

Minutes of 164th meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction, Industrial Estate and Miscellaneous projects held on 1st December, 2016 at Ministry of Environment, Forest and Climate Change, New Delhi - 3

1. Opening Remarks of the Chairman.

2. Consideration of Proposals

2.1	Development of Dholpur-Rajakhera up to State Boarder SH-2A road from km 0.000 to km 43.300 in Rajasthan by Rajasthan PWD – Finalization of ToR – [F.No.10-75/2016-IA-III]
2.1.1	<i>The project proponent has requested for postponement of the project. The proposal was, therefore, deferred.</i>
2.2	Development of Karauli-Mandrayal SH-22 Road from km 0.000 to km 38.750 in Rajasthan by Rajasthan PWD – Finalization of ToR – [F.No.10-76/2016-IA-III]
2.2.1	<i>The project proponent has requested for postponement of the project. The proposal was, therefore, deferred.</i>
2.3	Improvement of SH-79 from Hanur to Tamil Nadu Border including connectivity from Palar to Hoganakkal Falls (ODR) in the State of Karnataka by Karnataka State Highways Improvement Project – Finalization of ToR – [F.No.10-77/2016-IA-III]
2.3.1	<p>The project proponent made a presentation and provided the following information to the Committee:-</p> <p>(i) The proposal involves improvement of SH-79 from Hanur to Tamil Nadu Border including connectivity from Palar to Hoganakkal Falls (ODR) in the State of Karnataka promoted by Karnataka State Highways Improvement Project.</p> <p>(ii) Project Implementation Unit, Karnataka State Highway Improvement Project (PIU-KSHIP) has planned to:</p> <ul style="list-style-type: none"> ▪ Upgrade/strengthen Hanur to Tamil Nadu Border section of SH-79 & MDR outside wildlife sanctuary area and to strengthen the carriageway without widening and geometric improvement inside wildlife sanctuary areas. ▪ Improve the connectivity to Hoganakkal Falls (Palar to Hoganakkal), which includes improvement of riding quality by rehabilitation of the existing deteriorated pavement surface and adding Parapet/Railing to all Bridge structures which is currently missing. <p>(i) Total length of the project road will be 95 km, which includes:</p> <ol style="list-style-type: none"> a) Hanur (Ch. Km 85+815 of SH-79) to Tamil Nadu border near Palar (Ch. Km 163+023 of SH-79) – 65.5 km b) Palar (162+670 of SH-79) to Hoganakkal Falls (ODR) - 29.5 km <p>(ii) The proposed project road is located in Kollegal Taluka of Chamrajnagar district, in the State of Karnataka.</p> <p>(iii) Mysore (Chamarajapura Railway Station) is the nearest railway station, located at a distance of 86.0 km and Bangalore (Kempegowda International Airport) is the nearest airport, located at a distance of 209.0 km.</p> <p>(iv) 81.789 km out of 95 km of the proposed project road is passing through two Wildlife Sanctuaries namely Malai Mahadeshwara Wildlife Sanctuary and Cauvery Wild Life</p>

Sanctuary. 49.883 km stretch of the project road traverse through Malai Mahadeshwara Wildlife Sanctuary and 31.906 km stretch of the project road traverse through Cauvery Wildlife Sanctuary.

Existing Chainage Km			Design Chainage km			Side	Name of the Protected Area
Start	End	Length (km)	Start	End	Length (km)		
89+020	91+810	2.790	88+975	91+765	2.790	Both sides	Malai Mahadeshwara Wildlife Sanctuary
95+064	97+470	2.406	94+938	97+344	2.406	Both sides	Cauvery Wildlife Sanctuary
103+807	150+900	47.093	104+107	151+200	47.093	Both sides	Malai Mahadeshwara Wildlife Sanctuary
162+670	Near Hoganakkal	29.5	150+825	Near Hoganakkal	29.5	Both sides	Cauvery Wildlife Sanctuary
Total Length		81.789			81.789		

- (v) Agriculture is the main land use with very few industries along project road. Commercial activities is only noted when alignment passes through settlements however no major industries are noted along project road. Major settlements along the project road are Hanur, Kaudalli, Male Mahadeshwara, Palar and Gopinatham.
- (vi) The project road is located in plain terrain (9 km), rolling terrain (50.0 km) and hilly terrain (36 km). Out of 36.0 km of the hilly terrain, 8.4 km stretch is above 1,000 m from mean sea level.
- (vii) **Water Requirement:** Approx. 500 KLD water will be required per day during the construction period. There are good numbers of surface water bodies, irrigation canals along the project road. Water will be sourced from these surface water bodies / canals with due permission from concerned authorities.
- (viii) **Solid Waste:** The solid waste generated due to construction and allied activities would mainly consist of earth materials. These materials will be reused for rehabilitation of borrow area / quarry sites, camp sites and slopes. The municipal solid wastes generated in construction & workers camp will be disposed of at nearest identified location of disposal / landfill sites of local authority under their consent.
- (ix) **Liquid Waste:** Estimated quantity of liquid waste from labour camp is 10,400 liters per day. Septic tanks with soak pits will be provided at labour camps.
- (x) **Estimated Project Cost:** Rs. 224 Crore.

2.3.2

During deliberations, the Committee noted the following:-

- (i) The project for improvement of SH-79 from Kollegal to Tamil Nadu Border including connectivity from Palar to Hoganakkal Falls in Karnataka, was earlier envisaged in a total length of 119 km in the State of Karnataka, promoted by the Public Works Department through PPP.
- (ii) Due to tremendous public pressure for development of existing road from Kollegal to Hannur (total length 24 km), the State Government of Karnataka decided to take up the

