

**Minutes for 4<sup>th</sup> meeting of Expert Appraisal Committee (Infra-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 28<sup>th</sup> – 29<sup>th</sup> March, 2016**

**4.1. Confirmation of Minutes of 3<sup>rd</sup> EAC Meeting for Infra-2 held on 23<sup>rd</sup> February, 2016.**

The minutes of the 3<sup>rd</sup> Reconstituted Expert Appraisal Committee (Infrastructure- 2) meeting held during 23<sup>rd</sup> February, 2016 were confirmed.

**4.2. Consideration of Proposals**

4.2.1.	<p><b>Integrated Municipal Solid Waste Processing, Disposal &amp; Management Facility for Sonamarg Town &amp; Amarnath Yatra, Sarbal Village, Sonamarg, District Ganderbal, J&amp;K by Sonamarg Development Authority- Finalization of ToR</b></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 municipal solid waste management facility are listed at 7(i) of schedule of EIA Notification, 2006 covered under category 'B' and appraised at state level. However, applicability of general condition i.e. Thajiwas (Baltal) Wildlife Sanctuary located at a distance of 2.2 km, proposal is treated as category 'A' project.</p> <p>Sonamarg Development Authority has proposed for setting up of Integrated Municipal Solid Waste Processing and Disposal Facility for Sonamarg Town &amp; Amarnath Yatra at Village Sarbal, Sonamarg, District Ganderbal, Jammu &amp; Kashmir. Thajiwas Glacier and Thajiwas (Baltal) Wildlife Sanctuary is within 10 km radius of the project site. Sind River is next to the site. The site is connected to Srinagar-Ladakh Highway (NH-1D) at the distance of 250 m in north direction.</p> <p>The committee decided that before the additional TOR is given, the project proponents should submit a site sensitivity analysis based on the "Guidelines and check list for evaluation of MSW land fill proposals with information on existing landfills" published by the CPCB in August 2008, the site selection criteria under the Municipal Solid Waste Handling rules of 2000 as amended, the Guidelines for the selection of site for land filling, published by the CPCB and the Solid Waste Management rules of 2015 (Draft of 03-06-2015 or as finally notified). The Committee also suggested them to identify more sites and submit alternate site sensitivity analysis.</p> <p>The proposal was deferred till the desired information is submitted through online. The above information shall be provided with the uploading of minutes on the website.</p>
4.2.2.	<p><b>Development of integrated Common Hazardous Waste Treatment, Storage and Disposal Facility &amp; Incineration Facility at Survey No. 163,180,181,182, 183 &amp; 184 at Village Vadgam, Taluka Khambhat, District Anand, Gujarat by M/s Hindustan Enviro Life Protection Services Ltd.- Environmental Clearance</b></p> <p>The project authorities and their consultant (M/s Kadam) gave a detailed presentation on the</p>

salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the Meetings of the Expert Appraisal Committee (Infrastructure) held during 19<sup>th</sup>– 21<sup>st</sup>May, 2014 and 29<sup>th</sup> September, 2014 – 1<sup>st</sup> October, 2014 for preparation of EIA-EMP report. All the projects related to Integrated Common hazardous waste treatment, storage and disposal facilities (TSDFs) with incineration facility are listed at 7(d) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.

M/s Hindustan Enviro Life Protection Services Ltd. has proposed for setting up of integrated Common Hazardous Waste Treatment, Storage and Disposal Facility & Incineration Facility at Survey No. 163,180,181,182, 183 & 184 at Village Vadgam, Taluka Khambhat, District Anand, Gujarat. Total plot area is 8.97 ha of which area earmarked for greenbelt is 29,625 m<sup>2</sup>. Cost of project is Rs. 45 Crores. It is reported that no national park/ eco sensitive area/ wildlife sanctuary is located within 10 km distance. Sea / Estuary is located at an aerial distance of 1.58 km towards South Direction. **Lakes:** At an aerial distance of 600 m. River is located at an aerial distance of 817 m. Mangroves are located at an aerial distance of 5.85 Km towards NNW. Nearest village at an aerial distance of 0.92 km in ESE direction. Following is the configuration of the proposed facilities:

S. No.	Details	Description
1	Nature	Common Hazardous Waste Treatment, Storage & Disposal Facility (TSDF) & Incineration Facility for Liquid and Solid Hazardous waste
2	Size	TSDF Capacity : 4,20,410 MT Incineration facility : 1.5 tons/Hr. X 2 Nos.
3	Plot Area	8.97 Ha
4	Cost of the Project	~INR 45 Crore
5	Power	250 KWH, source: MG VCL One D.G set of 300 KVA (Emergency backup)
6	Fuel	FO - 150 Kg/Hr. (Process), source: local depot. HSD - 50 Kg/Hr. (D.G. Set), source: local depot.
7	Water	Construction Phase : 25 KLD Operation Phase : 98 KLD (if no leachate is generated) : or 22 KLD (if leachate is generated and reused) Source : Through Tanker from nearby sources.
8	Manpower	Construction Phase : 100 – 150 person. Operation Phase : 30–40 direct jobs, 50–60 indirect jobs.

In incineration process primary combustion chamber is operated in presence of excess air where minimum 850°C -900°C is maintained. The flue gas from primary combustion chamber is taken to post combustion chamber for elevating flue gas temperature to 1100-1200 OC for 2.5 seconds to achieve destruction of toxic compounds. Rotary kiln type furnace is proposed. Flue gas will be quenched using water in the spray drier. Flue gas from gas quencher is passed through bagfilter/ESP for removal of particulate matter. Before bagfilter/ESP, flue gas will be treated with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any). From bagfilter/ESP, clean flue gas is then passed through ventury scrubber

followed by packed bed scrubber, with caustic circulation neutralize the acidic vapours in flue gas will be provided for secondary scrubbing and demister column for arresting water carry over. Flue gasses are exhausted through stack. All systems interlocks, parameters settings, data logging and control are done through PLC. In worst case scenario, ETP having capacity 100 m<sup>3</sup>/day has been envisaged for treatment of wastewater from vehicle cleaning, floor washings and leachate. Sewage will be treated in the STP. No effluent will be discharged outside the plant area.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Gujarat Pollution Control Board on 08.01.2016. The issues were raised regarding anticipation of air pollution due to burning of waste and problem due to TSDF; threat to livelihood of fisherman; etc. It was also noted that the public hearing committee has listed the environmental concerns emerged from the public hearing.

After detailed deliberation, the Committee sought following additional information:

- (i) To carry out a sensitivity analysis of alternative sites as per the "Guidelines for conducting Environmental Impact Assessment: site selection for common Hazardous waste management facility published by the CPCB in October 2003."
- (ii) Project proponents would also submit a write up on how their project proposals conform to the stipulations made in the "Protocol for Performance evaluation and monitoring of the Common Hazardous Waste Treatment Storage and Disposal facilities including common Hazardous Waste incinerators", published by the CPCB on May 24, 2010
- (iii) Ground water table in all seasons, Ground water analysis report.
- (iv) Leachate characteristics and its treatment methodology.
- (v) Ambient air quality modelling.
- (vi) Issues raised during public hearing and commitments made by the project proponent in the form of tabular chart with financial budget for complying with the commitments made.
- (vii) Detailed reply on the environmental concerns (7 points) emerged from the public hearing.
- (viii) Comments of SPCB on the action report taken with respect to the observations of the Public hearing as well as recommendation of SPCB w.r.t. project.

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

4.2.3. **Expansion and strengthening of runway and up gradation of associated operational infrastructure and terminal facilities at Naini Saini Airport, Pithoragarh (Uttarakhand) by M/s Uttarakhand State Infrastructure Development Corporation Ltd.-Environment Clearance**

The project authorities and their consultant (M/s RITES) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the 112<sup>th</sup> Meeting of the Expert Appraisal Committee (Infrastructure) held during 10<sup>th</sup> - 11<sup>th</sup> May, 2012 for preparation of EIA-EMP report. All the projects related to Airports are listed at 7(a) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.

M/s Uttarakhand State Infrastructure Development Corporation Ltd. has proposed for expansion

and strengthening of runway and up gradation of associated operational infrastructure and terminal facilities at Naini Saini Airport, Pithoragarh (Uttarakhand). Cost of the project is Rs. 64.92 crore. Plot area of airport area is 28 ha. Naini-Saini Airport was constructed in the year 1991 for administrative use. It is reported that no wildlife sanctuary/national park is located within 10 km distance. Following facilities at the airport will be developed:

- i. No. of Passengers: 80 Passengers (20 incoming and 20 outgoing passengers for 2 flights)
- ii. Runway 14-32: 1510 m X 30 m
- iii. Taxiway: 50X25 m
- iv. Terminal Building: 500 sq. m
- v. ATC tower: 36 sq.m and 18 m above GL
- vi. Isolation Bay: No provision for separate isolation bay
- vii. Fire station: Category 4 Level of Fire Protection
- viii. Electric Sub Station: 225 sq.m
- ix. Car Parking: 20 nos.
- x. Drainage: RCC open drains
- xi. Boundary Wall: 2.4 m height with 0.6 m barbed fencing

Stack of adequate height and acoustic enclosure will be provided to DG set (500 KVA). Water requirement from municipal water supply will be 17.3 m<sup>3</sup>/day during operation period. Wastewater generation will be 11.2 m<sup>3</sup>/day and treated in the STP. Treated effluent will be reused for floor washing and horticulture purpose. Solid waste generation will be 30 kg/ day and transferred to municipal facility for treatment and disposal. Rainwater harvesting structure will be installed for buildings, apron, taxiway and parking area. Employment potential is 100 persons per day during peak construction and 20 persons during operation phase of the project.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Uttarakhand Environment Protection & Pollution Control Board on 18<sup>th</sup>February, 2013. The issues were raised regarding noise pollution, local employment, land acquisition, etc.

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

- i. PP shall obtain clearance from DGCA and AAI for safety and project facilities.
- ii. Diesel power generating sets proposed as source of back up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- iii. Transfers of fuels during refuelling operations, leak detection on underground pipes, containment of any surface spillage shall be monitored.
- iv. Aircraft maintenance, sensitivity of the location where activities are undertaken, and control of runoff of potential contaminants, chemicals etc shall be properly implemented and reported.
- v. Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc shall be provided.

	<ul style="list-style-type: none"> <li>vi. The run off from paved structures like Runways, Taxiways, can be routed through drains to oil separation tanks and sedimentation basins before being discharged into rainwater harvesting structures.</li> <li>vii. Storm water drains are to be built for discharging storm water from the air-field to avoid flooding/water logging in project area during monsoon season / cloud bursts.</li> <li>viii. Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.</li> <li>ix. Acoustic enclosures for DG sets, noise barriers for ground- run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.</li> <li>x. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.</li> <li>xi. The solid wastes shall be segregated as per the norms of the municipal solid waste management and Handling rules. Recycling of wastes such as paper, glass (produced from terminals and aircraft caterers), metal (at aircraft maintenance site), plastics (from aircrafts, terminals and offices), wood, waste oil and solvents (from maintenance and engineering operations), kitchen wastes and vegetable oils (from caterers) shall be carried out.</li> <li>xii. Traffic congestion near the entry and exit points from the roads adjoining the Airport shall be avoided. Parking should be fully internalized and no public space should be utilized.</li> <li>xiii. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy conservation building code (ECBC) 2007 of the Bureau of Energy Efficiency, Government of India. The energy system include air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.</li> <li>xiv. Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.</li> </ul>
4.2.4.	<p><b>Development of Port (30.57 MTPA) at Village Bhavanapadu, Marripadu, Devunalthada, Pollada, Komaralthada, Suryamanipuram, Santha BommaliVajrapukothuru Mandal, Srikakulam District, Andhra Pradesh by Energy, Infrastructure and Investment Department, Government of Andhra Pradesh- Finalization of ToR</b></p> <p>PP did not attend the meeting. Proposal will be considered after submission fresh application through online system.</p>
4.2.5.	<p><b>Development of Green Field International Airport at Bhogapuram, District- Vizianagaram, Andhra Pradesh by M/s Bhogapuram International Airport Corporation Ltd- Finalization of ToR</b></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 Airports are listed at 7(a) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.

