**: The proposed harvesting and recharge structures in IP are Roof-top rainwater harvesting, Storage ponds/tanks of 15 number, Recharge pits of five number and Recharge shafts/wells of five number. Estimated RWH potential for Naidupeta IP is as follows:-

S. No.	Land Use Distribution in Naidupeta IP	Volume of run-off harvested (m ³ /day)
1.	Roof top Area	33294
2.	Roads Area	6462
3.	Open Space	3339
4.	CFC Area	203
5.	Buffer + Green Belt Area	1187
	Total	44485

- (ix) **Investment/Cost of the project**: The approximate cost for development of infrastructure is Rs. 94.77 Crores.
- (x) **Car parking**: In Naidupeta IP, Parking area of 12.25 ha is provided with 573 parking bays.
- (xi) **Benefits of the project:** This project is going to benefit the entire region. The overall development of the region could be manifold. In order to augment the growth, the state has planned multitude of development options in all sectors (tourism, Water resources, Agriculture, urban development, education, etc.) including industrial sector. The proposed IP is one such development to improve

economy and employment generation. Employment potential: During the three year construction phase a total of 350 (xii) employees will get employment. During the operation phase the Industrial Park is expected to bring a direct employment for 17,442 personnel with an indirect employment for 4500 personnel. (xiii) Eco-Sensitive Zone in 10 km radius area: No. (xiv) Wildlife issues: No. (xv) **Details of Forest land involved, if any:** No forest land is involved. (xvi) ToR details: ToR was granted to the project vide letter No.21-140/2015-IA.III dated 29th February, 2016. (xvii) **Public Hearing**: Public hearing was conducted on 20th September, 2016. (xviii) Undertaking to the effect that no activity has since been taken up: Eleven nos of industrial establishments are already in operation in Naidupeta IP. These industries were also covered under Naidupeta IP Master Plan and are having a valid EC, Consent to Establish and Consent to Operate from APPCB. 3.24.2 While deliberations, the EAC noted that the project site proposed in a total area of 503.44 ha, is not a contiguous plot, but in two parts separated by some industrial establishments already in operation having independent ECs. At the same time, the project proponent have given an undertaking that the said industries are in operation in the proposed Naidupeta Industrial Park, and also covered under the Master Plan for Naidupeta IP. As such, there seems to be a contradiction and needs to be clarified by the project proponent for further consideration of the proposal. The EAC was also not convinced with the proposed hazardous waste disposal arrangements from the CETP, and desired for a clarification and firm mechanism for compliance of the Hazardous Waste Management and Handling Rules, 2016. 3.24.3 In view of the desired clarifications and inputs as above, the proposal was deferred. 3.25 Setting of LiDAR based offshore structure at Gulf of Khambat Off Gujarat coast in Gujarat by M/s National Institute of Wind Energy - CRZ Clearance - [F.No.11-1/2017-IA-III1 3.25.1 During the meeting, the project proponent made a presentation and provided the following information to the Committee:-3.25.2 During deliberations, the EAC noted the following:-The proposal is for setting up of LiDAR based offshore structure for the wind measurement project for survey, investigation, exploration, data acquisition and other related technical studies in territorial waters off the Jhakhau coast in District Kutch (Gujarat). The project site is 18 km from the shore having geographical coordinates (ii) Latitude 23^o 07' 24.42" N and Longitude 68^o27' 48.24" E. (iii) The LiDAR based offshore met mast is to be located at a water depth of 10 m with a tidal variation of 5 m on the platform of 5 m dia at about 7.5 m from the MSL. The data collection platform shall consist of instruments for collecting different parameters required for wind potential studies and design of structure for wind turbine.

