

Minutes for 9th meeting of Expert Appraisal Committee (Infra-2) for Projects related to All ship breaking yard including ship breaking unit, Airport, Common Hazardous Waste Treatment, Storage and Disposal Facilities, Ports and Harbours, Aerial Ropeways, CETPs, Common Municipal Solid Waste Management Facility, Building/Construction Project, Townships and Area Development projects held on 21st – 22nd September, 2016

9.1. Opening Remarks of the Chairman.

9.2 Confirmation of Minutes of 8thEAC Meeting for Infra-2 held on **28-29 July, 2016**.

The minutes of the 8th Expert Appraisal Committee (Infrastructure- 2) meeting held during **28-29 July, 2016** were confirmed.

9.3. Consideration of Proposals

9.3.1	<p>Construction of New Integrated Terminal Building at LGBI Airport, Guwahati (Assam) by M/s Airports Authority of India - Finalization of ToR – [F.No.10-58/2016-IA-III]</p> <p>The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP report. All the projects related to 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 Airports Authority of India has proposed for construction of new Integrated Terminal Building at LGBI Airport, Guwahati, Assam. It was informed that the existing terminal building has saturated. In view of the future traffic growth at Guwahati Airport, there is a requirement of construction of New Integrated Terminal Building. Total existing land available is 580.25 acre. No additional land will be acquired for the proposed project. Cost of project is Rs. 912 Crore. Deepore Beel Bird Sanctuary is located at a distance of 3km from the project site. Brahmaputra River is flowing at a distance of 2.2 km. Deeper Beel(Lake) is listed in Ramsar site. Proposed project consists of following activities:</p> <ul style="list-style-type: none"> (i) Integrated Terminal Building with area of 77500 sqm (excluding Service area as per requirement in Basement) shall be designed for 2900 Domestic and 200 International passengers at a time. (ii) Considering fast growing air traffic & demand for better passenger facilities an additional area of 12500 sqm is kept for retail / commercial outlets to tap future potential at the airport. (iii) Multilevel car parking is proposed with all amenities for at least 1500 cars and surface parking for VIP cars & 10 buses, Separate car / scooter park area for AAI and airlines staff at appropriate location. (iv) Development of four-lane vehicular road is also proposed from Terminal Building / Car parking with canopy covering two lanes in front of the Terminal Building on the city side and connecting the main approach road to the city. <p>Water requirement will be 150 kl/d for domestic and CFT, which will be met through</p>
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	<p>existing bore wells. Solid waste generated at the existing airport will be 3100 kg/day.</p> <p>After detailed deliberations on the proposal, the Committee <i>recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity</i> and the following TOR in addition to <i>Standard ToR</i> for preparation of EIA-EMP report:</p> <ol style="list-style-type: none"> Importance and benefits of the project. A separate chapter on status of compliance of Environmental Conditions granted by State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by Regional Office, MoEF&CC on status of compliance of conditions on existing unit to be provided in EIA-EMP report. Copy of consent to establish and consent to operate for the existing airport facilities. 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). Copy of application submitted for clearance from NBWL. The EIA should also address to the impacts of the project on the Deepor Beel which was described as a Ramsar Site. It should also suggest as to how does the project relate to and conform to requirements and action plans of the Ramsar Convention. Layout maps of proposed project indicating runway, airport building, parking, greenbelt area, utilities etc. Cost of project and time of completion. Justification for spending Rs. 913 crore on the project. 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 Details of emission, effluents, solid waste and hazardous waste generation and their management. Air quality modelling and noise modelling shall be carried out for the emissions from various types of aircraft. Classify all Cargo handled as perishable, explosive, solid, petroleum products, Hazardous Waste, Hazardous Chemical, Potential Air Pollutant, Potential Water Pollutant etc. and put up a handling and disposal management plan. Noise monitoring shall be carried out in the funnel area of flight path. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract) The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area. Details of fuel tank farm and its risk assessment. 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. Any litigation pending against the project and/or any direction/order passed by any
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	<p>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>xviii. 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>
9.3.2	<p>Extension of Runway 26 at Vijaywada airport, Gannavaram Village, Krishna District (Andhra Pradesh) by M/s Airports Authority of India - Finalization of ToR – [F.No.10-59/2016-IA-III]</p> <p>The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP report. All the projects related to 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 Airports Authority of India has proposed for extension of Runway 26 at Vijaywada Airport, Gannavaram Village, Krishna District, Andhra Pradesh. The existing airport covers an area of 531.65 acres and runway is 2,286 m long. The airport has parking bays for four ATR 72 Bombardian Q400 and one boeing Q400 and one boeing 737/airbus A320.</p> <p>Total available land for the existing airport is 531.65 acres. Additional land requirement is 698.00 acres. PP clarified that only 148 acres of addl. land is required for the proposed runway extension project. Therefore, the Committee suggested them to consider only 148 acres of addl. land for the proposed project. Remaining 558 acres land may be considered, as and when proposal for entire master plan and next phase will be implemented. Cost of proposed project is Rs. 144.93 Crore.</p> <p>Forests Adavinakkalam RF (13.5 km, NW) Water Bodies i.e. Budameru (2 km, SW) Krishna River (13.5 km, SW) are situated within 10 km distance. One stream crossing at runway 26 side. Eluru canal passing through proposed airport extension site. PP also informed that Elure canal will be rerouted. Therefore, the Committee suggested them to carry out hydraulic modelling study for rerouting of canal. Following activities will be carried out for extension of runway project:</p> <ul style="list-style-type: none"> (i) Extension of Runway towards Rwy26 by 1074m (towards Eluru canal) to make runway from 2286m(7500ft) to 3360m (11025ft) suitable to cater for B-747-400, B-777-300 ER type of aircraft with load penalty. (ii) To make provision of 950m for CAT-1 Approach lighting system for runway-26 (after receipt of additional land beyond Eluru canal).