Bhogapuram International Airport Corporation Ltd (BIACL) has proposed to develop the airport at Bhogapuram, Vizianagaram. In the Phase-I (2015-2030), the airstrip will be developed to cater for operation of Airbus A-380, type of aircraft. Development of Bhogapuram airport shall be taken broadly in 2 Phases. Airport will be developed for IFR operation of Airbus A-380 in phase-1. PP informed that AAI after studying four alternate locations in 2007 have shortlisted two sites 1<sup>st</sup> near S Rayavaram and 2<sup>nd</sup> near Bhogapuram ( 50 kms) from Vishakhapatnam) for development of international airport near Bhogapuram keeping in view the following:

- (i) Minimizing land acquisition cost as far as possible.
- (ii) Utilizing maximum Government Land;
- (iii) Reduce resettlement cost/educational institute.

Runway length is 3,800 m. All the facilities for safe operation of the aircraft like construction of new runway, terminal building (81000 m<sup>2</sup>), apron 198000 m<sup>2</sup>, air traffic controller tower, runway end safety area (RESA), apron, link taxi track shoulders, isolation bay shoulders, fully equipped firefighting equipments etc. are the part of the project. Other miscellaneous facilities will include DVOR building, CCR room, Security watch tower new substation, AC plant room, provision of hooter system at access points and provision of explosive detection system. Electric substation building of 2,750 Sqm is proposed to be constructed on city side to house HT and LT panels, DG set, Transformers, APFC Panel, Bus duct cabling etc. with control office in phase-1. Pump house and UG sump shall also be developed in phase-1 alongside of the substation for water supplies to the airport. Cost of project is Rs. 2,461.27 Crore. About 2004.54 acres of land out of 3645.79 acre of land is required for the proposed airport for phase-1. It is reported that no ecologically sensitive area/ National Park/wildlife sanctuary is located within 10 km distance. No forest land is involved. The power requirement will be 20,000 kVA or 20 MVA for the phase I. The bulk power supply of 1250 KVA shall be drawn from the grid of state electric board.

Category 7 level of protection is required to be provided to meet the of design aircraft. For category 7 level of protection, minimum 2 No. of Crash Fire Tender are required to be provided. A fully equipped Ambulance shall also support the Crash Fire Rescue Services. A fire station of 300 m<sup>2</sup> is proposed to house the CFT, ambulance and a Jeep in phase-1.

The source of water for the proposed area will be from nearby municipality. The daily consumption of water during operation phase will be about 273.8 KLD of which 152.1 KLD will be fresh water and 137.4 KLD will be recycled water. PP informed that in order to check the requirement of CRZ clearance, HTL/LTL demarcation map is being carried out by the authorized agencies of MoEF&CC.

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 toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000

	<p>scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)</p> <ul style="list-style-type: none"> <li>iii. Status of R&amp;R of the project to be submitted.</li> <li>iv. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.</li> <li>v. SCZMA recommendations if applicable.</li> <li>vi. Layout maps of proposed project indicating runway, airport building, parking, greenbelt area, utilities etc.</li> <li>vii. Cost of project and time of completion.</li> <li>viii. A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy conservation building code (ECBC) 2007 of the Bureau of Energy Efficiency, Government of India. The energy system include air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.</li> <li>ix. Details of Emission, effluents, solid waste and hazardous waste generation and their management.</li> <li>x. Noise monitoring shall be carried out in the funnel area of flight path.</li> <li>xi. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)</li> <li>xii. The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area.</li> <li>xiii. Fuel tank farm and its risk assessment.</li> <li>xiv. 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.</li> <li>xv. 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.</li> <li>xvi. A tabular chart with index for point wise compliance of above TORs.</li> </ul> <p>It was recommended that <b>‘TOR’ along with Public Hearing</b> 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>
4.2.6.	<p><b>Development of Commercial Airport at Mundra, Kutch District, Gujarat by M/s Mundra International Airport Pvt. Ltd.- Finalization of ToR</b></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 Airports are listed</p>

at 7(a) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.

Adani Ports and Special Economic Zone (APSEZ) has proposed for development of commercial Airport at Mundra. The project involves the construction of facilities like runway (length of 3946 m and width of 60 m) including shoulders at the orientation of 05-23; taxiways will be constructed with the length of 5290 m and width of 44 m including shoulders; international apron of 459 m length and 140 m width, domestic apron of 181 m length and 130 m width to be constructed. Isolation Bay with the length of 80m and 80 m width will also be constructed. Facilities to be constructed are runway; overrun; taxiways; apron (International); Apron (Domestic); Isolation Bay; Runways strip; Passenger Terminal Building; Cargo Terminal Building; Sub station building; fire building; ATC Tower; Administrative building; GSE Storage; Housing Complex; ATF dump; Office building for cargo operators; RESA; Parking; Landscaping/ open area. It is reported that Luni RF ( 0 Km), Baroi RF (0 Km), Bhadershwar RF ( 7.0 Km), Two RF near Borana ( 7.3 Km), Mangrove RF ( 8 Km), Mundra Dhoa RF ( 13.1 Km) are located. The existing air strip was granted NOC from Gujarat Pollution Control Board on 4<sup>th</sup> March, 2006. NOC from Ministry of Defence was obtained on 30<sup>th</sup> Nov, 2005.

The existing airstrip is located in an area covering approximately 45 hectares and additional land is 582 ha. Total area of the project after expansion is 627 ha. Out of this, land owned by APSEZ is 175 ha, abandoned salt works- 226 ha and Forest land- 226 ha. Whereas the area in which vegetation clearance required (redesigning of green area) = 214 ha. Approximately 91 ha of area fall under CRZ. However, no development is proposed in the CRZ area.

During construction phase, approx. 450 KLD and during operation phase, approx. 125 KLD of water would be required. The total water requirement for the entire airport will be provided by APSEZ utility division. 100 KLD capacity STP will be installed in a phase wise manner.

Power required for the entire airport would be 6500 KW which will be provided by Mundra Utility division. A dedicated 66KV / 132KV overhead transmission line would be constructed to provide the necessary power supply. The use of suitable renewable sources of energy will be explored.

Preliminary estimated cost of work for Development of Mundra Airport is worked out as INR 1,400 Crores. Construction time will be around 24 months.

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. Justification for a land area requirement. Details of displacement, resettlement and rehabilitation.
- iii. Since major buildings are also planned, the EIA should address to the standard terms of reference for both the building and construction projects and Airports.
- iv. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places).



- v. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
- vi. Recommendation of the SCZMA.
- vii. Status of stage -1 forest clearance for the involvement of forest land.
- viii. Layout maps of proposed project indicating runway, airport building, parking, greenbelt area, utilities etc.
- ix. Cost of project and time of completion.
- x. A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy conservation building code (ECBC) 2007 of the Bureau of Energy Efficiency, Government of India. The energy system include air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.
- xi. The plans for use of solar energy conformance of the proposals to the green building norms and the manner in which the proposal address to Indias Climate Change Strategy.
- xii. Details of Emission, effluents, solid waste and hazardous waste generation and their management.
- xiii. Noise monitoring shall be carried out in the funnel area of flight path.
- xiv. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- xv. The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area.
- xvi. Fuel tank farm and its risk assessment.
- xvii. Disaster Management Plan considering tsunami and cyclone.
- 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.
- xix. 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.
- xx. A tabular chart with index for point wise compliance of above TORs.

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.

4.2.7.

**Development of port at Vadhavan of village Dahanu and Vangaon, Thane, Maharashtra by M/s Jawaharlal Nehru Port Trust- Finalization of ToR**

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.  $\geq 5$  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.

The Vadhavan port is planned to be located on reclaimed land on inter tidal zone at Vadhavan Point. The site is surrounded on the West, North and South by Arabian Sea, various villages on East with discreetly habited land (19o55'46.19"N, 72o40'22.98'E). The port will be jointly developed by JNPT and Maharashtra Maritime Board (MMB) with a shareholding of 74% & 26% respectively.

**NEED OF PROJECT:** Maharashtra has two major ports i.e. Mumbai and JNPT which cater the hinterland of Maharashtra, including NCR, Punjab, Rajasthan and UP. Out of these ports, Mumbai port has constraint in evacuation of cargo for the past several decades due to development of city around it also due to availability of limited depths in the harbor. JNPT was basically developed as a satellite port of Mumbai port and has coped up well in becoming the largest container port of the country. The development of 4<sup>th</sup> container terminal is underway and after its full development there is little space for further expansion. Apart from that due to the presence of bed rock at or very close the existing bed level JNPT cannot be deepened further economically to handle the future generation of mega container ships drawing draft of 16 m or more. With the projected demand for containers to grow, it is necessary to locate a new mega port site which can cater to increased requirement of capacity and also could be developed to handle the future deep draft ships. Considering the above it has been decided to develop Vadhavan port as a satellite port for JNPT and for this purpose the present report has been prepared to assess its technical suitability and cost economics. Total cargo handling capacity for entire master plan is 177 Million Metric Ton. The total reclamation envisaged for the master plan is 402 ha whereas the dredging required is 18.7 million cum. Cost of **project is** Rs 9297 Crore for phase I.

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. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
- iii. Recommendation of the SCZMA.
- iv. Status of stage -1 forest clearance for the involvement of forest land if applicable.
- v. Mangroves conservation plan.
- vi. Various Ports facilities with capacities for proposed project.
- vii. List of cargo to be handled along with mode of transportation.
- viii. Layout plan of Proposed Port.
- ix. Study the impact of dredging on the shore line.
- x. A detailed impact analysis of rock dredging.

	<ul style="list-style-type: none"> <li>xi. Study the impact of dredging and dumping on marine ecology and draw up a management plan through the NIO or any other institute specializing in marine ecology.</li> <li>xii. A detailed analysis of the physico-chemical and biotic components in the highly turbid waters round the project site (as exhibited in the Google map shown during the presentation), compare it with the physico- chemical and biotic components in the adjacent clearer (blue) waters both in terms of baseline and impact assessment and draw up a management plan.</li> <li>xiii. Details of air pollution control measures to be taken as well as cost to be incurred.</li> <li>xiv. Total water consumption and its source. Wastewater management plan.</li> <li>xv. Details of Environmental Monitoring Plan.</li> <li>xvi. The Marine biodiversity impact assessment report and management plan shall deal with all micro, micro and mega biotic components and ecology within the area of influence and should be drawn up through the National Institute of Oceanography or any other institution specializing in marine ecology.</li> <li>xvii. Disaster Management Plan for the above terminal.</li> <li>xviii. Layout plan of existing and proposed Greenbelt.</li> <li>xix. Status of court case pending against the project.</li> <li>xx. A tabular chart with index for point wise compliance of above TORs.</li> <li>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.</li> </ul> <p>It was recommended that <b>‘TORs’ along with Public Hearing</b> 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>
4.2.8.	<p><b>Passenger Ropeway from PanchKoti to Boradi at New Tehri town in TehriGharwal district , Uttarakhand by M/s UTDB GOVERNMENT OF UTTARAKHAND- Finalization of ToR</b></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 Aerial Ropeway are listed at 7(g) of schedule of EIA Notification, 2006 covered under category ‘A’ and appraised at central level.</p> <p>The Uttarakhand Tourism Development Board for the development of Tourism in the State of Uttarakhand has decided to undertake development and operation/ maintenance of the Passenger Ropeway from PanchKoti to Boradi at New Tehri town in Tehri Gharwal district, Uttarakhand. The land requirement for the proposed project is about 3.86739 ha in which 0.21 ha is forest land. <b>Cost of the project is Rs.2390 lakhs.</b> The broad parameters of the ropeway are given below:</p>

S. No.	ITEM	Parameters
1	System	Mono-cable Pulsed Gondola system.
2	Design Capacity, Persons Per Hour (PPH)	Design 330@4 mts/sec and Operational 250@ 3.3 mts/sec
3	Line speed, m/sec	0.0 - 4.0
4	Horizontal distance, m	3304.65
5	Vertical rise, m	800.0
6	Inclined length, m	3462.39
7	Line gauge, m	5.2
8	Capacity of cabin, persons	4
9	Cabin Group spacing, m	866
10.	Total no of cabins (minimum), in no.	24 nos of 4 seat capacity
11	Travel time one way, sec	866 sec
12	Type of cabin	Fully enclosed cabin with lockable door, fabricated from Aluminum and Magnesium Alloy Section and sheeting duly painted
13	Hauling rope	44mm, 6x19 Langs Lay, PP Core, 1960 Grade Gradepropylenecore, MBL-
14	Main drive motor, HP	220
15	Tensioning system	Hydraulic
16	Engine drive for emergency, HP	70, Automotive engine ith integral clutch
17	Line Rescue System	Vertical by ladder, safety belt and Independent
18	Stand by D.G. set @ Lower station, KVA	300
19	Stand by D.G. set @ Upper	50
20	Ambient temp	0° C min and 47 ° C max
21	Relevant standard	IS 5228
22	Location of Tension gears	Upper station
23	Location of Drive gears	Lower station

Altitude is 1600 m.