As per the CRZ map prepared by NIOT, Chennai, the project site falls in CRZ-IV (iv) category requiring offshore facility, and thus considered to be permissible in terms of the provisions of the CRZ Notification, 2011. The GCZMA has recommended the project vide their letter dated 28th December, 2016 subject to strict compliance of certain conditions. National Institute of Wind Energy (NIWE) under the Ministry of new and renewable energy, is the nodal agency for the project for ensuring single window clearance from all the regulatory and security agencies, before the project is made operational. The EAC, after deliberations, recommended the project for grant of CRZ clearance 3.25.3 subject to strict compliance of all the conditions stipulated by the GCZMA in their letter dated 28th December, 2016, and the additions conditions as under:- The project shall be taken up only after necessary clearances/permissions are obtained from the Ministry of Defence, Ministry of Home Affairs, Gujarat Maritime Board, etc. The offshore structure shall be decommissioned after two years of the desired data collection, ensuring adequate safety measures as employed during the construction phase with the minimal impact on noise and marine environment. 3.26 Construction of Retaining wall, Service road, relocation of Bharatnagar Police Chowki along the banks of Mithi River Mumbai by Mumbai Metropolitan Region Development Authority (MMRDA) - Re-consideration for CRZ Clearance [F.No.11-64/2012-IA-III] 3.26.1 At the outset, the EAC was informed about the earlier directions of the NGT at Pune. and subsequent orders of Hon'ble Supreme Court on 28th October, 2016 as under:-The Ministry had accorded CRZ Clearance vide letter dated 4th December, 2012 in favour of M/s MMRDA for construction of retaining wall, service road along the banks of river Mithi in Mumbai. The NGT, Principal Bench at New Delhi vide order dated 31st May, 2016 in Appeal No.7/2015 in the matter of 'Jalbiradari & Othrs Vs MoEF & Othrs' has given the following directions:-The CRZ Clearance granted through the impugned communication of moEF dated 4th December, 2012, is kept in abeyance for a period of 4 months, and the matter is remanded back to the MoEF to place it before the EAC for its reappraisal, without any prejudice after ascertaining the factual physical progress of various works, various reports on the record including CWPRS and NEERI, and other material on record. The MoEF shall take decision on the CRZ Clearance for this project within 4 months. If no such decision is taken in such period, the CRZ impugned clearance will be deemed as quashed and set aside. MoEF shall particularly identify the damage caused to blasting activity and submit a detailed report on remediation along with costs within 4 months to this Tribunal,

(iii)

Given the directions of the Tribunal, the proposal was listed for consideration in

the 162nd EAC meeting held on 29 - 30 August, 2016. Since, the project proponent did not attend the meeting, the proposal could not be considered. The Committee desired that the Ministry may have a meeting with the project proponent and the MCZMA to resolve the issues to comply with the directions of the Tribunal in letter and spirit. There being no response, the proposed meeting could also not be held.

- (iv) Aggrieved with the orders of the NGT, MMRDA filed a Civil Appeal No. before Hon'ble Supreme Court in October, 2016. Hon'ble Supreme Court vide order dated 28th October, 2016 directed as under:
- (v) However, this Ministry came to know about the orders only in the first week of January, 2017 through a mention about the same in the orders of NGT, Principal Bench at N Delhi. Neither any persuasion nor any information in this regard was provided by the MMRDA to this Ministry to enable timely compliance of the orders of Hon'ble Supreme Court.
- (vi) Given the directions of Hon'ble Supreme Court, the proposal has been placed before the EAC to arrive at the line of action for timely compliance in letter and spirit.
- 3.26.2 During the meeting, the project proponent made a presentation and provided the following information to the Committee:-
 - (i) In view of the unexpected deluge in Mumbai in July, 2005, MMRDA took up the development works of Mithi River and Vakola Nalla for flood mitigation under the guidance of Central Water and Power Research Station (CWPRS) and Chitale Committee (Fact Finding Committee). The Mithi River Protection and Development Authority under the administrative control of MMRDA has undertaken the development works in its jurisdiction for 6 km length of Mithi River and 1.8 km length of Vakola Nalla in two phases. The works comprises of widening, deepening, retaining wall, service road and beautification etc.
 - (ii) In Phase-I, desilting and widening works of Mithi River and Vakola Nalla costing about Rs.34.50 crores were completed during the period from March, 2006 to June, 2006. As a result, Mithi River was widened by an average of 30 m and Vakola Nalla by 10 m. Also, the water carrying capacity and water holding capacity of Mithi river was improved by 1.5 times resulting in increase of flushing activity and decrease in pollution level of the river.
 - (iii) For Phase-II, the administrative approval (revised) amounting to Rs.570.76 crores was accorded. Against that, total expenditure incurred so far is Rs.459.55 crores, with the component wise details of works undertaken as under:-

