Minutes for 131st meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction and Miscellaneous projects

1. Opening Remarks of the Chairman.

The Chairman welcomed the members to the 131st meeting of the Expert Appraisal Committee.

2. Confirmation of the Minutes of the 130th Meeting of the EAC held on 22nd to 24th January, 2014 at New Delhi.

The EAC confirmed the minutes of the 130th Meeting.

In item No. 4.20. "Environmental Clearance for widening and upgradation of existing to 4/6 laning of Goa – Karnataka Border (Km 93.700) to Kundapur (Km 283300) Section of NH-17 in the State of Karnataka by M/s NHAI. (F.No. 10-107/2011-IA-III)' the condition No.(iii) is replaced as "*The blasting shall be from 8 am to 6 pm*."

3.1	Correction/ addition in Environmental & CRZ Clearance granted for setting up of coal conveyor system, Captive jetty and laying intake and outfall pipeline for the proposed power plant at Perunthottam and Agaraperunthottam villages of Sirkali Taluk, Nagapattinam District by M/s Sindya Power Generated Company Ltd [F. No. 11-62/2012-IA-III] The Committee observed that though the details of the Off Shore Breakwater was provided in the EIA report, Form – I, CRZ map and also explained at the time of presentation during the EAC meeting. Since the project was appraised and recommended by the earlier Committee, it was suggested by the Committee that the proponent shall present the case afresh before the present Committee.
3.2	Correction /addition in ToR granted for expansion of Adani Petronet (Dahej) Port Private Limited, Dahej, Bharuch District, Gujarat M/s Adani Petronet (Dahej) Port Pvt. Ltd.[F.No.11-37/2007-IA.III (P)] It was informed that ToR was granted on 02.12.2013. PP had stated that the component "Strengthening of existing Ro-Ro ramp' which was part of the project report was not included in the ToR hence PP requested for addition of the same in the project component. <i>EAC noted that the relevance of the component in the overall scheme</i> <i>would need to be appraised.</i> , <i>Hence it was decided to call the PP to present the</i> <i>case.</i>
3.3	CRZ Clearance for up-gradation of existing Dock for Ship building and repairing facilities at existing Bedi Port, Jamnagar by M/s Parekh Marine Agencies Ltd. [F.No.11-38/2011-IA.III]
	The EAC in 128th meeting held in November, 2013 advised the PP to submit clear layout indicating the existing and proposed facilities in different colour

a a s	Ind superimpose the layout on the latest Google map, as there was some confusion bout the existing port boundary in the layout and also in respect of a new basin and ome abandoned godown space sought to be re-designated.
A C	After deliberation, the Committee recommended the proposal for the grant of CRZ clearance subject to following conditions:
	(i) All the recommendations of GCZMA shall be complied with.
	(ii) The spillages of oil, waste etc shall be collected and disposed appropriately in accordance with the regulations.
	(iii) No wastes shall be disposed in coastal area. Solid and liquid wastes shall be collected and treated and disposed according to the norms of State Pollution Control Board.
	(iv) There shall be no ground water drawal within CRZ area.
3.4 (I I	CRZ for proposed Desalination plant of 336 MLD capacity located at SEZ – Dehej, Dist. Bharuch, Gujarat. M/s Swarnim Dahej Spring Desalination Pvt. Ltd. [F.No.11-92/2012-IA.III]
ii c T F b S s a a a	The proposal was earlier discussed in the 120 th , 121 st meeting of EAC and t was recommended to de-list the proposal till the comprehensive EIA studies are completed by the proponent. PP submitted the details to the EAC in February, 2014. The proposal is to set up a desalination plant utilizing Ultra Filtration (UF) and Reverse Osmosis (RO) Technology with a capacity of 336 MLD. The sea water will be drawn from the Narmada estuary through a channel and will be desalinated in the Seawater Reverse Osmosis desalination plant located in SEZ, to achieve the pecified water quality parameters according to IS 10500 standards. The technology idopted for this desalination plant will be among the most modern and the most appropriate treatment scheme adoptd to utilize the water of the Narmada Estuary.
f v d a ti l; a s ti r p p c c v v v v v v v r	The effluents from the desalination plant will comprise of more concentrated form of the feed water in terms of salinity and suspended solids. These effluents will be sent back to sea / Narmada estuary through an outfall arrangement. Suitable dispersion arrangement will be provided to ensure that salinity and suspended solids are dispersed in the sea with minimal impact to the surroundings. The area around he project sites is sparsely populated and major part of the terrain is non-cultivable and. Necessary green belt will be developed in and around the proposed plot according to norms of statutory authority. There will be general upliftment of the urrounding area because of the development activities in various sectors related to he proposed project. The proponent will conduct various social upliftment programs as a part of CSR activities, which will have a positive effect on the local people. Sewage generated from the domestic water usage is proposed to be collected and led to a package sewage treatment plant (STP). The treated sewage will be utilized for irrigation of the landscaped areas and green belt development. An effluent treatment plant (ETP) consisting of pH neutralization system for the RO cleaning chemicals and any spillage chemicals will be installed. During the operation phase, ETP sludge from the neutralization tank shall be disposed in TSDF ite and sludge from clarifier will be disposed into the estuary alongwith brine from putfall. Used oil and discarded containers will be sold to MoEF listed ecycler/GPCB approved scrap dealer. Sludge generated from STP shall be used as

manure in premises. The proposed site does not have any rehabilitation and resettlement requirement. The quality of the air in the area will not be affected as there are no emissions from the proposed plant

EAC noted that the proposal of creating engineered open channel of about 20 m width and 600 m long in the estuary may lead to many issues including increase in salinity, and change in hydrodynamics of the area. EAC therefore suggested to the PP to come with details of such similar facilities for "desalination" built in an estuary and also consider any alternatives, which could have a minimal impact on the natural estuary and the flow of water in it. It was also suggested to submit recommendation of GCZMA.

3.5 EC for development of Mega Container Terminal at Chennai Port by M/s Chennai Port Trust [F.No.10-127/2007-IA.III]

The Chennai Port located at 13° 0' N & 82° 18' E on the East Coast of India, is one of the Major Ports in India. The Port has two dedicated Container Terminals. One is 885 m length with an alongside draft of (-) 13.4 m CD which has been operated since August 2001 by a private consortium under a 30 years lease/ concession agreement. The rated capacity of the terminal is 1.20 Million TEUs per annum. The second Container Terminal is 820 m quay length of 820 m with an alongside draft of (-) 12 m CD which has been operated since September 2009. The rated capacity of the Terminal is 1 Million TEUs per annum. However, considering the steady growth in the container volumes, it is forecast that the container throughput demand will outstrip available capacity of 2.2 million TEUs by 2016-17. To cater to this demand for the next 30 years Chennai Port proposed to develop a container terminal at the new outer harbour, with a quay length of 2 km, 2.75 Km extension of existing outer arm breakwater and a new northern breakwater of about 1.73Km emanating from the Eastern Breakwater of the Fishing Harbour. The proposed initial depth in front of the new terminal is (-) 18 m CD initially and (-) 22 m CD later on. The 90 Hectares of land area behind the terminal will be the back-up and storage area which has to be reclaimed by using the dredged material. The estimated rated capacity of the Terminal is 4 Million TEUs. The estimate cost worked out to Rs. 3686 Crores.

Project:

Chennai Port has submitted a proposal for the approval of draft ToR during Oct. 2007. EAC considered the project in its 59th meeting held on $29^{th} - 30^{th}$ Nov., 2007 and approved the draft ToR and suggested addl. ToR for preparing draft EIA report waiving Public hearing.

The draft EIA report submitted to MoEF during August, 2010 and EAC appraised the project in its various meetings viz., (i) 92^{nd} EAC meeting held on 20^{th} – 22^{nd} Oct., 2010; (ii) 95^{th} EAC meeting held on 18^{th} – 20^{th} Jan., 2011; (iii) 100^{th} EAC meeting held on 11^{th} – 12^{th} May, 2011; and (iv) 102^{nd} EAC meeting held on 23^{rd} – 24^{th} June, 2011.

MoEF vide letter dtd. 06.06.2011 requested the HTL / LTL Map and the recommendation of the SCZMA. EAC in its 102^{nd} meeting deferred the proposal till the SCZMA's recommendation is submitted.

SCZMA recommended the project vide letter dt.23.11.2012.

	The the foll propon	e Committee recommended the proposal for Environmental Clearance with lowing condition in the Clearance letter for strict compliance by the project tent	
	i	The recommendations of TNCZMA shall be adhered to.	
	ii	<i>Justification regarding quantity of water which is available for the port purpose and the quantity required for construction purpose shall be submitted.</i>	
	iii	The disposal of the dredged material shall be according to the locations proposed in the EIA report.	
3.6	ToR for development of New Industrial Area at Salarpur District Alwar o RIICO units Bhiwadi-II. M/s RIICO [F.No.21-01/2014-IA.III]		
	the Ind house the lieu of core in arboric	As presented by the proponent, RIICO proposes to obtain EC for developing lustrial Area Salarpur over an area of 389.71 ha of land. It is proposed to industrial plots, commercial plots, Parcel of land reserved for Khatedars in cash compensation, CETP, green area, waste disposal area apart from the frastructure such as roads, drains, water supply & power supply network, ulture etc.	
	In this Industrial area, Auto Industries, Readymade Garment (Stitching an Other value addition), General Engineering, Electrical cable /manufacturing an secondary metallurgical Industries will be set up.		
	rain wa be mad on arou	RIICO will keep provision for village development, skill development and ater harvesting structure in the area. Allotment of plot to entrepreneurs will le on zero liquid discharge basis. RIICO also proposes to keep green cover and 9% of area.	
		During discussions, the Committee finalised the following additional TOR	
	<i>i</i>	Revised Form $-I$ shall be submitted for the industrial area clearly demarcating the outer boundary of the Industrial area and details of land.	
	ii.	Permission should be obtained for ground water extraction form the Central Ground Water Authority	
	iii.	Onlylow water based industries should be allowed.	
	iv.	Water balance calculations shall be submitted	
	<i>V</i> . <i>1</i>	A proposal for Ground Water Recharge shall be submitted with appropriate techenical details and ground water recharge	
	vi.	The type of industries coming in the Industrial Area should be very specifi, with no scope for deviation	
	vii.	Submit Justification of the project site from environmental angle.	
	viii.	Latest site photographs should be enclosed in the EIA report and presented	

	at the time of EAC meeting.
ix.	Submit the details of the present land use according to the revenue records and present status.
х.	Submit water requirement, identified sources and impact on the existing users.
xi.	Submit whether the site falls in semi-critical, critical over exploited zones according to the CGWA classification.
xii.	Submit Roles and legal responsibilities of Industrial Park and individual member units for EMP implementation and monitoring.
xiii.	Submit the details of the approach road and its adequacy causing main issues disruption to the existing highway traffic. Consultation with NHAi would be desitable.
xiv.	Submit the impacts due to land use change.
xv.	Submit the impacts due to liquid waste discharge, air emissions, solvent emissions, handling of hazardous waste & chemicals, odour.
xvi.	Submit the storm water management and impacts due to contamination of storm water with effluent/chemicals and mitigation measures at industrial park developer level and Unit level.
xvii.	Green cover of minimum 33 % should be provided in all phases of the proposed Industrial Park
xviii.	Submit the parking arrangements at Industrial park level.
xix.	Submit fire fighting arrangements at Industrial park level.
xx.	Submit the details of effluent collection system at member units level to meet the inlet norms for the CETP.
xxi.	Submit the effluent conveyance system from the member units to CETP.
xxii.	Submit on-site and off-site emergency plan and infrastructure requirements at Industrial park level to comply MSIHC Rules 1989.
xxiii.	Submit the details of the CETP with design parameters.
xxiv.	Site suitability for the development of TSDF, if planned. Submit to comply the Hazardous Waste Rules 2008 as amended.
xxv.	Submit the common solvent recovery systems planned at Industrial park level with anticipated efficiencies.
xxvi.	Submit VOC monitoring in the ambient air at SEZ level .
xxvii.	The General guidelines according to the annexure to this Minutes shall also be considered for preparation of EIA/EMP.
xxviii.	Any further clarification on carrying out the above studies including

anticipated impacts due to the project and mitigative measures, project proponent can refer to the model ToR available on Ministry website "http://moef.nic.in/Manual".