Level with respect to MSL - 1642 (UTP) and 833 m (LTP). The Committee suggested them 150 KLD water requirement is in higher side. During presentation, PP informed that total water requirement is 54.24 m<sup>3</sup>/day. Project will generate about 100 temporarily staff during construction period. About 32 numbers will be deployed permanently during operation as technical staff. Benefits of the project : The location is one of the major tourist destinations in the country and will provide connectivity from PanchKoti at Tehri Dam Reservoir to Boradi at New Tehri. PanchKoti is connected with people across the dam through boat ferry, helping them to reach New Tehri in short time.

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 toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Stage – I forest clearance to be submitted.
- iv. Layout maps of proposed project indicating Location of upper station and lower station, building, food court, parking, greenbelt area, utilities etc.
- v. Numbers of persons/projections of tourist.
- vi. Cost of project and time of completion.
- vii. A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy conservation building code (ECBC) 2007 of the Bureau of Energy Efficiency, Government of India. The energy system include air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices. Use
- viii. Details of Emission, effluents, solid waste and hazardous waste generation and their management.
- ix. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- x. The E.I.A. should specifically address to vehicular traffic management.
- xi. 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.
- xii. 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.
- xiii. A tabular chart with index for point wise compliance of above TORs.

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.

4.2.9.

**Greenfield CETP and Incineration Plant at Plot No D-23,24, 25,26 UPSIDC Industrial Area, Village Gopalpur, Tehsil Sikandrabad, Distt. Bulandshahar, Uttar Pradesh by M/S Unnati Udhog Pvt Ltd- Finalization of ToR**

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 CETPs are listed at 7(h) of schedule of EIA Notification, 2006 covered under category 'B' and appraised at State level. All the projects related to Common hazardous waste treatment, storage and disposal facilities (TSDFs) alongwith incineration facility are listed at 7(d) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level. Considering the project integrated in nature, proposal is treated as category 'A'.

M/S Unnati Udhog Pvt Ltd. has proposed for setting up of CETP and Incineration Plant at Plot No D-23,24,25,26, UPSIDC Industrial Area, Village Gopalpur, Tehsil Sikandrabad, Distt. Bulandshahar, Uttar Pradesh. The project will comprise of CETP of 1 MLD capacity and Incinerator facility of 2 ton/hr (solid & liquid waste).The total area of project site is 6,430 sqm. As the proposed project is a treatment facility, no raw materials will be required. However, chemicals will be sourced from local market. For CETP, 36 KLD of water requirement will be met by CETP treated water. For Incinerator, 120 KLD of water requirement will be fulfilled by CETP treated water after using RO of 150 KLD. Domestic water requirement will be 8 KLD, which will be supplied through tankers.The power requirement of 2,000 kW will be supplied from Uttar Pradesh Power Corporation Ltd (UPPCL). For emergency, the demand will be met from two D.G sets of 250 kVA & 500 kVA. Cost of project is INR 9.0 Crores. The project is proposed in industrial area. Upper Ganga Canal is at distance of ~7.0 km in NE direction and Khatana distributary is at a distance of 3.0 km in NW direction from project site. The site is connected via internal roads to NH-91 at the distance of 1.3 kms in SW direction.

In CETP, the effluent will be treated upto tertiary level using following sequence of units:

Equalization Tanks, Primary Settling Tank, Ist stage Aeration Tank, Secondary Settling Tank, IInd Stage Aeration Tank, Final Settling Tank, Pressure Sand Filter, Activated Carbon Filter, Final Collection Tank & Decanter Centrifuge.

For gaseous emissions APCM's like scrubbers & stacks with adequate height will be provided. All process waste water and Bleed Quencher/Scrubber liquid will be treated in CETP. Final disposal of CETP treated water will be carried out to designated UPSIDC drainage system. CETP sludge and Incinerator Ash will be disposed to TSDF site.

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 chapter on Quantification and Characterization of inlet characteristic including methodology adopted.
- iii. Process flow diagram of the proposed CETP.
- iv. Layout plan of CETP
- v. Cost of project and time of completion.
- vi. Area earmarked for CETP.
- vii. Method for conveyance of effluent from the individual industrial unit to CETP.
- viii. Explore the option to recycle the treated effluent to individual industrial unit instead of discharging outside.
- ix. Reuse and Recycle option of treated effluent.

	<ul style="list-style-type: none"> <li>x. List of hazardous waste to be handled and their source along with mode of transportation.</li> <li>xi. Other chemicals and materials required with quantities and storage capacities.</li> <li>xii. Details of temporary storage facility for storage of hazardous waste at project site.</li> <li>xiii. Details of pre-treatment facility of hazardous waste at proposed incinerator site.</li> <li>xiv. Details of air Emission, effluents, hazardous/solid waste generation and their management.</li> <li>xv. Hazard identification and details of proposed safety systems.</li> <li>xvi. Layout maps of proposed Solid Waste Management Facilities indicating storage area, plant area, greenbelt area, utilities etc.</li> <li>xvii. Disaster Management Plan.</li> <li>xviii. Status of court case pending against the project.</li> <li>xix. A tabular chart with index for point wise compliance of above TORs.</li> </ul> <p>Public hearing is exempted as per para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006 for preparation of EIA/EMP Report, being site is located in the UPSIDC Industrial Area.</p> <p>It was recommended that ‘TORs’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.</p>
4.2.10.	<p><b>Extension of Runway at Rajahmundry Airport at village Madhurapudi, District East Godavari (Andhra Pradesh) by Airports Authority of India- Finalization of ToR</b></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 Airports are listed at 7(a) of schedule of EIA Notification, 2006 covered under category ‘A’ and appraised at central level.</p> <p>Airports Authority of India has proposed for extension of Runway at Rajahmundry Airport at village Madhurapudi, District East Godavari (Andhra Pradesh). Existing Rajahmundry airport is situated on 365.49 acres of land and is in operation since 1938 and currently operates about 10 operations per day (5 landings and 5 takeoffs). The airport has a Runway 05/23 of dimension 1750 m x 45 m suitable for operation of ATR-72 type of aircraft in all weather conditions with an Aerodrome Reference Code 3C. New domestic passenger terminal building with 225 PAX capacity has been constructed at a cost of Rs. 43.29 Crores and commissioned on 15.05.2012. The old apron is suitable for parking 2 nos. of ATR-72 type of aircrafts and Extension of Apron with new link taxiway in front of the new passenger terminal building is under implementation for 3 parking bays of A-320/A-321 type of aircraft. To meet the growing demands of the traffic and to facilitate bigger aircrafts of A-321 type of Aircraft at Rajahmundry Airport, the runway is proposed to be extended. The airport reference point is latitude 17°06’34” N and longitude 81°049’09.7”. No areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value are present within 10km radius. Two reserved forest namely Divancheruvu West &amp; East and Godavari river exist</p>

within 10 km radius study area.

Govt. of AP has agreed to hand-over the additional land to the extent of 857.09 Acres to AAI on free of cost as per the requirement assessed based on the Master Plan prepared by the Dept. of Planning (Arch), AAI for expansion of the Rajahmundry Airport and GoAP handed-over initially 389.195 acres of land to AAI on 14.12.2015 and balance land to extent of 467.895 acres claimed to be handed-over to AAI on or before 29.02.2016. Cost of project is Rs. 181.00 Crores (approx.). As part of the extension of the runway, only construction water will be required. Presently, the entire water for the airport operation is being met through borewells which are located within the airport premises. Current peak demand is about 689 KVA which is being met from the sanctioned 700 KVA from Andhra Pradesh State Electricity Board. The connected load is 760 KW. The future additional requirement will be about 100 KW after extension.

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 toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places).
- 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 RO, MoEF&CC on status of compliance of conditions on existing airport to be provided in EIA-EMP report.
- iii. Layout maps of existing and proposed project indicating runway, airport building, parking, greenbelt area, utilities etc.
- iv. Cost of project and time of completion.
- v. Details of R & R involved in the project.
- vi. A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy conservation building code (ECBC) 2007 of the Bureau of Energy Efficiency, Government of India. The energy system include air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices. Use
- vii. Details of Emission, effluents, solid waste and hazardous waste generation and their management.
- viii. Noise monitoring shall be carried out in the funnel area of flight path.
- ix. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- x. The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area.
- xi. Fuel tank farm and its risk assessment.
- xii. 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



	<p>chart with financial budget for complying with the commitments made.</p> <p>xiii. 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.</p> <p>xiv. 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>
4.2.11.	<p><b>Amendment in ToR granted for redevelopment of Berths 8, 9 and Barge Berths at the Port of Mormugao, Goa by M/s Mormugao Port Trust</b></p> <p>M/s Mormugao Port Trust vide letter no CE/PC/59/2016/6932/318 dated 23.03.2016 has informed that they are withdrawing their proposal seeking exemption from public hearing.</p>
4.2.12.	<p>Additional Capital and Maintenance dredging for facilitate berthing of cape size vessels at existing offshore jetty off Tekra, near Tuna, Gujarat by M/s Adani Kandla Bulk Terminal Privat Limited- TOR reg.</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. <math>\geq 5</math> 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 Adani Kandla Bulk Terminal Private Limited has proposed for proposed additional dredging to facilitate berthing of cape size vessels at existing offshore jetty off Tekra, near Tuna, Gujarat. Kandla Port Trust (KPT) and Adani Kandla Bulk Terminal Pvt Ltd (AKBTPL) entered into concession agreement for development of dry bulk terminal near Tuna off Tekra Island on 27.06.2012. Letter of name change in Environment/CRZ clearance was issued by MoEF&amp;CC to AKBTPL on 10.11.2014. The approved project consists of an off shore berthing structure; 80 ha. back up area and associated infrastructure facilities including rail and road corridor.</p> <p>The existing terminal was designed to handle ships of 1,00,000 DWT drawing drafts of 15.0 m at its outer berth which required an approach channel width of 200 m and depth of 12.3 m. Now a days, bulk cargo business especially coal is mostly handled on Cape-size vessels. So, to make it viable in the present business scenario, Tuna port will have to handle Cape-size bulk vessels of 2,10,000 DWT and above drawing drafts of 18.0 m.</p> <p>To handle such cap size vessels, dredge depth of -15m CD; -17 m CD and -19 m CD is proposed for approach channel; turning circle and berth pockets (for berth 1 and 3) respectively. Width of approach channel will be increased from 200 m to 300 m. To achieve this draft, additional capital dredging in the approach channel; turning circle and berth pockets is</p>

required to the tune of 7.68 million m<sup>3</sup>. Additional maintenance dredging will be required to the tune of 0.2 million m<sup>3</sup> per year. The proposed dumping ground for the additional capital dredging as well as maintenance dredging will be Latitude 22° 47' 12.74" N and Longitude 70° 02' 56.91" E