S. No.	Item	Works Completed	% progress
1.	Deepening	2769274 cum	100%
2.	Widening	746136 cum	90%
3.	Rock excavation	256010 cum	58%
4.	Retaining wall	7.77 km	92%
5.	Service road	4.46 km	73%
6.	Beautification	1.12 km	100%

At present, overall progress is reported to be 92%.

- (iv) In Phase-II, Mithi River and Vakola Nalla were widened by an average width of 5 m and 10 m respectively. Also, carrying capacity of Mithi river was increased by three times and water holding capacity by two times, resulting in reducing the pollution levels. The same was vetted by CWPRS in their report dated 11th November, 2011. From the year 2013, pre-monsoon desilting works of Mithi River and Vakola Nalla was handed over to MCGM.
- (v) While construction of retaining wall and widening work along Mithi river and Vakola nalla, demolition of hutments was carried out at some places. During Phase-I, 2600 no. of hutments were demolished, and in Phase-II, 1128 no. of hutments were demolished. The demolition of total 367 hutments at Valmiki Nagar along Vakola nalla is still remaining.
- (vi) The site for construction of retaining wall and service road falls under the CRZ-II zone, and thus requiring CRZ Clearance by the MoEF in terms of the provisions of the CRZ Notification, 2011. MCZMA forwarded the proposal to MoEF on 19th June, 2012 with the recommendations to grant CRZ Clearance to the project. Considering the recommendations of MCZMA, the project was granted CRZ Clearance on 4th December, 2012 in favour of MMRDA.
- (vii) Further developments were informed as under:-

Date	Particulars
19.10.2012	Work order for undertaking underwater blasting work granted by the MMRDA to RE Infra Pvt. Ltd.
06.11.2012	PIL No.131 of 2012 filed by the Jalbiradari and Vanashakti before the Hon'ble High Court of Judicature at Bombay, falsely alleging that the MMRDA had, inter alia, undertaken unauthorised blasting operations in the Mithi River and that the same were having an adverse effect on the surrounding environment.
04.12.2012	MoEF issued the CRZ clearance to MMRDA.
24.01.2013	Approvals obtained from the Petroleum and Explosives Safety Organization of the Government of India and the Office of the Commissioner of Police, Brihan Mumbai for controlled blasting activities in the Mithi River.
05.02.2013	Jalbiradari and Vanashakti were permitted by the Hon'ble High Court of Judicature at Bombay to withdraw the PIL No. 131 of 2012 and file an appeal before the NGT.
13.02.2013	Jalbiradari and Vanashakti approached the NGT by way of the Appeal No.8 of 2013, inter alia, challenging the CRZ Approval granted to the MMRDA, along with an application seeking condonation of the delay in filing the said appeal. No orders were passed in pursuance of filing the said application for condonation of delay. The said appeal before the NGT was for a cause of action distinct from the one argued under the abovementioned PIL No. 131 of 2012.
02.03.2013,	CWPRS Pune monitored the blasting activity to ensure the
03.03.2013	safety of the nearby structures against the blast vibrations.
and	
06.03.2013	