	<p>said section of the project road (located outside the Forest and Wildlife Sanctuary area) on priority basis, and exclude the portion falling in the forest and wildlife sanctuary from the present scope.</p> <p>(iii) Total length of the project road would now be reduced from 119 km to 95 km, which includes, Hannur (Ch. Km 85+815 of SH-79) to Tamil Nadu border near Palar (Ch. Km 151+080 of SH-79) - 66 km and Palar to Hoganakkal (ODR) -29 km. Out of it, 81.789 km of road stretch passes through two Wildlife Sanctuaries namely, Malai Mahadeshwara and Cauvery Wildlife Sanctuary.</p> <p>(iv) ToR for the earlier proposal was granted on 1st February, 2016. With the scope of the project revised to the above extent, the ToR issued for the project stands infructuous and a fresh ToR needs to be issued.</p>															
2.3.3	<p><i>The Committee, after detailed deliberations, recommended the proposal for grant of Terms of Reference, specified by the Ministry in April, 2015 as Standard ToR for the said project/activity, and for preparation of EIA/EMP reports after public consultation.</i></p>															
2.4	<p>Delhi-Jaipur Expressway (Greenfield) Project in Haryana and Rajasthan by National Highways Authority of India – Further consideration for ToR – [F.No.10-48/2016-IA-III]</p>															
2.4.1	<p>The project proponent made a presentation and provided the following information to the Committee:-</p> <p>(i) The project is for Delhi-Jaipur Expressway (Greenfield) Project in Haryana and Rajasthan promoted by National Highways Authority of India.</p> <p>(ii) This project was initially designed for a length of 226.4 km including three spurs. The alignment started from Km 20 of NH-8 and ended at Km 242.9. The project alignment was going closure to wildlife areas (At Sultanpur of Haryana and Nahargarh of Rajasthan).</p> <p>(iii) The TOR for initial design was considered in 128th meeting of EAC on 20th- 23rd November, 2013 and Terms of References for EIA study was granted by MoEF, vide letter dated 10th December, 2013(F.No.10-62/2013-IA-III).</p> <p>(iv) Ministry of Road, Transport and Highway and Government of Haryana, decided to revise the proposed Greenfield Expressway alignment. It will start at km 40.10 of NH-8 near Kherki Dhoola Toll Plaza and, same will terminate at km 217.0 of NH- 8 near Chandwaji. Total revised length of project road is 195.10 km. The spurs have been deleted in the present proposal and factually the main expressway alignment remains the same except change in start and end point. The revised proposal, detailed is as under:-</p> <p style="text-align: center;">Old and New Proposal of Delhi-Jaipur Expressway (DJE)</p> <table border="1" data-bbox="400 1675 1374 1977"> <thead> <tr> <th>Particulars</th> <th>DJE Old Proposal</th> <th>DJE New Proposal</th> </tr> </thead> <tbody> <tr> <td>Start point chainage (Km 0)</td> <td>Km 20 of NH-8</td> <td>Km 40.1 of NH-8</td> </tr> <tr> <td>End point chainage</td> <td>Km 242 of NH-8</td> <td>Km 217 of NH-8</td> </tr> <tr> <td>Spurs</td> <td>3 numbers of total length 69.7 Km</td> <td>Nil</td> </tr> <tr> <td>Total length</td> <td>226.4 Km</td> <td>195.10 Km</td> </tr> </tbody> </table> <p>(v) Terrain of the revised project road is 90% plain and 10% hilly/rolling terrain. It</p>	Particulars	DJE Old Proposal	DJE New Proposal	Start point chainage (Km 0)	Km 20 of NH-8	Km 40.1 of NH-8	End point chainage	Km 242 of NH-8	Km 217 of NH-8	Spurs	3 numbers of total length 69.7 Km	Nil	Total length	226.4 Km	195.10 Km
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	<p>traverses through 423 villages, 11 talukas and 7 districts namely Gurgaon, Jhajjar, Rewari, Mahendergarh, Alwar, Sikar and Jaipur of two states. The proposed RoW will be 90 m for expressway.</p> <p>(vi) Land requirement: Total land covered is 1755.90 ha; Govt. Land is 360.65 ha, Private Land is 1354.98 ha, 1.22 ha Reserve forest area and 8.907 ha protected notified for managerial purpose in Haryana state, 30.821 ha Protected forest area in Rajasthan state are involved.</p> <p>(vii) Wildlife issues: Sultanpur Bird Sanctuary is situated at a distance of 5.15 km from the main expressway.</p> <p>(viii) Construction of ROB (1), ROB cum VUP (3), Flyovers (2), PUP (79), CUP (4) and VUP/Overpasses (12 VUP, 20 VOP), 2 Toll plazas are proposed. An elevated corridor of 11.5 km, Minor Bridge (34) & Major bridges (2) and Culverts (425) are also proposed to maintain the natural drainage pattern of the area. Three Interchanges are proposed at identified locations and Entry / Exit ramps.</p> <p>(ix) Trees cutting: Approximately 14650 no. of trees (with girth size of <60 cm – 29%; 60-90 cm – 20%; 90-120 cm – 32%; >120 cm 19%) are proposed to be felled for construction activity. The avenue plantation will be carried out apart from the statutory requirement as per IRC SP: 21, 2009 and NHA's Guideline for National Green Highway Policy 2015 as availability of land.</p> <p>(x) The use of the aggregates, soil, sand and bitumen is estimated to be 0.93 million cum, 19.92 million cum, 0.21 million cum, and 0.06 MT respectively.</p> <p>(xi) Around 640 properties/structures are affected due to the construction of the above road.</p> <p>(xii) During the construction phase of the project which is likely to be completed within 36-48 months, local manpower will be needed to take the part in various project activities. Skilled, semi-skilled and unskilled labours will likely to get work.</p> <p>(xiii) Water requirement: 7000 KLD of water will be required during construction stage. It is proposed that surface water is to be used for the project especially from the en-route canal and river subject to availability.</p> <p>(xiv) Thermal Power: NTPC Badarpur, Delhi; Indira Gandhi Super Thermal Power Plant, Jhajjar; Mahatma Gandhi Thermal Power Plant, Jhajjar and NTPC Dadri Thermal Power Plants are within the project influence area of 100 km. The fly ashes of 6.4 million cubic meters are proposed to be utilized for construction, subject to availability.</p> <p>(xv) Investment/Cost: The total environment budget is Rs.50.60 crores; R&R cost of the project is Rs.5,000 crore; Total civil cost is estimated to be Rs.6,350 crores.</p>
<p>2.4.2</p>	<p>The green field project 'Delhi-Jaipur Expressway' was earlier considered by the Expert Appraisal Committee in its 161st meeting held on 26th July, 2016, wherein the Committee recalled the proposal for Delhi-Jaipur Greenfield Expressway in a total length of 226.4 km, placed before it on 22-23 November, 2013. Also, based on the recommendations of the EAC, the ToR was granted on 10th December, 2013.</p>
<p>2.4.3</p>	<p>During deliberations, the EAC noted the following:-</p> <p>(i) As desired by the EAC, the project proponent has submitted a declaration for withdrawing the ToR dated 10th December, 2013, and requested to issue a fresh ToR for the revised proposal/alignment as detailed at para 2.4.1 above and presented before the Committee.</p> <p>(ii) The Greenfield expressway in a total length of 195.10 km starts from km 40.1 of NH-8 at Kherki Toll Plaza and terminates at km 217.0 of NH-8 near Chandwaji at Jaipur, promoted by NHA Ltd.</p>

	<p>(iii) The project area falls in 423 villages, 11 Talukas of 7 Districts in the states of Haryana and Rajasthan.</p> <p>(iv) Sultanpur Bird Sanctuary in Haryana is situated at a distance of 5.15 km from the proposed alignment of the Expressway, and as such requires clearance under the Wildlife (Protection) Act, 1972 by the Standing Committee of NBWL.</p> <p>(v) Total land required for the project is 1755.90 ha, which includes 1354.98 ha of private land, 360.65 ha of Government land, Reserved Forest of 1.22 ha and the protected forest of 39.728 ha.</p>
2.4.4	<i>The Committee, after detailed deliberations, recommended the proposal for grant of Terms of Reference, specified by the Ministry in April, 2015 as Standard ToR for the said project/activity, and for preparation of EIA/EMP reports after public consultation.</i>
2.5	Widening and strengthening of existing 2 lane to 4/6 lane of selected stretches/Corridors of National Highway under NHDP Phase III Group-F, Tiruchchirppali (km 130.000) to Karur (km 218.000) NH-67 in the State of Tamil Nadu by NHAI – Amendment in Environmental Clearance -[F.No.5-24/2007-IA-III]
2.5.1	<p>During the meeting, the project proponent provided the following information to the Committee:-</p> <p>(i) Environmental Clearance for the project ‘Widening and strengthening of existing 2 lane highway to 4/6 lane from Tiruchirapalli to Karur of NH-67’ was granted by this Ministry vide MoEFCC letter No.5-24/2007-IA-III dated 16th May, 2007. The work has been completed and the road is now under operation except the Trichy Bypass.</p> <p>(ii) Project road starts at Tiruchirappalli (km 135.800) and ends at Karur (km 218.000) with the total length as 82.2 km.</p> <p>(iii) Trichy Bypass starts at km 135+930 (bypass design chainage km 0+000) and ends at km 153+230 (bypass design chainage km 17+305). Total length of the bypass is 17.305 km.</p> <p>(iv) Alignment of the Trichy bypass from Km 1.750 to Km 6.250 was originally proposed through three irrigation tanks namely, Pirattiyur (Kothamangalam), Kallikudi and Punganur (Thayanur Village).</p> <p>(v) Against the alignment passing through these Irrigation tanks, 2 cases were filed in Hon'ble Madurai Bench of Madras High Court (W.P.No. 9112/2009 and W.P. No. 9510/2009) and one case in Hon'ble Madras High Court (W.P.No. 21205/2009 and M.P. No. 123 of 2009). Based on the judgment of Hon'ble Madurai Bench of Madras High Court dated 23.12.2009, an Expert Committee was constituted by the NHAI to study the alignment through tanks falling along Trichy bypass.</p> <p>(vi) The Expert Committee submitted its final report incorporating the comments of the Director on 09.06.2010. In its report, the committee recommended an alignment with minor modifications in the DPR alignment and it was also passing through the said irrigation tanks. Again three cases were filed in the Hon'ble Madras High Court against the recommended alignment (W.P.(MD). No.5769 of 2010, W.P.(MD). No. 11526 of 2010, and W.P.(MD). No.11705 of 2010; and M.P.Nos.2,1 and 1 of 2010).</p> <p>(vii) The final judgment of the Hon'ble Madras High Court was pronounced on 09.11.2010. The Order gave three options to NHAI. i.e., (A) The highway should not pass through the tanks, (B) The new alignment should at best be aligned along the boundaries of the tank without affecting the inflows or outflows from the tank and (C) If it is inevitable to align the highway in the tank, then the highway should be constructed over the bridges after proper hydraulic and hydrologic analysis so that</p>