Hydrodynamic modelling study would be submitted and dredged material (during capital as well as maintenance dredging) will be disposed as per the study at an identified dump location which is around 6.9 km away from jetty. Cost of project is Rs. 40.70 Crores. The nearest habitation as well as terrestrial environment is more than 10 km away from the proposed project activity site hence, there will be no adverse impacts on terrestrial environment due to dredging activity

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 RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA-EMP report.
- iii. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
- iv. Recommendation of the SCZMA.
- v. Various Ports facilities with capacities for the existing as well as proposed project.
- vi. Layout plan of the existing Port.
- vii. Study the impact of dredging on the shore line.
- viii. The EIA should also include a marine ecology impact assessment report and management plan from the National Institute of Oceanography or any other institution specializing in marine Ecology. The said report shall deal with all the micro, macro and mega biotic components and ecology within the area of influence.
- ix. Study of water, sediment, aquatic biological environment quality etc in and around the dredging facility.
- x. Detailed study to be carried out to identify impacts on different category of aquatic as well as benthic flora & fauna during the proposed project construction and operation phase.
- xi. Details of Environmental Monitoring Plan.
- xii. Disaster Management Plan for the proposed project.
- xiii. Status of court case pending against the project.
- xiv. A tabular chart with index for point wise compliance of above TORs.
- xv. 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 <b>‘TORs’ along with Public Hearing</b> 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. The Committee also suggested them to upload the copy of form1 in TOR section of the MoEF&amp;CC website.</p>
4.2.13.	<p><b>Extension of validity of Environmental and CRZ Clearance granted for development of Port (Phase-1) at Dahej, Gujarat by M/s. Sterling Port Pvt. Ltd</b></p> <p>MoEF&amp;CC vide letter no. 10-11/2009-Ia.III has issued Environmental &amp; CRZ Clearance to M/s Sterling Port Ltd. (SPL) for the development of Port(Phase –I) at Dahej, Gujarat on 23rd June, 2009. Proposal involves development of a Multi User Multi Cargo all weather Direct Berthing Port Facility at Dahej. In the present (first phase) Total Plot Area is 125 hectare, carrying capacity : 40 MMPTA includes solid (coal, fertilizer, DOC, steel, sugar, agricultural products), Liquid (LNG, LPG, Liquid Class A,B,C, chemicals, edible oil &amp; containers etc.).</p> <p>PP informed that in view of industrial development at Dahej area and to augment the infrastructure the common user multipurpose port facilities is proposed by Gujarat Maritime Board (GMB). The GMB granted Letter of Intent (LOI) to SPL for Build Own and Operate and Transfer the Dahej Port facilities vide letter dated 3rd January 2009. Thereafter on receiving the environment clearance from MoEF and also construction permission from GMB the developmental works were progressed and major construction activities done with high commitment as under:</p> <ol style="list-style-type: none"> <li>(i) Obtaining of EC &amp; CRZ clearance no. 10-11/2009-IA.III, dated 23/06/2009.</li> <li>(ii) Preparing of detailed project report and achieving financial closure for the project.</li> <li>(iii) Awarding construction work of offshore jetty to reputed EPC contractor through international bidding process.</li> <li>(iv) Mobilization by EPC contractor and construction of 950 mtrs of offshore rock bund.</li> <li>(v) Overall investment of Rs. 1200 crores towards preliminary &amp; pre-operative expenses, approach &amp; internal road, back-up area &amp; filling, general lighting, office, power line, studies and investigations, consultancy and advances to long lead equipment items, fencing, etc has been done at site.</li> <li>(vi) The railway &amp; road connectivity is studied and further approval activities taken on-hand.</li> </ol> <p>Reasons for delay in project as given below:</p> <ol style="list-style-type: none"> <li>i) The phase-1 for this project could not be progressed as envisage due to delay in signing of concession agreement and requisite land lease agreement for the project by Government of Gujarat.</li> <li>ii) The Letter of Intent ( LOI) issued by GMB in January 2009 on PPP mode with Government of Gujarat.</li> <li>iii) Land advance possession by GMB issued on 21.06.2010.</li> <li>iv) Concession Agreement signed by GMB on 18.06.2014.</li> <li>v) Permission for extending the construction period for three years by GMB on 10.04.2015.</li> </ol> <p>PP informed that application for extension of EC validity was initially sent to MoEF&amp;CC</p>

through speed post on 22.03.2014. Further, application was sent through courier on 19.06.2014 and submitted personally on 01.09.2014.

The Committee noted that as per records, Ministry of Environment, Forest and Climate Change vide their letter dated 15.09.2014 has directed the PP to make a fresh application to obtain TOR/EC under the EIA Notification, 2006.

After detailed deliberations, the committee referred the matter to MoEF&CC to decide the further course of action.

4.2.14. **Amendment in Environmental and CRZ Clearance granted for 'Development of -Port facilities at Haldia Dock-II' at Mouza Shalukha-li & Rupnarayanchak, District East Medinipore (West Bengal) by M/s Kolkata Port Trust.**

Environmental Clearance has already been granted vide F. No. 11-140/2010-IA.III dated 30<sup>th</sup> July, 2015 by Ministry of Environment, Forest & Climate Change, Govt. of India for "Development of Port facilities at Haldia dock-II at Mouza Shalukhali & Rupnarayanchak, P.S. Sutahata, District East Mednipore in West Bengal", comprising of four jetties (two mechanised and two multipurpose jetties) with associate infrastructure for handling coal & other dry bulk cargo.

Now, Kolkata Port Trust (KoPT) has proposed to install one liquid cargo Jetty as replacement of one multipurpose dry bulk cargo jetty (at Jetty no. 4) to make project viable.

Project scenario as per EC granted by MoEFCC as well as the revised scenario are tabulated as under:

Attributes	Project as per EC	Revised Project	Remarks
<b>Capacity</b>	23.4 MMTPA	20.89 MMTPA	Reduction of capacity
<b>Cargo Profile</b>	Dry Bulk 23.4 MMTPA	<ul style="list-style-type: none"> <li>• Dry Bulk 19.05 MMTPA</li> <li>• Liquid Bulk 1.84 MMTPA</li> </ul>	Reduction of capacity
<b>No. of Jetty</b>	4 (all for dry bulk cargo)	4 (3 for dry bulk cargo & 1 for liquid bulk cargo)	Replacement of one dry bulk cargo jetty by one liquid bulk cargo jetty.
<b>Jetty location &amp; Length</b>	Mouza - Shalukhali&Rupnarayanchak, P.S. - Sutahata, District - East Mednipore in West Bengal. The site is located between 22°06'02.82"N latitude & 88°11'30.35"E longitude and 22°06'54.30"N latitude & 88°11'35.50"E longitude.		No change
<b>Project Area</b>	The Project will be setup in vacant Government land of around 160 acres.		No change
<b>Services &amp; Utilities</b>	The Project will be setup in vacant Government land of around 160 acres.		No change
	Water Requirement: 540 m <sup>3</sup> /day		No change
	Water Source :Haldia Development Authority		No change

	(HDA) water supply system.		
	Power Requirement: 12000 KVA		No change
	Source: WBSEDCL supply		No change
<b>Project Cost</b>	1707.5 Crores	1474.0 Crores (for Liquid Bulk Cargo Jetty capital cost is 172.52 Crores)	Reduction in project cost

**FACILITY FOR STORAGE OF MATERIALS:**

- ❖ Stack yards for storage of dry bulk cargo separately for each of the 3 dry bulk cargo handling jetty for storage of dry bulk cargo will be developed.
- ❖ For liquid bulk cargo jetty, there will be separate storage facility. The cargo will be directly discharged and will be transported through pipeline to the end users' storage facilities.

**LIST OF CHEMICALS TO BE HANDLED  
AT LIQUID CARGO JETTY**

<b>Chemicals</b>	<b>Quantity (in lakh tonnes)</b>
Paraxylene	10.00
Phosphoric Acid	1.67
Benzene	1.44
PY Gas	1.34
CBFS	1.19
Butadiene	0.96
MEG	0.72
Ammonia	0.58
Acetic Acid	0.28
Butene-1	0.14
Styrene Monomer	0.053

The Committee exempted the proposal from public hearing as per Section 7 (ii) of EIA Notification 2006 as public hearing was held for the existing project on 5.02.2014 and there is no increase in the approved capacity of the berths.

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:

	<ol style="list-style-type: none"> <li>i. The proponents could use the base line data generated earlier. Any data gaps as required under the fresh TOR may be suitably addressed to.</li> <li>ii. Importance and benefits of the project.</li> <li>iii. A separate chapter on status of compliance of Environmental Conditions granted by State/Centre to be provided. As per circular dated 30<sup>th</sup> May, 2012 issued by MoEF, a certified report by Regional Office, MoEF&amp;CC on status of compliance of conditions on existing unit to be provided in EIA-EMP report.</li> <li>iv. Copy of consent to establish and consent to operate for the existing facilities.</li> <li>v. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.</li> <li>vi. Recommendation of the SCZMA.</li> <li>vii. Various Ports facilities with capacities for the existing as well as proposed project.</li> <li>viii. List of cargo to be handled along with mode of transportation.</li> <li>ix. Layout plan of existing Port and Proposed Port.</li> <li>x. Details of air pollution control measures to be taken as well as cost to be incurred.</li> <li>xi. Total water consumption and its source. Wastewater management plan.</li> <li>xii. Details of Environmental Monitoring Plan.</li> <li>xiii. Draw up an aquatic and marine biodiversity management plan for the area of influence through the National Institute of Oceanography or any other organization specializing in marine ecology, with regards to all micro, macro and mega biotic components of the study area.</li> <li>xiv. Risk Assessment &amp; Disaster Management Plan <ul style="list-style-type: none"> <li>- Identification of hazards</li> <li>- Consequence Analysis</li> <li>- Details of domino effect of the storage tanks and respective preventive measures including distance between storage units in an isolated storage facility.</li> <li>- Onsite and offsite emergency preparedness plan.</li> </ul> </li> <li>xv. Status of court case pending against the project.</li> <li>xvi. A tabular chart with index for point wise compliance of above TORs.</li> </ol> <p>It was recommended that <b>‘TORs’ along without Public Hearing</b> prescribed by the Expert Appraisal Committee (Infra-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.</p> <p>The Committee also suggested them to upload the copy of form1 in TOR section of the MoEF&amp;CC’s website. TOR letter will be issued after uploading form 1.</p>
4.2.15.	<p><b>Modernization of existing facility and addition of new facilities entailing capacity at Vishakhapatnam Port by M/s Vishakhapatnam Port Trust –Reconsideration for Environmental Clearance</b></p> <p>The aforesaid proposal was considered by the Expert Appraisal Committee (Infra-2) in its 3<sup>rd</sup></p>

meeting held during 18<sup>th</sup>- 19<sup>th</sup> January, 2016 and Committee sought following additional information:

- (i) Tabular statement indicating details of (a) existing facilities as per existing EC obtained; (b) proposed additional facilities; (c) total capacity after expansion to be provided.
- (ii) CRZ classification of the project area.
- (iii) Dispersion modelling for the dumping of the additional dredge materials shall be carried out. The study report shall be incorporated.
- (iv) Baseline ambient air quality monitoring data in respect of parameters such as methane and VOC to be collected.
- (v) Details of the air pollution control measures to be undertaken for the coal handling berth and well as bulk cargo handling berth.
- (vi) Layout map of greenbelt proposed around the coal handling berth and bulk cargo berth.
- (vii) Water balance chart indicating fresh water requirement and waste water generation for the existing port as well as after expansion.
- (viii) Issues raised during public hearing and commitments made by the project proponent in the form of tabular chart with financial budget for complying with the commitments made.