22.04.2013	A fresh no objection for controlled blasting activities obtained from the Office of the Commissioner of Police, Brihan Mumbai.
23.04.2013	A fresh approval was obtained from the Petroleum and Explosives Safety Organization of India to conduct blasting operations
03.10.2013	Observation note issued by Central Water and Power Research Station recommending that the blasting patterns followed at the site during March 2013 be continued for the further widening and deepening of the Mithi River
08.10.2013	The National Green Tribunal (Western Zone) Bench, Pune arrived at a prima facie opinion that an EIA study would be required to be conducted in order to determine the effects of the blasting operations on the river and ecology.
14.03.2014	EIA Report on the rock blasting activity in the Mithi River issued by the National Environmental Engineering Research Institute recommending that the blasting activity be discontinued due to its alleged impact on the biodiversity and ecosystem.
20.05.2014	CWPRS recommended that removal of impediments like rock outcrops was essential to maintain a proper river bend gradient and that river channelization by way of widening and deepening of the Mithi River and the Vakola Nalla was recommended.
22.01.2015	The Hon'ble Expert Member and the Hon'ble Judicial Member of the National Green Tribunal (Western Zone) Bench, Pune passed differing orders.
31.05.2016	Hon'ble Chairperson, NGT, upon a reference under Section 21, held that, inter alia, the CRZ Approval granted to the MMRDA be kept in abeyance, the MMRDA be made liable to pay environmental compensation and that the Respondent Nos. 3 and 5 re-examine the Mithi River Project.
01.09.2016	The MMRDA challenged the above orders of the NGT by way of the WP (Civil) No.10631 of 2016 before the Hon'ble Court of Judicature at Bombay.
30.09.2016	The Hon'ble High Court of Judicature at Bombay was of the view that the challenge to the NGT orders be heard by this Hon'ble Court and permitted the MMRDA to withdraw the writ petition, while granting it liberty to approach this Hon'ble Court.

(viii) The Appeal No.7/2015 in the matter of 'Jalbiradari & othrs Vs Union of India & othrs' filed before the National Green Tribunal (WZ) at Pune, was alleging that rock blasting work caused immense damages to flora and fauna in the vicinity of blasting areas, damages to marine and aquatic life, and also construction of retaining wall along Vakola Nalla caused damages to the surrounding mangroves. The prayers made before the Tribunal included to pass orders to quash and set aside the Environment Clearance Certificate dated 4th December, 2012 issued by MoEF in favour of MMRDA, demolition of Retaining walls and any concretization within the river bed on the banks of the river that have been constructed within the Mithi River and to restore the river to its original position, stoppage of blasting operations being conducted in the Mithi River,

restoration and restitution of the river to its original pristine state, etc.

(ix) MMRDA's pleading before NGT

Controlled blasting work:

The work of controlled blasting was included in the list forwarded to MCZMA on 07-12-2010 and subsequently to MoEF&CC, in the work listed at Sr.No.4 as deepening of Mithi River from Ch.0.0m (Mahim Causeway) to Ch.2140.0m which is specified in tender at item no.3. The rock hump were available at scattered locations near the mouth of Mithi River at Mahim Causeway, which were very sporadic. Therefore, there was no separate mention of work in the list submitted to MoEF&CC. All statutory permissions from the Petroleum and Explosives Safety Organisation and the Commissioner of Police were obtained prior to start of rock blasting work.

MMRDA has ensured that no adverse environmental impact caused due to the use of mild controlled blasting of rock during the process. Once the rock is fragmented, it is manually removed with equipment.

Deepening and widening of Mithi River is very much in interest of the environment and also in public interest to mitigate danger of deluge like 26th July 2005. Also, the mild blasting is not affecting any marine flora and fauna. The blasting work was carried out under the expert guidance of Central Institute of Mining and Fuel Research, which has stated in its report dated 30-10-2012 that no damages to flora and fauna would occur due to this mild blasting.

Retaining wall and other works

While executing these works of deepening, widening and construction of retaining walls including service roads, MMRDA had not damaged any mangroves or flora and fauna or marine life. CIMFR in their report dated 30th October, 2012 and CWPRS report dated 3rd October, 2013, have endorsed the same. All the works were executed as per the directions of CWPRS, Pune vide their report of January, 2006 and Fact Finding Committee's report of March, 2006. In fact, construction of retaining wall was essential to provide better tidal exchange, increase discharging capacity during floods, control the encroachments, train the river, restrict filling of debris, maintain the designed waterway, protect the banks from erosion and to channelize the flow.

As regards the pipes laid in the stretch of Vakola Nalla for feeding water to mangroves, CWPRS in its report has stated that the sufficient quantity of water is being supplied to mangrove areas in the stretch of Vakola Nalla from Ch.705.0m to Ch.1005.0 m and survival and growth of mangroves is satisfactory.