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

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

3.7 EC for development of New Industrial Area Karoli (Tapuklara Extension), at village-Karoli, Tapukara, Ladamka, Kamalpur and Dhiriyawas Distt Alwar, Rajasthan. M/s RIICO [F.No.21-28/2012-IA.III]

The proposal involves development of Karoli Industrial Area at Village Karoli (Tapukara Extension) Dist. Alwar, Rajasthan. The total Area of the proposed project site is 393.008 ha. Industrial as well as Commercial plots are planned to be developed. A total of 256 industrial plots will be developed along with commercial plots for services. The proposed project site is situated in Villages of Kamalpur, Ladamka, Tapukara, Karoli & Dhiriyawas of Tehsil: Tijara, District Alwar (Rajasthan). The co-ordinates of the project site is 28°6'14.66''N, 76°48'19.43''E. There will be water requirement of approximately 110 KLD including 27 KLD domestic water requirements for construction workers (90 lpcd for 300 workers) during the construction phase based on construction activity requirement. The water requirement during this phase will be met from the existing ground water sources outside the proposed industrial area. Drinking water at construction sites will be provided by RIICO.

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

Based on the data collected from RIICO of its operational industrial areas, the water requirement in the proposed project during operation phase will be about 1,000 m3/day. The water requirement during operation phase will be met through ground water abstraction. RIICO will obtain prior permission from Central Ground Water Authority (CGWA) for abstraction of ground water. During operation phase of the project, power requirement will be approximately 10 MVA, which will be provided by Jaipur Vidyut Vitran Nigam Limited (JVVNL). Therefore, total municipal waste generation due to the project during operation phase will be about 1,850 kg/day. The total approximate cost of the project is estimated to be Rs.630 Crores.

The project is approximately 8 km away from the state boundary and

	proposed a CETP within the industrial area. Therefore the proposal is 'A' category project. The ToRs for the proposal was issued vide letter dated 12 th September 2012 and Public hearing held on May 8, 2013.
	During the discussion, the following points emerged:
	<i>i.</i> Green belt of 9 m width shall be provided all around the periphery of the industrial area and as committed during the public hearing.
	<i>ii.</i> Documents related to Public Hearing shall be submitted
	<i>iii.</i> Revised detailed plan for the rainwater harvesting giving full details of necessary pondage and ground water recharge shall be submitted
	In view of the foregoing observations, the Committee recommend to defer the proposal. The proposal shall be reconsidered after the above observations are addressed and submitted.
4.1	CRZ clearance for intake and outfall facilities at Sikka, Jamnagar by M/s Reliance Industries Ltd. [F.No.11-63/2013-IA.III]
	The proposal was discussed by the EAC in its meeting held in November, 2013 and January, 2014. The EAC after deliberation, deferred the proposal and suggested to the PP to either present the entire component as in Form I of the application or resubmit separate application for the present limited proposal along with the required documents including CRZ map of 1: 4000 scale, NOC with respect to Eco Sensitive Zone, and Marine National Park etc. and the impact of dredging etc.
	PP submitted and presented the details of the limited and truncated project to the EAC in February, 2014. The Committee noted that the PP proposed to draw the water from the existing natural creek during high tide to the two proposed stilling basins of size 115 x 80 x 12 m. The basins are designed to ensure supply of 3hrs requirement during neap tide. PP stated that the salinity of the ground water in the area varies between 9 to 10. 7 ppt due to close proximity to the Gulf of Kutch hence the establishment of stilling basins is unlikely to increase the salinity of ground water. The soil excavated from stilling basins will be utilised for raising low level areas within the plant. PP stated that a pipeline from desalination plant connecting the existing disposal line will be laid for the disposal of rejects. PP informed that there are two existing disposal lines with combined capacity of 32, 000 Cum/hr which have the capacity to carry proposed discharge of12,000 Cum/hr and informed that health and specification of the existing disposal lines is good enough to carry the increased discharge also. He informed that no dredging is involved either in the ecosensitive zone or elsewhere. The PP explained that all the construction activity would take place within its own fenced boundary. The EAC after deliberation decided to recommend the proposal for grant of CRZ clearance as the proposal is to draw water through natural channel without indulging in any trenching, digging or dredging, stipulating the following conditions:
	<i>i)</i> All the conditions stipulated by GCZMA shall be complied with.
	<i>u)</i> The soil excavated from stilling basins shall be utilised for raising low

level areas within the plant	
iii) The water quality especially j the stilling basins and outf submitted to Regional Office,	for the salinity shall be monitored around all once in six months and reports be MoEF.
iv) The PP shall not engage in a for water intake into the pro- the sea.	ny trenching, digging or dredging either posed stilling basins or for disposal into
v) The PP shall take the clea authority for undertaking co depth of 12m.	rance of the concerned ground water onstruction of stilling basins of desired
4.2 CRZ clearance for Resort at Survey No Andaman & Nicobar Islands. M/s Som [F.No.11-5/2012-IA.III]	b. 148, Bharatpur Village, Neil Island, a Andaman Resorts Private Limited.
ANIIDCO awarded the Develop Bharatpur, Neil Island, Andaman & Nico BOT basis. The Concession period, includ An SPV SOMA ANDAMAN RESORTS purpose by Soma Enterprise Ltd.	nent of ecofriendly beach resort at bar Islands to Soma Enterprise Ltd on ing Construction period, is for 60 years. PVT LTD has been incorporated for this
The resort would be developed a business / meeting facilities. The Resort individual villas, with fine dining, spa and Casual beach side shacks serving authentic to the experience. The resort will be des friendly Resort guidelines.	s a leisure oriented Beach resort, with will have a combination of rooms and, wellness facilities to pamper the guests. sea food, water sports facilities will add igned and constructed to meet the Eco
The Size of Land for developmen required shall be 130.5 KLD. Source of v Power required shall be 125 KVA X 3 Rs.114.7 Crores. The project would have harvest system, solar power system.	t is 9.7 Hectares. The quantity of water vater is Municipal or Ground water. The Nos. The Expected Cost of Project is water treatment plant, STP, rain water
There will be 80 rooms for an area 28,554 sqft, spa & Gym for an area of 20,3600 sqft, Lobby & reception-front Officinfrastructure 16115 sqft. The total built-rooms shall be developed in a phased mann	a of 55,670 sqft, 40 villas for an area of 0,554 sqft, Sports facility for an area of 2,554 sqft, Sports facility for an area of 4537 sqft, others and up area is 1,28,882 sqft. The Villas and er.
The ANCZMA had recommended September 2013.	I the project for approval to MoEF in
During the discussion, the following	g points emerged:
i. Details of the highest ingress of wat	er during Tsunami/ cyclone,
ii. Details regarding proposed measur disasters viz. Tsunami, cyclone.	es to tackle emergencies during natural
iii. Design details of structures within t	he layout plan with respect to the highest

	ing	ress of water during Tsunami/ cyclone and earthquake forces.
	iv. De	tails of the access road from the existing jetty to the resort
	v. Th	e recommendations of ANCZMA shall be adhered to.
	vi. Tre and	eated sewage should be recycled within the resort boundary for flushing d gardening.
	In the propos addressed	view of the foregoing observations, the Committee recommend to defer sal. The proposal shall be reconsidered after the above observations are and submitted.
4.3	Environm intake an Plant at Industries	nental and CRZ Clearance for the extension of existing Jetty and d outfall pipeline for sea water intake for proposed Thermal Power village Akri Moti, Ta: Abdasa, distt. Kuchchh. by M/s. Sanghi s Ltd. [F.No.11-96/2012-IA.III]
	Th information requirement The detail EAC in M superimpont as well as with their 14.67 ha a co-ordinat diversion of	e EAC considered the project in January, 2013 and sought additional on viz. layout superimposed on the latest google map, details of the soil nt for level raise, source, permissions of competent authority, if any etc. s submitted and presented by the project proponent was examined by the March, 2013. The Committee noted that the proposed activities are not osed on CRZ map. Therefore Committee suggested that both the existing the proposed activities shall be superimposed on the HTL map along co-ordinates and submitted. Further, the GCZMA has stated that about area falls within the Mangrove forest. The details on the map along with the shall be submitted. Prior Forest Clearance shall be obtained for the of forest land according to OM dated 31.03.2011.
	The detail After deli stipulating	s submitted and presented by the PP were examined by the Committee. beration, the EAC recommended the proposal for grant of clearance following conditions after receipt of the Stage-I Forest Clearance:
	(i)	PP shall submit mangrove conservation plan. Such Plan shall provide Action plan for prevention of the impact on mangroves, details of mangroves on the map in the site, details of action plan on mangrove afforestation along with budget provision and latitude and longitude.
	(ii)	The project involves about 14.67 ha forest area. Prior Stage –I forest clearance shall be obtained for the diversion of forests land according to OM dated 31.03.2011.
	(iii)	All the recommendations and conditions specified by State Coastal Zone Management Authority shall be complied with.
	(iv)	The commitments made during the Public Hearing and recorded in the Minutes shall be complied with letter and spirit.
	(\mathbf{v})	All the conditions stipulated in the earlier Clearance including the

		recommendations of Environment Management Plan, Disaster management Plan shall be strictly complied with.
	(vi)	Cargo shall be unloaded directly into hopper from the ship and transported to the stack yards through closed conveyor system only. Inbuilt dust suppression systems shall be provided at hoppers and all the transfer points / storage yards. Cargo shall not be unloaded directly onto the berth. Water meters shall be provided at different locations to record the consumption of water used for dust suppression and daily log shall be maintained.
	(vii)	The dredged material shall be used for low level raising wherever possible and excess shall be dumped into sea at the designated dumping areas only as identified based on mathematical model studies.
	(viii)	Disposal sites for excavated material should be so designed that the revised land use after dumping and changes in the land use pattern do not interfere with the natural drainage.
	(<i>ix</i>)	There shall be no ground water drawal in no development zone of CRZ area.
	(x)	Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.
	(xi)	All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to the RO MoEF along with half yearly compliance report.
4.4	CRZ for p	proposed construction of shoreline protection structures between the
4.5	villages o Villupura	f Sothanaikuppam to Bommaiyarpalayam in Vanur Taluk of n District M/s PWD/WRO I ower Pennaiyr Basin Division
4.6	Villupura	m[F.No.11–70/ 2013-IA.III]
4.7	CRZ clear Sirkali Ta Basin Divi	rance for construction of RMS wall at Vanagirikuppam village in aluk of Nagapattinam District M/s PWD/WRO, Lower Pennaiyr sion Villupuram[F.No.11–74/ 2013-IA.III]
	CRZ clear stretch ale Basin Div	cance for construction of RMS wall and groynes to 4.70 Km coastal ong Devanampattinam in Cuddalore District, M/s PWD, Kavari (East) [F.No.11–77/ 2013-IA.III]
	CRZ clean Sirkali Ta [F.No.11-7	rance for construction of RMS wall at Thirumullaivasal village in luka of Nagapattinam Division M/s PWD, Kavari Basin Div (East) 78/ 2013-IA.III]
	As	presented by the proponent the proposed shore protection consists of

