

Minutes of 1st meeting of Expert Appraisal Committee (Infrastructure -2) for Projects related to All ship breaking yard including ship breaking unit, Common Hazardous Waste Treatment, Storage and Disposal Facilities, Ports and Harbours, Aerial Ropeways, CETPs, Common Municipal Solid Waste Management Facility, Building/Construction Project, Townships and Area Development projects held on 21st – 22nd December, 2015

Monday, 21st December, 2015 (Narmada Conference Hall)

Time: 10.00 A.M.

1. Opening Remarks of the Joint Secretary, MOEFCC and Chairman of the EAC.

At the outset, Member Secretary welcomed the Chairman, members of the Expert Appraisal Committee and Joint Secretary (Impact Assessment Division) and made a presentation on environmental clearance process. The Committee was apprised about the provisions of EIA notification, 2006; the projects and activities covered under Infrastructure-2; procedure being followed in the Ministry for environmental appraisal of such projects and post project compliance monitoring procedure. Shri Manoj Kumar Singh, Joint Secretary welcomed the Chairman and the Committee members and briefed the role and functioning of the Impact Assessment Division and environmental appraisal of Infrastructure projects as per the provisions of EIA Notification, 2006. He assured them for full cooperation of the Ministry in the functioning of the Committee. The Chairman of the Committee subsequently in his opening remarks welcomed the Members and advised them to suggest expert opinion as per their expertise.

2. Consideration of Proposals

2.1	<p>Modification of existing Iron Ore Terminal on "as is where is" to also handle common user coal at Kamarajar Port by Kamarajar Port Limited (erstwhile Ennore Port Limited) – Finalization of ToR- [F.No.10-28/2005-IA-III]</p> <p>The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP report. All the projects related to Ports and Harbour i.e. ≥5 million TPA of cargo handling capacity (excluding fishing harbours) are listed at 7(e) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.</p> <p>Erstwhile Ministry of Environment & Forests has granted environmental clearance and CRZ clearance vide letter no. 10-28/2005 IA III dated 19.05.2006 for the following projects including associated capital dredging of 15.5 million cubic meters:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">(i)</td> <td style="width: 70%;">Marine Liquid Terminal to handle 3 MTPA (BOT basis)</td> <td style="width: 25%;">Status Operational</td> </tr> <tr> <td>(ii)</td> <td>Coal Terminal to handle 8 MTPA (BOT Basis)</td> <td>Operational</td> </tr> <tr> <td>(iii)</td> <td>Iron Ore Terminal to handle 12 MTPA (BOT basis)</td> <td>Constructed</td> </tr> <tr> <td>(iv)</td> <td>Container Terminal to handle 12 MTPA (700mtr quay length) and subsequently modified to handle 18 MTPA (1000 mtr. Quay length) vide MoEF letter no. 10-28/2005 IA III dated 10.09.2007 –</td> <td>Terminal under construction</td> </tr> </table> <p>The licensee Agreement for the development of Iron Ore Terminal was entered between M/s Sical Iron Ore Terminal Ltd. (SIOTL) and KPL on 23.09.2006. the terminal was physically completed on 03.11.2010.</p> <p>However, due to the ban on the Iron ore mining from Bellary-Hospet region, the Licensee could not perform the train run and the terminal is lying idle without any operation since then in ready condition. The required infra structure facilities like berth, elevated closed conveyor system, stack</p>		(i)	Marine Liquid Terminal to handle 3 MTPA (BOT basis)	Status Operational	(ii)	Coal Terminal to handle 8 MTPA (BOT Basis)	Operational	(iii)	Iron Ore Terminal to handle 12 MTPA (BOT basis)	Constructed	(iv)	Container Terminal to handle 12 MTPA (700mtr quay length) and subsequently modified to handle 18 MTPA (1000 mtr. Quay length) vide MoEF letter no. 10-28/2005 IA III dated 10.09.2007 –	Terminal under construction
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yard are lying idle.

Due to trade demand and in order to utilize the terminal and its associated infrastructure in an efficient way it is proposed to also handle coal from the above terminal. The feasibility study for handling coal was carried out.

KPL's Board approved the proposal for conversion of the existing Iron Ore Terminal into Common User Coal Terminal subject to the approval of the Ministry of Shipping, Government of India.

Due to the trade demand and under Ministry of Shipping's guidance KPL decided to modify this terminal to also handle coal. The demand for coal by consumers other than TANGEDCO in the region is also growing substantially. The requirement of terminal coal by Private Power Generation, Steel, Cement and other industries would go up from the current requirement.

The present proposal is to modify the already approved Iron Ore Terminal of 12 MTPA capacity to handle common user coal. There is no change in the approved capacity of the terminal i.e. 12 MTPA. The locations of berths, conveyor belt system for the transport of cargo stack yard, road and rail linkages remain unchanged and the already created facilities will be effectively utilized. No new construction of berths or any major buildings will be carried out, There is no issues of re-settlement/re-habilitation of the proposed project.

There is a court case pending in the Supreme Court. Hon'ble Supreme Court constituted an Empowered Committee to look into the issue of pollution in the context of Chennai Port Trust's Review Petition to the Supreme Court for restoration of coal handling at Chennai Port.

After detailed deliberations on the proposal, the Committee *recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity* and the following TOR in addition to *Standard ToR* for preparation of EIA-EMP report:

- i. A separate chapter on status of compliance of Environmental Conditions granted by State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by Regional Office, MoEF&CC on status of compliance of conditions on existing unit to be provided in EIA-EMP report.
- ii. Copy of consent to establish and consent to operate issued by the SPCB for the existing facilities.
- iii. Specify clearly that iron ore handling facilities will not be retained and the application involves only conversion to coal handling capacities. Total coal handling shall not exceed 12 MTPA as given for ore handling.
- iv. Carry out the EIA only for coal handling and related development and all modifications planned as per standard TOR prescribed by the MoEF.
- v. What is the impact and base level concentration of environmental attributes at the existing 8 MMTPA coal handling facility.
- vi. Use baseline monitoring data for last one year.
- vii. Compare base level environmental quality with the environmental quality monitored at Iron ore handling plant.
- viii. Layout plan of Greenbelt to be created around Coal stack yard.
- ix. Layout plan for drainage system to be included.
- x. Details of air pollution control measures to be taken as well as cost to be incurred.
- xi. Details of Environmental Monitoring Plan.
- xii. Disaster Management Plan.
- xiii. Status of court case pending in the Supreme Court.
- xiv. Recommendation of the SCZMA.
- xv. A tabular chart with index for point wise compliance of above TORs.

The Committee exempted the public hearing as per Section 7 (ii) of EIA Notification 2006 as public hearing was carried out for the existing project and there is no change in the approved capacity of the coal handling terminal i.e. 12 MTPA.

2.2 Coastal Waste Management Project (CWMP), Unit:2 at Raviguntapalli village in Nellore District Andhra Pradesh by M/s Mumbai Waste Management Limited (A subsidiary of M/s Ramky Enviro Engineers Ltd.) – **Finalization of ToR** – [F.No.10-31/2015-IA-III]

The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP report. All the projects related to Common hazardous waste treatment, storage and disposal facilities (TSDFs) are listed at 7(d) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.

M/s Mumbai Waste Management Limited (A subsidiary of M/s RamkyEnviro Engineers Ltd.) has proposed for setting up of Coastal Waste Management Project (CWMP), Unit:2 at Raviguntapalli village in Nellore District Andhra Pradesh. The plot area of the project site is 19.5 Ha (48.0 acres). The total cost of the project including infrastructure setup is **Rs260.00Crores. It is reported that** No forest land and diversion is involved for the proposed facility. Kandaleru Reservoir is about 8 Kms North from the proposed project. It is reported that no national park/wildlife sanctuary is located within 10 km distance of the project site. Reserved forests namely PotuKonda New Extension Reserved Forest (10 m; N), Marlapudi Reserved Forest (300 m; E) and Vellikallu East Reserved Forest (7.5 km; S) are located within 10 km distance. Water bodies namely VirayapalamCheruvu (2 Km in NE), Telugu Ganga Canal (2.4 Km, E) and Kundaleru Reservoir (8 Km, N) are located within 10 km distance. It is reported that alternative sites analysis were carried out for three sites. Two sites namely (i) at Pangili Village and (ii) at Naidupalem Village were rejected. Project Site namely Reviguntapalli Vilage was found to be best ranked site. Water table of the project site is reported to be 5m below ground level. Following is the project configurations:

Phase – I	Hazardous Waste	Secure Landfill	548 TPD
		Treatment /Stabilization	383 TPD
	Recycling Facility	E- Waste	82 TPD
		Spent Solvent Recycling	27 KLPD
		Used oil recycling	54 KLPD
		Used Lead Acid Batteries	65 TPD
	Alternative Fuel and Raw Material		55 TPD
	Bio-medical Waste	50000 beds @2.5 Kg/day/bed	12.5 TPD
Phase – II	Waste Plastic Recycling		27 TPD
	Waste Paper Recycling		54 TPD
	Incineration		55 TPD
Phase – III	Renewable Energy		2 MW
	Waste to Energy		2 MW

After detailed deliberations on the proposal, the Committee *recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity* and the following TOR in addition to *Standard ToR* for preparation of EIA-EMP report:

- i. Importance and benefits of the project.
- ii. Details of various waste management units with capacities for the proposed project.
- iii. List of waste to be handled and their source along with mode of transportation.
- iv. Other chemicals and materials required with quantities and storage capacities.
- v. Details of temporary storage facility for storage of hazardous waste at project site.
- vi. Details of pre-treatment facility of hazardous waste at TSDF.
- vii. Details of air Emission, effluents, hazardous/solid waste generation and their management.
- viii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- ix. Process description along with major equipments and machineries, process flow sheet (quantative) from waste material to disposal to be provided
- x. Hazard identification and details of proposed safety systems.
- xi. Layout maps of proposed Solid Waste Management Facilities indicating storage area, plant area, greenbelt area, utilities etc.
- xii. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.
- xiii. Clearly specify the distance of landfill from the Forests and reasons as to why 300 m should be allowed. No objection certificate to be obtained from Forest Department regarding project location near to reserved forest.
- xiv. Give justification for using 43 ha of land for the project.
- xv. Status of the land purchase in terms of land acquisition Act and study the impact.
- xvi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xvii. R&R details in respect of land in line with state Government policy
- xviii. Details of effluent treatment and recycling process.
- xix. Leachate study report and detailed leachate management plan to be incorporated.
- xx. Action plan for measures to be taken for excessive leachate generation during monsoon period.
- xxi. Action plan for any pollution of ground water is noticed during operation period or post closure monitoring period.
- xxii. Give specific plans for artificial recharge to ground water as per CGWA guidelines of November, 2015 for the surrounding villages.
- xxiii. Detailed Environmental Monitoring Plan as well as Post Closure Monitoring Plan.
- xxiv. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- xxv. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit

	<p>received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.</p> <p>xxvi. A tabular chart with index for point wise compliance of above TORs.</p> <p>It was recommended that 'TOR' along with Public Hearing prescribed by the Expert Appraisal Committee (Infrastructure- 2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.</p>
2.3	<p>Multi-purpose all weather port at Tadadi, Karnataka by Karnataka State Industrial & Infrastructure Development Corporation Limited - Environmental and CRZ Clearance - [F.No.11-28/2011-IA-III]</p> <p>The project authorities and their consultant (M/s NEERI) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Terms of References (TORs) awarded vide MoEF letter dated 26.9.2011 for preparation of EIA-EMP report. TOR validity was further extended on 25.09.2014. PP vide their letter no GM/TP/1209/2015-16 dated 14.09.2015 has submitted the EIA report for consideration of EC. All the projects related to Ports and Harbour i.e. ≥ 5 million TPA of cargo handling capacity (excluding fishing harbours) are listed at 7(e) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.</p> <p>Government of Karnataka through Karnataka State Industrial and Infrastructure Development Corporation Limited (KSIIDC) has proposed to develop a port at Tadadi. The port is to be constructed in the PPP (Public Private Partnership) mode on DFBOT (Design, Finance, Build, Operate& Transfer) basis. The port is being designed to initially handle about 34.25 MTPA Cargo with final design capacity of 62.36 MTPA. For development of port at Tadadi, the Karnataka Industrial Area Development Board (KIADB) had acquired a total of about 1416 acres (560 hectares) of land in 1970s. The land acquired from different villages is :Hilalmakki (288 acres), YemmeMadi (126 acres), Midlagazani (364 acres), Hiregutti (475 acres), Morba (151 acres) and Torke (12 acres). The total cost of the project works out to Rs. 3813 crores.</p> <p>It is reported that the backwaters of the river have a huge waterfront area, which make the location a natural harbour. At present, it is a fair weather lighthouse fishing port situated on the estuary of the Aghanashini River at a distance of about 50 km from Karwar, about 24 km from Belekeri and approximately 35 km from Honnavar. The existing Tadadi fishing harbour is located in the mouth of the Aghanashini River and has a draft of about 2 m. The proposed facility is in the Aghanashini estuary east of the existing fishing harbour. The proposed location is in Latitude 14032'40"N and Longitude 740 22'03" E. The Konkan Railway Line and National Highway (NH-66) pass very close to the port site. The nearest station on the Konkan Railway line is Ankola, which is at a distance of about 25 km from Tadadi.</p> <p>To handle cargo transport facilities of ultimate capacity of 50.51 million tonnes per annum (MTPA) of coal and iron ore as well as 11.85 MTPA of steel products, general cargo and containers is as follows:</p> <ol style="list-style-type: none"> i. Iron Ore Export - 27.17 MTPA ii. Coal Import - 23.34 MTPA iii. Steel Products Export - 8.78 MTPA iv. General Cargo and Containers - 3.07 MTPA

To meet this requirement, seven berths are proposed as under.

- i. Iron ore export - 2 berths
- ii. Coal import - 2 berths
- iii. Steel products export - 2 berths
- iv. General Cargo and containers - 1 berth

The total quantity of dredging involved is 500,00,000 m³, out of which the hard material to be dredged is 69,00,000 m³. Out of the above, 180,00,000 m³ of suitable material will be used for reclamation and the balance of 320,00,000 m³ will be disposed off shore, in the designated dumping areas based on the model studies. The dredged material which is suitable for reclamation is proposed to be used partly for filling or reclamation of the backup area of the port and unsuitable material will be disposed off in the offshore disposal area. The dredged material cut by the cutter suction dredger will be transported to the reclamation area through a system of floating and shore pipelines.

Various utilities like water, power, control system, communication system, workshop, gate complex, customers, administrative and dispensary buildings etc. will be provided at the Tadadi Port. The projected water requirement up to year 2020-21 for the port activities would be about 150 m³/day. The nearest water source identified is from the river Gangavalli which is within 8km from Tadadi port.

The total requirement of electricity will be about 22 MW, which can be met from Kodasahalli (120- MW hydel power plant) or Khadra Hydel power project (150 MW power).

Based on the estimated quantity of waste production, the desired treatment and disposal facilities would be provided at the site of the Tadadi port. The waste streams generated by ships include bilge water (water that collects in the lowest part of the ship's hull and it may contain oil, grease, and other contaminants), sewage, grey water (wastewater from showers, sinks, laundries and kitchens), ballast water (water taken onboard or discharged from a vessel to maintain its stability), and solid waste (food waste and garbage). STP will be constructed to treat sewage from port area. Treated sewage will be used for greenbelt. The area to be reclaimed is 10,71,000 m²

The handling of huge quantity of iron ore and coal at the port will generate fugitive dust emissions from various transfer points. Since the ship unloading cranes will be used for unloading of coal, and ship loaders for loading of iron ore, onboard dust suppression system will be provided for mitigation of dust, if any. Similarly all transfer towers connected to the coal / iron ore handling will have provision for installing dust suppression system. At each location, bag filter type dust extraction system will be provided. The emission level through the installations will be limited to 150 mg/m³. During the transportation of the coal and iron ore by means of conveyor belts and transfer towers, a state- of- the- art equipment/facilities, which is fully covered and equipped with air filters will capture the dust produced. In the storage area too, the dust emission sprinkler system will be provided around the coal heaps in order to maintain them in wet condition and avoid dust generation.

PP has submitted the copy of demarcation of HTL and Delineation of CRZ boundaries carried out by NIO for TADRI Sea Port at Tadri Uttara Kannada. The Committee deliberated on the proceedings of Karnataka State Coastal Zone Management Authority (KSCZMA) meeting held on 11th August, 2015. It was noted that SCZMA recommended the proposal to the Ministry for clearance.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Karnataka State Pollution Control Board on 23rd March, 2015. The issues were raised regarding anticipation of adverse impact on fisherman, seashell mining, fishing business, land acquisition, local employment; dredging of the area may affect the drinking water sources; etc. The Committee noted that besides public hearing proceedings, objections from 300

representations were received. The Committee suggested them to furnish comments/reply on the issues raised during public hearing meeting as well as 300 representations.

After detailed deliberation, the Committee sought following additional information:

- (i) Generate 1 month fresh baseline data and compare it with 2010 baseline data.
- (ii) Reply/comments by the PP on the issues raised during public hearing and representations containing 350 pages from NGOs and affected people.
- (iii) Have the concerns of the public consultation suitably been addressed. If yes, give details.
- (iv) What are the environmental impacts of coal and Iron ore handling port.
- (v) Whether impacts have been predicted on marine biota. What is the biotic composition and how is it going to be impacted. What are the mitigation measures.
- (vi) As per EIA report, mangroves to be relocated. Mangroves Conservation Plan to be submitted.
- (vii) Whether Coast line change if dredge material is dumped. Give details.
- (viii) Action plan to protect mud flat.
- (ix) Rehabilitation plan for existing salt pan.
- (x) Measures to be taken for Oyster bed modification.
- (xi) One side of project is belt of Western Ghat. Action plan for transportation facility to avoid Western Ghat.
- (xii) Copy of report on demarcation of HTL and Delineation of CRZ boundaries of TADRI Sea Port duly signed by NIO for record.
- (xiii) Copy of offshore dump study report and location of dumps.

The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.

2.4 Development of FSRU based LNG Terminal at Deep Water, Kakinada, East Godavari dist., Andhra Pradesh by M/s Andhra Pradesh Gas Distribution Corporation Ltd – **Further consideration for Environmental Clearance** - [F.No.11-70/2012-IA-III]

The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 148th meeting held during 21st May, 2015 and the Committee sought following addl. Information:

- 1) Recommendations of APCZMA.
- 2) Details regarding measures to control ship oscillations envisaged due to prevailing weather conditions ; particularly in cyclonic conditions.
- 3) Construction plan for laying pipelines under sea bed, and impact of pile driving on marine life.
- 4) Weather forecasting system.
- 5) Details of disaster management plan including evacuation procedures, lead time to evacuate the vessel. Disaster Management plan is to be redone and included in the EIA report.
- 6) Reconfirmation of the dumping area.