	<p>there is no obstruction to the inflow into and outflow from the tank. The Order also specified that before adopting any one of the options, environmental clearance should be obtained by NHAI from MoEFCC.</p> <p>(viii) Initially, NHAI adopted Option C and approached MoEFCC for amendment to the Environmental Clearance already issued for the project. However, MoEFCC vide Letter No.5-24/2007-IA-III, dated 11.10.2011 suggested to change the alignment again since it was passing through water bodies.</p> <p>(ix) Subsequently, NHAI adopted option B. NHAI has applied for amendment in environmental clearance from MoEFCC for the revised alignment based on this option.</p> <p>(x) The realigned portion of the Trichy bypass doesn't require diversion of any forest land. Total forest land required for the remaining portion of the project is 5.08 Ha and the forest clearance has already been obtained.</p> <p>(xi) The project road is not located in whole or in part within 10 km from the boundary of: (i) Protected Areas notified under the Wild Life (Protection) Act, 1972, (ii) Critically Polluted areas as identified by the Central Pollution Control Board (iii) Notified Eco-sensitive areas, (iv) inter-State and international boundaries.</p> <p>(xii) About 235 trees are to be felled for the revised alignment of Trichy Bypass, against which about 2350 trees are proposed to be planted.</p> <p>(xiii) Total project cost is Rs. 516.00 Crores. Cost of revised alignment of Trichy Bypass is Rs. 84.14 Crores.</p> <p>(xiv) Total 258.880 Ha of land is proposed to be acquired for the project out of which 212.720 Ha has been handed over to the Concessionaire. Remaining 46.16 Ha of land is to be acquired for the revised alignment of Trichy Bypass.</p>
2.5.2	<p>During deliberations, the EAC noted the following:-</p> <p>(i) NHAI has applied for amendment in environmental clearance dated 16th May, 2007 for the project, with the preferred option B, as referred in para 2.5.1 (vii) above viz. The new alignment should at best be aligned along the boundaries of the tank without affecting the inflows or outflows from the tank.</p> <p>(ii) Under the option B, realignment of Trichy bypass has been proposed from km 1+750 (bypass design chainage km 0+000) to km 6+250 (design chainage km 7+941).</p> <p>(iii) NHAI has applied for amendment in the EC, after obtaining the necessary permission from the State agencies only in March, 2016.</p>
2.5.3	<p><i>The EAC, after deliberations on the proposal, noted that the EC dated 16th May, 2007 was for a period of 5 years and is no more valid now. As such, there seems to be rationale for amendment in the said EC and not admissible under the present regulatory framework. Instead, the project proponent may apply for a fresh EC for the Trichy Bypass stretch with the preferred option B.</i></p>
2.6	<p>4/6 laning of Kerala/Tamil Nadu Border to Kanyakumari Section of NH-47 and Nagercoil to Kavalkinaru Section of NH- 47B by NHAI – Environmental Clearance – [No.5-59/2007-IA-III]</p>
2.6.1	<p>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,</p>

	2010 for a total length of 70.36 km (50.70+16.60) as new alignment passing through 25 villages in Kanyakumari District.																								
2.6.2	<p>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.</p> <p>The NGT vide order dated 7th March, 2016, directed that the project proponent not to proceed further with the project. Subsequently after hearing the contentions of the applicant, the Tribunal passed an order dated 16th March, 2016 permitting the respondent to proceed with the project activities subject to the condition that the same shall not affect any ponds which are situated in the course of the execution of the project and no trees on the way to be cut.</p> <p>NGT vide order dated 14th September, 2016 directed ordered as under:-</p> <p><i>'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.'</i></p>																								
2.6.3	<p>During the meeting, the project proponent informed that :-</p> <p>(i) There are total 43 water bodies (system tanks and ponds) and 207 canal and drain crossings along the project alignment.</p> <p>(ii) In compliance of the observations and directions of the NGT, the proposal has since been revised with more major/minor bridges and cross drainage structures proposed with the details as under:-</p> <table border="1" data-bbox="258 1451 1485 1827"> <thead> <tr> <th>S. No</th> <th>Structure type</th> <th>Quantity of structures proposed at the time of EC dated 9th Sept, 2009</th> <th>Quantity of structures proposed in compliance to Hon'ble NGT order dated 14th Sept, 2016</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Major Bridge</td> <td>1</td> <td>34</td> </tr> <tr> <td>2.</td> <td>Minor Bridge</td> <td>25</td> <td>43</td> </tr> <tr> <td>3.</td> <td>Box Culvert</td> <td>141</td> <td>82</td> </tr> <tr> <td>4.</td> <td>Hume Pipe Culvert</td> <td></td> <td>91</td> </tr> <tr> <td></td> <td>Total</td> <td>167</td> <td>250</td> </tr> </tbody> </table> <p>(iii) No tree has so far been cut for project development in compliance of the earlier order of the NGT dated 16th March, 2016.</p>	S. No	Structure type	Quantity of structures proposed at the time of EC dated 9 th Sept, 2009	Quantity of structures proposed in compliance to Hon'ble NGT order dated 14 th Sept, 2016	1.	Major Bridge	1	34	2.	Minor Bridge	25	43	3.	Box Culvert	141	82	4.	Hume Pipe Culvert		91		Total	167	250
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2.6.4	<i>In view of the observations of the NGT, the EAC opined for a site visit to be undertaken shortly to assess the ground situation, especially in respect of ensuring protection of</i>																								

	<p><i>water bodies, feasibility of the structures proposed, and minimizing the trees to be cut along the project alignment.</i></p> <p><i>The EAC decided that the site visit may be conducted by a team consisting of one of its members Shri K. Gowarappan and one member from the Regional Office of MoEF&CC of Chennai. It is only after receipt of their report suitably addressing the concerns of the NGT, the proposal would be placed before the Committee for re-appraisal.</i></p>
2.7	Almas Ayurvedic Resort at Village Purathur, District Malappuram, (Kerala) by M/s Almas Ayurvedic Hospitals and Research Centre Pvt. Ltd. – CRZ Clearance – [F.No.11-31/2016-IA-III]
2.7.1	<p>The project proponent made a presentation and provided the following information to the Committee:-</p> <ul style="list-style-type: none"> (i) The project is for Almas Ayurvedic Resort at Survey Nos: 8/1A9, 8/1A10, 8/1B2 in Village Purathur, District Malappuram, (Kerala) promoted by M/s Almas Ayurvedic Hospitals and Research Centre Pvt. Ltd. (ii) Total Land Area is 2.1 ha and built up area will be 5056.87 m². (iii) The project proposal is to establish a new resort to provide facilities for traditional ayurvedic wellness centre. The project involves development of buildings of 5056.87 sqm with a total capacity of 138 inmates along with 50 Staff at a time. (iv) The proposed plot is under the influence of 500 m HTL Line with respect to Arabian Sea and CRZ Zone of Tirur Puzha. (v) Land use: The proposed location is in a village setting with mixed landuse with agriculture. A road maintained by Kerala PWD running along the western side, the Tirur Puzha (river) on eastern side. South and North portions are coconut plantations with some residential units location. Present plot is having barren land in front of the road followed by coconut plant towards river side. The proposed buildings are majorily falling in the barren land. (vi) Project Components: The project involves the construction of two treatment blocks and with a separate restaurant block. It also includes facilities like STP, RWH, pools, open area for cultural activities, walkway and parking areas. (vii) Constructional water requirement will be 8.42 m³/day and the source of water will be vendor supply. Operational water requirement will be 35.5 m³/day and the source of water will be rain water harvested and R.O treated water from the river. (viii) An Expanded Granular Sludge Bed Reactor (EGSB) with a capacity of treating sewage of 16m³/day has been proposed for the proposed project. It includes the following operational units namely Grit chamber, oil trap separator, collection tank, EGSB reactor, clarifier, and filters. The treated effluent could be used for inland irrigation. Recycling/reuse of treated water and disposal. (ix) Solid Waste Management: The construction waste produced will be reused to the maximum extent possible for leveling and recyclable waste will be sent for recycling. During operation phase, the biodegradable waste will be treated in the biogas plant and recyclable waste such as plastic, paper etc will be sent to market for recycling. The oil contaminated waste will be treated using bulking agents such as saw dust, waste paper and nutrient mixture and composted to manure. (x) No hazardous waste is expected to be generated. (xi) The project location is dominated by Coconut plantation and common shrubs. It was estimated that about 30 coconut trees coming on the foot print of the proposed structures shall be cleared.