	Soft and Hard measures, which have been proposed after location specific modelling on coastal processes and field evaluation on geomorphology. Unlike in earlier cases, sand nourishment to fill the inter spaces between the Groynes have been proposed, the groynes are designed in respect of their geometric dimensions(length and spacing), which will allow natural bypassing of sand to prevent the down drift erosion. The MIKE 21 model was used for developing coastal protection measures. The projects encompass eroding shoreline stretches and in the worst affected Zone of Tsunami-2004, where the life and property of fisherman community is under threat as it was explained during the presentation.
	Funds have been already sanctioned by Government of India to Government of Tamilnadu and so the projects can be implemented once the CRZ Clearance is accorded.
	It was observed by the Committee that no senior official above Executive Engineer was present from the proponent side. The Committee felt that they should have been present during the meeting. However, keeping in view the importance of the project and the human suffering involved, it was decided to go ahead with the hearing.
	The Committee suggested the following
	i) To conduct public hearing in the villages adjoining the project site 5 km both below and above each project site, to seek views of local population on the proposed shore protection measures and pilot study before starting any physical activity on the coast.
	ii) A pilot project at highly eroding sites to be taken up initially, where shoreline of length 3 km on either side of the project site should be monitored for its perfromance. Based on its performance and evaluation after two years of a base line study other sites to be taken up. The base line study and valuation should be carried out by Tamil Nadu PWD with the active involvement of the NIO.
	iii) As the coastal protection measures were arrived at based on a numerical model calibrated with deep water wave conditions, it was suggested to calibrate/validate the numerical model with near shore observations for obtaining reliable results.
4.8	EC for rehabilitation and upgradation of existing carriageway to 4 lane from Hisar to Dabwali sectin of NH-10 in the State of Haryana by M/s NHAI [F.No.10-52/2012-IA-III]
	As presented by the project proponent, the proposal is for rehabilitation and upgradation of existing carriageway to 4 lane from Hisar to Dabwali sectin of NH-10 in the State of Haryana. The proposed project road starts from km 170/000 at Hisar in District Hisar and ends at km 315/550 at Dabwali in Sirsa District in the State of Haryana. The existing length of the road is <u>145/550</u> km and proposed length is <u>145/785</u> km. The project road traverses through three district viz. Hisar, Fatehabad and Sirsa in the state of Haryana. The alignment passes through the 18

cities/villages/towns like: - Hisar, Chikan wass, Agroha, Khara Khedi Village, Badopal Village, Dhangar village, Fatehabad Town, Dariyapur, Dhani Nanakram, Daba ki Dhani, Ding Mor, Moriwala, Sirsa City, Odhan, Chorma, Mithadi, Malik pura, Samat Khera, Dabwali etc. The existing landuse along the project corridor is predominantly Agriculture. Agriculture area is 63.89 %, Built up area 24.05 %, Barren & uncultivable Land 1.75 %, Notified Protected forest land 9.62 % and rest is others. There are No environmentally sensitive areas within 15 km. The project does not pass through National park/Sanctuary/ Wildlife corridor/ Reserved Forest/ eco sensitive zone. The Proposed alignment traverses through the Notified protected forest area along the NH-10. The proposal for diversion of protected forest land is submitted to the forest division. The total land required for the proposed project is 485.80 ha; out of which 332.00 ha for widening to four lane, 87.00 ha. for Fatehabad Bypass, 61.80 ha. for Sirsa Bypass and 5.00 ha. for facilities like Toll Plaza, Truck Layby, Bus Bays etc. The existing carriageway varies from 2 lane with paved shoulder (121 km) to 4 lane divided carriageway with 1.20m median (24/050 km). It is proposed to widen 4 lane with paved shoulder from Km 170 to km 315.550. The existing ROW varies from 19 m to 42 m, whereas the proposed ROW is 45-60 m. There are 2 nos. of proposed bypasses, Fatehabad bypass has been proposed from existing km 208.840 to Km 221.590 (Proposed length 14.500 km) and Sirsa bypass from existing km 250/330 to 262/200 (Proposed length 10.300 km). There are 1 no Major Bridge, 15 Minor Bridges, 43 Pipe Culverts, 52 nos of slab culvert existing. Proposed improvement involves widening of 1 major bridge, 9 minor bridges, 32 slab culverts, 33 pipe culverts while new construction involves 2 minor bridges, 13 box culverts, 85 pipe culverts. Reconstruction involves 3 minor bridges, 2 slab culverts and 1 pipe culvert and 13 slab culvert are proposed for rehabilitation. 2 ROB, 9 flyovers, 1 VUP, 2 CUP, 2 PUP, 127 Junctions, 56.610 km Service/slip Road, 03 Truck layby, and 03 toll plazas have also been proposed in the section.

Approx 43904 numbers of trees are likely to be felled (70% Eucalyptus). About 68 no of structures likely to be affected and 251 families/persons affected. Total water requirement is 733 KLD. Fly ash proposed to be used from Rajiv Gandhi Thermal Power Plant which is 23 Km away from ch. Km 188/500. Total Project Cost is Rs. 1609.13 crores (Including Civil cost Rs. 1059.79 crores, R&R Cost& Land Acquisition cost 257.13 Crore, and EMP cost Rs. 12.26 crores).

The EAC after deliberation recommended the proposal for grant of EC stipulating the following conditions:

- (i) The proposal indicates the diversion of 181.78. ha forests land. Necessary stage –I forestry clearance shall be obtained. An undertaking as required according to OM dated 19.03.2013 regarding execution of work in non- forests area shall be submitted to the Ministry.
- (ii) It is indicated that 43904. nos. trees will be cut. Necessary permission from competent authority shall be obtained for tree cutting. Necessary compensatory plantation shall be carried out and cost provision should be made for regular maintenance.
- (iii) Rain water harvesting including oil and grease trap shall be

		provided. Water harvesting structures shall be located at every 500 mts along the road. Vertical drain type rainwater harvesting structures shall be set up to minimize surface runoff losses of rainwater.
	(iv)	<i>R&R</i> shall be according to the guidelines of <i>NHAI/State/Central</i> Government which ever is higher.
	(v)	IRC guidelines shall be followed for widening & up-gradation of road.
	(vi)	The responses/commitments made during public hearing shall be complied within letter and spirit.
	(vii)	All the recommendations of the EMP shall be complied with , in letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.
4.9	Environmen	tal Clearance for widening and rehabilitation of existing 4 lane to
	6 lane of Au	rangabad to Barwa Adda (km 180.000 to km 400.057) Section of
	NH-2 in the	State of Bihar and Jharkhand by M/s NHAI, New Delhi [F.No.10-
	73/2012-IA-I	II]
	The p deliberation, drainage, drin asked the Pro- resolution of Project Propo- meeting with accordingly, t	project was examined by the EAC in October, 2013 and after EAC noted that the response of Project Proponent on issues viz, nking water, ponds and animal safety are not proper. The EAC has oject Proponent to go to villages and come back with satisfactory the above issues. The Local Authorities should Co-operate with the ponent (NHAI). NHAI informed that it has conducted village level a District Authorities at 10 locations during December, 2013 and the EAI report has been revised and submitted to the Ministry.
	The det is noted that proposal of co	tails submitted and presented by the PP were examined by the EAC. It the major issues raised are about the likely damage to the ponds and construction of new ponds, plan and after deliberation.
	The Co following cor	ommittee recommended the proposal for grant of EC stipulating the additions:
	(i)	The proposal indicates the diversion of 13.22d ha ha forests land. Necessary stage –I forestry clearance shall be obtained. An undertaking as required according to OM dated 19.03.2013 regarding execution of work in non- forests area shall be submitted to the Ministry.
	(ii)	It is indicated that 15000 nos. trees will be cut for the project. Necessary permission from competent authority shall be obtained for tree cutting. Necessary compensatory plantation shall be carried out and cost provision should be made for regular maintenance.

	(iii)	Rain water harvesting including oil and grease trap shall be provided. Water harvesting structures shall be located at every 500 mts along the road. Vertical drain type rainwater harvesting structures shall be set up to minimize surface runoff losses of rainwater.
	(iv)	<i>R&R</i> shall be according to the guidelines of NHAI/State/Central Government which ever is higher.
	(v)	IRC guidelines shall be followed for widening & up-gradation of road.
	(vi)	The responses/commitments made during public hearing shall be complied with, in letter and spirit.
	(vii)	All the recommendations of the EMP shall be complied within letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.
4.10	EC for exp Associated (Airport, Pit Grant, Dehr	pansion and strengthening of Runway and up gradation of Operational Infrastructure and Terminal facilitiesat Naini- Saini thoragarh (Uttarakhand) M/s Civil Aviation, Directorate Jolly adun [F.No.10-37/2012-IA.III]
	As pr strengthening and terminal Airport is co ha and situate type Aircraft 30 m, Taxiw building with and damaged abandoned c Elevation: 15 No power su available for the airport. International Hilly Terrain	esented by the project proponent the proposal involves expansion and g of runway and up gradation of associated operational infrastructure facilities at Naini-Saini Airport, Pithoragarh (Uttralhand). Naini-Saini nstructed during 1991 for administrative use. Airport area is about 28 ed about 4 km away from Pithoragarh. Airport is developed for Dornier . The existing features are Runway 14-32: 1300 X 20 m, Apron: 50 X ray: 50 X 15 m, Terminal Building/ATC Tower, Two storey terminal a ATC tower on top is in dilapidated condition with no doors, windows I finishing, Fire Station, Residential Quarters: 6 Quarters which are in ondition. Location: Lat 29° 35'31.55"N and Long 80° 14' 22.47" E 600 m above MSL. Presently no commercial Operations at this Airport. pply to the Airport and No DG room/Sub station. Car parking area is 20 numbers only. There is no security boundary wall/fencing around Seismic Zone: Zone V according to seismic zone map of India Boundary: Nepal International Boundary Aerial distance is 11.5 km.
	Propo 1510m and w taxiway, Terr	osed facilities includes extension of 210 m to make total length of videning to make 30 m, 5 m paved shoulder on either side of existing minal Building: 480 sq. m for 20 incoming and 20 outgoing passengers,

r	
	25 m height ATC tower, expansion of Apron to make the overall dimension to 60 x 90 m for parking of 2 ATR -42 aircraft, 225 sqm fire station, and 225 sqm electrical substation, Car Parking for 20 nos, culvert and drainage improvement, boundary wall of 2.4 m height with 0.6 m overhang.
	The water requirement is 14.4 KLD and the same will be met from Municipal Water supply. The wastewater generation of 9.9 KLD will be treated and reused for horticulture. The solid waste expected is 6 kg/day and it will be handed over to Municipality.
	The EAC finalised ToR in May, 2012 including conduct of Public Hearing.
	EAC after deliberation decided to defer the project and suggested the following:
	(i) The Committee noted that the proposed facilities appear to be under designed in respect of future as well as safety requirements. PP shall get the project vetted from DGCA and AAI for safety and project facilities and seek their comments. It also decided to call representatives from DGCA and AAI to the Committee meeting.
	(ii) The Committee noted that the estimation of wastes generation is under estimated. PP shall re estimate the waste generation and also management of the same and resubmit.
	(iii) The PP shall submit the issues raised during the Public Hearing and responses of the PP.
4.11	EC for Integrated Solid Waste Management Facility at Sarai, Haridwar[F.No.10-110/2011-IA-III]
	Haridwar city a premier religious and tourist destination of Uttrakhand is facing frugal infrastructure and management practices since a long time in respect of Municipal Solid Waste management. The deficient components include source segregation, primary collection, processing, treatment and scientific disposal of waste. City has no proper system of treatment and disposal of their waste.
	Hence, the entire waste generated every day is getting dispose of in an unsatisfactory manner at various places in the city. Some salient features of project are depicted below:-
	Currently no waste processing or waste handling unit exists for Haridwar city. The waste generation according to 2010 survey is 200-215 tonnes/day and in peak months the waste generation is 250 tonnes/day. The expected MSW generation for year 2027 is about 429.87 TPD. The total area allocated for the project is 20 Hectare, out of which 4.5 Ha is for compost plant, 4.5 Ha for engineered landfill, 6 ha. green area and 5 ha for service station, road, parking, etc. The land has been earmarked in Haridwar Master plan for solid waste management facility.
	The project involves installation of compost plant (100 TPD) and an engineering sanitary landfill site (50 tonnes/day) on a total area of 45 Ha. The