- (iii) Provision of Turn Pad at Rwy26 with suitable strength for B-747-400, B-777-300 ER type of Aircraft.
- (iv) Strengthening of existing runway and turn pad at 08 end of runway for critical aircraft B-747-400, B-777-300 ER.
- (v) Provision of 7.5 m wide shoulders on both side of Runway in shoulder strength in the extended portion suitable for B-747-400, B-777-300 ER type of Aircraft.
- (vi) Storm-water Drainage and Rain-harvesting works in Operational Area.
- (vii) Grading of the 300m Basic strip area as per DGCA.
- (viii) An isolation bay of size 110m x 120m to be constructed as indicated in the enclosed drawing.
- (ix) A link taxiway from Runway to Isolation bay of size 261.6 m x 23m with 7.5 m wide shoulders to be constructed as indicated in the enclosed drawing.
- (x) Construction of DVOR building and electrical connection of desired load.
- (xi) Construction of 2.4m high operational boundary wall with concertina coil all around the operational area of the newly acquired land. Non- operational boundary wall in the newly acquired land to be constructed towards city side.
- (xii) Construction of perimeter road of 3.5m width with Electrification, all along the perimeter boundary wall inside operational area.
- (xiii) Construction of security watch towers.

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

- i. Importance and benefits of the project.
- ii. A separate chapter on status of compliance of Environmental Conditions granted by State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by Regional Office, MoEF&CC on status of compliance of conditions on existing unit to be provided in EIA-EMP report.
- iii. Copy of consent to establish and consent to operate for the existing facilities.
- iv. 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. Layout maps of proposed project indicating runway, airport building, parking, greenbelt area, utilities etc.
- vi. Cost of project and time of completion.
- vii. A clear cut statement on the requirements of additional land acquisition.
- viii. Details of emission, effluents, solid waste and hazardous waste generation and their management.
- ix. Hydraulic modelling study for rerouting of Elure canal.
- x. Classify all Cargo handled as perishable, explosive, solid, petroleum products,