PP vide letter dated 21.10.2015 has submitted addl. Information. PP has submitted the copy of Andhra Pradesh Coastal Regulatory Zone (APCZMA), vide letter 1103/Env/CZMA/2015 dated 21.05.2015 has issued no objection certificate (NOC) with compliance to safety and other conditions. PP informed that in case of non cyclonic conditions, the mooring pattern and LNG/HP transfer systems will safely cope with the ship movements of the facility considering the robust metcean design criteria; mooring layout, mooring equipment and jetty design as per international codes and industry standards; Loading arm design to accommodate predict vessel motion and mechanism in place for automatic disconnection beyond design envelope; reliable weather forecasting and cyclone avoidance & emergency departure plan. FSRU will leave the berth in case

of cyclone alert and sail to a safe area by using weather forecasting system and cyclone avoidance & emergency departure plan. Sub sea pipeline construction plan includes 28" x 3.6 km pipeline (offshore, within port limits) and 28" x 500 m (onshore section). Offshore portion of pipeline will be laid using shallow water lay barge. Pipeline will be installed in a trench on sea bed. The trench will be backfilled, minimizing the impact on the environment. Near shore portion by shore pull winch. The pipeline shall have suitable concrete coating to take care of buoyancy forces for prevention of floating of pipeline. Approximate 250 piles will be driven to penetration between 30 to 45 m below seabed. Mitigation measures include soft start of piling activity to allow marine fauna to leave the area before noise levels are produced. Regular monitoring of noise levels during piling. Disaster Management Plan considering scenario cyclone and T sunami was discussed. PP informed that dumping site is located around 8 km north of the project site and at around 3 km from Uppada coast which has the requisite draft of 10 m to facilitate movement of dredger at this level. Currents at this location as from south to north and this facilities prevent of dredge material flowing back towards the dredge area. Modeling Study results indicate the dredge material as the site facilitates rapid dispersion /dilution. Under no circumstances the mud plume will reach coast line and it will disperse, settle with the Kakinada Ports limits (no fishing zone).

After detailed deliberations, the Committee recommended the project for environmental clearance & CRZ clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

- (i)** *All the recommendations and conditions specified by AP Coastal Zone Management Authority (APCZMA) vide letter no. 1103/Env/CZMA/2015 dated 21.05.2015 shall be complied with.*
- (ii)** The environmental clearance is subject to obtaining prior clearance from Wildlife angle including clearance from the Standing Committee of the National Board for Wildlife as applicable.
- (iii)** Adequate measures to be taken for protection of hope island.
- (iv)** Shoreline should not be disturbed due to dumping.
- (v)** Construction activity shall be carried out strictly according to the provisions of CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- (vi)** The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- (vii)** Adequate stack height shall be provided to FSRU boilers. Installation of online flue gas monitors & Emergency stop system.
- (viii)** Automatic Detection System and Emergency shut off system shall be provided for LNG gas leak near pipeline connection from FSRU to subsea pipeline as well as ORF operation.
- (ix)** Thick greenbelt shall be developed in the periphery of the ORF.
- (x)** No open discharge of sewage or oily waste shall be done in marine water. All liquid containing oil shall pass into sea only via oil separation system. The FSRU shall be equipped with centrifugal type blig oil/ water separator that reduce oil in the discharge to 10 ppm. Sewage generated will be treated in the STP. Sewage generated from ORF development facility shall be treated in the STP.
- (xi)** All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.
- (xii)** Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.
- (xiii)** Company shall have own Environment Management Cell having qualified persons with proper background.

(xiv) Company shall prepare operating manual in respect of all activities. It shall cover all safety & environment related issues and system. Measures to be taken for protection. One set of environmental manual shall be made available at the project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office.

2.5 Development of Krishnapatnam Port Phase-II at Krishnapatnam, PottiSriramulu Nellore Dist, Andhra Pradesh by M/s Krishnapatnam Port Company Ltd. - **Further consideration for amendment in the Environmental and CRZ Clearance** - [F.No.11-62/2009-IA-III]

Ministry of Environment & Forest (MoEF), Government of India(GoI) accorded Environmental and CRZ clearance (EC) for Phase I and Phase II development of the Krishnapatnam Port during 2006 &2009 respectively. The clearances cater in all to 17 berths with handling capacity of 72.3 MTPA of various cargoes and 3.3 MT PA of Container argo in a designated area of Ha.1240 (Ac.3064).In terms of the Concession Agreement, GoAP are to provide entire land for the development of the KrishnapatnamPort on a lease basis. GoAP has approved the Master Plan for the development of Krishnapatnam Port covering an area of Ha.2752 (Ac.6800) during October, 2007. Out of the above, only82% of the designated land for Phase-I & phase-II of the port development could be leased by GoAP till date. The balance area is yet to be handed over due to local issues which need time to resolve. About 70% of the planned infrastructure has so far been developed leaving the project incomplete. Meanwhile GoAP have been able to make available some other areas out of the area earmarked for total Master Plan development.

To optimally operate the existing port infrastructure developed at a considerable cost optimally, it has become essential to incorporate the following minor modification:-

- i) Re-designate the project area by utilising lands to the same extent of area leased by GoAP within the approved port boundary.
- ii) Ancillary construction works to facilities cargo handling viz., construction of railway lines with bridges and road flyovers, edible oil pipelines and helipad.

It is proposed to make up the short fall ha 226 (Ac 558) of designated land on account of delay in making available Salt lands and GoAP lands from out of the land made available by GoAP within the approved Master Plan Port boundary and effect minor modifications in the layout of related infrastructure as under:

. Project infrastructure proposed to be shifted to the land requested for redesignation in order to complete the approved phase – II development of Krishnapatnam port.

Sl No	Item	From	To	Details
1	Cargo Storage Area –AI	a) 14°15'45.77" N; 80°06'39.49"E	a) 14°15'28.32" N; 80°05'38.08"E	AC.128.50

		<p>b) 14°15'51.57" N; 80°06'41.36"E</p> <p>c) 14°16'28.49" N; 80°06'19.28"E</p> <p>d) 14°16'17.69" N; 80°06'02.57"E</p>	<p>b) 14°16'13.94" N; 80°05'18.20"E</p> <p>c) 14°16'15.64" N; 80°05'30.49"E</p> <p>d) 14°15'33.94" N; 80°05'48.45"E</p>	
2	Cargo Storage Area –A2	<p>a) 14°16'40.29" N; 80°08'14.53"E</p> <p>b) 14°17'01.72" N; 80°08'25.25"E</p> <p>c) 14°17'13.21" N; 80°08'03.21"E</p> <p>d) 14°16'51.00" N; 80°07'51.13"E</p>	<p>a) 14°16'01.21" N; 80°07'49.24"E</p> <p>b) 14°16'01.34" N; 80°08'03.47"E</p> <p>c) 14°16'42.60" N; 80°08'12.15"E</p> <p>d) 14°16'44.68" N; 80°07'57.41"E</p>	Ac.141.50
3	One Number of Berth	<p>a) 14°15'44.78" N; 80°07'48.81"E</p> <p>b) 14°15'44.78" N; 80°07'47.98"E</p> <p>c) 14°15'28.51" N; 80°07'47.92"E</p> <p>d) 14°15'25.51" N; 80°07'48.75"E</p>	<p>a) 14°15'16.23" N; 80°06'29.37"E</p> <p>b) 14°15'15.47" N; 80°06'29.05"E</p> <p>c) 14°15'21.61" N; 80°06'13.60"E</p> <p>d) 14°15'22.37" N; 80°06'213.92"E</p>	Shifting of the Northern berth towards west
4	Road cum Railway bridge – One number 135 M long	Additional Requirement	Location: 14°17'19" N; 80°07'47"E	To form a Merry-Go-Round system as per the directions of South Central Railway.
5	Railway Bridges (parallel to existing Road Bridges) . Three Nos . 300RM . 340RM . 120RM	Additional Requirement	Locations . 14°15'19" N; 80°06'05"E . 14°14'28" N; 80°06'30"E . 14°14'24" N; 80°06'44"E	To form essential rail way connectivity to the South Port area.
6	Edible Oil pipelines Two nos each 10.50 KM Long from Berth # N2 Upto the Port's entrance at . 14°15'48.49" N; 80°04'12.85"E	To avoid spillage of cargo and avoid vehicular movement to improve environment	Locations: Marked as P1 & P2 in the drawing attached as Appendix No. 7 (copy enclosed) Submitted along with Justification for Amendments under the cover of KPCL Ltr. No. KP/MOEF/250, Dt. 14/12/2015	To Transport Edible oil from berth refinery located close to the port's boundary.

7	Road Flyovers on existing railway lines		Locations Marked as F1, F2 & F3 in the drawing attached as Appendix No. 7 (Copy Enclosed)	Required for efficient cargo evacuation
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3. Mode of Transportation

A. Coal

- a. Conveyors directly to the power plant (Approx. 70%)
- b. By Railway wagons covered with tarpaulins to external destinations (Approx. 15%)
- c. By Road through covered trucks (Approx. 15%)

B. Fertilizer

- a. Handled / Bagged in covered warehouses (100%)
- b. By Railway wagons (Approx. 75%)
- c. By Road through trucks duly covered (Approx. 15%)

C. General cargo (Granite, Limestone, Food grains etc.,)

- a. By Railway wagons (Approx. 60%)
- b. By Road through trucks duly covered (Approx. 40%)

D. Edible Oil

- a. By pipe Line directly to the refineries (100%)

4. Brief Details of existing facilities

- | | |
|--|-------------------|
| <ol style="list-style-type: none"> A. No of Berthing structures completed B. Road, Railway line, Conveyor, Pipelines and Drainage system - C. Operational, administrative, control and functional buildings D. Dust suppression measures <ol style="list-style-type: none"> a. 248 nos. mechanically operated sprinklers for cargo storage areas b. Transfer housed with dust suppression systems installed c. Conveyor with hood covering d. 25 nos. truck mounted sprinklers e. 4 nos. heavy duty atomizers E. Full- fledged fire fighting equipment along with trained personnel F. Oil spill contingency plan with requisite equipment, trained personal as well as a tie up with Coast Guard. G. Disaster management plan and tie up with the District administration. H. On site as well as Offsite emergency contingency plans I. Development of over Ha. 200 of green belt along the port boundary and around coal stock yards besides avenues plantation | <p>- 9 (Nine)</p> |
|--|-------------------|

5. Compliance to EC Conditions:

PP informed that condition prescribed in the EC being implemented and submit periodical returns in time to respective authorities. EMP envisaged is being implemented as per the EIA

6. NOC of APCZMA and Recommendation of GoAP

A. APCZMA have issued No Objection Certificate (NoC) for the shifting of Cargo Areas 1 & 2 and shifting of the Northern Berthing structure vide letter No. 7401/ CZMA/ 2012, dt 2-2-2013.