	required. The source of water is ground water. The total cost of the project is 225.64 Crores. 70 kW of power requirement during operation phase. Backup power supply by 2 DG sets of 75 kVA each. 100 people will be engaged during construction phase and 50 people will be engaged in operation phase. Door – to door collection will be carried out for waste collection. About 26 vehicles will be engaged in collection of waste. The life of compost plant and engineered sanitary landfill is for 20 years. The leachate generated will be treated by proposed leachate Treatment Plant proposed within the site.
	The Committee observed that the proposal submitted by the proponent is based on the Census of 2001 and waste generation data for the year 2010. Figures of 2011 census are available. The proposed design of 100 TPD is obviously grossly inadequate. The proposed design period should go up to 2025 estimates.
	The Committee recommended in-principal, the present proposal for Environmental Clearance with a condition that proponent shall submit the revised proposal, for phased execution of the project, considering the present proposal being Phase – I. The final Environmental Clearance shall only be issued once the revised proposal of phased execution (Phase – I, Phase –II etc.) is submitted, catering to the future needs for the proposed design period.
4.12	Environmental Clearance for Industrial Model Township (IMT), Faridabad by M/s HSIIDC [F.No.21-1044/2007-IA.III]
	As presented by the Project Proponent, Haryana State Industrial and Infrastructure Development Corporation Limited (HSIIDC) proposes to develop IMT Faridabad as a modern industrial township with international level of environmental friendly infrastructure. Total area in Sector-66,67,68, 69,70 & 71 is 1901.05 acre, out of which 1784.01 acre area has already been acquired by HSIIDC for the purpose of development of IMT. Out of the area acquired, 1766.30 acre (715 ha) has been planned and 17.71 acre would be planned later on.
	The Project Proponent stated that the water requirement of the project would be 36000 KLD. The energy requirement would be 160 MW (tentative peak load). The project is having the provision for the development of 21 MLD CETP in the IMT. There is no reserve forest and Ecological Sensitive Areas within the 15 km Buffer Zone of the Project. The expected cost of project is 442 crores (exclusive of the cost of the land).
	The project aims at creation of state-of-the-art industrial infrastructure in the district. With the implementation of the project, other utilities would also be created like development of road network, sewerage network, augmentation of water supply system & wastewater treatment, solid waste collection facility, educational and health facilities etc. In nutshell, project aims at amelioration of the socio-economy of the areas as well as providing basic amenities to people.
	The TORs for the above project were approved by MOEF vide letter dated 20 th June, 2008. EIA report was prepared but could not be considered by the Ministry because of the temporary ban imposed by MOEF vide memorandum dated 13.1.2010; citing Comprehensive Environmental Pollution Index (CEPI) score

	above 70 in case of Faridabad. The ban imposed by the Ministry was finally lifted for consideration of the projects for environmental clearance vide office memorandum dated 31.3.2011 and EIA report/executive summary were submitted to MOEF on 5.4.2011.
	MOEF vide its letter dated 8.8.2011 advised the proponent to conduct public hearing in the case. However, HSIIDC represented vide its letter dated 29.9.2011 alongwith copies of gazette notification wherein such hearing already stands concluded being the land acquired as an integral part of final published development plan and conformance of land use accordingly.
	The matter was considered in the 127 th EAC meeting held on 30.10.2013. The proponent presented the clarifications on the issues raised in the previous meeting. Regarding the estimation of capacity of the ground water reserve and water balance for the overall development plan for Faridabad, the Committee observed that CGWA has accorded NOC for ground water withdrawal of 12700 cubic meter per day (46,35,500 cubic meter per year) subject to recharge of 55,27,969 cubic meter per annum. The present proposal envisages ground water withdrawal of 28890 cubic meter per day (Internal tubewell + Ranney wells + Tubewells in Yamuna flood plains) or 105,44,850 cubic meter per annum which is different from the NOC accorded by CGWA. HSIDC has to approach CGWA for modifications. Further, Ballabhgarh block, Faridabad district falls in the "Critical" category and HSIDC has to provide recharge plan for 105,44,850 cubic meter per annum as per existing guidelines of CGWA.
	Part of runoff is proposed to be disposed off to Yamuna river and Agra canal. This runoff should also needs to be recharged.
	Recharge rate of each structure is 30,000 LPH or 8.33LPS which is on very high side. A justification may be provided.
	Regarding the issue of public hearing, the Ministry clarified that since the proposed Industrial Area is not a notified industrial area and only the Development Plan/Master Plan of Faridabad has been approved by Government of Haryana, a fresh Public Hearing has to be conducted for the proposed Industrial Area.
	In view of the forgoing the Committee advised the proponent to conduct the public hearing. The proceedings of the public hearing along with compliance of the commitment given during the Public hearing shall be submitted to the Ministry. The matter shall be reconsidered by the Committee once the Public Hearing is conducted and clarification/necessary approval from CGWA are submitted. The PP shall give a clearance from the concerned wild life/forest authority that there is no ecosensitive zone within the prohibited limit.
4.13	CRZ Clearance for Bhavanapadu Heavy Mineral Sand Project (ML area 1788.00 Ha and capacity 10.0 MTPA) at village Rajapuram & Bhavanapadu, in Santhabommali Mandal and Devunalthada, Suryamani Puram, Komariathada, Sainooru, URK Puram, Amalapadu & Pallivuru in Vajrapukothuru Mandal, in Santhabommai & Tajrapukothuru Talika in Srikakulam District in AP by M/s Trimey Heavy Minerals Pyt Ltd [F No 11-

88/2013-IA.III]

Trimex Heavy Minerals (Pvt) Ltd. has filed an application for grant of Mining lease over an area of 17.95 Sq. km in Rajapuram & Bhavanapadu Villages in Santhabommali Mandal and Devunalthada, Suryamanipuram, Komarlathada, Sainoor, URK Puram, Amalapadu & Pallivuru villages in Vajrapukothuru Mandal, of Srikakulam District, Andhra Pradesh

Application for obtaining Terms of Reference for undertaking detailed EIA study in accordance with the provisions of the EIA Notification dated September 2006 was applied and MoEF has accorded TOR vide Lr no J - 11015/90/2009 - IA.II (M) dated 25th May 2009.

The Industries and Commerce Department, State Government vide letter memo no 963/M.III (1) 2009 - 4 & 5, dated 03.09.2010 has issued an in-principle approval over an area of 17.88 Sq. km i.e. 1788 ha in favour of M/s. Trimex Heavy Minerals (Pvt) Ltd. for a period of 30 years.

The Proposed mining of Heavy Mineral Sand is 10 million tons per year. The Pre-Concentration Plant is for the capacity of 1,525 TPH. The Mineral Separation Plant is of the capacity of 270 TPH

The Latitude is $18^{\circ} 30' 18.50''$ N to $18^{\circ} 39' 49.05''$ N and the Longitude is $84^{\circ} 17' 05.84''$ E to $84^{\circ} 26' 19.35''$ E. The total water requirement is $1,400\text{m}^3$ /hour (900 sea water & 500 river water). The Water drawl permission has been obtained from irrigation department. The direct employment potential of the project is 588 nos. In addition, the project is likely to generate indirect employment to 1500 nos

The APSCZMA has recommended the proposal vide Lr No 652/ENV/CZMA/2013 dated 24.01.2014.

The Committee observed that the depth of Mining is proposed to be up to 8 meters below the ground level, Which deserved observance of necessary clearance and caution. It also observed by the Committee that the APCZMA has restricted the mining in the inter-tidal zone Which is where the major mineral deposits should normally lie. However, the APCZMA restricted mining to within 100 mts from HTL towards landward side.

After deliberation, the Committee recommended the proposal for the grant of CRZ clearance subject to following conditions:

- i. All conditions as stipulated by the APCZMA shall be complied with.
- ii. The depth of mining in CRZ area should be decided in consultation with APCZMA and with Ground Water Authority. The details shall be submitted to the Ministry before commencing the mining activity at site.
- iii. Ground water observatory wells shall be within and outside the mining area prior to the mining for ground water monitoring. PP shall carry out soil analysis, ground water analysis at the site once in three months and submit the same to the State PCB and Regional Office, MoEF.

iv.	Digital processing of the entire mining lease area using remote sensing technique should be carried out regularly once in three years for monitoring land use pattern and physiography of the area and report submitted to the RO, Ministry.
v.	No drilling and blasting should be involved.
vi.	There shall be no ground water drawal in CRZ area.
vii.	Mining in the CRZ-III area will be done by scraping using manual labor with the help of shovels and spades, There shall be no mechanical mining
viii.	"Consent to Operate" shall be obtained from State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of mining work at the site.
ix.	There shall be no mining in intertidal zone.
x.	The balance sand after removal of rare minerals shall be refilled. Site photographs shall be submitted before and after the mining activity to RO of MoEF.
xi.	To control dust during transportation water sprinklers shall be adopted and also the sand transport vehicles shall be covered with Tarpaulin sheets.
xii.	TCLP analysis of both mined and tail materials can be done to check the presence of Hazardous materials and report shall be submitted along with the six monthly monitoring reports.
xiii.	A green belt shall be developed after mining and refilling block by block.
xiv.	Project proponent shall ensure that no disturbance is caused to the mangroves/ fisherfolk.
XV.	All the commitments made during the public hearing including the budget for corporate social responsibility shall be earmarked for carrying out the activities.
xvi.	Mineral processing plant shall be located outside CRZ area.
xvii.	Safety measures shall be taken for workers to prevent radioactive impact on health. All the safety regulations as applicable shall be strictly followed.
xviii.	All prior statutory clearances from Department of Atomic Energy, Indian

	Bureau of Mines, Central and State agencies as applicable shall be obtained.
	xix. Sand dunes should not be flattened
4.14	CRZ Clearance for construction of school, orphanage school, vruddhashrm, Dispensary, free vocational training school, library, meditation hall, temple and garden in Survey no.112/1, Yendada village of GVMC, Andhra Pradesh by M/s ISKCON [F.No. 11-82/2013-IA.III]
	International Society for Krishna Consciousness (ISKCON), is doing spiritual and social services. ISKCON in Visakhapatnam is serving daily 47000 Mid Day Meals and doing social service by running free Clinics etc. ISKCON has purchased 2 acres of land, Sy. No. 113/1, in Yendada, Visakhapatnam, through Tourism Department of Government of Andhra Pradesh in the year 2005 to build a School, Orphanage, Virdhashram, Vocational Training Center, Temple etc. In the year 2006, the State Environment Department had issued order permitting ISKCON to build Ashram building at the site. In the year 2010, State CZMA Committee recommended ISKCON land to MoEF to be re-classified from CRZ-III to CRZ-II. MoEF sent back the proposal stating that since the area is developed area, the whole area should be recommended in one go and not in piecemeal.
	APCZMA considered the proposal in its meeting held on 07.11.2012 and recommended the proposal to MoEF for approval by treating the proposal as Tourism oriented project. It has been requested to get the proposal examined under Annexure – III of CRZ Notification 2011 and approval for construction of school, Orphanage School, Vrudhashram, Dispensary, free Vocational Training School, Library, Meditation Hall, Temple and garden in survey no 113/1, Yendada Village, GVMC by ISKCON, Visakhapatnam.
	The matter was considered in the 130 th EAC meeting held on 22 nd to 24 th January, 2014. The Committee observed that the component of the project presented during the meeting includes Planetarium and Cultural Center which but not covered in the list of components recommended by the APCZMA. It was suggested by the Committee to get the components approved from the APCZMA for getting the final CRZ clearance.
	The proponent mentioned that they would like to drop the component of Planetarium and Cultural Center and requested to grant CRZ clearance for the components which has been earlier approved by APCZMA.
	The Committee recommended the proposal for CRZ Clearance with the following condition in the Clearance letter for strict compliance by the project proponent
	 (i) All the recommendations of APCZMA shall be complied with (ii) The school and dispensary should be at the farthest end of the plot from the seaward side. (iii) No flattening of sand dunes shall be carried out
	(iv) Groundwater shall not be tapped within 200metre of the High Tide