PP has submitted the above mentioned addl. Information. The total capacity of existing port is 88.10 MMTPA. Proposed additional capacity is 37.49 MMTPA and after expansion the port capacity will be 125.59 MMTPA. The details of various coastal regulation zones as per CRZ notification 2011 in the proposed locations are as given below:

Project Component -1		
(i)	Ore handling complex	Non-CRZ area
(ii)	WQ-1	CRZ-II
Project Component -2		
	Development of WQ-7 and 8	CRZ-II & CRZ IVB
Project Component -3		
	Extension of Container Terminal	CRZ – II
	Existing Container Terminal	CRZ-IV B

It is reported that no mangroves are present at proposed sites. However, mangroves were observed outside the project sites. The distance of nearest mangroves from the project site is 1532.8 m. The Kambalakonde Wildlife Sanctuary lies on the northern side of the project sites. The shortest distance of the project site and Kamalakonda wildlife sanctuary is 5503.7 m. PP has submitted the copy of sediment transport study conducted by CWPRS vide letter no 101/13/72-PH II dated 10.03.2016. It is reported that spoil ground of 2.6 km<sup>2</sup> area is suitable for proposed dumping. It is reported that in order to address the dust generation problem, mechanization of cargo handling is the major solution, where in bulk cargo/coal unloaded from ship falls in a hopper, from hopper passed on to closed conveyor, conveyor to stack yard, from stack yard to silo with bucket wheel reclaimer/conveyor arrangement, loading into railway wagons from silo etc. and transportation to the destination. In the said process, transport to stack yards through dumpers by road is avoided and conventional handling as mentioned above is avoided. Also environmental measures viz. Sprinkling and dry fogging at unloading points, transfer houses in conveyor system are also proposed and thereby dust generation is

minimized. PP informed that the following EMP is in place:

1. Mechanical handling with respect to Iron ore and semi mechanical handling of Fertilizers and Fertilizer raw materials.
2. Manual sweeping and Sprinkling of water on wharfs to minimize surface dust emissions.
3. Covering of cargo carrying trucks with tarpaulins while moving to and from berths w.r.t bulk cargo.
4. Provision of save wall nets along berth for preventing spillages into the sea.
5. Maintaining the minimum drop height while unloading from ships onto the berth where there is no feasibility of wetting of cargo.
6. Covering of stacks with tarpaulins and maintaining the height under permissible.
7. Deployment of Mobile fog cannons for spraying the water for preventing the spreading the of air emission while unloading from ship to berth and loading into trucks/wagons etc.

As regard to queries related to air pollution raised during public hearing, PP replied that VPT would invest Rs. 200 Crores in the next three to four years to make VPT a green port. Out of which works at a cost of Rs. 70 Crores were already sanctioned and in the process of tender finalization for award of work in due course of time. Improving the environment and reducing vehicular traffic movement within the port area due to the mechanisation. Re- Organization of stack yards is proposed by shifting the present location of coal stack to inside from periphery by providing proper environmental safeguards viz. construction of high rise walls, drainage system, MDSS and plantation which is targeted to be completed by end of year 2015. In this regard PP has submitted the action plan.

As regard to queries related to health and medical facilities during public hearing, PP informed that VPT is conducting regularly in coordination with Indian Red Cross, health camps for the residents of the 1 Town Area as a part of CSR activities and also regular health checkups are being conducted of all the VPT employees who are working in the field and there is no evidence/ correlation of any illness caused due to pollution to the employees.

As regard to query raised by Sri Mohamed Irfan during public hearing, PP informed that covering of coal stack yards with tarpaulins, deployment of mobile fog cannons are being carried out for preventing the spreading of dust in air during loading and unloading operations.

As regard to query raised by J T Ramarao, PP informed that the proposed expansion project of VPT is not in any way related to the R K Beach erosion. It was also informed that as a responsible Corporate Citizen VPT have realized the problem of erosion in the early 1970s which mainly due to the natural phenomena on account of sea wave/current hence taken up the beach nourishment activity for past 3 decades. A quantity of about 4 lakh cu.m of sand is being pumped for the beach nourishment at a cost of about 6.00 Crore. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

The Committee deliberated upon the certified compliance report dated 24.03.2016 issued by the MoEF&CC Regional Office, Chennai. The Committee noted that PP has implemented air pollution control measures within port area. However, no environmental monitoring data was provided during the visit of Regional Office. In this regard, VPT made commitment that latest six monthly compliance report alongwith environmental monitoring report will be uploaded on



their website. The Committee was satisfied with response of VPT.

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

- (i) 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.
- (ii) 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.
- (iii) The Project proponent shall ensure that there shall be no damage to the existing mangroves patches near site and also ensure the free flow of water to avoid damage to the mangroves.
- (iv) The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site.
- (v) Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report.
- (vi) The commitments made during the Public Hearing and recorded in the Minutes shall be complied with letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.
- (vii) All the conditions stipulated in the earlier Clearance including the recommendations of Environment Management Plan, Disaster management Plan shall be strictly complied with.
- (viii) Cargo shall be unloaded directly into hopper from the ship and transported to the stack yards through closed conveyor system only. Inbuilt dust suppression systems shall be provided at hoppers and all the transfer points / storage yards. Cargo shall not be unloaded directly onto the berth. Water meters shall be provided at different locations to record the consumption of water used for dust suppression and daily log shall be maintained.
- (ix) Disposal sites for excavated material should be so designed that the revised land use after dumping and changes in the land use pattern do not interfere with the natural drainage.
- (x) There shall be no ground water drawal in no development zone of CRZ area.

- (xi) Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.
- (xii) All the operational areas will be connected with the network of liquid waste collection corridor comprising of storm water, oily waste and sewage collection pipelines.
- (xiii) Ship /vessels calling at the jetty shall not be permitted to dump wastes/bilge water during the berthing period.
- (xiv) Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components as part of the management plan.
- (xv) The marine ecology management plan being drawn up with regards to the environmental impacts of natural disasters, oil spills and other wastes, dredging and dumping on marine ecology (all micro, macro and mega biotic components) shall be scrupulously implemented. It shall be ensured that the marine ecology in the area of influence is not adversely affected.
- (xvi) Marine ecology shall be monitored regularly also in terms of all micro, macro and mega floral and faunal components of marine biodiversity.
- (xvii) Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.
- (xviii) All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to the RO MoEF&CC along with half yearly compliance report.
- (xix) Ships/barges shall not be allowed to release any oily bilge waste or ballast water in the sea. Any effluents from the Jetty which have leachable characteristics shall be segregated and recycled/disposed as per SPCB guidelines.
- (xx) Location of DG sets and other emission generating equipment shall be decided keeping in view the predominant wind direction so that emissions do not effect nearby residential areas. Installation and operation of DG sets shall comply with the guidelines of CPCB.
- (xxi) All the mechanized handling systems and other associated equipments such as hoppers, belt conveyors, stacker cum reclaimers shall have integrated dust suppression systems. Dust suppression systems shall be provided at all transfer point.
- (xxii) No product other than permitted under the CRZ Notification, 2011 shall be stored in the CRZ area.
- (xxiii) The quality of treated effluents, solid wastes, emissions and noise levels and the

	<p>like, from the project area must conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.</p> <p>(xxiv) All the mitigation measures suggested in the EIA report and the marine environment study of CWPRS, Pune shall be implemented. The compliance for each of these measures shall be submitted to concerned SPCB and R.O. of this Ministry along with six monthly compliance reports.</p> <p>(xxv) There shall be no drawal of ground water in CRZ area.</p> <p>(xxvi) Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report.</p> <p>(xxvii) It shall be ensured by the Project Proponent that the activities does not cause disturbance to the fishing activity, movements of fishing boats and destruction to mangroves during the construction and operation phase.</p> <p>(xxviii) The Project Proponent shall take up and earmark adequate fund for socio-economic development and welfare measures as proposed under the CSR Programme. This shall be taken up on priority.</p> <p>(xxix) The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.</p> <p>(xxx) The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.</p> <p>(xxxi) The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.</p> <p>(xxxii) 10 m thick greenbelt shall be developed on the periphery of the area proposed to be developed for WQ- North ( WQ-7 &amp; WQ-8) berth in the inner Hrbour of Visakhapatnam Port.</p>
4.2.16.	<p><b>Environment and CRZ Clearance for Construction of fifth Oil Berth at Jawahr Dweep, Mumbai by M/s Mumbai Port Trust- Reconsideration for Environmental Clearance.</b></p> <p>The aforesaid proposal was considered by the Expert Appraisal Committee (Infra-2) in its 3<sup>rd</sup> meeting held during 18<sup>th</sup>- 19<sup>th</sup> January, 2016and Committee sought following additional information:</p> <p>As per MSCZMA recommendation, dredging shall be done about 4-5 million m<sup>3</sup>. However, PP informed that quantity of dredging is 6 million m<sup>3</sup>. PP has to confirm the quantity of dredging to be done.</p> <p>(i) The project proponents would clearly specify as to where does the project site fall, as regards to the coastal regulation zones, as certified in the report submitted to this effect.</p> <p>(ii) Mangroves conservation plan to be submitted.</p> <p>(iii) Pipeline to be laid 50 m away from the mangroves area. Therefore, revised maps with</p>

- coordinates for the location especially with reference to mangroves to be submitted.
- (iv) SCZMA has not recommended the reclamation. Therefore, revised layout map to be submitted.

PP vide letter dated 14.03.2016 has submitted the following addl. Information:

- (i) PP has confirmed that capital dredging quantity is about 5 million m<sup>3</sup>. About 0.30 million cum maintenance dredging every year is envisaged.
- (ii) Mangroves conservation plan has been submitted.
- (iii) The pipeline trestle will be located beyond 50 m from the mangrove. The drawing prepared by IRS, Chennai showing the revised location is submitted. PP also informed that the existing bund acts as a barrier to the mangroves and there shall be no effect owing to the construction activity on the other side of the bund.
- (iv) The revised layout prepared by IRS, Chennai, deleting the reclamation and proposing the tankages on piled structure.

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

- (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 Maharashtra Coastal Zone Management Authority (MCZMA) vide letter no. CRZ-2015/CR-298/TC 4 dated 5<sup>th</sup> February, 2016 shall be complied with.*
- (iii) The Project proponent shall ensure that there shall be no damage to the existing mangroves patches near site and also ensure the free flow of water to avoid damage to the mangroves.
- (iv) The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site.
- (v) Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report.
- (vi) The quality of treated effluents, solid wastes, emissions and noise levels and the like, from the project area must conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.
- (vii) The commitments made during the Public Hearing and recorded in the Minutes shall be complied with letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.
- (viii) All the conditions stipulated in the earlier Clearance including the recommendations of Environment Management Plan, Disaster management Plan shall be strictly complied with.
- (ix) Dredge material shall be dumped at approved location.

- (x) The marine ecology management plan being drawn up with regards to the management of impacts of natural disasters, oil spills and other wastes, dredging and dumping on marine ecology including all micro, macro and mega biotic components, shall be scrupulously implemented. It shall be ensured that the marine ecology in the area of influence is not adversely impacted.
- (xi) As proposed, mangroves management plan shall be implemented.
- (xii) Vessels visiting the facility shall meet emission standards as per MARPOL.
- (xiii) Oil spill contingency plan shall be prepared and will be implemented.
- (xiv) All the liquid cargo shall be evacuated through pipeline.
- (xv) Greenbelt shall be developed in 2 ha of land.

2<sup>nd</sup> Day (29<sup>th</sup> March 2016)

**4.3.1 Proposed Common Hazardous Waste Treatment, Storage and Disposal Facility (CHWTSDF) at Plot No. 5, Pissurlem Industrial estate Phase I, District North Goa, Goa by M/s SMS Envocare Limited- Finalization of ToR**

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 'B' and appraised at state level. However, applicability of general condition i.e. Mhadei Wildlife Sanctuary located at 3.0 km, the proposal is treated as category 'A' project and appraised at Central level.

M/s SMS Envocare Limited has proposed for setting up of Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility (CHWTSDF) at Plot No. 5, Pissurlem Industrial Estate Phase-I, Village Pissurlem, Tehsil Satari, Dist. North Goa, Goa. Mhadei wildlife sanctuary eco sensitive zone is at 3.0 km to NE direction & Bondla Wildlife Sanctuary eco sensitive zone is 7.25 km to S direction.