B. GoAP have recommended the same vide their letter No. C. No. 7401/ CZMA/ 2012 Dt. 17/05/2013 addressed to MoEF.

C. APCZMA have issued NoC for the construction of a Rail cum Road Bridge for the proposed Merry-Go-Round on the north port and three railway bridges on the railway line connecting the south port and three road flyover on railway lines, vide letter No. 3160/ ENV/ CZMA/ 2014 dt 14-8-2014.

D. GoAP recommended the same vide their letter no. C. No. 3160/ Env/ CZMA/ 2014 Dt. 05/09/2014 addressed to MoEF.

7. List of Survey Numbers:

List of survey numbers of the land to be re-designated (Ac. 558) is submitted.

8. PP confirmed that :-

A. That the project profile approved in the EC granted namely, extent of Designated Area, Number of Berths, Cargo Mix, Extent of cargo storage areas, Port Cargo handling capacity etc., shall remain unchanged.

B. No disturbance would be caused to ecologically sensitive areas like Mangroves. They are protecting the existing mangroves and developed 50 ha mangroves as directed in the EC

C. No Litigation is pending against the port in any court of law

The Committee noted that public hearing of existing EC was held on 29.02.2009. Therefore, the Committee exempted the preparation of EIA /EMP report and public hearing as per 7 (ii) of EIA Notification, 2006.

After detailed deliberation, the Committee recommended the aforesaid amendment requested with following additional specific conditions:

- i) Construction activity shall be carried out strictly according to the provisions of CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- ii) *All the recommendations and conditions specified by AP Coastal Zone Management Authority (APCZMA) vide letter no. 3160/Env/CZMA/2014 dated 14.08.2014 shall be complied with.*
- iii) Automatic /online monitoring system (24 x 7 monitoring devices) for air pollution as well as water pollution in respect of flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.
- iv) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.

2.6	<p>Proposed expansion of Residential Project – Oxygen at 260/4A, 260/4B1, 260/4B2, 262/1, 262/2, 263/2A, 263/2B, 264, 265/1B, 296/1, 3, 4, 6, 7, 8A, 8B, 297, 298, 299/1, 3, New S.No. 301/5 (Old S. No. 301/2), 360/2, Village Perumbakkam, Perumbakkam, Tamil Nadu by M/s Urban Tree Infrastructures Pvt. Ltd. – Further consideration for Environmental Clearance [F.No.21-74/2015-IA-III]</p> <p>PP did not attend the meeting.</p>
2.7	<p>Proposed construction of Information Technology Park at S.No. 281/1, 4 & 54/293, Kottivakkam Village, Saidapet Taluk, Rajiv Gandhi salai, kandanchavadi, Chennai, Tamil Nadu by M/s Easyaccess Financial Services Limited – Further consideration for Environmental Clearance [F.No.21-71/2015-IA-III]</p> <p>The Committee noted that Planning Permit from CMDA approval was obtained for the project on 4.10.2015. Completion certificate was obtained from CDMA vide their letter no. ES3/27919/2005 dated 01.11.2006. The Committee clarified that the said project commenced construction before EIA Notification, 2006 came into force and there is no provisions for post facto environmental clearance in the EIA Notification, 2006.</p>
2.8	<p>Establishment of seafront research facility of NIOT at Nellore District, Andhra Pradesh by National Institute of Ocean Technology (NIOT) – Finalization of ToR – [F.No.10-32/2015-IA-III]</p> <p>Project Proponent clarified that the said project falls under ‘Building and Construction Project for Institution (NIOT). Besides, Laboratories facilities, there shall be a pipeline facility extending into sea for intake and out fall of sea water, for which they have to obtain CRZ clearance. The proposed project does not fall under 7 (e) as mentioned in the Form-1.</p> <p>The Committee noted that no EC is required for institutional building project. The Committee suggested them that no TOR is required for CRZ. PP shall directly apply to SCZMA and submit the recommendations of SCZMA to the MoEF&CC for consideration of CRZ clearance.</p>
2.9	<p>Redevelopment of Berths 8, 9 and Barge Berths at the Port of Mormugao, Goa by Mormugao Port Trust – Finalization of ToR – [F.No.10-33/2015-IA-III]</p> <p>The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP report. All the projects related to Ports and Harbour i.e. ≥ 5 million TPA of cargo handling capacity (excluding fishing harbours) are listed at 7(e) of schedule of EIA Notification, 2006 covered under category ‘A’ and appraised at central level.</p> <p>Mormugao Port Trust has proposed for redevelopment of Berths 8, 9 and Barge Berths at the Port of Mormugao, Goa. PP informed that the existing Berth No. 8 is a POL berth. Similarly Berth No. 9, barge berth and mechanical ore handling plant (MOHP) comprise of a dedicated iron ore handling facility. Berth No. 8 has very low occupancy rate. The iron ore handling facility has been practically lying utilised for about 3 years. Moreover, most of the equipment in the MOHP are more than 37 years old. Replacement of these equipments will cost more than Rs. 600 Crore. The back area which includes Berth 8, 9, barrage berth and the MoHP occupies about 35 % of the main operational area of the port. Hence these areas need to be put to gainful use. Now, PP has proposed to construct 3 berths which can handle a variety of Cargo like coal, iron ore, bauxite, limestone, gypsum, steel coils, fertilizer, granite etc. This will ensure optimum utilization of the area and at the same time the trade will benefit.</p> <p>Following are the details of proposed facilities :</p> <ul style="list-style-type: none"> (i). Construction of bund, extension of berth face, railway line conveyor system and office structure. (ii). Covered storage for coal cargo and open storage for general cargo.

- (iii). Construction of one coal berth.
- (iv). Construction of one Iron Ore Berth and
- (v). Construction of one multipurpose cargo berth.
- (vi). Construction of multipurpose cargo berth.
- (vii). Reclamation of 640000 m².
- (viii). Capital dredging – 24 lakh m³.
- (ix). Capacity of proposed capacity will be 19 MMTPA
- (x). Proposed length of berth – 950 m.
- (xi). Proposed length of unloading jetty – 90 m.
- (xii). Backup area is 65 acres.
- (xiii). Reclamation -16 acre.

After detailed deliberations on the proposal, the Committee *recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity* and the following TOR in addition to *Standard ToR* for preparation of EIA-EMP report:

- i. A separate chapter on status of compliance of Environmental Conditions granted by State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by Regional Office, MoEF&CC on status of compliance of conditions on existing unit to be provided in EIA-EMP report.
- ii. Copy of consent to establish and consent to operate for the existing facilities.
- iii. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
- iv. Details of existing and proposed port facilities
- v. Layout plan of existing and proposed Greenbelt.
- vi. Action plan for drainage system to be included.
- vii. Details of air pollution control measures to be taken as well as cost to be incurred.
- viii. Total Water consumption and its source. Wastewater management plan.
- ix. Details of Environmental Monitoring Plan.
- x. Disaster Management Plan for the above terminal.
- xi. Status of court case pending against the project.
- xii. Recommendation of the SCZMA.
- xiii. A tabular chart with index for point wise compliance of above TORs.
- xvi. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

It was recommended that **‘TORs’ along with Public Hearing** prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

2.10 Development of Deep Water Jetty Facility and Capacity/ expansion at existing Inland Water Jetty Facility on Kundalika River, Village Korlai, District Raigarh, Maharashtra by M/s Indo Energy International Ltd – **Finalization of ToR** – [F.No.10-34/2015-IA-III]

The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. All the projects related to Ports and Harbour i.e. ≥5 million TPA of cargo handling capacity (excluding fishing harbours) are listed at 7(e) of schedule of EIA Notification, 2006 covered under category ‘A’ and appraised at central level.

M/s Indo Energy International Ltd has proposed for development of Deep Water Jetty Facility and Capacity/ expansion at existing Inland Water Jetty Facility onKundalika River, Village Korlai, District Raigarh, Maharashtra. IEIL intends to expand the facility to include the Coal required for the proposed Power Plant planned to be located close to the riverine facility at Sanegaon. The existing Jetty is about 21 km upstream on the right bank of the river Kundalika and is about 200 m long with a backup area of about 5 hectare for storage, handling and despatch of material. It is reported that the proposed project site does not have any ecologically sensitive areas like Wetlands Mountains or forests. However the adjacent coastal zone and water bodies will be conserved and protected. Cost of project is Rs. 2000 Crore. The proposed construction works proposed in the project are :

- i. The proposed project is a conventional marine project requiring new jetty of 500m length, with two mooring Dolphins 25 m from the Jetty on either side of the berth. The location and alignment to be decided through model studies & reclamation of about 40ha for foreshore facilities at Village: Korlai, District Raigadh, The capacity expansion at Sanegaon (inland Water Facility) will be by upgrading the equipments and by operating throughout the year.
- ii. Upgradation of the existing facilities at Sanegaon, District Raigad, Maharashtra.
- iii. Provision of material storage alongwithconnectingroads, drains, material handling system, water sprinkler.
- iv. Provision of electrical system and other utilities.