	 Line (v) Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that the untreated effluents and solid wastes are not discharged into the water or on the beach; and no effluent or solid waste shall be discharged on the beach; (vi) The overall height of construction upto the highest ridge of the roof, shall not exceed 9metres and the construction shall not be more than two floors (ground floor plus one upper floor);
4.15	ToR for setting up of a new major Port in the state of AP at Durgarajapatnam
	The Ministry of Shipping, Government of India is proposing to develop a green field port at Dugarajapatnam in Andhra Pradesh to meet the ever increasing cargo demand in the country. Dugarajapatnam is known for port related activities since long. It is proposed to be developed a major port at Dugarajapatnam along Andhra Coast in the East Coast of India at a distance of about 90 km north of Ennore port and 700 km south of Visakhapatnam port. It is planned to develop the port with world class terminal facilities well suited to meet the present and future needs of the trades. Dugarajapatnam port once developed will have a unique distinction of being most modern green field major port in India with water depth up to 21 m, making it the deepest and capable of handling deep draft super cape size vessels to handle containers and bulk cargo. The port with its proposed facilities will become a gateway port for its entire hinterland spread over north, south, west and central India
	Dugarajapatnam Port will be an artificial deep-sea, harbour comprising of two rubble mound type breakwaters with concrete capping. The port is protected by providing south and north breakwaters. Hence, the master layout is developed in between a pair of break waters, one on the south side which is 4.56 km long and the other on the north side which is 2.4 km long. The harbor is planned in between these two breakwaters and the shore. These breakwaters are placed in such a way to protect the harbor basin from predominantly easterly and southeasterly waves. They will also protect the basin from siltation due to littoral sediments. The area enclosed by the basin is 6.49 km ² . This consists of berthing structures and future provision for a dry dock and a ship lift facility. There will be a turning circle of diameter 780m. An approach channel is provided to enable access from north-north east direction.
	The approach to the port is through a channel of 16 to 18 km in length, dredged to -21.0 m level and equipped with night navigational facilities. The permissible draught is 18.3m to handle super cape size vessels of 200,000 DWT to commercially carry bulk cargo of coal, ore, containers and other commodity raw materials from overseas and through coastal shipping.
	In the first phase, there will be 8 berths. Among these, 4 berths are for coal and four for containers and general cargo. The berths are laid out in such a way that the coal is segregated from the other clean cargo. The coal berths and conveyor corridor is provided along the south breakwater. The total area of berths is 1.31 km ² . In the phase 2, there will be an addition of 10 berths with an additional berthing area

	of 0.93 km^2 . There could be two more berths along the outer arm of southern breakwater. These berths could be planned for future for handling of hazardous cargo or coal.
	The overall project is proposed to be implemented through a joint venture (JV) between Visakhapatnam Port Trust (VPT) and the State Government of Andhra Pradesh.
	The Committee desired that the Ministry may check and prvide details of any technical committee set up by the Ministry of Shipping for the site selection of a major port at Durgarajapatnam area.
	i. Latest Google map superimposed by the layout of the project boundary
	ii. Justification for the need for a port in the area when Krishnapatnam port is in the vicinity.
	iii. Details of port on the nearby creeks, or any ecosensitive zone/bird sanctuary .
	The Committee suggested that a Sub-Committee comprising of Dr. M.V. Ramana Murthy, Shri S.K. Sinha, Sh. R. Radhakrishnan and a representative of MoEF shall visit the site and submit its report.
	The Committee recommended to defer the proposal. The proposal shall be considered after the above observations are addressed and submitted for reconsideration.
4.16	Revalidation of ToR for Multiproduct SEZ and free Trade Warehousing Zone at Layja Mota, Kutch District, Gujarat, Sealand Ports Pvt Ltd. [F.No.21- 68/2011-IA.III]
4.16	Revalidation of ToR for Multiproduct SEZ and free Trade Warehousing Zone at Layja Mota, Kutch District, Gujarat, Sealand Ports Pvt Ltd. [F.No.21- 68/2011-IA.III]M/s. Sealand Ports Private Limited (SPPL) and Avash Logistic Park Private Limited (ALPL) propose to develop a Multi-Product Special Economic Zone (SEZ) and a Free Trade and Warehousing Zone (FTWZ) at Layja Mota Village in Mandvi Taluka, Kutch District, Gujarat. Infrastructure Leasing and Financial Services Limited (IL&FS) and Allcargo Global Logistics Limited (AGL) are promoters of
4.16	Revalidation of ToR for Multiproduct SEZ and free Trade Warehousing Zone at Layja Mota, Kutch District, Gujarat, Sealand Ports Pvt Ltd. [F.No.21- 68/2011-IA.III] M/s. Sealand Ports Private Limited (SPPL) and Avash Logistic Park Private Limited (ALPL) propose to develop a Multi-Product Special Economic Zone (SEZ) and a Free Trade and Warehousing Zone (FTWZ) at Layja Mota Village in Mandvi Taluka, Kutch District, Gujarat. Infrastructure Leasing and Financial Services Limited (IL&FS) and Allcargo Global Logistics Limited (AGL) are promoters of proposed SEZ and FTWZ. The Industries Commissionerate, Gujarat issued a bonafide certificate in May, 2010 for use of land for industrial purpose. SPPL and ALPL have been granted in- Principal approval in June, 2010 by The SEZ Board of Approval (BoA) for development of SEZ and FTWZ. The total area of the proposed SEZ and FTWZ is 3,473 acres comprising of about 2678 acres of processing area 150 acres of non processing area and 645 acres of DTA. The potential sectors identified for investment in the proposed SEZ & FTWZ are Power Generation and Desalination plant, Logistics, Focus Engineering goods, Textiles & Handicrafts, Shipping ancillary and Naval offsets Basic Chemicals, Allied Chemicals, Polymer products, Pharmaceuticals and Medicinal products and Non metallic mineral products.

	wastewater conveyance pipelines and road. SPPL and ALPL has submitted the proposal. EAC in September 22, 2010 has recommended the ToR and MoEF has issued the ToR letter vide file no. 21-68/2011-IA-III dated March 05, 2013 .
	The studies required for the project EIA according to approved ToR are under progress. A fresh baseline survey covering both marine & terrestrial environmental components were carried out in 2012. National Institute of Oceanography (NIO) was engaged for demarcation of HTL, LTL and CRZ area. According to the NIO report, SEZ site is located at about eight (8) kilometer (km) from the HTL of open sea and six (6) km away from tidal influenced (CRZ) area of river Kharod. In order to compile the additional studies & surveys carried out for the Project and prepare EIA study report to conduct public hearing for Environmental Clearance, SPPL/ALPL requested MoEF to provide extension of validity of ToR for another one year i.e till September 2014 . MoEF has considered the project in 127th EAC meeting agenda for EAC review to issue the extension of validity of ToR Letter. MoEF has issued the Extension of validity of ToR up to March 2014 vide letter F.No: 21-68/2011-IA-III dated December 03, 2013 .
	Considering the quantum of work involved to complete the EIA Study report and to conduct Public Hearing for Environmental/ CRZ Clearance, SPPL requested MoEF to provide extension of validity of ToR till March 2015 .
	The committee observed that the matter was considered in 105 th EAC meeting held on September 22, 2011 however the ToR letter was issued on March 05, 2013 with a validity of 2 years i.e up to March 04, 2015. The proponent meanwhile applied for extension of ToR based on the Minutes of the 105 th EAC meeting, according to which date of ToRs was expiring in September 2014. The Ministry issued a letter dated December 03, 2013 extending the validity of ToR upto March 4, 2014.
	The Committee noted that the letter issued by the Ministry dated December 3, 2013 is infructuous and the validity of the ToRs shall remain up to March 4, 2015.
4.17	EC for Sector specific SEZ with CETP- CRZ clearance for Treated Effluent disposal to marine project at Chittivalasa, Boyapalem & Naravu Village, Ranasthalam Mandal, Srikakulam distt. Andhra Pradesh. M/s Vivimed Labs Limited, SEZ [F.No. 11-14/2011-IA.III]
	The proposed Sector Specific SEZ is located in 289 acres of Survey No. Parts of 4, 5, 7, 10, 11, 12, 13, 15; 9, 12; 16 to 20, 107 to 119, 122 to 129, 150 etc., in Chittivalasa, Boyapalem and Naravu Villages, Ranasthalam Mandal, Srikakulam District, A.P. The project proponent has more than 2.5 decades of experience in running Cosmetics, Synthetic Organic Chemicals, Bulk Drugs and Intermediate manufacturing Industry and has proposed to establish a Sector Specific Special Economic Zone (SEZ) for accommodating Cosmetics, Synthetic Organic Chemicals Bulk Drugs and Intermediates manufacturing industries within the SEZ under project / activity 5(f) of the EIA Notification 2006.The SEZ is located at an aerial distance of about 60 Km from Visakhapatnam and is well connected by road from Vishakhapatnam and Srikakulam districts of A.P through NH-5. The transportation of raw materials and finished products can be arranged by road roil, air and see to

The site (289 acres) will be divided as Part 1 with 148 acres consisting of 13 plots including Vivimed unit (Plot-1) with 36 Acres and Part 2 with 141 acres will be utilized for the common Infrastructure facilities as described below. Proposed site comprises of Private & Government Lands, which have been acquired through the APIIC and In-principle allotment from Government of A.P., Industries and Commerce Department vide Memo. No. 6562/INF.A1/2010 dated May 25, 2010.

Terms of Reference (ToR) has been issued by MoEF vide F. No. 21-14/2011-IA.III dated May26, 2011 and as interlinking item obtained ToR from SEAC vide Lr. No. SEIAA/AP/SKL-04/2010 dated March 11, 2011 for CETP. Marine EIA studies have been conducted by M/s INDOMER Coastal Hydraulics (P) Ltd, and CSIR-NIO has demarcated LTL, HTL and CRZ boundaries of the proposed SEZ. Public Hearing was conducted by APPCB on 14-03-2012. APPCB issued NOC on 20-05-2013. APSCZMA recommended for marine outfall for the treated effluentson 21-10-2013 and submitted the Final EIA report incorporating the ToR compliances and additional observations during MoEF EAC 113th (5-06-2012) & 118th (09-11-2012) meetings is submitted to MoEF for appraisal and CRZ Clearance on 24-12-2013.