The primary objective of this project is to provide a common Integrated facility for the collection, transportation, treatment and disposal of hazardous waste generated in the state of Goa. GIEMA / GIDC have identified M/s SMS Envocare Limited as service provider for design, finance, construction & operation of the CHWTSDF.

The proposed facility at Pissurlem is an "Integrated" facility that is it will have facilities for secure landfilling and Incineration designed to meet CPCB standards and will cater to environmentally and economically sound disposal of waste generated in Goa.

Aspect	Detail
Area	78,126 sq.m.
Capacity	Direct Landfill: 25,000 TPA Incineration: 1.5 Ton/ Hr
Project cost	Rs. 9,000 Lacs

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. To carry out a sensitivity analysis of alternative sites as per the "Guidelines for conducting Environmental Impact Assessment: site selection for common Hazardous waste management facility published by the CPCB in 2003."
- iii. project proponents would also submit a write up on how their project proposals conform to the stipulations made in the "Protocol for Performance evolution and monitoring of the Common Hazardous Waste Treatment Storage and Disposal facilities including common Hazardous Waste incinerators", published by the CPCB on May 24, 2010.
- iv. Details of various waste management units with capacities for the proposed project.
- v. List of waste to be handled and their source along with mode of transportation.
- vi. Other chemicals and materials required with quantities and storage capacities.
- vii. Details of temporary storage facility for storage of hazardous waste at project site.
- viii. Details of pre-treatment facility of hazardous waste at TSDF.
- ix. Details of air emissions, effluents, hazardous/solid waste generation and their management.
- x. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- xi. Process description along with major equipments and machineries, process flow sheet (quantative) from waste material to disposal to be provided
- xii. Hazard identification and details of proposed safety systems.
- xiii. Layout maps of proposed Solid Waste Management Facilities indicating storage area, plant area, greenbelt area, utilities etc.
- 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. Ground water quality monitoring in and around the project site.
- xvi. Status of the land purchase in terms of land acquisition Act and study the impact.
- xvii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xviii. R&R details in respect of land in line with state Government policy
- xix. Details of effluent treatment and recycling process.
- xx. Leachate study report and detailed leachate management plan to be incorporated.
- xxi. Action plan for measures to be taken for excessive leachate generation during monsoon period.
- xxii. Action plan for any pollution of ground water is noticed during operation period or post closure monitoring period.
- 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

	<p>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> <p>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 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 ‘<b>TOR</b>’ 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.</p> <p>Public hearing is exempted as per para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006 for preparation of EIA/EMP Report, being site is located in the Notified industrial area.</p>
4.3.2	<p><b>Establishment of 500 kg/hr Hazardous Waste Incinerator at Existing Common Hazardous Waste Treatment, Storage, and Disposal Facility at Nimbuan, DeraBassi, Mohali District, Punjab by Punjab Waste Management Project (PWMP), Ramky Enviro Engineers Limited-Finalization of ToR</b></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) alongwith incineration facility are listed at 7(d) of schedule of EIA Notification, 2006 covered under category ‘A’ and appraised at central level.</p> <p>Punjab Waste Management Project (PWMP), has proposed to install an incinerator inside the existing Hazardous Waste Treatment and Disposal Facility at Nimbuan Village, DeraBassi Tehsil, Mohali District, Punjab State. This proposed expansion falls in schedule 7(d) Common hazardous waste Treatment, Storage and Disposal Facilities (TSDFs), Category A. This proposed plant is located at Sy.No.1/7, 1/13, 1/14, 1/15, 1/16, /17, 1/18, 1/23, 1/24, 1/25, 2/20, 2/21, 2/22, 2/23, 10/1, 10/2, 10/3, 10/8, 10/9, 10/10, 11/2, 11/3, 11/4, 11/5, 11/6, 11/7, 11/8 and 11/9 situated in Nimbuan Village, Teh: Derabassi, Distt. Mohali, Punjab. Out of 20,946 MTA of Hazardous waste generated by various Industries in the State of Punjab, 2.5 % of the waste is Incinerable Waste (545 TPA). To dispose the Incinerable waste in a scientific manner, PWMP is proposed to put up an Incinerator of the capacity 1.5 M Kcal/Hr in 1.20 acres out of 20.74 acres of existing TSDF at Nimbuan so that the existing TSDF will become an Integrated Common Hazardous Waste Management Facility. The nearest surface water body to the site is river Ghaggar which is flowing around 5 Kms away from the site.</p> <p>Water requirement for incineration setup will be about 5 KLD. The source of water is through ground water. The existing plant electricity requirement of 62.35 MW and for the proposed incinerator setup is 250 KW will be supplied by nearby substation. Further requirement and Power back up will be support by proposed DG sets. Ash generated from the proposed incinerator will be disposed of in the secured landfill after appropriate treatment/stabilization. All air pollution control devices will be in place to ensure emissions are within the prescribed limits as per all applicable guidelines. The Committee advised that the EIA would cover the cumulative impacts of the existing plant and the proposed plant. The project proponents were advised to carry out a sensitivity analysis of alternative sites as per the “Guidelines for conducting Environmental Impact Assessment: site selection for common Hazardous waste management facility published by the CPCB in October 2003.” They were also advised to</p>

address to the concerns of public hearing. The committee recommended that the project proponents would also submit a write up on how their project proposals conform to the stipulations made in the "Protocol for Performance evaluation and monitoring of the Common Hazardous Waste Treatment Storage and Disposal facilities including common Hazardous Waste incinerators", published by the CPCB on May 24, 2010.

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 RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA-EMP report.
- ii. Details of various waste management units with capacities for the proposed and existing 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/incineration facility.
- vii. Details of air Emission, effluents, hazardous/solid waste generation and their management.
- viii. The report will present a trend analysis of base level quality before the existing facilities came into existence, present scenario (with the present activities being fully commissioned) and the projected impacts of the proposed incinerator etc. as proposed.
- ix. Ground water quality analysis of the peizometer wells installed in and around the TSDF. Trend analysis of results w.r.t. baseline data during initial project establishment to be carried out
- x. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- xi. Process description along with major equipments and machineries, process flow sheet (quantative) from waste material to disposal to be provided
- xii. Hazard identification and details of proposed safety systems.
- xiii. Layout maps of proposed Solid Waste Management Facilities indicating storage area, incinerator plant area, greenbelt area, utilities etc.
- xiv. Details of effluent treatment and recycling process.
- xv. Leachate study report and detailed leachate management plan to be incorporated.
- xvi. Action plan for measures to be taken for excessive leachate generation during monsoon period.
- xvii. Action plan for any pollution of ground water is noticed during operation period or post closure monitoring period.
- xviii. Detailed Environmental Monitoring Plan as well as Post Closure Monitoring Plan.
- xix. Public hearing to be conducted and issues raised and commitments made by the project



	<p>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> <p>xx. 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.</p> <p>xxi. A tabular chart with index for point wise compliance of above TORs.</p> <p>It was recommended that '<b>TOR</b>' along with <b>Public Hearing</b> 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>
4.3.3	<p><b>Development of Heliport at Kasna Village, Gautam Budha Nagar, Gautam Budha District, Uttar Pradesh by M/s Greater Noida Industrial Development Authority- Finalization of ToR</b></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 Airports are listed at 7(a) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.</p> <p>M/s Greater Noida Industrial Development Authority has proposed for development of Heliport at Kasna Village, Gautam Budha Nagar, Gautam Budha District, Uttar Pradesh. Greater NOIDA Industrial Development Authority (GNIDA), intends to develop a heliport for the operations at GreaterNOIDA, (UP), with the primary objective of providing independenthelicopter operations from Greater NOIDA to Delhi, Lucknow, Agra, Jaipur and other parts ofthe country . Accordingly, following three sites were selected by GNIDA for setting up of heliport:  Site I- Knowledge Park - I I, Greater NOIDA opposite Galgotia Institute.  Site II- Opposite the site 1 on NOIDA-Greater NOIDA highway and  Site III- Opposite GautamBudh University at Greater NOIDA  A site evaluation study was carried out by RITES Ltd; for all three sites and following isbrought out:  (i) Site I had several obstruct ions in terms of existing structures, elevated proposed Metro lineand environmental concerns.  (ii) Site II also had several obstructions in terms of existing structures and proposed HT line andenvironmental concerns.  (iii) Site III was found to be better than site I and II as it had very few existing structures in thevicinity of heliport and would affect environment the least.</p> <p>The heliport is proposed in 13 acre of vacant land with the following facilities:</p> <ul style="list-style-type: none"> <li>• Terminal Building: 500 sq.m to cater 20 incoming and 20 outgoing passengers</li> <li>• ATC Building: 104 sq.m</li> <li>• Touchdown and Liftoff (TLOF) area: 21m X 21m</li> <li>• Final approach and take-off (FATO) area: 300m X 30 m</li> <li>• Safety Area including FATO: 420m X 90m</li> <li>• 2 Hangers: 40m X 25m</li> </ul>

- Parking Area: for 25 cars
- Refuelling System
- Navigational Aids and
- Crash Fire Rescue Facilities

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 toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Status of DGCA approval for the project.
- iv. Layout maps of proposed project indicating runway, airport building, parking, greenbelt area, utilities etc.
- v. Cost of project and time of completion.
- vi. A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy conservation building code (ECBC) 2007 of the Bureau of Energy Efficiency, Government of India. The energy system include air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices. Use
- vii. Details of air emissions, effluents, solid waste and hazardous waste generation and their management.
- viii. Noise monitoring shall be carried out in the funnel area of flight path.
- ix. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- x. The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area.
- xi. Fuel tank farm and its risk assessment.
- xii. 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.
- xiii. 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.
- xiv. A tabular chart with index for point wise compliance of above TORs.

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.
4.3.4	<p><b>Upgradation of Chhatrapati Shivaji International Airport at Aslfa, Kiro, Kolekalyan, Vile parle (E), Sahar, Bapnala, Kondivita, Kurla, Mohili, Chakala, Brahamanwada, Marol, Mumbai by M/s Mumbai International Airport Limited -Finalization of ToR</b></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 Airports are listed at 7(a) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.</p> <p>M/s Mumbai International Airport Limited has proposed for Upgradation of Chhatrapati Shivaji International Airport at Aslfa, Kiro, Kolekalyan, Vile parle (E), Sahar, Bapnala, Kondivita, Kurla, Mohili, Chakala, Brahamanwada, Marol, Mumbai. The total site area of CSIA is 812.44 Ha (2006.73 acres) which includes 516.75 Ha of airside area and 170.61 Ha of landside area, while balance 125 Ha of land under encroachment. Out of these 125 hectares, a small part of encroached land (8.057 Ha) is proposed to be utilized for some of the projects, and would need Rehabilitation will be done in accordance with Slum Rehabilitation policy of Govt. of Maharashtra for CSIA. So there is no acquisition of additional land. Cost of total project is Rs. 3423.55 Crore. The proposed upgradation involves the following components:</p> <p>I. Completion of balance works approved in EC of 2007 including:</p> <ul style="list-style-type: none"> <li>• Completion of balance work of passenger terminals;</li> <li>• Completion of balance work of cargo terminals;</li> <li>• Completion of balance work of apron expansion;</li> <li>• Completion of balance work of Taxiway extension; and</li> <li>• Completion of balance work of airport facilities.</li> </ul> <p>II. New Projects</p> <ul style="list-style-type: none"> <li>• Construction of Vehicle Underpass under Runway 14-32;</li> <li>• Construction of Taxiway M; and</li> <li>• Construction New ATC Tower in Kalina.</li> </ul> <p>The ultimate stage CSIA water demand is estimated at a maximum of 15.763 MLD. In this, fresh water requirement is 8.00 MLD &amp; the balance 7.763 MLD will be met by recycled water. The said requirement is well within the earlier estimated/ approved water demand of 18.03 MLD; hence no extra provision of fresh water from Municipal Corporation of Greater Mumbai (MCGM) is required. About 18.39 MVA power is required for the new projects which will be met from existing power supply of 140 MVA installed capacity.</p> <p>PP has requested for exemption from public hearing on the following grounds:</p> <p>1. All the projects included in this proposal were approved in the Environmental Clearance granted in 2007 for modernization of CSIA, except the three fresh projects. There is no land acquisition involved in any of the projects/works and all the proposed projects are within airport site area and are required to enhance efficiency, safety and security of airport operations at</p>

CSIA.