	<p>(xii) Parking facilities: The parking provisions are made according to the Kerala Municipal Building Rules (KMBR) norms. Parking facilities for 23 cars are provided in front of the administrative block out of which two slots are kept for parking for disabled persons.</p> <p>(xiii) Energy requirement: Solar energy to minimize conventional energy use, photovoltaic panels (5 kVA) and solar water heater systems will be provided. The street lighting and emergency lighting will be provided with solar energy. Solar water heater with 2000 litre storage tank capacity is proposed in the project. It is estimated to have a saving of 54 units per day with the usage energy conservation measures. Source of power supply will be Kerala State Electricity Board (KSEB).</p> <p>(xiv) RWH: A roof top rain water harvesting facility is integrated with the project and a rainwater storage tank of capacity 186 m³ is proposed. The same is in line with KMBR 25liters per sqm of total coverage area.</p> <p>(xv) SCZMA Recommendations: The Kerala State Coastal Zone Management Authority (KCZMA) has recommended the project vide their letter No. 3573/A2/15/KCZMA/S&TD dated 2nd March, 2016.</p> <p>(xvi) Cost of the project: Rs.4.80 Crores.</p> <p>(xvii) Whether the project is in Critically Polluted area: No.</p> <p>(xviii) If the project is for EC under EIA Notification, 2006: EIA clearance is not applicable for the project, since the built-up area is only 5056.87 sqm.</p> <p>(xix) If the project involves diversion of forest land: No forest land is involved in the project.</p> <p>(xx) Benefits of the project: Project benefit includes long term positive impact on the socio economy of the area. The project has several benefits in terms of foreign exchange and local area development. The other benefits include: the development of health tourism, exposure of Ayurveda to the Middle East and other foreign countries, employment opportunities to the local people, socio economic development of the area etc.</p> <p>(xxi) Employment potential: 50 nos.</p>
<p>2.7.2</p>	<p>During appraisal of the proposal, the EAC noted the following:-</p> <p>(i) The proposal has been recommended by the Kerala Coastal Zone Management Authority vide their letter dated 2nd March, 2016.</p> <p>(ii) According to the CRZ report for the area prepared by the National Centre for Earth Science Studies, the site falls at a distance of 280 m from the HTL, sandwiched between Tirur River and Lakshadweep sea.</p> <p>(ii) Total plot area is sqm. Total built up area of the resort is 5224.41 sqm, which includes plinth area of Block 1&2 (4419.23 sqm), restaurant & staff accommodation (770.78 sqm), security rooms (9.60 sqm), swimming pool & bathroom (9.60 m).</p> <p>(iii) Total plot area is less than 0.40 ha, and the total covered area on all floors is not exceeding 33% of the plot size.</p> <p>(iv) In terms of clause 8 II (B) (i) development of vacant plot in designated areas for construction of hotels or beach resorts for tourists or visitors is permissible with prior approval of MoEF&CC.</p>
<p>2.7.3</p>	<p><i>The EAC, considering the legal provisions, recommended approving the project from CRZ perspective subject to the following conditions:-</i></p>

	<ul style="list-style-type: none"> • <i>All the recommendations/conditions stipulated by Kerala Coastal Zone Management Authority (KCZMA) vide their letter dated 2nd March, 2016 shall be strictly complied with.</i> • <i>The construction in CRZ areas shall strictly be in accordance with the provisions of CRZ Notification, 2011.</i> • <i>There shall be no dressing or alteration of the sand dunes, natural features including landscape changes for beautification, recreation and other such purpose.</i> • <i>The project proponent shall ensure compliance to all the safety measures, as proposed for the project site, to meet any contingency during Tsunami or any such natural calamity including the construction of restaurant on stilts in the resort project site as assembling place as part of on-site emergency preparedness for all guests and staff within resort in case of any natural calamity.</i> • <i>The development of Resort shall be strictly for occupation of tourist and visitors. There should not be any construction for residential purpose.</i> • <i>All waste (liquid and solid) arising from the proposed development will be disposed off as per the norms prescribed by Kerala State Pollution Control Board. There shall not be any disposal in to the sea/coastal water bodies.</i> • <i>No permanent labour camp, machinery and material storage is allowed in CRZ Area.</i> • <i>The project proponent shall not undertake any construction within 200 m in the landward side of High Tide Line and within the area between Low Tide Line and High Tide Line. The proposed constructions shall be beyond 200 m from the HTL.</i> • <i>Fencing with vegetative cover is allowed around private properties subject to the condition that such fencing shall in no way hamper public access to the beach.</i> • <i>There shall no ground water drawl within CRZ without approval of the competent Ground Water Authority.</i> • <i>The project proponent shall obtain necessary permission/clearances from the concerned authorities as applicable.</i> • <i>Installation and operation of DG sets shall comply with the guidelines of CPCB. The D.G set shall be at least 6 m away from the boundary.</i>
<p>2.8</p>	<p>Construction of one nearshore reef, one offshore reef and beach nourishment for restoration of Puducherry Beach in Puducherry by Public Works Department, Govt. of Puducherry – CRZ Clearance – [F.No.11-32/2016-IA-III]</p>
<p>2.8.1</p>	<p>A similar project ‘Construction of series of 19 nos. of Groynes from Ennore to Ernavoor Kuppam’ in Madhavaram Taluk of Tiruvallur District by Water Resources Department, Government of Tamil Nadu was considered in the 162nd EAC meeting held on 29-30 August 2016 for consideration for CRZ Clearance.</p> <p>During the meeting, the Committee was informed about the observations of NGT (SZ) at Chennai in their order dated 17th August, 2016 in Application No.4 of 2013 in the matter of ‘Shri O. Fernandes and C.H. Balamohan Vs Union of India & Others’. While considering the proposal, the Committee took note of the amendment dated 28th November, 2014 in the CRZ Notification, 2011, which inter-alia provides that such proposals covered under para 4(i) of the CRZ Notification, 2011 but not attracting the EIA Notification, 2006, require CRZ clearance from the State Environment Impact Assessment Authority (SEIAA) in the respective States, after having been recommended by the concerned CZMA. The Committee was informed that the same stand has been taken by the MoEF&CC before the NGT (SZ) at Chennai in the above said matter. Also, an affidavit has been before the Tribunal.</p> <p>The Committee felt that the same logic and Notification would apply to the present case</p>