The proposed new port will be developed in 3 phases at Korlai:

S.N.	Phase	Capacity
1	Phase -I	7.5 Million MT
2	Phase - II	17 million MT
3	Phase III	22 million MT

Expansion will be done at Sanegaon (5-6 million MT)

The existing depths inside the estuary arc about 3 to 3.5 m and to be dredged to -16.0 m CD. The depths in the approach channel will vary from 3 m inside the creek to the 16 m contour, which is the beginning of the outer channel. An approximate quantity of 23033167 m³ material will be dredged for creating the approach channel (17500 m), Port basin and turning circle for handling vessels up to 105,000 DWT vessels with approximate loaded draft of 14.5 m.Total consumption of water will be 42,000 liters per day. The water requirement shall be sourced from MIDC or irrigation department. Sewage will be treated in the STP.

After detailed deliberations on the proposal, the Committee *recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity* and the following TOR in addition to *Standard ToR*for preparation of EIA-EMP report:

- i. Importance and benefits of the project.
- ii. A separate chapter on status of compliance of Environmental Conditions granted by State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by Regional Office, MoEF&CC on status of compliance of conditions on existing unit to be provided in EIA-EMP report.
- iii. Copy of consent to establish and consent to operate for the existing facilities.
- iv. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
- v. Various Ports facilities with capacities for the existing as well as proposed project.
- vi. List of cargo to be handled alongwith mode of transportation.
- vii. Layout plan of existing Port and Proposed Port.

- viii. Details of air pollution control measures to be taken as well as cost to be incurred.
- ix. Total water consumption and its source. Wastewater management plan.
- x. Details of Environmental Monitoring Plan.
- xi. Disaster Management Plan for the above terminal.
- xii. Layout plan of existing and proposed Greenbelt.
- xiii. Status of court case pending against the project.
- xiv. Recommendation of the SCZMA.
- xv. A tabular chart with index for point wise compliance of above TORs.
- xvi. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

It was recommended that **‘TORs’ along with Public Hearing** prescribed by the Expert Appraisal Committee (Infrastrucure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

Tuesday, 22ndDecember, 2015 (Indus Conference Hall)

2.11 Hazardous Waste Management facility Phase II of Integrated Waste Management Facility in Karnataka at village Madanhatti, District Kolar (Karnataka) by M/s SMS Infrastructure Limited – **Further consideration for Environmental Clearance** - [F.No.10-19/2012-IA-III]

The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 148th meeting held during 20th May, 2015 and the Committee sought following addl. Information:

- (i) Security Certification in terms of installation and operation of the technology/equipment by appropriate authority to be submitted by PP.
- (ii) Establishment of testing lab for testing the contamination of resalable items.
- (iii) The maintenance and security check up to be certified by appropriate Officer and periodic monitoring report to be submitted.

PP vide letter dated 13.08.2015 has submitted the above addl. Information. The Committee suggested that the Company should have proper safety certification system for operation of the equipments.

After detailed deliberations, the Committee, on the basis of the additional information provided and presentation made, recommended the project for environmental clearance and stipulated following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

- As proposed, 3 stage Wet scrubbing system followed by wet ESP shall be installed in the Plasma based incineration facility to control air emissions. The stack height shall be provided to disperse clean gas as per the specified norms. Bag filter with adequate height of stack shall be provided Coal fired boiler to control particulate emission. Efficiency of scrubber shall be monitored regularly and maintained properly. At no time, the emission levels shall go beyond the prescribed standards. PM, SO₂, NO_x and Temperature shall be monitored in the Plasma based Incinerator.
- Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and

	<p>information shall be submitted to the SPCB and the Regional Office of MoEF&CC.</p> <ul style="list-style-type: none"> • Ambient air quality monitoring shall be carried out in and around the landfill site at up stream and downstream locations. • The depth of the land fill site shall be decided based on the ground water table at the site. • Environmental Monitoring Programme shall be implemented as per EIA report and guidelines prescribed by CPCB for hazardous waste facilities. Periodical ground water/soil monitoring to check the contamination in and around the site shall be carried out. • The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals. • All leachates arising from premises should be collected and concentrated in MEE. There should be no discharge of leachates from the premises. Solids from the MEE shall be incinerated in plasma gasifier or taken to captive land fill. Condensate from MEE shall be sent to Plasma incinerator. • Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by MEE to achieve zero liquid discharge. • No non hazardous wastes, as defined under the Hazardous waste (Management, Handling and Transboundary Movement) Rules 2008 and amendments thereof, shall be handled in the premises. • No fly ash shall be disposed outside facility. All fly ash generated from the premises shall be mixed with Cement and used as a stabilizer for hazardous waste in the captive land fill. • All recommendations made in the public hearing proceedings shall be satisfactory implemented. • Gas generated in the Land fill should be properly collected, monitored and flared. • Project Proponent shall develop green belt, as committed. Atleast 5 m thick greenbelt shall be developed in the periphery of hazardous waste facility. • Project should ensure that the site is properly cordoned off from general movement and no unauthorized person or goods permitted to enter the premises. Necessary security provision should be made as a condition in the Authorisation under the Hazardous Wastes(Management , Handling and Transboundary Movement) Rules 2008 to prevent unwanted access. • Emergency plan shall be drawn in consultation with SPCB/CPCB and implemented in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or non sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water. • Rain water runoff from the landfill area and other hazardous waste management area shall be collected and treated in the effluent treatment plant.
2.12	<p>Construction of Ropeway Project at Mount Abu (Rajasthan) by M/s Mars Entertainment Pvt. Ltd. - Further consideration for Environmental Clearance -[F.No.11-4/2011-IA-III]</p> <p>The proposed project “Ropeway Project” from Raghunath temple to Tod Rock will be located at Nakki Lake, Mount abu, Rajasthan being developed by Mars Entertainment Pvt. Ltd. The project is a 261 m long aerial Passenger Ropeway covering an area of 3774.7 sq.m. (including Lower Terminal Station, Upper Terminal Station & Ropeway Corridor) which shall be based on Mono-cable Jig back/detachable system. The site is at an elevation of more than 1000 m above MSL.The proposed ropeway shall be developed by the Company itself. The total cost of the project is Rs. 400 Lakhs. Ropeway will have carrying capacity of 400 persons per hour. Operation of 8 hours of ropeway is envisaged. Population of 3200 persons/day will use the ropeway. Staff for operation & maintenance to be deployed at project will be about 15 persons. The total water requirement has</p>

	<p>been estimated as 53 KLD. Water shall be used mainly for flushing, drinking, hand washing & horticulture purposes. Total quantity of waste water generation has been estimated to be 45 KLD. The wastewater generated will be treated in 2 STPs of 30 KLD each based on FAB (Fluidized Aerobic Bio-reactor) technology proposed at LTP and UTP. The total solid waste will be generated by ropeway users, employee etc biodegradable waste of 497 kg/day will be disposed by pyrolysis method. Recyclable waste of 145 kg/day will be collected and given to approved recycler. Total power requirement will be 100 kw. DG set of capacity (1 x 100 KVA) is proposed at LTP of back up power supply. Acoustic enclosure and DG set of adequate stack will be provided.</p> <p>After detailed deliberations, the Committee, on the basis of the additional information provided and presentation made, recommended the project for environmental clearance and stipulated following specific conditions along with other environmental conditions while considering for accord of environmental clearance:</p> <ul style="list-style-type: none"> ▪ The distance from the Toad Rock to the ropeway and its various components, shall be strictly maintained as mentioned in the validation letter issued by the District Collector. ▪ The environmental clearance is subject to obtaining prior clearance from Wildlife angle including clearance from the Standing Committee of the National Board for Wildlife as applicable. ▪ The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. ▪ No restaurant/dhaba/food court shall be allowed in Rope way project without setting up of proper effluent treatment plant as well proper monitoring mechanism. ▪ As proposed sewage generated shall be treated in the Sewage Treatment Plant. Treated sewage will be recycled/reused for horticulture purpose. ▪ In any case, no treated/untreated wastewater shall be discharged into lake. ▪ No Trees shall be cut without obtaining permission from the competent authorities. Since Ropeways are covered under the Mining Act, the Project Proponents will take necessary clearances as may be prescribed.
2.13	<p>Development of Single Buoy Mooring (SBM) facility for Handling Liquid Bulk Cargo at Deep Drafted location for HDC, Kolkata Port by Kolkata Port Trust – Finalization of ToR – [F.No.10-35/2015-IA-III]</p> <p>PP did not attend the meeting.</p>
2.14	<p>Setting up of Integrated Common Hazardous Waste Treatment, Storage, Disposal and Recycling Facilities including incineration at Kakkireni village in Nalgonda District, Telangana by M/s Mumbai Waste Management Limited – Finalization of ToR – [F.No.10-36/2015-IA-III]</p> <p>The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP report. All the projects related to Common hazardous waste treatment, storage and disposal facilities (TSDFs) are listed at 7(d) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.</p> <p>M/s Mumbai Waste Management Limited (A subsidiary of M/s RamkyEnviro Engineers Ltd.) has proposed for setting up of Integrated Common Hazardous Waste Treatment, Storage, Disposal</p>

and Recycling Facilities including incineration at Kakkireni Village, Ramannapeta Mandal in Nalgonda District, Telangana. The plot area of the project site is 29.94 Ha (74 acres). The total cost of the project including infrastructure setup is **Rs260.00Crores**. **It is reported that** No forest land and diversion is involved for the proposed facility. It is reported that no national park/wildlife sanctuary is located within 10 km distance of the project site. Water bodies namely Kakkireni River (2 Km), AkkenepalleCheruvu(4.25 Km) and Musi River (8 Km) are located within 10 km distance. It is reported that alternative sites analysis were carried out for three sites. Two sites namely (i) at Urmadla Village and (ii) at Mandara Village were rejected. Project Site namely KakkireniVilage was found to be best ranked site. Water table of the project site is reported to be more than 5m below ground level. Following is project configurations:

Phase – I	Hazardous Waste	Secure Landfill	548 TPD
		Treatment /Stabilization	383 TPD
	Recycling Facility	E- Waste	82 TPD
		Spent Solvent Recycling	27 KLPD
		Used oil recycling	54 KLPD
		Used Lead Acid Batteries	65 TPD
	Alternative Fuel and Raw Material		55 TPD
	Bio-medical Waste	50000 beds @2.5 Kg/day/bed	12.5 TPD
Phase – II	Waste Plastic Recycling		27 TPD
	Waste Paper Recycling		54 TPD
	Incineration		55 TPD
Phase – III	Renewable Energy		2 MW
	Waste to Energy		2 MW

After detailed deliberations on the proposal, the Committee *recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity* and the following TOR in addition to *Standard ToR* for preparation of EIA-EMP report:

- i. Importance and benefits of the project.
- ii. Details of various waste management units with capacities for the proposed project.
- iii. List of waste to be handled and their source along with mode of transportation.
- iv. Other chemicals and materials required with quantities and storage capacities.
- v. Details of temporary storage facility for storage at project site.
- vi. Details of pre-treatment facility of hazardous waste at TSDF.
- vii. Details of air Emission, effluents, hazardous/solid waste generation and their management.
- viii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)

- ix. Process description along with major equipments and machineries, process flow sheet (quantative) from waste material to disposal to be provided
- x. Hazard identification and details of proposed safety systems.
- xi. Layout maps of proposed Solid Waste Management Facilities indicating storage area, plant area, greenbelt area, utilities etc.
- xii. In addition to baseline data monitoring, Lead level shall also be monitored in ambient air and ground water as pp has proposed to set up Lead battery recycling unit.
- xiii. Examine the gradient of ground water flows towards sensitive areas.
- xiv. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.
- xv. Examine the impact of leachates and outflows from the facility on downstream inland surface water and ground water resources and to examine whether the natural drainage of surface flows are towards the lake and river.
- xvi. Give justification for using 29.9 ha of land for the project.
- xvii. Status of the land purchase in terms of land acquisition Act and study the impact.
- xviii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xix. R&R details in respect of land in line with state Government policy
- xx. Details of effluent treatment and recycling process.
- xxi. Leachate study report and detailed leachate management plan to be incorporated.
- xxii. Action plan for measures to be taken for excessive leachate generation during monsoon period.
- xxiii. Mitigation plan for any pollution of ground water is noticed during operation period or post closure monitoring period.
- xxiv. Detailed Environmental Monitoring Plan as well as Post Closure Monitoring Plan.
- xxv. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- xxvi. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
- xxvii. A tabular chart with index for point wise compliance of above TORs.

It was recommended that **‘TORs’ along with Public Hearing** prescribed by the Expert Appraisal Committee (Infrastructure- 2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

2.15	<p>Setting up of 20 MLD SWRO Desalination Plant inside ONGC Uran Plant, Uran, Maharashtra by M/s ONGC Ltd. – Finalization of ToR – [F.No.10-37/2015-IA-III]</p> <p>Proposal was listed in the meeting of EAC (Infrastructure-1) as proposal involve only CRZ clearance.</p>																														
2.16	<p>Modification of Phase-I for development of Machilipatnam Port at Krishna District, Andhra Pradesh by M/s Machilipatnam Port Ltd. – Finalization of ToR – [F.No.10-5/2009-IA-III]</p> <p>The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP report. All the projects related to Ports and Harbour i.e. ≥ 5 million TPA of cargo handling capacity (excluding fishing harbours) are listed at 7(e) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.</p> <p>M/s Machilipatnam Port Ltd. has proposed for Modification of Phase-I for development of Machilipatnam Port at Krishna District, Andhra Pradesh. MoEF&CC vide letter no 10-5/2009 IA III dated 25.11.2009 has granted CRZ and Environmental Clearance to M/s Machilipatnam Port Ltd. for the phase –I development. Validity of EC has been extended for another 5 years upto 24.11.2019. The phase –I development comprising of 4 nos. berths in an area of 685 ha with cargo handling capacity of 16.6 MTPA. Capacity of port will be increased from 16.60 MTPA to 100 MTPA after modification. Following modification will be carried out:</p> <table border="1" data-bbox="213 909 1458 2042"> <thead> <tr> <th data-bbox="213 909 517 943">Components</th> <th data-bbox="521 909 1034 943">Phase –I</th> <th data-bbox="1038 909 1458 943">Modified Phase - I</th> </tr> </thead> <tbody> <tr> <td data-bbox="213 949 517 983">Berths, Numbers</td> <td data-bbox="521 949 1034 983">4</td> <td data-bbox="1038 949 1458 983">15</td> </tr> <tr> <td data-bbox="213 990 517 1357">Breakwaters</td> <td data-bbox="521 990 1034 1357">Northern: 2800 m long Southern : 4100 m long</td> <td data-bbox="1038 990 1458 1357">Northern breakwater (rubble mound) of 260 m length will be perpendicular to coast and will be extended upto- 3 m CD. Southern breakwater of 1915 m length (1615 structural & 300 m rubble mound) will be aligned with a bearing of 232^o – 52^o N.</td> </tr> <tr> <td data-bbox="213 1364 517 1496">Dredging</td> <td data-bbox="521 1364 1034 1496">Capital dredging : 31 million m³ Maintenance Dredging : 1.66 million m³</td> <td data-bbox="1038 1364 1458 1496">Capital dredging : 99.2 million m³ Maintenance Dredging : 1.06 million m³</td> </tr> <tr> <td data-bbox="213 1503 517 1563">Filling Material for reclamation</td> <td data-bbox="521 1503 1034 1563">4.5 Million m³</td> <td data-bbox="1038 1503 1458 1563">41.3 Million m³</td> </tr> <tr> <td data-bbox="213 1570 517 1603">Depth of dredging</td> <td data-bbox="521 1570 1034 1603">Maximum-16 m CD</td> <td data-bbox="1038 1570 1458 1603">Maximum of – 25.1 CD</td> </tr> <tr> <td data-bbox="213 1610 517 1704">Approach road connectivity</td> <td data-bbox="521 1610 1034 1704">9.8 Km length with right of way of 60 m approach road from NH-9</td> <td data-bbox="1038 1610 1458 1704">An approach road of 7.2 km long, connecting the central port boundary</td> </tr> <tr> <td data-bbox="213 1711 517 1805">Approach rail connectivity</td> <td data-bbox="521 1711 1034 1805">8.4 Km length of railway line alongwith railway siding from Pedana railway station</td> <td data-bbox="1038 1711 1458 1805">6.2 Km long railway corridor alongwith railway siding from Pedana railway station.</td> </tr> <tr> <td data-bbox="213 1812 517 1872">Dumping grounds for dredged material</td> <td data-bbox="521 1812 1034 1872">-25 to 28 m contours</td> <td data-bbox="1038 1812 1458 1872">-20 to 28 m contours</td> </tr> <tr> <td data-bbox="213 1879 517 2042">Water requirement</td> <td data-bbox="521 1879 1034 2042">1280 KLD of water from Tarakaturu storage reservoir will be pumped through pipelines to Port premises</td> <td data-bbox="1038 1879 1458 2042">3000 KLD (3.0 ML) of water from Tarakaturu storage reservoir will be pumped through pipeline to port premises.</td> </tr> </tbody> </table>	Components	Phase –I	Modified Phase - I	Berths, Numbers	4	15	Breakwaters	Northern: 2800 m long Southern : 4100 m long	Northern breakwater (rubble mound) of 260 m length will be perpendicular to coast and will be extended upto- 3 m CD. 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Power requirement	1.2 MW	86 MW of power from Gudivada substation will be provided by Govt. of AP.
Solid waste generation	200 kg/day	1000 kg/day
Sewerage System/STP	Modular STP has been proposed as the quantity is negligible	500 KLD
DG sets	As per requirement	8 nos. of 250 KVA DG sets
Cost of project	15,900 million	1,19,240 million

It is reported that water bodies viz. Guneru River (0.5 km), Manginapdi back water (0 Km), Upputeru River (6.3 Km) an Goguleru Creek (15 Km) are located. Ecological sensitive area namely mangroves Gunderu River Estuary (0 km), Spars Dwarf mangroves in the Manginapudi back water region (o Km), Mangroves in the Upputeru River (7.0 km)and Mangroves in Goguleru Creek are located within 10 km distance. Old Bandar Dutch Fort and Old Church are located at Machilipatnam town (0.8 km).