2. Construction of Vehicular Underpass connecting existing aprons at T1 and T2 is essential to enhance operational efficiency, passenger safety and reduce traffic congestion within airside area. This project shall not only reduce vehicular emissions and noise pollution currently caused due to movement of buses/GSE vehicles on a 4 km road around RWY 14 end for transferring passengers from T2 apron to T1 apron, but also substantially reduce travel time. It is essential that construction of the proposed vehicular underpass is taken up immediately to ensure effective and efficient connectivity between the two aprons. It may be noted that the proposed project shall be constructed within the operation area of CSIA.

3. Construction of proposed Extension of Taxiway M queuing of aircrafts at Runway 27 end for departures shall be reduced leading to reduction in taxiing time, fuel consumption of aircrafts and noise pollution.

In view of the above, the Committee recommended for exemption from Public hearing as per para 7 (ii) of EIA Notification, 2006.

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.
- iii. 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 RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA-EMP report.
- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Layout maps of proposed project indicating runway, airport building, parking, greenbelt area, utilities etc.
- iv. Cost of project and time of completion.
- v. A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy conservation building code (ECBC) 2007 of the Bureau of Energy Efficiency, Government of India. The energy system include air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices. Use
- vi. The clearance of encroachment shall be, in procedure and implementation, strictly as per the Slum Rehabilitation Policy of Government of Maharashtra and any others Laws in force. There will be no acquisition of additional land.
- vii. Details of Emission, effluents, solid waste and hazardous waste generation and their management.
- viii. Noise monitoring shall be carried out in the funnel area of flight path.
- ix. Requirement of water, power, with source of supply, status of approval, water balance

	<p>diagram, man-power requirement (regular and contract)</p> <ul style="list-style-type: none"> <li>x. The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area.</li> <li>xi. Fuel tank farm and its risk assessment.</li> <li>xii. 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.</li> <li>xiii. A tabular chart with index for point wise compliance of above TORs.</li> </ul> <p>It was recommended that '<b>TOR</b>' 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.</p>
4.3.5	<p><b>Expansion of Krishnapatnam Port (Phase III) at SPSR Nellore District, Andhra Pradesh by M/s Krishnapatnam Port Company Ltd-Finalization of ToR</b></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. <math>\geq 5</math> 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 Krishnapatnam Port Company Ltd. has proposed for expansion of Krishnapatnam Port (Phase III) at SPSR Nellore District, Andhra Pradesh. Proposed Phase III Expansion of Krishnapatnam Port with 20 berths to handle about 153.7 MTPA of non-container cargo plus 2.2 MTEUsPA of container cargo, in an area of Ha 1512 (Ac 3736). Details are as under: Coal-88 MTPA, with 7 berths, General Cargo-14MTPA with 6 berths, Containers-2.2 MTEUsPA with 4 berths, Liquid Bulk-51.7 MTPA with 3 berths + 3 SBMs. GoAP is making available entire land for Port development on lease basis in terms of Concession Agreement. Forest land is involved for which stage-1 forest land will be obtained. There are no National Parks, Marine Parks, Sanctuaries, Wildlife habitats including Biosphere Reserves, Structures of Archaeological importance and heritage sites within 15 km of the proposed project boundary. Upputeru Creek - Upstream on west Mangroves - Within port boundary Iperu Reserve Forest - Adjacent on west Tammenapatnam Reserve Forest - Adjacent on south Momidi Reserve Forest - ~ 4.5 km on South Kottapatnam Reserve Forest - ~ 3.5 km on South.</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> <ul style="list-style-type: none"> <li>i. Importance and benefits of the project.</li> <li>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 RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA-EMP report.</li> <li>iii. Copy of stage – I forest Clearance for forest land involved in the proposed project.</li> <li>iv. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an</li> </ul>

	<p>authorized agency on 1:4000 scale.</p> <ul style="list-style-type: none"> <li>v. Recommendation of the SCZMA.</li> <li>vi. Various Ports facilities with capacities for the existing as well as proposed project.</li> <li>vii. List of cargo to be handled along with mode of transportation.</li> <li>viii. Layout plan of existing and proposed Port.</li> <li>ix. Study the impact of dredging on the shore line.</li> <li>x. Study the impact of dredging and dumping on marine ecology and draw up a management plan through the NIO or any other institute specializing in marine ecology.</li> <li>xi. Study on shoreline changing.</li> <li>xii. Mangroves details to be mapped.</li> <li>xiii. Make an impact assessment specific to the creek, draw up a management plan for protection of creeks and get a certificate from the competent authority on widening of creeks. The report will also give evidence that the carrying capacity will increase and that the hydraulic flow will not be impacted.</li> <li>xiv. Study the impact on surface drainage.</li> <li>xv. Study the impact on Human Development index.</li> <li>xvi. Details of air pollution control measures to be taken as well as cost to be incurred.</li> <li>xvii. Total water consumption and its source. Wastewater management plan.</li> <li>xviii. Details of Environmental Monitoring Plan.</li> <li>xix. Draw up a marine ecology impact assessment report and a marine ecology management plan through the NIOS or any other Institute specializing in marine ecology, covering all the micro, macro and mega biotic components of the ecosystem in the area of influence.</li> <li>xx. Disaster Management Plan for the above terminal.</li> <li>xxi. Layout plan of existing and proposed Greenbelt.</li> <li>xxii. Status of court case pending against the project.</li> <li>xxiii. A tabular chart with index for point wise compliance of above TORs.</li> <li>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.</li> </ul> <p>It was recommended that <b>'TORs' along with Public Hearing</b> 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>
4.3.6	<p><b>Amendment in ToR granted for establishment of integrated TSDF in Vapi, GIDC, Distt. Valsad, Gujarat by M/s Vapi Waste and Effluent Management Co. Ltd.</b></p> <p>MoEF&amp;CC has issued TOR to M/s Vapi Waste and Effluent Management Co. Ltd. for</p>

	<p>preparation of EIA –EMP report alongwith public hearing for the above mentioned project.</p> <p>Now, PP has requested for exemption from public hearing as project is located in the notified Vapi industrial area. PP has submitted the land allotment letter dated 10.12.2010 issued by Gujarat Industrial Development Corporation.</p> <p>After detailed deliberation, the Committee recommended the proposal for exemption from Public hearing as per para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006 for preparation of EIA/EMP Report, being site is located in the Notified GIDC industrial area, Vapi.</p>
4.3.7	<p><b>Amendment in ToR granted for development of the facilities envisaged in the Port Master Plan (Phase-III) of Kamarajar Port Limited by Kamarajar Port Limited</b></p> <p>PP didn't attend the meeting.</p>
4.3.8	<p><b>Extension of validity of ToR granted for development of Shipyard cum Captive jetties including a LNG Terminal at Nana Layja, Kutch district, Gujarat by M/s Gujarat Integrated Maritime Complex Pvt. Ltd</b></p> <p>MoEF&amp;CC vide F. No. 11-87/2011-IA-III dated <b>14.11. 2013</b> has granted TOR toM/s Gujarat Integrated Maritime Complex Pvt. Ltd.for preparation of EIA Report.</p> <p>Now, PP has requested for extension of validity of TOR. PP informed the Committee about progress of project. EIA/EMP study was completed and public hearing was held on December 12, 2014. Final CEIA/EMP report inclusive of other documents was submitted to Gujarat Coastal Zone Management Authority (GCZMA) on 16 Jan 2015. GCZMA appraisal is under progress.</p> <p>The EAC, after deliberations, recommended the proposal for extension of validity of the ToR upto 13.11.2016.</p>
4.3.9	<p><b>Proposed Terminal Capacity Enhancement at Berth 5A-6A of Mormugao Port for Handling Coal and Coal Products, Iron Ore and Limestone including Unitised and Steel Products at Mormugao Port Trust, Goa by M/s South West Port Ltd.-Amendment in ToR</b></p> <p>PP didn't attend the meeting</p>
4.3.10	<p><b>Development of Integrated facilities within existing Kandla Port at Kandla, Gujarat by M/s Kandla Port Trust –ToR/ Environmental and CRZ Clearance</b></p> <p>MoEF&amp;CC vide letter no J-11-82/2011-IA III dated 9<sup>th</sup> February, 2016 has directed M/s Kandla Port Trust to start the process afresh for CRZ clearance and environment clearance for the activities to be undertaken. In response, PP has submitted fresh form1 for the 10 activities/projects. The Committee noted that GCZMA has recommended only 7 activities/projects. Further, the PP has requested to consider the application for only following seven activities instead of 10 activities:</p> <ol style="list-style-type: none"> <li>i. Development of Oil Jetty to Handle Liquid Cargo and Ship Bunkering Terminal at Old Kandla under PP mode ( Jetty : 300 m x 15 m, approach: 450 m x 10 m, Back up area 5.5 ha, capacity 3.39 MMTPA, capital dredging : 1,73,660 m<sup>3</sup>, maintenance dredging : 1,56,294 m<sup>3</sup> Estimated Cost : 276.53 Crore.</li> </ol>

- ii. Multipurpose Cargo Terminal at Tekra off Tuna on BOT basis ( T shape Jetty- 600 m x 80 m, capacity 18 MMTPA, back up area: 101 ha, Capital dredging : 1,26,57,175 m<sup>3</sup>, maintenance dredging : 18,98, 576.25 m<sup>3</sup>, estimated cost : 1686.66 Crore.
- iii. Upgradation of Barge handling capacity at Bunder Basin at Kandla ( capacity : 3.33 MMTPA, Back up area: 5 ha, Estimated cost: 109.59 Crore.
- iv. Construction of Rail Over Bridge at NH 8A near Nakti Bridge (Crossing of NH8A) ( Estimated Cost : 32.17 Crore.
- v. Mechanization of Dry cargo handling facility at Kandla Port (Berth 7 & 8) ( capacity 7.35 MMTPA, Estimated cost : 80.61 Crore.
- vi. Strengthening of Oil Jetty 1 (Estimated Cost : 7.5 Crore).
- vii. Modification and Strengthening of Cargo Berths no. 6 at Karidha Port ( Estimated cost : 11.5 Crore).

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. The proponents could use the base line data generated earlier. Any data gaps as required under the fresh TOR may be suitably addressed to.
- iii. A separate chapter on status of compliance of Environmental Conditions granted by State/Centre to be provided. As per circular dated 30<sup>th</sup> 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.
- iv. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
- v. Recommendation of the SCZMA.
- vi. Status of stage -1 forest clearance for the involvement of forest land if applicable.
- vii. Mangroves conservation plan.
- viii. Various Ports facilities with capacities for the existing and proposed project.
- ix. List of cargo to be handled along with mode of transportation.
- x. Layout plan of existing and proposed port.
- xi. Study the impact of dredging and dumping on marine.
- xii. The Marine biodiversity impact assessment report and management plan shall deal with all micro, micro and mega biotic components and ecology within the area of influence.
- xiii. A marine ecology impact assessment report and management plan covering all aspects of the biota as included in the Gujarat Coastal zone Management Authority recommendations for the project as submitted during the meeting.
- xiv. Details of air pollution control measures to be taken as well as cost to be incurred.