Infrastructure facilities at SEZ

	1.	SEZ Size :	289	acres
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	1.	SEZ Size : 289 acres
	2.	Project cost : Rs. 412 Crores
		(Rs. 200 Crores for SEZ Facilities and Rs. 212 Crores for Plot-1 in the SEZ)
	3.	Investment for Environmental Protection measures : Rs. 130 Crores
	4.	Investment on Occupational Health & Safety: Rs. 2.75 Crores
	5.	No. of manufacturing plots: 13 [148 acres including 49 acres of Greenbelt area]
		i. Plot 1 (Vivimed own unit) : 36 acres
		ii. Plot 2 to 5 & 10 to 13 of 8.7 acres each : 69.6 acres
		iii.Plot 6 to 9 of 10.5 acres each : 42 acres
	6.	Parking area : 7 acres
	7.	Water requirement in the SEZ : 3850 KLD
	8.	Reuse of treated effluent : 1500 KLD
	9.	Fresh water requirement : 2350 KLD
	10.	Common Effluent Treatment Plant: 2352 KLD (Design capacity-3000 KLD)
		i. HTDS / HCOD effluent treatment system : 1120 KLD (Design capacity-
		1500 KLD)
		ii. LTDS / LCOD effluent treatment system : 672 KLD (Design capacity-
		800 KLD)
		iii.HTDS effluent treatment system : 560 KLD (Design capacity-
		700 KLD)
	11.	Marine Disposal of treated effluent : 850 KLD
	12.	Common Solvent Recovery System : 100 KLD for Spent Mixed Solvents
	13.	Total Greenbelt area: 118 acres (which includes total periphery of entire SEZ
	1.4	and periphery of each individual units in the SEZ).
	14.	Employment Potential:Direct: 3000 Nos. and Indirect: 500 Nos.
	15.	The energy / power requirement for the project will be 18000 KVA drawn from
		AP Central Power Distribution Corporation Ltd. i.e., 4000 KVA for Common
		Tacilities of SEZ, 2000 KVA for Plot 1 and 1000 KVA for remaining 12 plots
	10	
ļ	16.	Electricity for Common facilities with standby power (DG sets) $-4x1000$ KVA.

Other member industries will install DG sets according to their requirement.

- 17. Coal is used in the proposed boilers of 3x20 TPH for CETP & Common Solvent recovery system; 7x10 TPH (including 3x10 TPH for Vivimed Plot 1) and 8x 8 TPH for Member industries. The Coal consumption is about 776 TPD.
- 18. Auditorium for Training / conferences
- 19. Common Internal Roads
- 20. Primary Health Care Centre with Ambulance Facility
- 21. Communication systems like Phone, Internet etc.
- 22. Construction of Boundary wall
- 23. Security system at the SEZEntrance

The total estimated water requirement is 31 KL/acre of activity area and 3 KL/acre for Greenbelt area will be about 3826 KLD (Rounded to 3850 KLD). Wastewater generation @ 21KL/acre will be about 2352 KL/Day (Rounded to 2400 KLD).

The effluent from the individual plots will be segregated according to TDS & COD concentrations like HTDS/HCOD (from process), HTDS (from Boiler blow down, Cooling tower bleed, DM Water & Scrubbers), LTDS / LCOD (from other sections like washing, R&D, Q.C etc.) & domestic wastewater and sent to CETP common collection tanksthrough separate pipelines.Effluent treatment tanks will be constructed minimum 1 m above ground level in the CETP / Member industries. Minimum 3 days storage tank will be provided in the individual industries for standby storage facility.

Total Marine disposal (from HTDS & R.O rejects from LTDS/LCOD) is850 KLD and the point of discharge at a distance of about ~1.5 km from the Land Fall Point with a 10.8 m sea depth. The pipeline from shore to the diffuser point will be routed under the seabed through appropriate buried pipeline system. Diameter of diffuser port = 0.15 m (multiple diffuser ports). Discharge velocity = 0.37 m/s.

Stripped solvents from steam stripper will be collected and sent to APPCB authorized agencies for reuse as alternate fuel. Concentrate from MEE will be sent to ATFD and the salts will be sent to CWMP – TSDF, Parwada along with the ETP sludge for safe disposal.

Solid waste from SEZ will be generated in the form of Distillation residue, MEE salt, ETP Sludge, Boiler ash, Waste oils, Used Lead acid Batteries, Containers&Container liners, Organic residue, Spent Carbon, Inorganic waste will depend on the type of product and is safety handled and disposed according to APPCB directions.

The organic solid waste will be disposed off to Cement, Steel or Power units where the waste will be used as alternate fuel. The Inorganic Solid waste from the individual industries and from the common liquid waste treatment facility will be collected and disposed off to the nearest TSDF located at Parwada belongs to JN Pharma City.

For process emissions, the individual industries will provide Scrubbers based on the characteristics of gases. Boiler emissions will be controlled by providing Bag filters to reduce the particulate emissions.

	Member industries have to obtain CFE / CFO Under water and Air Acts and HW authorization from APPCB under HW (M, H & T) Rules.
	For the benefit of the community in the vicinity of the project, SEZ will initiate several measures to develop various amenities with a CSR Budget of Rs. 8.5 Crores to improve standard of living.
	The Committee recommended the proposal for Environmental and CRZ Clearance with the following conditions in the Clearance letter for strict compliance by the project proponent
	i. The existing Kandivalasa River in the vicinity of the SEZ should not be disturbed. No discharge shall be released into the river.
	<i>ii.</i> As committed the treated effluent shall be recycled and reused within the SEZ premises.
	<i>iii. The salts obtained from the MEE and other hazardous waste shall be sent to TSDF as proposed and committed.</i>
	iv. As committed, an online monitoring system for Environmental Parameters shall be put in place and the censors shall be maintained on periodic basis. The report shall be submitted to the APPCB and regional office of the Ministry every three months. The APPCB shall make sure that the censors are calibrated and are in working condition, through regular inspection.
	v. Rain water harvesting facility shall be provided.
4.18	EC for improvement and upgradation of Nayabazar to Namchi State highway SK 02 in the state of Sikkim under North Eastern State Roads Investment Program-Tranche 1 roads. M/s ADB, Project and Bridges, Sikkim. [F.No.10- 28/2012-IA.III]
	The project road takes off at Jorethang (Nayabazar) on eastern bank abutment of Akkar Bridge and terminates at Namchi covering a total length of 19.7 km in South Sikkim. The existing carriageway width varies from 3.0 to 4.0m. The proposal under this project involves expansion of existing single lane to intermediate lane with 5.5 m carriageway. Total formation width is 10.2 m considering future widening. Project road is not passing through any Biosphere reserves, National Parks, Wildlife Sanctuary or any other similar eco-sensitive areas. However, it is located within 10 km radial distance from Kitam Bird Sanctuary. 7.36 km of road section is passing through forest (1.0 km of reserved forest and 6.36 km protected forest). 3079 trees are likely to be affected. No loss of any endangered/ rare/ threatened species. There is no river crossing. However, there are several streams locally known as khola, crossing the project road. Most of them are non-perennial in nature. Diversion of stream/ nallah is not envisaged. Project area lies in Seismic Zone IV. All civil structures have been designed according to BIS codes corresponding to seismic zone IV. Few sections of the road are under landslide prone areas. Protection measures have been proposed according to IRC-SP 48:

1998.

Diversion of 1.030 ha forests land is required for the project. Final Forest Clearance has already been obtained. No alternative alignment or bypass proposed. The existing ROW is 16.36 m (uniform on either side) and almost same as existing except at junction and curve improvement and bus bays. 50 culverts (3 retained, 1 abandoned, 6 to be widened, 32 to be reconstructed and 9 new) proposed.

Sikkim State Pollution Control Board has conducted the Public Hearing on 15 March 2013 at Government School Playground at Nandugaon, South Sikkim in compliance with EIA notification no. S.O. 1533 (E) dated 14 Sep 2006. Public Hearing Report was forwarded to MOEF on 22 March 2013.

EIA and EMP has been carried out in compliance with the TOR issued by EAC in its 111th meeting of Infrastructure and Miscellaneous Projects & CRZ. Public Hearing was conducted on 15.-3.2013, at Nandugaon, issues land acquisition, compensation, tree cutting etc. The responses of PP on the issues raised during Public hearing were examined by the EAC.

The EAC after deliberation recommended the proposal for grant of EC stipulating the following conditions:

- (i) The proposal indicates the diversion of 1.03 ha forests land. Forest Clearance was granted by RO, MoEF, Shilong vide letter dated 05.03.2008.
- (ii) It is indicated that 3079 nos. trees will be cut for the project. Necessary permission from competent authority shall be obtained for tree cutting. Necessary compensatory plantation shall be carried out and cost provision should be made for regular maintenance.
- (iii) Rain water harvesting including oil and grease trap shall be provided. Water harvesting structures shall be located at every 500 mts along the road. Vertical drain type rainwater harvesting structures shall be set up to minimize surface runoff losses of rainwater.
- *(iv) R&R shall be according to the guidelines of NHAI/State/Central Government which ever is higher.*
- (v) IRC guidelines shall be followed for widening & up-gradation of road.
- (vi) The responses/commitments made during public hearing shall be complied within letter and spirit.
- (vii) All the recommendations of the EMP shall be complied with, in letter and spirit. All the mitigation measures submitted in the EIA

	report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.
4.19	ToR for development of LNG storage and regasification terminal at village Chhara Taluka Kodinar, District Gir Somnath, Gujarat.M/s HPCL Shapoorji Energy Ltd. [F.No.11-1/2014-IA.III]
	The Chairman recused himself from the meeting. Shri M.L. Sharma, Vice Chairman took the Chair for this item,
	M/s Simar Port Limited, a Shapoorji Pallonji company, is developing a deep draft, direct berthing, all weather port at Chhara in Gujarat. Port will be developed in phases. Environmental Clearance and CRZ Clearance for Phase I of the Port, based on Comprehensive EIA, was granted by MOEF in Jan 2014. HPCL Shapoorji Energy Limited (HSEL), a Joint Venture between Shapoorji Pallonji and Hindustan Petroleum Corporation Ltd, proposes to develop LNG regasification terminal at Chhara. Land requirement for the LNG Terminal will be 47 ha. No land procurement is required for LNG terminal as the same will be located within boundary of the port at Chhara. It is proposed to develop LNG facilities in two stages.
	In Stage 1, Floating Storage & Regasification Unit (FSRU) vessel of 2.5 MMTPA will be berthed at jetty on continuous basis and LNG carrier will unload LNG to FSRU. This LNG will be regasified on the FSRU. Regasified LNG (RLNG) will be supplied to gas grid through pipeline. This is to make RLNG available to customers even prior to completion of on-shore LNG terminal.
	In Stage 2, on-shore LNG storage and regasification facilities of 10 MMTPA in two phases of 5 MMTPA each will be constructed. Facilities proposed to be developed for on-shore terminal include receiving facility sized to allow unloading of carriers of 80 000 m ³ to 266 000 m ³ , one main jetty with a provision for one standby Jetty, trestle for LNG unloading lines, 2 self-supporting full containment LNG storage tanks of 185,000 m ³ each, and LNG vaporization with STV/air heaters supplemented by SCV for cold weather conditions. 15 MW Power will be sourced from grid. There will be backup from gas based power plant. For evacuating RLNG pipeline will laid to connect to GSPL Gas grid on Darod-Jafrabad section. The LNG terminal buildings proposed include Security Gate house, Administration building, metering station, workshop, warehouse and watch towers.
	The EAC after deliberation finalized the following additional ToRs for carrying out EIA studies:
	(i) Submit the details of the various applicable regulations including safety regulations along with the proposed compliances. Also details of safety aspects associated with handling of LNG vis a vis other cargo in other facilities within the port.
	(ii) Submit the details of the Hazop analysis