- (x) Mithi River protection works were undertaken on priority as flood mitigation measure, as per the orders dated March, 2006 of Hon'ble Bombay High Court in PIL No.2116/2005. Hon'ble Court had appreciated the works executed by MMRDA in Phase-I, and further in January, 2007 directed that the Phase-II works like deepening, widening and construction of retaining walls shall be undertaken on priority and complete the same to avoid flooding in future.
- (xi) The NGT in their order dated 31st May, 2016 observed as under:-

'MMRDA has started the project without compliance to the relevant provisions of law. It caused environmental degradation and even the blasting work was carried in violation to the relevant laws in force. Consequently, MMRDA is liable to pay environmental compensation. At this initial stage, it is directed that MMRDA shall pay Rs.25 lakhs as Environmental Compensation, which will be subject to final adjustment upon submissions of the report by the expert body including the money required for taking restorative and remedial measures.'

More directions contained in the said order are stated in para 2.26.1 above.

- (xii) Since MMRDA has not done any damage to environment such as mangroves, flora and fauna, marine life etc. due to controlled blasting and other works executed so far, MMRDA has challenged the orders of the NGT, Principal Bench at Pune before Hon'ble Supreme Court of India, with the prayers as below:-
- (a) The works executed by MMRDA as stated in pre-page under Phase-I and Phase-II, were carried out pursuant to orders passed by Hon'ble High Court dated 01-03-2006 and 17-01-2007 to prevent loss of life and injury to the public in the light of the floods. Also all the works were executed under the guidance of CWPRS, Pune and CIMFR.
- (b) The works of rock blasting was carried out under the strict supervision and guidance and after design of the blasting charge by the CIMFR. Thereafter the CWPRS has also been asked to study the blasted site. Accordingly, CWPRS had visited the site and vetted that no damages have been occurred to the surroundings vide their report dated 31-10-2013.
- (xiii) Few actual photographs of site were also shown. The balance work of retaining wall in the stretch of Valmiki Nagar, where the retaining wall is not executed, it is seen that the encroachments are cropped up in the waterway obstructing the flow of water and at the same time where the retaining wall works are completed no encroachments are seen and flow of water is also smooth.
- The EAC, in view of the directions contained in the order dated 31st May, 2016 of NGT, Principal Bench at Pune, and further orders dated 28th October, 2016 of Hon'ble Supreme Court, decided to first conduct a site visit in the last week of January, 2017 on a mutually convenient date. The proposal, thereafter, shall be placed before the EAC for re-appraisal. The Committee also firmly decided to conclude the proceedings as per the orders of Hon'ble Supreme Court.

List of the Members

- 1. Dr. Deepak Arun Apte, Chairman and Director, Bombay Natural History Society (BNHS), Mumbai (Maharashtra)
- 2. Dr. E. Vivekanandan, Plot 1, Sarathy Nagar, 5th Street, Velachery, Chennai 42.
- 3. Dr. S. W. A Nagvi, Former Director, NIO-CSIR, Goa
- 4. Dr. S.G. Bhave, Associate Dean Forestry, Konkan Krishi Vidyapeeth, Dapoli, Maharashtra
- 5. Dr. Anuradha Shukla, Central Road Research Institute (CRRI), CRRI, Mathura Road, New Delhi-25
- 6. Shri N.K. Gupta, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum Office Complex, East Arjun Nagar, Delhi -110 032
- 7. Shri Y. Chandrasekhar Iyer, Commissioner (FM), MoWR, RD &GR
- 8. Shri S.K. Srivastava, Scientist E, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, 3rd Floor, Vayu Wing, Jor Bagh Road, Aliganj, N Delhi -3

Note: Dr. Deepak Apte, Chairman excused himself from agenda point 3.14 and 3.18 for conflict of interest (being Director of BNHS who has undertaking bird study for the Navi Mumbai Airport and conducted mangrove assessment for JSW transmission line). The agenda items were chaired by Shri Gupta and Dr. Bhave respectively.