	<p>Hazardous Waste, Hazardous Chemical, Potential Air Pollutant, Potential Water Pollutant etc. and put up a handling and disposal management plan.</p> <ul style="list-style-type: none"> xi. Noise monitoring shall be carried out in the funnel area of flight path. xii. Noise modelling and air quality modelling shall be carried out for various types of aircraft be used. xiii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract). xiv. The EIA report should explain as to why only partial rehabilitation and resettlement is proposed. xv. It was given to understand that double crop land is proposed to be acquired. The proponents were advised to include compliance of land acquisition laws and procedures in the EIA report and examine how much degraded lands they may be able to rejuvenate as part of their legal obligation/ social commitment. xvi. The proponents were also advised to submit details on the conformity of the proposals to the Central Ground Water Authority guidelines of November 2015 as related to abstraction of ground water and ground water dewatering incidental to digging and excavation. xvii. 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. xviii. 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. xix. A tabular chart with index for point wise compliance of above TORs. <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>
9.3.3	<p>New Dry Dock Facility at Cochin Shipyard Ltd, Kochi (Kerala) by M/s Cochin Shipyard Ltd – Environmental and CRZ Clearance – [11-9/2015-IA-III] IA/KL/MIS/27087/2015</p> <p>The project authorities and their consultant (M/s Asian Consulting Engineers Pvt. Ltd.) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Terms of References (TORs) awarded during the 148th Meetings of the Expert Appraisal Committee (Infrastructure) held during 19th – 21st May, 2015 for preparation of EIA-EMP report. All the projects related to capital dredging and break water are listed at 7(e) of schedule of EIA Notification, 2006 covered under category ‘A’ and appraised at central level.</p> <p>M/s Cochin Shipyard Limited (CSL) has proposed to build a new dry dock in its existing premises along the Ernakulam Channel in Kochi City, Kerala. Total plot area of CSL is 170 acres, of which, 140 acres is occupied by the existing facilities comprising of two existing dry docks of sizes 270 x 45x12 m and 255 x 43x 9 m. The remaining 30 acres was left for future</p>

development out of which, 15 acres is now proposed to be developed into a new dry dock facility. Cost of proposed project is Rs. 1700 Crore. Configuration of the proposed project is as given below:

S.N.	Items	Details
New Dry Dock by Cochin Shipyard Limited, Kerala		
1	Dock Dimension	310 metres x 75 metres x 13 metres
2	Dock Draught	13 m with 2.0 m free board (depth)
3	Offshore Structure	Dock Projection is 20 m and Crane Track Projection is 45 m
4	Excavation and Capital Dredging Quantity Total: Approx.	400,000 m ³
5	Land based Excavation:	Approx. 350,000 m ³
6	Water Channel based Dredging:	Approx. 50,000 m ³
7	Design Excavation/ Dredge Level	Excavation Level: - 15 m to - 16 m bgl Dredge Level: (-) 10 m CD
8	Dock Load Parameter The following maximum vessel dimensions are proposed for the dock floor:	Liquid Natural Gas Tanker (LNGT): <ul style="list-style-type: none"> ○ LOA: 300 m ○ Beam (B): 52.0 m ○ draught ballast: 8.0 m Aircraft Carrier (ACC): <ul style="list-style-type: none"> ● LOA: 300 m ● Beam (B): 40.0 m at waterline, 70 m at flight deck ● Draught up to 8.30 m Oil & Gas Rigs <ul style="list-style-type: none"> ● Overall dimensions: 70x110 m. ● Depth: up to 8.3 m.

It is reported that Mangalavanam Bird Sanctuary (Approx. 3.30 km – North-North-West) is located at a distance of 3.30 km. Naval Base is situated at a distance of (1.4 Km, South West).