(iii)	Submit the layout along with the port boundary.
(<i>iv</i>)	Submit details of Risk Assessment, Disaster Management Plan including emergency evacuation during natural and man-made disaster like floods, cyclone, tsunami and earth quakes etc along with design details.
(v)	Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale along with the recommendation of the SCZMA.
(vi)	Submit details of storage and regasification, distribution network etc and vulnerability of human habitation vis a vis LNG associated risks.
(vii)	Type of LNG carriers proposed taking into account the future growth in vessel sizes beyond the present day market trend and the handling aspects of such vessels from environmental considerations.
(viii)	Submit the Hydrodynamic study as required under OM dated 3.11.2009.
(ix)	Ship Navigation simulation studies covering approach channel and turning circle to ensure the safety of LNG carrier under various hydrodynamic conditions.
<i>(x)</i>	Submit the details of the reclamation along with the source of materials and its quantity & quality.
(xi)	Submit the details of shore line changes along with the shore protection if required.
(xii)	Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.
(xiii)	Submit the details of the fishing activity and likely impact due to the activity.
(xiv)	Details of land breakup along with land use plan and Details of green belt development.
(xv)	Details of solid / liquid wastes generation and their management.
(xvi)	Water requirement, source, impact on competitive users.
(xvii)	Submit the details of the eco-sensitive areas, if any.
(xviii)	Submit the details of Oil Spill Contingent Management Plan.
(xix)	Submit the details of dredging sludge quantity quality in terms of its toxic metals (atleast Cr+6, Arsenic, Mercury, and lead) and its disposal with quantity (reclamation/ dredging disposal site) If disposal is in sea,

		location, the justification for selecting such location, the dispersal of dumping material, its effect on marine environment, effect of fishes.	
	(xx)	Submit the details of study on connectivity and its carrying capacity (both road and railway).	
	(xxi)	The General guidelines according to the annexure to this Minutes shall also be considered for preparation of EIA/EMP.	
	Public hearing to be conducted for the project according to the provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.		
	A above ada Notificati	detailed draft EIA/EMP report should be prepared according to the ditional TOR and should be submitted to the Ministry according to the on.	
4.20	ToR for extension of Breakwater at village Chhara-Sarkhadi, Taluka Kodinar, District Gir Somnath, Gujarat. M/s Simar Port Ltd. [F.No.11-02/2014-IA.III]		
	M/s Sima direct ber phases. E granted i Corporati Chhara. 7 operations	r Port Limited, a Shapoorji Pallonji company is developing a deep draft, thing all weather port at Chhara in Gujarat. Port will be developed in nvironmental Clearance and CRZ Clearance for Phase I of the Port was in Jan 2014. Shapoorji Pallonji in JV with Hindustan Petroleum on Ltd., proposes to develop LNG regasification terminal at Port at To provide tranquil conditions for berthing and safe LNG unloading s, Phase 1 breakwater is proposed to be extended from 1700 m to 4956 m.	
	The property of the property o	be breakwater is planned to be constructed in two phases $(1700m + 3256)$ water is designed to dissipate the near shore wave energy of the incident from south to 270° in order to maintain tranquil condition inside the ea to facilitate smooth conduct of loading and unloading of cargo. Rubble eakwater with Accropodes armour units will be used for protection against	
	Rubble m overlain b will be co concrete Proposed breakwate of breakw	nound breakwater will be constructed with a core of quarry-run stone by one or more rock underlayers and secondary armours. The outer layer composed of massive rocks or specially shaped concrete armour units. A crest structure will be constructed on the mound to provide access. breakwater will be an island type breakwater. For the construction of the er, rock will be quarried, transported to port site and placed in the location vater using floating craft and plants.	
	About 6.2 breakwate available stock pile be source from third	2 million tons of stones of various sizes are required for constructing the er. The required quantity of rock could be obtained from various quarries in the hinterland. Transportation of the rocks from the stack yard to the at site will be done using trucks. The construction power requirement will d by diesel generators. Water for construction shall be purchased in tanker l parties in nearby villages.	
	The	e EAC after deliberations finalized the following additional ToRs for	

	carrying out EIA studies:		
	(i)	Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale along with the recommendation of the SCZMA.	
	(ii)	Type of LNG carriers proposed taking into account the future growth in vessel sizes beyond the present day market trend and the handling aspects of such vessels from environmental considerations.	
	(iii)	Submit the details of the fishing activity and likely impact due to the activity.	
	(iv)	The General guidelines according to the annexureto this Minutes shall also be considered for preparation of EIA/EMP.	
	PP reque was cond and the p venture w go for Pu exemptio	ested for waiver of Public Hearing on the ground that Public Hearing fucted on 19.11.2010 while obtaining the EC/CRZ clearance for the Port proposed extension of berth is within Port boundary. Further, the Joint which will establish and operate LNG terminal at the proposed berth will ablic Hearing. The EAC accepted the justification and recommended for n from conducting the Public Hearing for the above proposal.	
4.21	Finalizat LNG floa Port Ltd 27/2013-1	ion of ToR for proposed Greenfield facility for import of 5 MMTPA ating storage unit (FSU) and handling facility within Krishnapatnam , Nellore, Andhra Pradesh by M/s LNG Bharat Pvt. Ltd. [F.No.11- IA.III]	
	LNG BH Krishnapa be supplie Pradesh additiona has been pollution	HARAT is proposing to set up an LNG import terminal at the atnam port, Andhra Pradesh. LNG imported through this terminal can ed to the industries located in the areas of north Tamilnadu, south Andhra and west Karnataka. LNG BHARAT is proposing not to build any l berth for this purpose but rather use an already permitted berth which allowed to handle petroleum products by the MOEF and the state control board.	
	Inore decided r phase-I, t berthed a from the regulation installation USA, So	der to reduce the carbon foot print further, LNG BHARAT has not to construct any big permanent storage tanks on the shore during but would be using an operational LNG ship as a floating storage facility longside this berth. This ship will have all the necessary permissions e Director General Shipping of India under the stringent marine as. This is called a floating storage unit (FSU) and these kinds of ons are already operating safely in 15 locations in the world in Europe, uth America, SE Asia and the Gulf very safely for the past 10 years. The LNG transferred from the floating storage to the small buffer tanks	

locate transp taken and Li road tu	d onshore will be further transferred to cryogenic road tankers and orted to the industry location. This kind of operation is already being up at the Petronet Dahej terminal, Gujarat for the past 7 years very safely NG is being supplied to industries in Gujarat and Maharashtra by cryogenic rucks.
ToRs in the	During the discussions, the Committee finalized the following additional for carrying out EIA studies subject to compliance to the direction if any Final order to be issued to M/s Krishnapatnam Port Ltd,:
(i)	Submit MoU with the land owner for the allotment of the area,
(ii) Submit the layout along with the port boundary.
(ii	i)Submit the details of the various applicable regulations including safety regulations along with the proposed compliances. Also details of safety aspects associated with handling of LNG vis a vis other cargo in other facilities within the port.
(iı)Ship Navigation simulation studies covering approach channel and turning circle to ensure the safety of LNG carrier under various hydrodynamic conditions.) Hydrodynamic Modelling study
(v)	i)Submit the details of the Hazop analysis
(0	ii) Submit the details of safety regulations applicable and its compliance.
(0	iii) Submit details of Risk Assessment, Disaster Management Plan including emergency evacuation during natural and man-made disaster like floods, cyclone, tsunami and earth quakes etc.
(ix	c)Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale along with the recommendation of the SCZMA.
(x,) Submit details of safety aspects associated with handling of LNG vis a vis other cargo in other facilities within the port.
(x	i)Submit details of storage and regasification, distribution network etc and vulnerability of human habitation vis a vis LNG associated risks.
(x:	ii) Type of LNG carriers proposed taking into account the future growth

in vessel sizes beyond the present day market trend and the handling aspects of such vessels from environmental considerations.

- (xiii) A comprehensive EIA based on 3-season data and actual field measurements, appropriate modeling study etc shall be carried out.
- (xiv) Submit the Hydrodynamic study as required under OM dated 3.11.2009.
- (xv) Submit the details of the reclamation along with the source of materials and its quantity & quality.
- (xvi) Submit the details of shore line changes along with the shore protection if required.
- (xvii) Submit details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.
- (xviii) Submit the details of the fishing activity and likely impact due to the *activity*.
- (xix) Details of land breakup along with land use plan and Details of green belt development.
- (xx) Details of solid/liquid wastes generation and their management.
- (xxi) Water requirement, source, impact on competitive users.
- (xxii) Submit the details of the eco-sensitive areas, if any.
- (xxiii) Submit the details of Oil Spill Contingent Management Plan.
- (xxiv) Submit the details of dredging sludge quantity quality in terms of its toxic metals (atleast Cr+6, Arsenic, Mercury, and lead) and its disposal with quantity (reclamation/ dredging disposal site) If disposal is in sea, location, the justification for selecting such location, the dispersal of dumping material, its effect on marine environment, effect of fishes.
- (*xxv*) Submit the details of study on connectivity and its carrying capacity (both road and railway).

	 (xxvi) The General guidelines according to the annexure to this Minutes shall also be considered for preparation of EIA/EMP. Public hearing to be conducted for the project according to provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. 		
	A detailed draft EIA/EMP report should be prepared according to the above additional TOR and should be submitted to the Ministry according to the Notification.		
	The prescribed ToRs would be valid for a period of two years for submission of the EIA/EMP Reports, after public consultation.		
4.22	Finalisation of ToR for development of a Multiuser Liquid Terminal at Cochin Port Trust [F.No. 10-21/2009-IA-III]		
	As presented by the Project Proponent, ToR was granted by the MoEF on 20/05/2009. Though CoPT had approached several agencies like M/s. NIO, Cochin, M/s. Anna University. M/s. NEERI, M/s. CUSAT, M/s. NIOT etc., for carrying out the EIA studies, they were not ready to undertake the assignment due to various reasons. Finally, the assignment could be entrusted to the Consultants, M/s. WAPCOS, Haryana only on 12/10/2010.M/s. WAPCOS had commenced the study in November, 2010 but the final reports were submitted only in June 2013, as the updation of Risk Assessment and Disaster Management Studies covering all the projects of Cochin Port that was included in the ToR proved to be a time consuming item.		
	The EAC in January, 2014 noted that the ToR was valid up to 20.05.2013 and PP has submitted the application only in October, 2013 for extension of validity after the lapse of validity of ToR. The EAC therefore advised the PP to submit a fresh application to consider for grant of ToRs.		
	The PP accordingly submitted fresh application and presented before the EAC in February, 2014. The project includes development of a Multi-User Liquid Terminal (MULT) in the Puthuvypeen SEZ area, mainly for handling bunker fuels, LPG and crude oil. The above project would facilitate setting-up of bunkering as well as LPG Import facilities at Cochin Port, which would also include development of storage facilities in the backup area of the berth. The MULT project will include construction of a main berth to cater to vessels up to a maximum of 260 m LOA for handling bunker fuels and other POL cargo and LNG, with a capacity of 4.1 MMTPA, a barge berth of 130 m long in the vicinity for loading of bunkers into barges of size upto 5000 DWT, construction of a fire pump platform 18 x 10 m and dredging for terminal basin area and turning circle. Dredging is for 14.5 m for main berth and 7.0m for barge berth. The water requirement is 6 KLD. The total cost of the project is Rs. 147.38 crores.		
	During the discussions, the Committee finalized the following additional		

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Toks for	carrying out EIA studies:
(i)	Submit the details of the various applicable regulations including safe regulations along with the proposed compliances. Also details of safe aspects associated with handling of LNG vis a vis other cargo in othe facilities within the port.
(ii)	Submit the details of the Hazop analysis
(iii)	Submit details of Risk Assessment, Disaster Management Plan includin emergency evacuation during natural and man-made disaster like flood cyclone, tsunami and earth quakes etc.
(iv)	Submit a copy of layout superimposed on the HTL/LTL map demarcate by an authorized agency on 1:4000 scale along with the recommendation of the SCZMA.
(v)	Submit details of storage and regasification, distribution network etc an vulnerability of human habitation vis a vis LNG associated risks.
(vi)	Type of LNG carriers proposed taking into account the future growth to vessel sizes beyond the present day market trend and the handling aspects of such vessels from environmental considerations.
(vii)	Submit details of Environmental Management Plan and Environment Monitoring Plan with parameters and costs.
(viii)	Details of solid / liquid wastes generation and their management.
(<i>ix</i>)	Water requirement, source, impact on competitive users.
<i>(x)</i>	Submit the details of Oil Spill Contingent Management Plan.
(xi)	Submit the details of dredging sludge quantity quality in terms of its tox metals (atleast $Cr+6$, Arsenic, Mercury, and lead) and its disposal with quantity (reclamation/ dredging disposal site) If disposal is in set location, the justification for selecting such location, the dispersal dumping material, its effect on marine environment, effect of fishes.
(xxii)	The General guidelines according to the annexure to this Minutes sha also be considered for preparation of EIA/EMP.
Publi Environn	c hearing to be conducted for the project according to the provisions nental Impact Assessment Notification, 2006 and the issues raised by the

4.23 Widening to 2- lane, re- alignment and geometric improvement of Champhai to Zokhawthar Road (0.000 km to 27.247 km) by PWD, Mizoram[F.No. 10-/2014-IA-III]

Recognizing the current inadequate transportation infrastructure facility and the vital role played by transport sector in the upliftment of economic development in nationwide, the Government of India through DEA, Ministry of Finance, has requested the World Bank for financial assistance for upgradation of existing ODR road to 2-lane NH standard. The World Bank agreed to finance the Mizoram State Road Project –II Regional Transport Connectivity Project for 100% IDA assistance.