	<ul style="list-style-type: none"> <li>xv. Total water consumption and its source. Wastewater management plan.</li> <li>xvi. Details of Environmental Monitoring Plan.</li> <li>xvii. Disaster Management Plan for the above terminal.</li> <li>xviii. Layout plan of existing and proposed Greenbelt.</li> <li>xix. Status of court case pending against the project.</li> <li>xx. A tabular chart with index for point wise compliance of above TORs.</li> <li>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.</li> </ul> <p>It was recommended that ‘<b>TORs</b>’ 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 Committee exempted the proposal from public hearing as per para 7 (ii) of EIA Notification, 2006 as public hearing was conducted by Gujarat Pollution Control Board on 18.12.2013. The Committee also suggested them to upload the copy of form1 for 7 activities.</p>
4.3.11	<p><b>Expansion of Adani Petronet (Dahej) Port Private Limited, Dahej, Bharuch District, Gujarat by M/s Adani Petronet (Dahej) Port Pvt Ltd. –Environmental and CRZ Clearance.</b></p> <p>The project authorities and their consultant (M/s Cholamandalam MS Risk Services Limited) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of References (TORs) awarded during the 127<sup>th</sup> Meeting of the Expert Appraisal Committee (Infrastructure) held during 28<sup>th</sup>- 30<sup>th</sup> October, 2013 for preparation of EIA-EMP report. All the projects related to Ports and Harbour i.e. <math>\geq 5</math> 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 Adani Petronet (Dahej) Port Private Limited (APPPL) has proposed to developed additional area for coal stockpiles, back up equipment’s, coal storage silo at railway siding and other supporting infrastructure and to <i>expand</i> its cargo handling facility from 11.7 MMTPA to 23 MMTPA by proposing the following activities:</p> <ul style="list-style-type: none"> <li>• Reclamation to the tune of 23 Ha contiguous lands to the existing back-up area to store and handle multipurpose cargo.</li> <li>• Optimal utilization of existing back-up area for coal storage and handling of other designated cargo. Additional coal stock pile to be developed for storage of 1.1 Million Tonnes.</li> <li>• Widening of existing 15 m wide rubble bund to 60 m wide to handle project cargo (i.e. ODC).</li> <li>• Existing Ramp being used for port crafts and tugs will be strengthened to handle project cargo.</li> <li>• Mechanization of south jetty to handle coal cargo.</li> <li>• Rail loading silo and other supporting infrastructure facilities.</li> <li>• No dredging, Break water, Jetties are proposed.</li> <li>• The overall Capacity and productivity of terminal will increase from 11.7 MMTPA to 23 MMTPA .</li> </ul> <p>The proposal includes other cargoes like Steel, Gypsum, Project cargoes, Silica sand etc. It is</p>

reported that no national park, marine parks, sanctuaries, reserve forests, wildlife habitates, biosphere reserves are located at the project site. Mudflats are present at project site, however they are biologically insensitive. Coastal areas rich in mangroves are located at Ban Khadi ( 7 km from the project site); Ghugar khadi ( 10.5 km) and Narmada Estuary ( 12 Km). Nearest water bodies /reservoirs are Lakhabava pond ( 1.3 km), Ambetha pond ( 6.8 km), Jolva Pond ( 13.4 km), Sabarmati Pond ( 4.3 km) and Narmada Estuary ( 3 Km). Marginal fishing is done by about 50 fishermen from Jageshwar village along the shore.

APPPL has developed the said port in phased manner. Existing berths, jetty, rubble bund, stack yard and supporting infrastructure were developed in phase-1. The CRZ clearance for phase-1 was accorded on 6<sup>th</sup> July, 2007 by MoEF. In phase-II, 38 ha of forest land were diverted for port backup area. MoEF granted environmental clearance for the same on 11<sup>th</sup> November, 2008. PP has submitted the copy of letter no 6-GJC060/2006- BHO/1508 dated 16.06.2008 issued by MoEF&CC, Regional office, Bhopal for diversion of 38.00 ha. of forest land. Current proposal of APPL, intends to expand Dahej Port under Phase-III. Cost of project is Rs. 464.32 Crores. Out of which, Rs 171.65 Crore and Rs 173.35 Crore are earmarked towards capital cost and recurring cost per annum for environmental management plan.

Additionally, the PP informed the Committee that ambient air quality monitoring was carried out at 6 locations during December,2013 - February, 2014 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (59.05 µg/m<sup>3</sup> to 87.98 µg/m<sup>3</sup>), PM<sub>2.5</sub> (25.54 µg/m<sup>3</sup> to 40.64 µg/m<sup>3</sup>), SO<sub>2</sub> (9.59 µg/m<sup>3</sup> to 15.32 ug/m<sup>3</sup>) and NO<sub>2</sub> (19.71 µg/m<sup>3</sup> to 37.07 µg/m<sup>3</sup>) respectively. AAQ modeling study for fugitive coal dust emissions indicates that the maximum incremental GLCs after the proposed project would be 5 to 10 µg/m<sup>3</sup>. The resultant concentrations are within the NAAQS. Additional air pollution control measures will be taken to reduce the fugitive coal dust emissions viz. (i) water spray nozzle will be provided at the top of the mobile hopper; (ii) conveyor belt with hood and water spray arrangement to reduce the dust; (iii) at all transfer tower dry fog dust suppression system will be provided; closed transfer towers will be provided. Stacker cum reclaimers with water spray nozzles and use of mist canon for dust suppression during stacking will be provided (iv)water sprinkling in the coal storage yards, wind breaker of 14 m height and greenbelt along storage yard will be provided; (v) tyre washing system will be provided to minimize the dust problem; (vi) dust suppression system at the conveyor belt just before the chute will be provided at filling of silo for railway rack loading; (vii) Dry fog dust suppression system shall be provided to suppress the coal dust; water spray nozzles shall be provided to suppress the dust during wagon filing at railway rack loading.

The total water demand for the proposed project will be increased from 600 m<sup>3</sup>/day to 4500 m<sup>3</sup>/day after expansion. Source of water supply is GIDC water supply. Water used for dust suppression system is collected in a solar evaporation pond. The collected water will be evaporated through solar evaporation and the sludge generated from the pond is sent to coal yard for recycling. Sewage will be treated in the STP. The total power demand is estimated as 7000KVA. The total project cost is envisaged as Rs.464.32 Crores. STP will be set up in modular phases for management of sewage. It is proposed to develop total greenbelt in an area of approximately 6 ha. within the project area. Existing greenbelt alignment on the north side and south side will be extended towards sea in the width of 5 m on both side of proposed reclamation area of 23 ha. On the eastern side (landward side) greenbelt area will be developed in the width of 5m.

The Committee deliberated on the certified compliance report dated 2.7.2014 issued by the Regional Office of MoEF&CC, Bhopal. It is reported that most of the environmental conditions have been complied. Few conditions are reported to be partly complied, which are related with environmental monitoring data. The Committee suggested them to upload the complete information on their website. PP committed to do the same. The Committee was

satisfied with the response.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Gujarat Pollution Control Board on **18<sup>th</sup> March 2015**. The issues were raised regarding noise pollution, tyre washing, permission from Village panchayat, transportation of coal; prediction of pollution level; public hearing venue; fugitive emission from road, local employment; etc. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

Gujarat Coastal Zone Management Authority vide letter no. ENV-10-2015-171-E dated 14<sup>th</sup> March, 2016 has recommended the proposal to MoEF&CC to grant CRZ clearance for proposed Phase- III expansion project at Dahej by M/s Adani Petronet (Dahej) Port Ltd. It is also reported that as per CRZ map duly demarcation of HTL CRZ Boundary etc. prepare by the National Centre for Earth Science Studies, Thiruvananthpuram, the proposed activities falls within CTZ-I (B), CRZ – III Categories, which are permissible as per CRZ Notification, 2011.

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

- (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) The Project proponent shall ensure that there shall be no damage to the existing mangroves patches near site and also ensure the free flow of water to avoid damage to the mangroves.
- (iii) The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
- (iv) Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report.
- (v) The commitments made during the Public Hearing and recorded in the Minutes shall be complied with letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.
- (vi) All the conditions stipulated in the earlier Clearance including the recommendations of Environment Management Plan, Disaster management Plan shall be strictly complied with.
- (vii) Cargo shall be unloaded directly into hopper from the ship and transported to the stack yards through closed conveyor system only. Inbuilt dust suppression systems shall be provided at hoppers and all the transfer points / storage yards.

	<p>Cargo shall not be unloaded directly onto the berth. Water meters shall be provided at different locations to record the consumption of water used for dust suppression and daily log shall be maintained.</p> <p>(viii) Disposal sites for excavated material should be so designed that the revised land use after dumping and changes in the land use pattern do not interfere with the natural drainage.</p> <p>(ix) The ground water shall not be tapped within the CRZ areas by the PP to meet with the water requirement in any case.</p> <p>(x) Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.</p> <p>(xi) All the operational areas will be connected with the network of liquid waste collection corridor comprising of storm water, oily waste and sewage collection pipelines.</p> <p>(xii) Ship /vessels calling at the jetty shall not be permitted to dump wastes/bilge water during the berthing period.</p> <p>(xiii) Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components as part of the management plan.</p> <p>(xiv) The marine ecology management plan being drawn up with regards to the environmental impacts of natural disasters, oil spills and other wastes, dredging and dumping on marine ecology (all micro, macro and mega biotic components) shall be scrupulously implemented. It shall be ensured that the marine ecology in the area of influence is not adversely affected.</p> <p>(xv) Marine ecology shall be monitored regularly also in terms of all micro, macro and mega floral and faunal components of marine biodiversity.</p> <p>(xvi) Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.</p> <p>(xvii) All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to the RO, MoEF&amp;CC along with half yearly compliance report.</p> <p>(xviii) Ships/barges shall not be allowed to release any oily bilge waste or ballast water in the sea. Any effluents from the Jetty which have leachable characteristics shall be segregated and recycled/disposed as per SPCB guidelines.</p> <p>(xix) Location of DG sets and other emission generating equipment shall be decided</p>
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keeping in view the predominant wind direction so that emissions do not effect nearby residential areas. Installation and operation of DG sets shall comply with the guidelines of CPCB.

- (xx) All the mechanized handling systems and other associated equipments such as hoppers, belt conveyors, stacker cum reclaimers shall have integrated dust suppression systems. Dust suppression systems shall be provided at all transfer point.
- (xxi) No product other than permitted under the CRZ Notification, 2011 shall be stored in the CRZ area.
- (xxii) The quality of treated effluents, solid wastes, emissions and noise levels and the like, from the project area must conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.
- (xxiii) All the mitigation measures suggested in the EIA report and the marine environment study of CWPRS, Pune shall be implemented. The compliance for each of these measures shall be submitted to concerned SPCB and R.O. of this Ministry along with six monthly compliance reports.
- (xxiv) It shall be ensured by the Project Proponent that the activities does not cause disturbance to the fishing activity, movements of fishing boats and destruction to mangroves during the construction and operation phase.
- (xxv) The Project Proponent shall take up and earmark adequate fund for socio-economic development and welfare measures as proposed under the CSR Programme. This shall be taken up on priority.
- (xxvi) The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
- (xxvii) The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.
- (xxviii) The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.

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**LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 3<sup>rd</sup> MEETING OF EAC (INFRASTRUCTURE-2 ) HELD ON 28<sup>th</sup> – 29<sup>th</sup> March, 2016**

<b>S.N.</b>	<b>Name</b>	<b>Designation</b>	<b>Attendance</b>
1	Prof. T. Haque	Chairman	P
2	Shri K. Gowarappan	Member	P
3	Dr. Yashpal Singh	Member	P
4	Dr. Ayi Vaman N. Acharya	Member	P: 2 <sup>nd</sup> day
5	Dr. S.K. Bhargava	Member	A
6	Dr. Chandrahas Deshpande	Member	P
7	Shri A.P. Singh	Member	P
8	Ms. Mili Majumdar/Dr.Hina Zia Representatives of TERI	Member	A
9	Prof.Dr. Sanjay Gupta	Member	P
10	Dr. R Deoliya	Member	P
<b>MOEF&amp;CC Representative</b>			
14.	Shri A. N. Singh	Joint Director & Member Secretary	P