After detailed deliberations on the proposal, the Committee *recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity* and the following TOR in addition to *Standard ToR* for preparation of EIA-EMP report:

- i. Importance and benefits of the project.
- ii. A separate chapter on status of compliance of Environmental Conditions granted by State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by Regional Office, MoEF&CC on status of compliance of conditions on existing unit to be provided in EIA-EMP report.
- iii. Copy of consent to establish and consent to operate for the existing facilities.
- iv. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
- v. Various Ports facilities with capacities for the existing as well as proposed project.
- vi. List of cargo to be handled along with mode of transportation.
- vii. Layout plan of existing Port and Proposed Port.
- viii. Details of air pollution control measures to be taken as well as cost to be incurred.
- ix. Total water consumption and its source. Wastewater management plan.
- x. Details of Environmental Monitoring Plan.
- xi. Since it is a major expansion, therefore the impact of the project activity on the fishing port at Machilipatnam, the Old Bandar Port , Mangroves and the dumping of dredged material should specifically addressed to in detail.
- xii. Very comprehensively, document the entire spectrum of marine biota based on primary/secondary information and study the impact. The studies should not be just restricted to phytoplankton , Zooplankton or macro invertebrates.
- xiii. Disaster Management Plan for the above terminal.
- xiv. Layout plan of existing and proposed Greenbelt.
- xv. Status of court case pending against the project.
- xvi. Recommendation of the SCZMA.
- xvii. A tabular chart with index for point wise compliance of above TORs.
- xviii. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

It was recommended that **'TORs' along with Public Hearing** prescribed by the Expert Appraisal Committee (Infrastrucure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall

	<p>be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.</p>
<p>2.17</p>	<p>Development of Mega Container Terminal at Chennai Port, Tamil Nadu by Chennai Port Trust - Further consideration for finalization of ToR - [F.No.10-127/2007-IA-III]</p> <p>The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP report. All the projects related to Ports and Harbour i.e. ≥ 5 million TPA of cargo handling capacity (excluding fishing harbours) are listed at 7(e) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.</p> <p>Chennai Port Trust has proposed for Development of Mega Container Terminal at Chennai Port, Tamil Nadu. Chennai Port is one among the twelve major ports in the country and 2nd largest Port in terms of cargo handled. The total quay length available is around 5.5 km. It has all 24 berths spread over in 3 docks i.e. Ambedkar Dock, Jawahar Dock and Bharathi Dock. The depth is varying from 8.5m to 16.5m. There is 7.0 km of entrance channel with the depth of outer channel being 19.2 m and that of the inner channel being 18.6 m. The Port has a total land area of 240 ha (approx.).The following proposals planned for development/ improvement of Infrastructure facilities:</p> <ol style="list-style-type: none"> 1) Improvement to the existing Jawahar Dock (East) Berths for handling bulk cargoes – No Capacity addition; 2) Improvement to the existing Bharathi Dock II Berth for handling bulk cargoes – No Capacity addition; 3) Relocation of existing Sand Trap and Capital Dredging – Not Applicable; 4) Development of Multi level Car parking facility – 5000 Cars; 5) Development of Coastal Terminal at northern sheltering arm at east of Bharathi Dock turning circle – 1MTPA; 6) Development of Dry Dock Facility in the Boat Basin / Timber Pond area - Not Applicable; and 7) Development of Storage Sheds and Tank Farms as per the Land Use Plan of the Chennai Port. <p>It is reported that Eco sensitive area i.e. Vedanthangal Bird Sanctuary at (90 Km) Gunidy National Park (14 Km) and Anna Zoological Park (42 Km) is located. The established infrastructure having designed capacity for 86.04 Million Tonnes.</p> <p>The proposal of Chennai Port is for creation/ improvement of facilities for export and import of cargoes through Port.</p> <p>Port is drawing water from CMWSSB for the operations of Port. As of now, Port is having surplus of water due to ban in handling dusty cargoes viz., Coal and Iron Ore. The surplus water will be utilized for construction purpose. Port being an operational area, Power requirement is met through the supply from TNEB. No additional power requirement is anticipated. The major liquid effluent generated is from the office buildings which are disposed to the sewer lines of the Chennai Municipal Corporation for treatment and disposal.</p> <p>After detailed deliberations on the proposal, the Committee <i>recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity</i> and the following TOR in addition to <i>Standard ToR</i> for preparation of EIA-EMP report:</p> <ol style="list-style-type: none"> i. Importance and benefits of the project. ii. A separate chapter on status of compliance of Environmental Conditions granted by State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by Regional Office, MoEF&CC on status of compliance of

	<p>conditions on existing unit to be provided in EIA-EMP report.</p> <ol style="list-style-type: none"> iii. The EIA would also clearly demarcate between the pre 1994 and post 1994 activities and give status of compliance on all earlier E.C.'s availed. iv. Copy of consent to establish and consent to operate for the existing facilities. v. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale. vi. Various Ports facilities with capacities for the existing as well as proposed project. vii. List of cargo to be handled along with mode of transportation. viii. Layout plan of existing Port and Proposed Port. ix. Details of air pollution control measures to be taken as well as cost to be incurred. x. Total water consumption and its source. Wastewater management plan. xi. Details of Environmental Monitoring Plan. xii. The EIA would include an impact on the Guindy National Park. A map of the national park with relation to the project duly certified by the chief Wild Life Warden shall be submitted. xiii. The ambient air quality in the existing coal handling terminal shall be done for atleast 3 locations in the terminal area for the entire period of EIA. xiv. The impact of the multi level car parking and its relation and status with regards the CRZ notification will be provided in the EIA. xv. The EIA will include a comprehensive mention to the impacts of allowing the long term accumulation of sand and other dredged material on disposal areas. xvi. Disaster Management Plan for the above terminal. xvii. Layout plan of existing and proposed Greenbelt. xviii. Status of court case pending against the project. xix. Recommendation of the SCZMA. xx. A tabular chart with index for point wise compliance of above TORs. xxi. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made. <p>It was recommended that 'TORs' along with Public Hearing prescribed by the Expert Appraisal Committee (Infrastrucure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.</p>
2.18	<p>Development of a deep water port at Astaranga, Puri, Odisha by M/s Navayuga Engineering Co. Ltd - Further consideration for finalization of ToR - [F.No.11-60/2013-IA-III]</p> <p>M/s Navayuga Engineering Co. Ltd has proposed for development of a deep water port at Astaranga, Puri, Odisha. The proposal was considered in the 133rd meeting held in April, 2014 and the Committee recommended that a Sub Committee of EAC would make site visit and submit the report.</p> <p style="text-align: center;"><u>Site Visit Report of Sub-Committee</u></p> <p>Report on Site of visit for consideration of proposal by M/s Navayuga Engineering Company Ltd for Establishment of an All Weather Multi-User Greenfield Port at Astaranga, Puri District , Odisha.</p> <p>MoEF vide F No 11-60/2013-IA-III dated 25th August 2015 constituted a sub-committee comprising of Shri R. Radhakrishnan, Member-EAC and Dr.M.V. Ramana Murthy, Member-EAC and Scientist G, NIOT to submit a report to EAC. The site visit was performed during 4-6th September, 2015 to Astaranga to examine the site conditions based the proposal submitted by M/s Navayuga Engineering Company Ltd for Establishment of an All Weather Multi-User Greenfield Port . The committee visited site with support of Dr. V. P. Upadhyay, Advisor, East Region, Orissa, MoEF & CC. The observations and recommendations of the committee are as under.</p>

- i. NEC studied three alternatives based on coastal stability and replacement of mangroves and alternative 2 was considered at Astaranga which is located south of Devi River. The other two alternatives considered are confluence of Devi (Alternative 1) and Village Rahakandol (Alternative 2), which is also located at confluence of two creeks. The coast at the proposed location is a medium to low accreting coast. The proposed site is located south of Devi River. Creek system connects Devi River north through Chanrapada Nadi and Kadua river at south.
- ii. The water depth at Devi river confluence is shallow and minimum tidal excursion is noticed. Due to shallowness of creek , only small out board boats can only enter into the proposed site.
- iii. Fishing activity is noticed at Devi river confluence but limited activity at proposed site.
- iv. Sparse mangroves are noticed at Devi river confluence and also at some locations along the creeks at proposed site.
- v. Project Proponent proposed rerouting of creek at two places for development of port related support facilities.
- vi. Project Proponent informed that displaced villages will be rehabilitated as per R&R polcy of the state government.

Recommendations of the Committee.

- i. The project received TOR from SEIAA Odisha for 4.5 MTPA on 20.11.2009 with a proposal to acquire 5,000 acre of land and surface water requirement of 5,000 KLD from Devi river. Now, project capacity proposed as 17.7 MTPA with land requirement of 1578.269 ha and the water requirement as 5,000 KLD proposed to be drawn from Devi river. The water and land requirement should be assessed based on present situation and source of water for construction and operation of port should be reported.
- ii. The traffic forecast should be updated and submitted.
- iii. The comprehensive land use plan for phased development of port should be detailed and EIA should cater to all the aspects, as the major portion of proposed site falls under agriculture.
- iv. Permissible activities for development of port should be overlaid on CRZ map.
- v. The augmentation of rail/road infrastructure and connectivity should be detailed.
- vi. Mangroves at proposed site should be mapped by authorized agency and management plan for replanting mangrove system should be submitted, in case of likely disturbance due to construction of port.
- vii. The rerouting of proposed creek system at two places is to be studied in detail through numerical model catering to the flow regime and to maintain free flow of water during flood/cyclone.
- viii. The drainage pattern in catchment area should be studied to avoid flooding of adjoining villages due to construction of port including raising of embankments and compound wall towards landward side of the outer boundary of the proposed site. The data on bathymetry and topography of the area with suitable resolution should be collected. The peak flows during monsoon/cyclone should be considered for such study.
- ix. Project Proponent should ensure smooth rehabilitation of village population including religious places based on detailed surveys to be undertaken and the Government of Odisha should ensure proper implementation of the R&R.
- x. Long-term shoreline change analysis with impact of port on adjacent coast including Devi River should be carried out.
- xi. Orissa is known for turtle breeding grounds and hence development of port on nesting grounds should be studied.
- xii. Details of Dredging / Excavation and disposal strategies supported by impact study on marine/aquatic life should be studied.
- xiii. An Expert Committee, to coordinate the project implementation from environmental aspects may be contemplated with representative of Regional Center of MoEF &CC, Orissa.