The existing Champhai – Zokhawthar Road was originally constructed during the early part of eighties by the State PWD to provide connectivity between district headquarters and International border of Indo Myanmar for international trading as well as for Eastern part of Mizoram. The total length of the proposed road is 27.247 km. (24.717Km plus 2.53 Km.spur road to Champhai). The existing road was later upgraded to the status of State Road.

The Project's objective is "To upgrade the existing *Champhai –Zokhawthar Road* (28.00Km) from single lane standard to 2-Lane National Highway Standard (27.247Km plus spur road of 2.53Km length) to provide better connectivity with the North Eastern belt of Mizoram".

The improvement works will consist mainly of civil and non-civil works. The civil work includes re-alignment, geometric improvement, Pavement work, construction of cross drainage structures, protection works, road safety measures, KM stones and road signs. The non-civil work includes asset management, procurement and contract management, and environmental and social safeguards management. The Environmental Safeguard Management includes broad screening and detail survey, assessment of impacts, mitigation adopted for minimization of impact and monitoring programme during and after construction. The Social Safeguard includes Resettlement Action Plan (RAP) and Resettlement and Indigenous People Development Plan (R&IPDP)

The proposed road will take off at 146Km of Seling to Champhai road and pass through five villages, namely Khankawn, Zotlang, Mualkawi, Melbuk and Zokhawthar.

The alignment of the project road passes through mountainous and steep terrain exceeding 30 % ground slope across the alignment. The soil along the alignment of the project is fairly homogenous in nature and character. Soil types vary from silty clay to sandy clay of medium plasticity, plasticity index varying from 7 to 18. The soaked CBR value ranges from 5 to 8. It has been estimated that about 2.62 million cum of spoil will be generated due to widening of this road. Only 22.25% of the spoil will be reused for embankment and subgrade preparation. The remaining earth debris will be disposed at 14 nos of designated dumping sites in an environmental friendly manner.

Construction period of 42 months has been proposed considering the quantum of activities to be performed including mobilization period needed and

four months of intervening rainy seasons.

The total cost of civil work and non-civil works are Rs 163.20 Crores and Rs. 69.28 crores respectively. The total cost of the project is Rs. 232.48 crores.

PP informed that the EIA, EMP has been prepared based on the Notification dated 22nd August, 2013 of the MoEF and submitted to PCB for conduct of Public Hearing. Accordingly, the PCB has conducted Public Hearing on 17th January, 2014 at Zotlang, Champhai after giving 30 days notice as required under the EIA Notification, 2006. The major issues raised are compensation, and conservation of wildlife.

Forest land of 0.28 ha is required for the project and the Divisional Forest Officer, Chanphai, Mizoram has granted clearance vide dated 12.12.2013. Therefore, the PP requested to consider the grant of EC.

The EAC after deliberation recommended the project for grant of EC subject to following conditions:

- (i) Since the PP has carried out the EIA study based on the model ToR of the Ministry, the Ministry shall verify the compliance of ToR before grant of EC.
- (ii) It is indicated that 693 nos. trees will be cut. Necessary permission from competent authority shall be obtained for tree cutting. Necessary compensatory plantation shall be carried out and cost provision should be made for regular maintenance.
- *i) PP* shall intimate local authority before carrying out the blasting. If there are any damage caused due to blasting, PP shall compensate 100 % under the notice of local Authority.
- *ii)* All the other required clearances for carrying out blasting shall be obtained from the competent Authority including Forests / Wildlife.
- *iii)* The blasting shall be carried out only from 8 am to 6 pm.
- *iv)* The technique adopted for controlled blasting at identified locations is non-electric detonating technique.
- (iii) Rain water harvesting including oil and grease trap shall be provided. Water harvesting structures shall be located at every 500 mts along the road. Vertical drain type rainwater harvesting structures shall be set up to minimize surface runoff losses of rainwater.
- (iv) R&R shall be according to the guidelines of NHAI/State/Central

		Government which ever is higher.	
	(v)	IRC guidelines shall be followed for widening & up-gradation of road.	
	(vi)	The responses/commitments made during public hearing shall be complied with, in letter and spirit.	
	(vii)	All the recommendations of the EMP shall be complied within letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.	
4.24	4.24 Widening to 2- lane, re- alignment and geometric improvement of Lung Tlabung- Kawrpuichhuah Raod (0.000 km to 87.830 km) by PV Mizoram[F.No. 10- /2014-IA-III].		
	As presented by the Project Proponent, recognizing the current inadequate transportation infrastructure facility and the vital role played by transport sector in the upliftment of economic development in nationwide, the Government of India through DEA, Ministry of Finance, has requested the World Bank for financia assistance for upgradation of existing ODR road to 2-lane NH standard. The World Bank then agreed to finance the Mizoram State Road Project –II Regional Transport Connectivity Project for 100% IDA assistance.		
	The existing Lunglei-Tlabung-Kawrpuichhuah Road was origin constructed during the early part of seventies by the State PWD to prov connectivity between district headquarters and International border of In Bangladesh for international trading but also for western part of Mizoram. total length of the proposed road is 87.35 Km. The Project's objective is "To upgrade the existing <i>Lunglei-Tlabu Kawrpuichhuah Road</i> (104.9Km) from single lane standard to 2-Lane Natio Highway Standard(87.35Km) to provide better connectivity with the So Western belt of Mizoram".		
	The in The civil we construction KM stones procurement management and detail su impact and Safeguard in Indigenous P	nprovement works will consist mainly of civil and non-civil works. ork includes re-alignment, geometric improvement, Pavement work, of cross drainage structures, protection works, road safety measures, and road signs. The non-civil work includes asset management, and contract management, and environmental and social safeguards . The Environmental Management Safeguard includes broad screening prvey, assessment of impacts, mitigation adopted for minimization of monitoring programme during and after construction. The Social ncludes Resettlement Action Plan (RAP) and Resettlement and People Development Plan (R&IPDP)	

The proposed road will take off from 4.5Km of NH-54A and passes through 10 villages, namely Lunglei, Hauruang, Pachang, Phairuang, Chhumkhum, Lungsen, Sihphir, Tuichawng, Tlabung and Kawrpuichhuah.

The alignment of the project road passes through mountainous and steep terrain exceeding 35 % ground slope across the alignment. The soil along the alignment of the project is fairly homogenous in nature and character. Soil types vary from silty clay to sandy clay of medium plasticity, plasticity index varying from 7 to 18. The soaked CBR value ranges from 5 to 8. It has been estimated that about 2.62 million cum of spoil will be generated due to widening of this road. Only 22.25% of the spoil will be reused for embankment and subgrade preparation. The remaining earth debris will be disposed at 9 nos of designated dumping sites in an environmental friendly manner.

Construction period of 48 months has been proposed considering the quantum of activities to be performed including mobilization period needed and four months of intervening rainy seasons in between. The total cost of the project (civil and non-civil works) is Rs. 670.84 crores.

PP informed that the EIA, EMP has been prepared based on the Notification dated 22nd August, 2013 of the MoEF and submitted to PCB for conduct of Public Hearing. Accordingly, the PCB has conducted Public Hearing on 22nd January, 2014 at Lunglei after giving 30 days notice as required under the EIA Notification, 2006. The major issues raised are land acquisition. The Public Hearing noted that no major archaeological, religious or cultural site would be involved in the land acquisition for the road project. The Committee on a query was informed that in fact no archaeological religious or cultural site was involved in the land acquisition. The Committee desired that this fact should be got recorded by the concerned authority which conducted the public hearing. The PP agreed to get the same.

In view of the above, PP requested to consider the grant of EC.

The EAC after deliberation recommended the project for grant of EC subject to following conditions:

- (i) Since the PP has carried out the EIA study based on the model ToR of the Ministry, the Ministry shall verify the compliance of ToR before grant of EC.
- (ii) The proposal indicates the diversion of 10 ha forests land. Necessary Stage –I Forest Clearance shall be obtained. An undertaking as required according to OM dated 19.03.2013 regarding execution of work in non- forest area shall be submitted to the Ministry.
- (iii) Necessary permission from competent authority shall be obtained for tree cutting. Necessary compensatory plantation shall be carried out and cost provision should be made for regular maintenance.
- *(iv) Rain water harvesting including oil and grease trap shall be provided. Water harvesting structures shall be located at every 500*

mts along the road. Vertical drain type rainwater harvesting structures shall be set up to minimize surface runoff losses of rainwater.

- (v) R&R shall be according to the guidelines of NHAI/State/Central Government which ever is higher.
- *(vi) IRC guidelines shall be followed for widening & up-gradation of road.*
- (vii) A certification should be obtained from the concerned authority that no archaeological, religious or cultural site was involved in the land acquisition.
- (viii) The responses/commitments made during public hearing shall be complied with, in letter and spirit.
- (ix) All the recommendations of the EMP shall be complied within letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.

General Guidelines

- (*i*) The EIA document shall be printed on both sides, as for as possible.
- (ii) The status of accreditation of the EIA consultant with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.
- (iii) On the front page of EIA/EMP reports, the name of the consultant/consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed TORs (TOR proposed by the project proponent and additional TOR given by the MoEF) have been complied with and the data submitted is factually correct (Refer MoEF office memorandum dated 4th August, 2009).
- (iv) While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through which the samples have been got analysed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the Environment (Protection) Act, 1986 and the rules made there under (Please refer MoEF office memorandum dated 4th August, 2009). The project leader of the EIA study shall also be mentioned.
- (v) All the TOR points as presented before the Expert Appraisal Committee (EAC) shall be covered.
- (vi) Environmental Management Plan presented before the EAC as a part of EIA report, shall be made part of Concessionaire Agreement/ other relevant documents. Proponent shall submit an undertaking in this regard.
- (vii) Since most of the environmental issues are related to design parameters, following additional information should also be sought under Chapter-II (Disclosure of Consultant)

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

Minutes of the 131st meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction and Miscellaneous projects held on 28th February to 1st March, 2014 at Conference Hall, MoEF, New Delhi – 110 003.

List of Participants

Expert Committee

1.	Shri Anil Razdan	Chairman
2.	Shri. M.L. Sharma	Vice Chairman
3.	Sh. R. Radhakrishnan	Member
4.	Dr. M.V. Ramana Murthy	Member
5.	Dr. Anuradha Shukla	Member
6.	Dr. R. Prabhakaran	Member
7.	Shri S.K. Sinha	Member
8.	Shri Y.B. Kaushik	Member
9.	Ms Mita Sharma	Representative, CPCB
10.	Shri Lalit Kapur	Member Secretary
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MoEF officials

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