	also, and as such, it may have no jurisdiction to consider the proposal.																								
2.8.2	<i>The proposal was, therefore, not considered and the project proponent was advised to apply to the SEIAA in Puducherry for the desired CRZ Clearance as per the extant provisions of the CRZ Notification, 2011.</i>																								
2.9	Bidkin Industrial Area, Aurangabad, Maharashtra by Delhi Mumbai Industrial Corridor Development Corporation – Further consideration for Environmental Clearance - [F.No.21-69/2012-IA-III]																								
2.9.1	<p>The project involves development of Bidkin Industrial Area (BIA) in a total area of 3179.1 ha in District Aurangabad (Maharashtra) by Delhi Mumbai Industrial Corridor Development Corporation (DMICDC). The delineated region for Bidkin Industrial Area (BIA) is spread over the 8 villages namely, Meherrban Naik Tanda, Jambhali, Nilajgaon, Bidkin, Banni Tanda, Nandalgaon, Bangla Tanda and Chincholi under the jurisdiction of Tehsil Paithan in District Aurangabad (Maharashtra). Other details of the project were informed as under:-</p> <p>(i) The proposed BIA will be a mixed land use development comprising of industries, residential units, commercial areas and social amenities. Land use plan of the proposed BIA is as below:</p> <table border="1" data-bbox="373 936 1401 1245"> <thead> <tr> <th>Land Use</th> <th>Area (ha)</th> <th>Percentage of Total (%)</th> </tr> </thead> <tbody> <tr> <td>Industrial</td> <td>1375.8</td> <td>43.28</td> </tr> <tr> <td>Residential</td> <td>663.6</td> <td>20.87</td> </tr> <tr> <td>Commercial</td> <td>117.6</td> <td>3.70</td> </tr> <tr> <td>Amenities</td> <td>170.1</td> <td>5.35</td> </tr> <tr> <td>Open Space</td> <td>358.1</td> <td>11.26</td> </tr> <tr> <td>Transport (Roads)</td> <td>494.0</td> <td>15.54</td> </tr> <tr> <td>Total</td> <td>3179.1</td> <td>100</td> </tr> </tbody> </table> <p>(ii) During construction phase, total water demand is expected to be ~42 KLD and will be sourced from authorized local sources. 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 engagement.</p> <p>(iii) During operation phase, the total water demand for the project is 111 MLD out of which 67 MLD is fresh water demand and will be met by Jayakwadi Dam Reservoir. Approximately about 44 MLD of the water demand is for non-potable uses, which will be met through reuse of treated wastewater. 30 MLD of sewage and 27 MLD of industrial effluent will be treated in STP and CETP of capacity 36 MLD and 28 MLD respectively and the treated water available will be reused flushing and landscaping. ~14 MLD of excess treated wastewater will be discharged into developed water bodies for ground water recharging.</p> <p>(iv) About 250 TPD of municipal solid waste (MSW) shall be generated from various areas planned in Bidkin Industrial Area during operation phase. ~141 TPD of biodegradable will be generated and will be treated using biomethanation technique. ~107 TPD of non-biodegradable waste will be handed over to the authorized local vendor for further processing.</p> <p>(v) Hazardous waste that will be generated from industrial area will be collected in</p>	Land Use	Area (ha)	Percentage of Total (%)	Industrial	1375.8	43.28	Residential	663.6	20.87	Commercial	117.6	3.70	Amenities	170.1	5.35	Open Space	358.1	11.26	Transport (Roads)	494.0	15.54	Total	3179.1	100
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keeping with the norms and will be transported to the nearest hazardous waste treatment, storage and disposal facility (TSDF) at Ranjangaon, Pune.

(vi) Total power requirement during construction phase is ~11 kVA and will be met through 33/11 KV Bidkin substation, 33/11 KV Chitegaon substation, 33/11 KV Balagaon substation and 33/11 KV Dhorkin substation. Total power requirement during operation phase is estimated to be 1000 MVA and will be sourced from 765 kV sub-station at Chitepimpalgaon of Power Grid Corporation of India Limited (PGCIL), 765 kV sub-station at Ekthunitanda of Maharashtra State Electricity Transmission Company Limited (MSETCL) and 400 kV substation at Thaptitanda.

(vii) Rainwater harvesting potential for individual buildings will be calculated at detailed designing stage.

(viii) Since this is an industrial estate project with many buildings and blocks, estimations regarding number of parking lots is not possible at EIA stage. However, adequate space will be provided for truck terminus and individual plot holders shall provide parking as per the applicable DC Rules.

(ix) It is not located within 10 km any eco-sensitive area.

(x) There is no court case pending against the project.

(xi) **Investment/Cost:** The cost of the project is approx Rs. 6000 crore (for trunk Infrastructure).

(xii) **Public Hearing:** Public hearing was conducted on 5th February 2016 at Anjani Lawn, Bidkin, District Aurangabad of state of Maharashtra. Main issue raised during PH was regarding non-payment of compensation against a) Loss of land: The compensation against loss of land is pending in four (4) out of the eight (8) projectaffected villages; b) Loss of trees, wells, other private structure and c) Class II land.

- With regard to the payment of land for the remaining 4 villages, it was stated that the total process viz. 32/1 process, grant, issuance of necessary notification, etc. will be completed within a period of one month and if the first stage is delayed then it will take further time for the payments.
- With regard to payment of trees and structures, it was informed that there was procedural delay for payment. However, total valuation had been received from MIDC and the awards of Bangla Tanda and Banni Tanda were ready and the awards of Bidkin were being prepared. The payments would be disbursed within a week. It was also stated that a fresh survey will be conducted for the trees that were left out during valuation.
- With regard to class II land, it was stated that issues regarding Class II land legally differ from case to case and one rule cannot be applied to all. It was assured that in 7 particular cases, the payment will be made within a week as orders have already been issued.
- Efforts will be taken to review the remaining cases and make payments to all the concerned.

(xiii) **Employment potential:** The BIA will involve development of ~1607 ha of industrial area and will generate vast employment opportunities. It has been estimated that by year 2030, the proposed BIA will generate about 1,00,481 industrial jobs comprising of both

	<p>direct and indirect employment.</p> <p>(xiv) Benefits of the project: The project benefits include:</p> <ul style="list-style-type: none"> • The proposed development will have social benefits by improvement of infrastructure in the area; in terms of road, power supply, water supply, waste management, transportation etc. • The advent of industrial operations and parallel developments would create aspirations of increasing technical knowledge and educational progress among the local community. • There would be an increase in the number of men and women opting for higher 10 education and skill trainings in the face of demand from the industrial sector. • The proposed BIA project has also estimated the residential population and provides for planned development for this population.
<p>2.9.2</p>	<p>The project was considered by the EAC in its 159th meeting held on 30 - 31 May, 2016. During deliberations on the proposal, the EAC noted mainly the following:-</p> <p>(i) The proposal involves development of Bidkin Industrial Area in an area of 3179.1 ha spread over 8 villages in District Aurangabad (Maharashtra), and no forest area is involved.</p> <p>(ii) The proposed industrial area would include namely, food and beverages, pharmaceuticals, medicinal chemical & botanical products, rubber & plastics products, other non-metallic mineral products, electrical equipment, basic metals, machinery & equipment etc.</p> <p>(iii) The SPV namely, Aurangabad Industrial Township Ltd (formed by MIDC and DMIDC) has been created for planning and development of the said industrial area. Whereas, Mumbai Industrial Development Corporation shall be the nodal agency, responsible for land acquisition under the MID Act.</p> <p>(iv) The proposal does not indicate the number of Category A or B industries. There being no details available in this regard, the Committee felt that while handling such large industrial areas, any methodology adopted in developed countries or emerging economies could be useful for assessing the overall impact to be considered by practice, and thus leaving each individual case of Category A or B industries to be examined at a later stage.</p> <p>(v) The Committee also desired that the Ministry may also like to inform any of such practice being followed or methodology given for such cases where overall load of pollution cannot be envisaged. The EAC appreciated that such industrial area need to be developed for 'Make in India' campaign of the country.</p> <p>(vi) The detailing and categorization of industries which have been allotted and/or proposed to the allotted, require more accurate and precise classification/categorization, so that the environmental impacts can be appropriately assessed and addressed. Adequacy of these measures needs to be examined in the light of the pollution load for consideration of EC.</p>
<p>2.9.3</p>	<p>In response to above mentioned observations of EAC, the project proponent, vide their letter dated 20th July, 2016 has submitted the details as under:-</p>