After detailed deliberations on the site visit report and the project proposal, the Committee recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following TOR in addition to Standard ToR for preparation of EIA-EMP report:

- i. Importance and benefits of the project.
- ii. The water and land requirement should be assessed based on present situation and source of water for construction and operation of port should be reported.
- iii. The traffic forecast should be updated and submitted.
- iv. The comprehensive land use plan for phased development of port should be detailed and EIA should cater to all the aspects, as the major portion of proposed site falls under agriculture.
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- xxi. The EIA should include a comprehensive mention to the impacts of allowing the long term accumulation of sand and other dredged material on disposal areas.
- xxii. Disaster Management Plan.
- xxiii. Layout plan of proposed Greenbelt.
- xxiv. Status of court case pending against the project.
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- xxvi. A tabular chart with index for point wise compliance of above TORs.
- xxvii. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

It was recommended that '**TORs**' along with **Public Hearing** prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the

	State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.
2.19	<p>Expansion of Dharamtar Jetty facility at Dolvi of District Raigad (Maharashtra) by M/s JSW Dharamtar Port Pvt Ltd – Amendment in Environmental and CRZ Clearance – [F.No.11-79/2013-IA-III]</p> <p>MoEF&CC vide letter no. F No. 11-79/2013 IA III dated 26th November, 2015 has granted environmental clearance and CRZ clearance to M/s JSW Dharamtar Port Pvt Ltd with following specific condition: <i>“There will be no disposal of dredged material into the sea. But to be reused for reclamation, and for shore enrichment based on its characteristics, as committed.”</i></p> <p>Now, PP has requested for amendment in the said specific condition. PP informed that CWPRS, Pune has carried out mathematical model study to determine the impact of the waterfront development. As per study report, it is reported that dumping ground is suitable for disposal of excess soil from the dredging. The granular and rocky materials could be used for landfilling and grading. Dumping location of the dredge spoil indicating the location of the disposal ground in the geographical coordinates viz. Disposal Ground No. 1 : 18°52’29.96”N, 72°52’17.98” E and Disposal Ground No. 18°45’11.97”N, 72°48’24.0” E. In this regard, PP has submitted the copy of corrigendum no MMCE/2015 dated 22.12.2015 issued by CWPRS, Pune showing locations of dumping grounds alongwith geographical co-ordinate.</p> <p>After detailed deliberation, the Committee recommended the following amendment in the aforesaid Specific Condition :</p> <p>“As proposed, the granular and rocky materials shall be used for landfilling and grading. Other dredge materials shall be disposed at designated disposal ground off Mumbai Port as suggested by Central Water and Power Research Station (CWPRS), Pune indicating the location of the disposal grounds in the geographical coordinates viz. Disposal Ground No. 1 : 18°52’29.96”N, 72°52’17.98” E and Disposal Ground No. 18°45’11.97”N, 72°48’24.0” E”.</p>
2.20	<p>Model economic township at Jhajjar, Haryana by M/s Reliance Haryana SEZ Ltd-Name change in EC[21-39/2011-IA.III]</p> <p>MoEF&CC vide letter no. F No. 21-39/2011 IA III dated 16th August, 2012 has granted environmental clearance to Reliance Haryana SEZ Ltd. for the above mentioned subject.</p> <p>Now, PP has requested to transfer the above said environmental clearance in the name of M/s Model Economic Township Ltd. from M/s Reliance Haryana SEZ Ltd. In this regard, PP confirmed that there is no change in the project configuration for which the environmental clearance has been granted by the MoEF&CC. PP has also submitted a copy of the undertaking to abide with all the specific and general conditions prescribed in the EC letter no 21-39/2011-IA III dated 16.08.2012.</p> <p>After detailed deliberation, the Committee recommended the proposal for transfer of the above said environmental clearance in the name of M/s Model Economic Township Ltd. from M/s Reliance Haryana SEZ Ltd.</p>
2.21	<p>Deepening of approach channel for capsized vessels at Mormugao Port by M/s Mormugao port Trust – Environmental Clearance & CRZ Clearance</p> <p>The project proponent and their consultant (M/s WAPCOS Ltd.) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Terms of References (TORs) awarded vide MoEF letter dated 9.12.2014 for preparation of EIA-EMP report. All the projects related to Ports and Harbour i.e. ≥5 million TPA of cargo handling capacity (excluding fishing harbours) are listed at 7(e) of schedule of EIA Notification, 2006 covered under category ‘A’ and appraised at central level. Ministry vide letter</p>

dated 23.09.2015 has exempted Public hearing under Para 7 III Stage (3) (i) (cc) of the EIA Notification, 2006.

M/s Mormugao port Trust has proposed for Deepening of approach channel for capsized vessels at Mormugao Port. The Port has 7 cargo handling berths of which two are dedicated coal berths, one dedicated iron ore berth and a dedicated POL berth and the remaining general cargo berths. Apart from these 7 berths, there is also a dedicated berth for cruise vessels and a non-cargo berth which is proposed to be earmarked for the exclusive use of Navy and Coast Guard and 6 nos Mooring Dolphins. There is a 6.0 km long entrance channel with the depth of outer channel being 14.40 m and that of the inner channel being 14.10 m. The port has a total land area of 530 acres (212 ha) approx. A fully loaded Panamax vessel can be handled under these conditions by taking advantage of tide. The proposal is to deepen the outer channel to -19.80 m and inner channel to -19.50 m. This will facilitate navigation of Capesize vessels at any state of tide. Cost of project is Rs. 380 Crore.

The material to be dredged will mainly consist of silt and clay. A small quantity of weathered rock may be encountered. The total quantity to be dredged will be about 15.40 million cum. Most of the dredging work will be undertaken with a Trailer Suction Hopper Dredger (TSHD). A Cutter Suction Dredger (CSD) will also be deployed for hard material and weathered rock if encountered. Blasting will not be involved. The dredged material will be dumped in the designated dumping ground suggested by CWPRS.

The channel has been designed for 185,000 DWT bulk carriers. The typical dimensions of design vessels are as given below:

Vessel size (DWT)	Length (m)	Beam (m)	Draft (m)
1,85,000 (bulk carrier)	300	45.0	18.5

The proposed depth of the channel has been arrived at as follows:

Draft for 185,000 DWT vessels : 18.50 m

Under keel clearance : 1.30 m

Total depth required : 19.80 m.

The dredge spoil will be disposed of in the offshore disposal area. CWPRS has carried out hydrodynamic studies and dispersion studies for finding out a suitable location in offshore to dispose of the dredged material. As per CWPRS recommendations, a disposal area of 2 X 2 km, located at a distance of 1 km north from the intersection of the centre line of the outer approach channel with the -20 m contour at a depth of about -27 m CD has been identified. CRZ mapping for the proposed dredging of navigation channel project has been done through Institute of Remote Sensing (IRS) Anna University, Chennai.

The project was reviewed by Goa Coastal Zone Management (GCZMA) Authority during 120th meeting held on 11.9.15 and 122nd meeting held on 23.11.15. GCZMA has recommended the proposal to MoEF&CC vide letter No GCZMA/5/15-16/2012 dated 27.11.15

After detailed deliberations, the Committee recommended the project for environmental clearance & CRZ clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

- i) *All the recommendations and conditions specified by Goa Coastal Zone Management (GCZMA) vide letter no. GCZMA/5/15-16/2012 dated 27.11.15 shall be complied with.*
- ii) As proposed, blasting shall not be used in the dredging.
- iii) Dredging shall not be carried out during the fish breeding season.
- iv) Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life, particularly benthos. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap

	<p>the spillage.</p> <p>v) Dredging, etc will be carried out in the confined manner to reduce the impacts on marine environment.</p> <p>vi) Dredged material shall be disposed safely in the designated areas as per CWPRS recommendations, a disposal area of 2 x 2 km, is at 2 locations at a distance of 11 km and 14 km, north from the outer approach channel at a depth of about -27 m CD and in no case shall be disposed in the marine environment.</p> <p>vii) As proposed, the effluent from workshops, oil storage, etc. will contain oil and grease particles which shall be treated in an oil skimmer and suitably disposed after treatment or will be sold to registered recyclers.</p> <p>viii) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.</p>
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LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 1st MEETING OF EAC (INFRASTRUCTURE-2) HELD ON 21st – 22nd DECEMBER, 2015

S.N.	Name	Designation	Attendance
1	Prof. T. Haque	Chairman	P
2	Shri K. Gowarappan	Member	P
3	Dr. Yashpal Singh	Member	P
4	Dr. AyiVaman N. Acharya	Member	P
5	Dr. S.K. Bhargava	Member	P
6	Dr. Chandrahas Deshpande	Member	P
7	Shri A.P. Singh	Member	P
8	Ms. Mili Majumdar/ Dr. Hina Zia Representatives of TERI	Member	Dr. Hina Zia attended the meeting
9	Shri V Ramanamurthy	Co-opted Member	P on 1 st Day. P on 2 nd day for project item nos. 2.18, 2.19 and 2.21
MOEF&CC Representative			
14.	Shri A.N.Singh	Joint Director & Member Secretary	P