	<p>(i) Bidkin Industrial Development is a Mega Infrastructure Project, spanning over a period of 30 years.</p> <p>(ii) While the broad categorization has been done as above, actual type of industries will depend on the demand and cost economics at the time of implementation in future.</p> <p>(iii) Industries have been estimated based on the regional demand.</p> <p>(iv) All the industries will have to obtain prior Environment Clearance from MoEF&CC as applicable (as per EIA notification) and NOC from MPCB along with Consent to Establish/Operate.</p> <p>(v) Regarding international practices for the methodology of developing such industrial areas, examples were quoted for 'Map Tha Phut' in Thailand, 'Kaohsiung Linhai Special Industrial Park' in Taiwan and 'Kota Bukit Indah Industrial City' in Indonesia.</p> <p>(vi) As per the condition of the lease, the lessee will comply with all environment clearance conditions.</p> <p>(vii) The SPV/authority will monitor the Ambient Air Quality.</p> <p>(viii) An integrated approach will be followed for Wastewater (WWM) and Solid waste management (ISWM).</p>
2.9.4	<i>The EAC, on being satisfied with the compliance by the project proponent, recommended the project for grant of environmental clearance, subject to all generic conditions applicable for building and construction projects.</i>
2.10	Development of Industrial Estate of HSIIDC on Refinery Road, Panipat (Haryana) by Haryana State Industrial & Infrastructure Development Corporation (HSIIDC) Ltd - Further consideration for Environmental Clearance - [F.No.21-14/2013-IA-III]
2.10.1	<p>The project involves development of an industrial estate in a total area of 373 ha in four villages namely, Bohli, Rajapur, Dadlana and Begumpur on Refinery Road, Panipat (Haryana) promoted by Haryana State Industrial & Infrastructure Development Corporation (HSIIDC) Ltd.</p> <p>The salient features of the project and other details as informed by the project proponent are as under:-</p> <p>(i) The industrial estate proposes to house industries like plastic packaging, polyester fiber, woven socks etc.</p> <p>(ii) The energy requirement would be 70 MVA (tentative peak load from UHBVN).</p> <p>(iii) Daily water demand is 25 MLD (16.7MLD fresh water from 28 nos of tubewells. The project is having the provision for the development of 10 MLD CETP.</p> <p>(iv) Water bodies: Major water bodies are Drain -2.</p> <p>(v) Provision of 15 RWH wells.</p> <p>(vi) MSW generation would be 11.5 MT/day.</p> <p>(vii) Solid Waste Management: CETP sludge will be disposed through authorized recycler/management company (GEPIL).</p> <p>(viii) Waste water quantity, treatment capacity, detail: 8.4 MLD, CETP capacity (5+5=10 MLD in two phases); based on ASP process, extended aeration, trickling filters, sludge thickeners, chlorination, deep bed filters.</p> <p>(ix) Recycling/reuse of treated water and disposal: Recirculation scheme exists, CETP discharge 10 MLD (8.4 MLD recycled and reused & remaining 1.6 MLD to main drain-2). Out of 8.4 MLD 29% (2.9 MLD) recycled, 55% (5.5 MLD) horticulture use after conforming to standards.</p> <p>(x) Investment/Cost: The initial cost of project is Rs.410 crores (exclusive of the cost of the land viz. Rs.244.13 crore), 46.8 % is reserved for industrial plots, 11.74% under R&R, 5.11% for commercial purpose, and 33% for green belt.</p> <p>(xi) Energy conservation measures with estimated saving: SPV and LED street lights will be installed in each industry. Solar power heating systems. Use of energy</p>

	<p>efficient building materials, use of fly ash in construction, Energy efficient air-conditioning.</p> <p>(xii) Parking requirement with provision made: Adequate parking space for commercial vehicles, private cars and two wheelers in designated parking areas. Weighing balance will also be installed in the IE.</p> <p>(xiii) Whether the project is in Critically Polluted area: No- (Outside the municipal Limits of Panipat).</p> <p>(xiv) Public Hearing: Public Hearing was conducted at Panipat on 15th February, 2015 and Karnal on 29th April, 2015.</p> <p>(xv) Employment potential: 4000-5000</p> <p>(xvi) Benefits of the project: Creation of downstream petrochemical industries, local availability of raw materials, trained manpower etc.</p>
2.10.2	<p>The project was considered by the EAC in its 159th meeting held on 30 - 31 May, 2016. During deliberations, the EAC noted that the proposed industrial estate involves an area less than 500 ha. Also, the industrial units already allotted and the proposed ones, are neither covered under category A nor B, and thus not requiring environmental clearance in terms of the EIA Notification, 2006.</p> <p>On a specific query by the EAC regarding location of the project site with respect to the identified '<i>Critically Polluted Area (CPA)</i>' near Panipat town, it was informed that the proposed site is more than 5 km from that area. Accordingly, at a later stage, even if any proposed project/activity is reported to be in category B, the industrial estate would be covered under category B, and shall require EC from the concerned SEAC/SEIAA.</p> <p>The Committee also noted the ToR was earlier granted by the Ministry on 26th February, 2014, in view of a proposed fertilizer unit covered under category B, and the general conditions applicable due to the location of the project site <i>about</i> 5 km from the CPA. However, the project proponent was asked to get a confirmation from the SPCB (or any other appropriate authority) on location of the project site vis-a-vis the CPA, and also the category of industrial units, to ascertain the concerned regulatory authority for further considering the proposal. The EAC, after deliberations, deferred the proposal for want of the desired clarifications/ inputs.</p>
2.10.3	<p>In response to the query of the EAC, the project proponent has submitted a certificate issued by Tehasildar of the Panipat, which confirms that the distance of HSIIDC Industrial Estate (situated in revenue estate of village of Rajapur & other villages) from the Municipal limits of Panipat City is about 5.5 km.</p> <p><i>However, neither the project proponent attended the meeting nor there was any request for the same. The proposal was, therefore, deferred.</i></p>
2.11	<p>Integrated Cooum River Eco-restoration project from Cooum River mouth to Chetpet Railway Bridge in Chennai (Tamil Nadu) by M/s Chennai Rivers Restoration Trust - Further consideration for CRZ Clearance - [F.No.11-15/2016-IA-III]</p>
2.11.1	<p>The project proponent made a presentation on the proposal and provided the details and related information as under:-</p> <p>(i) The State Government of Tamil Nadu has created the Chennai Rivers Restoration Trust (CRRT) under the Municipal Administration and Water Supply Department to take necessary action to improve ecological conditions of rivers and water bodies in Chennai.</p> <p>(ii) The interventions for Cooum River basin, under the proposed Integrated Cooum</p>

River Eco-restoration Project, are proposed from Paruthipattu to the Cooum river mouth for a total distance of 32 km.

(iii) Under the eco-restoration project, CRRT proposes implementation of 60 sub-projects, of which 20 sub-projects including development of parks, maintenance of walkways, de-silting, laying of interceptors, & modular Sewage Treatment Plants and flora & Mangrove plantation, thus fall in CRZ areas on either side of the tidal estuary and requiring CRZ clearance under the CRZ Notification, 2011.

(iv) The main objective of the proposed Integrated Cooum River Eco restoration Project is as follows:

- (a) To ensure effective abatement of pollution and protection of the river by adopting a sustainable approach, promoting inter-sectoral co-ordination through comprehensive integrated planning and management.
- (b) To improve and maintain flood carrying capacity of the river,
- (c) Riverfront development plan

(v) The various works/activities that the line departments are involved under the Project are detailed below:-

S. No	Department	Works
1.	Public Works Department	Desilting, Demarcation & Fixing boundary stones and Bio-metric survey
2.	Greater Chennai Corporation	Solid waste removal, Fencing, Boom deployment, Developing parks, cycle tracks and walkways
3.	Commissionerate of Municipal Administration	Solid Waste removal, Fencing and providing children parks.
4.	Directorate of Rural Development	Solid waste removal, Fencing and vegetation
5.	Chennai Metropolitan Water Supply & Sewerage Board	Laying interceptors, Installing modular sewage treatment plants & UGSS
6.	Tamil Nadu Slum Clearance Board	Resettlement & Rehabilitation plan
7.	Chennai Rivers Restoration Trust	Mangrove development, Flora Plantation, Community education programme and Monitoring of project implementation.

(vi) The project proposals have a set of 69 activities to be performed in total over three phases. Phase I (0 to 3 years) consist of 60 activities, Phase II (4-8 years) of 7 activities and thereafter Phase III comprises of maintenance activities after the restoration process is completed. The restoration of the river is therefore envisaged to be completed. The restoration of the river is therefore envisaged to be completed over a total period of 8 years.

2.11.2

(a) The proposal was earlier considered by the EAC in its 158th meeting held on 28/29 April, 2016, wherein the Committee observed as under:-

(i) The EAC welcomed formulation of such projects intended to clean health of river Cooum within Chennai or in the vicinity, which would improve the present insanitary condition and help clean the highly polluted river. The EAC has had occasion to handle the related Cooum river project earlier, and reiterated its views that no opening of Cooum

	<p>river into the Bay of Bengal waters should be allowed till the entire water flowing from the Cooum river into the sea was treated and sanitised from harmful pollutants and effluents.</p> <p>(ii) It was pointed that the Cooum river was earlier taken up under the National River Conservation Plan (NRCP), sponsored by this Ministry. In the process, pollution abatement schemes were sanctioned with the objective of holistic conservation of the river, as in the instant case. The Committee apprehended duplication of efforts, and desired evaluating the project comprehensively in the light of the earlier schemes, and utilizing and dovetailing the assets already created under the NRCP to get optimisation of expenditure and benefit.</p> <p>(iii) The Committee, further, suggested that the project proponent must clarify the role of different agencies involved in handling or treatment of effluent generated in the river catchment, which would otherwise, be falling directly into river Cooum or any drains/water bodies connected to the river.</p> <p>(iv) The EAC, after deliberations, desired that the State Government of Tamil Nadu may give a statement that the proposed Integrated Cooum River Eco-restoration project had been prepared in consultation with all concerned agencies like the State Government, other stakeholders, and duly integrated/dovetailed with the pollution abatement schemes commissioned under the NRCP. The State Government must ensure that there is no duplication of efforts, and the pollution abatement schemes are suitably dovetailed and the created assets are utilized optimally.</p> <p>(b) The proposal was again placed before the Committee in its meeting held on 29th June, 2016. While appraising the proposal on merits, the Committee asked whether any parameter was fixed for baseline or for final expected levels of water quality, as any river restoration project should state these basic parameters. There being no satisfactory response, the Committee advised the project proponent to prepare an appropriate document listing out the overall project objectives in quantitative and qualitative terms.</p> <p>(c) The proposal was considered by the EAC in its 161st meeting held on 26th July, 2016, wherein the Committee asked for identification of the measurement points for water quality, clear enunciation of the qualitative and quantitative benchmark for water quality, marine/riverine flora and fauna, and a progressive summary of the progress achieved through successive schemes, and the end result sought to be achieved through this proposal.</p> <p>The proposal was again deferred for more clarity on justification of the proposal, especially in view of enough expenditure already incurred on the river conservation project with no perceptible impact on river water quality.</p>
<p>2.11.3</p>	<p>In response to the queries of the EAC, the submissions and clarifications provided by the project proponent are:-</p> <p>(a) During 2000-01, the Government of Tamil Nadu, along with Government of India formulated the Chennai City River Conservation Project (CCRCP) with an objective to:</p> <ul style="list-style-type: none"> • Prevent sewage entering into the waterways. • Augment the treatment capacity of the Sewage Treatment Plants at Nesapakkam, Koyambedu, Kodungaiyur, and Perungudi. • Keep the city waterways clean on a sustainable basis.

(b) The Ministry of Environment & Forests, Government of India had sanctioned and funded a sum of Rs.491.52 crore for the component 'Prevention of untreated sewage flow reaching waterways' which was implemented through Chennai Metropolitan Water Supply and Sewage Board (CMWSSB) under the NRCP. That included RS 382 crores for strengthening & capacity expansion of sewer system and Rs.109.52 crores for construction of STPs.

(c) CCRCP was commenced during 2001 and implemented by CMWSSB. These works were carried out in 16 packages, with the details as under:-

Activity	Project Proposals taken in all the basins under CCRCP	Works undertaken in Cooum River Basin under CCRCP
Laying of Interceptors (km)	59.2	7.29
Laying of Sewage Pumping Mains (km)	28.85	0.717
Gravity Conveying Main (km)	17.3	0.397
Pumping Station (No's)	28	2
STP's (No's)	4	1
Sewage Treatment Capacity (MLD)	264	60
Outfalls Plugged	488	127 outfalls

(d) The CMWSSB in its report after the completion of all works under the CCRCP, has informed that with the additional sewage treatment capacity of 264 MLD, the sewage overflow and untreated sewage entering the Otteri Nallah Basin, Buckingham Canal Basin, Captain Cotton Canal Basin, Cooum River basin and Adyar River basin was considerably reduced. Also, the bogas produced during sewage treatment helped in saving electrical energy.

(e) Under the CCRCP, the plugging of outfalls by constructing interceptors and increasing the treatment capacity of Koyambedu STP from 60 mld to 94 mld, drastically reduced the BOD level in the river indicating improvement in the river water quality.

(f) From 2012, the BOD concentration has shown an increasing trend which may be attributed to the increase in number and area of dwelling along the Cooum river disposing raw sewage into the river.

2.11.4

During deliberations, the EAC expressed its serious concerns over the sharp decline in river water quality even after completion of the CCRCP. The project involved considerable expenditure on core works relating to interception and diversion of sewage and treatment aimed at improving water quality of Chennai waterways including Cooum River. That indicates no comprehensive and holistic planning for urban development in the river basin, but adopting a piecemeal approach. Even the presently proposed restoration project does not seem to cater to the future requirement of adequate sewage treatment.

The present BOD levels in the range 22-77 ppm reveal sewage entering the river either without any treatment or inadequate treatment and the regulatory agencies not performing their statutory functions.

	<p>The Committee desired that the project proponent should submit a status report on performance monitoring of all STPs in Chennai, especially those commissioned under NRCP, impact of CCRCP on river water quality and also whether the proposed restoration project would suffice for future population projection in order to meet the river water quality to the prescribed standards.</p>
<p>2.11.5</p>	<p><i>The EAC, after deliberations, recommended for approving the project from CRZ perspective subject to the submission of the status report/commitment by the State Government to the satisfaction of this Ministry, in respect of the following:-</i></p> <ul style="list-style-type: none"> • <i>Performance monitoring of all STPs in Chennai, especially those commissioned under NRCP reflecting the impact of CCRCP.</i> • <i>Stage wise reduction in BOD values starting from commissioning of the proposed project and tending to the prescribed norms.</i> • <i>The project shall take care of all likely developments in the river basin proposed in the next 25-30 years, and meanwhile, there shall be complete sewerage network/UGD ensuring no ingress of untreated/partially treated waste water to the river.</i> <p><i>The clearance to the project under the CRZ Notification, 2011, shall be further subject to the following conditions:-</i></p> <ul style="list-style-type: none"> • <i>All the recommendations/conditions stipulated by Tamil Nadu Coastal Zone Management Authority (TNCZMA) vide their letter dated 7th June, 2016 shall be strictly complied with.</i> • <i>The construction in CRZ areas shall strictly in accordance with the provisions of CRZ Notification, 2011.</i> • <i>There shall be no dressing or alteration of the sand dunes, natural features including landscape changes for beautification, recreation and other such purpose.</i> • <i>The project proponent shall obtain necessary permission/clearances from the concerned authorities as applicable.</i> • <i>There shall no ground water drawl within CRZ without approval of the competent Ground Water Authority.</i>
<p>2.12</p>	<p>Development of Petroleum, Chemical and Petro-chemical Investment Region (PCPIR) at Dahej, Vagra, District Bharuch (Gujarat) by M/s Gujarat Industrial Development Corporation – Further consideration for Environmental and CRZ Clearance – [F.No.21-49/2010-IA-III]</p>
<p>2.12.1</p>	<p>The proposal involves development of Petroleum, Chemical and Petrochemical Investment Region (PCPIR) at village Dahej, Taluka Vagra and Bharuch in District Bharuch (Gujarat) by M/s Gujarat Industrial Development Corporation (GIDC) in a total area of 45298 ha. Other details of the project were informed as under:-</p> <ol style="list-style-type: none"> (i) The proposed PCPIR is spread over 33 villages of Taluka Vagra and 11 villages of Taluka Bharuch in District Bharuch (Gujarat). (ii) More than 60% of land is under cultivation with crops like millet, wheat, jowar, bajra and paddy etc. Other crops such as sugarcane, groundnut, pulses and cotton are also grown in the study area. The study area is covered with 7% irrigated land whereas forest land is only about 1% of the total land area. (iii) Out of 45298 ha area of PCPIR, 50.79% area i.e. 23005.97 ha area of land shall be developed as processing area which includes GIDC estates, medium and large scale PCP industries, engineering industries, port/ship building, salt pans, warehousing, oil

terminals, logistics etc. Further 49.21 % area i.e. 22292.05 ha area of land shall be developed as a non-processing area which includes residential, commercial, institutional, recreational, specific mix zone, Eco-park, Eco-zone, Forest, agriculture, gamtal including gamtal buffer, Roads (30-150 m Row), proposed Kalpasar canal and water bodies like (pond, lake, developing pond, bhukhi khadi, bhukhi khadi nala).

- (iv) Forest land: Total of 853.41 ha area is reserved forest in PCPIR.
- (v) Water requirement: Major source of raw water is intake well at Narmada River and Narmada canal. Present utilization of water in GIDC estates of PCPIR is approximately 28 MGD for which the approval has been obtained from the State Irrigation Department. The said PCPIR will be developed phase wise up to 2040 and a total of 175 MGD water demand has been forecast to be met from River Narmada and Bhadbhut barrage.
- (vi) Waste water generation: At present generation of waste water is approximately 24 MLD from different large scale industries in PCPIR. The same shall be treated by individual industries and is being disposed into the deep sea in the Gulf of Cambay in keeping with the GPCB standards into the effluent disposal conveyance laid by GIDC in 2005. The future wastewater generation is forecast at 300 MLD up to 2040 out of which approximately 100 MLD shall be treated in Proposed CETPs in PCPIR from small and medium scale industries and remaining 200 MLD treated effluent (from large scale individual industries) shall be disposed-off by effluent disposal conveyance.
- (vii) Municipal solid waste: As per the report of final development plan 378 TPD solid waste (neglecting the inert and recyclable waste) has been forecast in PCPIR area which shall be composted and disposed to the nearby Landfill site.
- (viii) Power requirement: In the industrial utility projection, a total power requirement of around 1800 MW for industrial and around 200 MW for residential set up has been envisaged for all phases. The power supply will be made available from Gujarat Urja Vikas Nigam and a 1500 MW gas based power station and a 2640 MW coal based power station are under construction.
- (ix) Concept of energy efficient system using energy saver panel/ (APFC-automatic power factor correction) envisaged in proposed street light and pumping machinery.
- (x) Rain water harvesting: Rain water harvesting has been provided in GDCR of PCPIR for non-processing area in PCPIR.
- (xi) Parking facility: Parking regulations have been provided in GDCR of PCPIR.
- (xii) Investment/Cost: The cost of the project is Rs.15,297.02 crores.
- (xiii) Benefits of the project: The major benefits of the project are:
- It is expected that additional people will get employment and hence job opportunities for the local people as well as migrants from nearby areas would increase
 - Employment in tertiary sector is expected to be improved in the region □ There would be increase in the commercial, business and shopping centers due to influx of population in the region to cater to the needs of existing population as well as the migrants
 - There will be development of infrastructural facilities in the region. It would also result in the appreciation of land values around these areas
 - It will fulfil demands for additional manufacture and production, essential for the progress of the nation.
 - Indirect benefit to the local people by providing opportunities for starting small/medium scale business in trade and commerce
 - More opportunity in the field of education
 - Augmentation in the areas of medical facilities
 - Improvement in banking and postal services

	<ul style="list-style-type: none"> • Overall improvement of the peripheral human habitat • Most of the environmental pollution problems will be mitigated through implementation of recommendations given in EMP • Increase in infrastructural activities with respect to the development of the region will definitely increase the livelihood of people of the region <p>(xiv) Justification for selection of the site: The State Government has identified Dahej region as the focal point for the development of India's pilot global investment region. The choice for Dahej came naturally due to its numerous locational advantages and its potential for competing at Global levels in infrastructure and industrial production.</p> <p>(xv) Employment potential: Actual direct employment is 30,000 and indirect employment is 90,000 as on May, 2016. The Final Development Plan of GPCPSIR envisages 6,08,751 employment up to 2040.</p> <p>(xvi) The proposal falls under 7 (c) category: "Industrial estates of area > 500 ha. and not housing any industry belonging to Category A or B."</p> <p>(xvii) Water bodies: Bhukhi khadi, Lakes/ponds near villages under PCPIR. No impact on drainage is envisaged.</p> <p>(xviii) ToR details: The project was accorded ToR vide letter No.21-49/2010-IA-III dated 03.12.2013.</p> <p>(xix) Public Hearing: Public Hearing was held on 30th July, 2014 in District Bharuch, Gujarat.</p> <p>(xx) The said PCPIR is having around 3477 ha area under CRZ out of total 45298 ha.</p> <p>(xxi) The Gujarat Coastal Zone Management Authority has recommended the project vide their letter No.ENV-10-2015-271-E dated 7th June, 2016.</p> <p>(xxii) Remote sensing study was conducted by Bhaskaracharya Institute for Space Applications and Geo-Informatics (BISAG), Dept. of Science and Technology, Govt. of Gujarat, Gandhinagar.</p> <p>(xxiii) M/s. Anna University, Chennai has done HTL, LTL and CRZ mapping (1:4000 scale) in the coastal area of PCPIR.</p> <p>(xxiv) Details of Marine disposal: 90 MLD Effluent Disposal Line has been laid from Vilayat Industrial Estate to the Village Luvara into the deep sea for disposal of treated Effluent from different Industries in the PCPIR for the same EC has obtained in 2005 and NOC is valid up to 2018.</p> <p>(xxv) The rapid marine EIA due to release of GIDC treated effluent in coastal water off Dahej had conducted by NIO, GOA in August 2000 to finalize the location of diffuser to achieve dilution of 100 to 200 times.</p> <p>(xxvi) Location of intake/outfall: 90 MLD capacity pumping station is located at Dahej Industrial estate for treated effluent disposal (from Dahej and Vilayat Industrial estate) through which the treated effluent is being disposed-off in to the deep sea, Gulf of Cambay at village Luwara in Dahej PCPIR.</p>
<p>2.12.2</p>	<p>The proposal was earlier considered by the EAC in its 160th meeting held on 28 - 29 June, 2016 wherein the Committee noted that the project document circulated to the members was lacking basic information, especially in respect of the statutory powers of GIDC in developing the proposed PCPIR. Further, the Committee expressed its concern in respect of water availability/allocation to meet the total projected demand of 175 MGD water for the project, and asked for necessary authorization in this regard from the designated authority/Department in the State Government. The project proponent was also asked to clarify whether any part of the project area proposed to be allocated for industries or residential purpose is within the flood plain of any river or within the bounds of any water body.</p>

<p>2.12.3</p>	<p>In response to the observations of EAC, the clarifications and other inputs provided by the project proponent are as under:-</p> <p>(i) The Gujarat Petroleum, Chemicals & Petrochemicals Special Investment Regional Development Authority (GPCPSIRDA) has been constituted by the Industries and Mines Department, Government of Gujarat, under the GSIR Act, 2009 in pursuance of the PCPIR policy of the Ministry of Chemicals and Fertilizers, Government of India. The said Authority has resolved to designate Gujarat Industrial Development Corporation (GIDC) as the project development agency, and to avail the environmental clearance from this Ministry and implementation of the same for the development of infrastructure and amenities.</p> <p>(ii) To meet the projected water demand of 175 MGD, GIDC has requested the concerned State agencies (SNNL and Narmada Water Resources, Water Supply and Kalpsar Department of the State Government) for necessary authorization to draw 127 mld of water from Miyagam Branch Canal to Dahej through gravity main, and from river Narmada through intake wells and Angreshwar and Nand (already commissioned respectively).</p>
<p>2.12.4</p>	<p><i>During deliberations, the EAC asked about conservation of mud flats (eco-sensitive areas) at the project site and recycling of water to minimise the fresh water requirements.</i></p> <p><i>The EAC although agreed in principle for grant of Environmental/CRZ clearance to the project, but desired to seek clarifications/inputs in respect of the following:-</i></p> <ul style="list-style-type: none"> • <i>The proposal involves development of PCPIR which also includes the industrial estates/projects/activities already in existence and operational. As such, the requirement of prior EC for the PCPIR in terms of the EIA Notification, 2006 needs to be revisited.</i> • <i>Compliance status of EC conditions for the industrial project/activities already covered under the EIA Notification, 2006.</i> • <i>Land acquisition for a total area 45298 ha of PCPIR to be examined vis-a-vis the provisions of the Land Acquisition, rehabilitation and Resettlement Act, 2013.</i> • <i>Proposed activities in different CRZ areas namely, CRZ-I(A), I(B), III & IV, and whether in conformity with the approved CZMP for the State of Gujarat.</i> • <i>Whether the complete set of documents were submitted by the project proponent to GCZMA as per the provisions of the CRZ Notification, 2011.</i> <p><i>The EAC decided for reconsideration of the proposal after clarifications on the above lines from the project proponent/GIDC.</i></p>