The proposed new dry dock development by Cochin Shipyard Limited along the Ernakulam Channel/ Creek will involve significant land excavation. It will also involve capital dredging to some extent due to the civil construction work proposed to be projected on the sea front. The total quantity of excavated & dredged material is expected to be around 400,000 cubic metres. Annual maintenance shall be carried out at the project site. The offshore existing dump sites of the dredged material is located at North (10° 00'N, 76°05'E) and South (9° 55'N, 76° 06'E), which is 22.4 km away from the project site. It is reported that the design capacity of the existing dump site is 50,000,000 m³. Only, 600,000 m³ capacity is being utilized. Hence existing dumping ground has enough available capacity to cater the dredge materials generated from the proposed dredging.

PP informed that during excavation of dry dock area, the bulk amount of the water shall be removed from the flooded dock by the Dewatering System (main dewatering pumps) while any

	<p>residual amount or any subsequent under dock floor water rising from the subsurface will be taken care of by the Drainage Pumping System (stripping pumps). The pumps along with the drainage system are designed to dewater the dock within three to four hours. This extracted water will be released into the sea after necessary treatment.</p> <p>The shipbuilding and ship repair activities in the new dry dock will involve extensive cutting, welding activities which will require the use of various welding gases. The dry dock area and the grand assembly area will be provided with the gas supply pipeline network.</p> <p>The grit/ steel blasting operations for cleaning vessels will be carried out using copper slag. It will be stored in existing storage facility near the ship repair dock. Paints will be stored and handled as per the provisions of the Hazardous and Other Wastes (Management and transboundary Movement) Rules, 2016. The potable water requirement will be 14 KLD while the industrial water requirement will be met through dedicated line to CSL. 31 KLD of water will be required for drinking and sanitation purposes of the workers at site. The total water requirement in the construction phase will be sourced from the local authority's round the clock water supply.</p> <p>Sea water will be used for ballasting the vessels within the dry dock. The proposed rate of ballasting is 500m³/hr which may be doubled to 1000m³/hr as and when required. Sea water shall also be used for cooling the vessels prior to flooding the dock when a vessel's onboard power generation cannot be used to run the pumps. Sea water will be utilized at the rate of 150m³/hr.</p> <p>A contaminated water treatment plant (CWTP) will be installed to treat the contaminated dock floor wastewater as discussed above. It will be set up in the North of the new dry dock, in the Ernakulam Channel side and adjacent to one of the sub-stations (power source). It shall be of capacity 500 KLD. The CWTP will be based on physico-chemical treatment mechanism employing dissolved air floatation (DAF) technique supplemented by coagulation.</p> <p>The power required during the construction and operation phases of the proposed project are about 400 KVA and 4,000 KVA respectively which will be drawn by the contractors from the CSL grid. DG sets 1,250 KVA x 2 nos. and 320 KVA x 1 no. are already part of the existing facilities of the shipyard. Additional backup power supply proposed during the construction phase is of capacity 250 KVA and in operation phase too is of capacity 250 KVA. The shipyard already has eight solar power plants of total capacity 285 KW. These power plants are grid connected. The hazardous wastes will be disposed off through CTSD (Common Treatment, Storage and Disposal Facility). M/s Kerala Enviro Infrastructure Limited (KEIL). Greenbelt has been developed in 6.5 acre. For the proposed project, CSL will develop greenbelt in 17.5 % area in phased manner. Out of which, 10 % plantation will be done by year 2018 and remaining 7.5 % will be carried out in the year 2019.</p> <p>Central Water and Power Research Station (CWPRS) conducted a study to assess the effect of dredging due to proposed new dry dock on nearby water front facilities. The comparison of the model outcome revealed that the variation in maximum depth of deposition from development of the proposed new dry dock is negligible (< 0.04 m) with the overall variation in deposition being even lesser (< 0.02 m). Therefore, the offshore protrusion proposed as part of the new dry dock will not adversely impact CSL or its neighbouring Ernakulam Channel waterfront facilities.</p> <p>The Committee also deliberated on the comments made by the CRZ Div. As per EIA report, the project site area is reported as <i>Stable Coast</i>.</p> <p>Kerala Coastal Zone Management Authority vide letter no. 4232/A2/16/KCZMA/S&TD dated 18th August, 2016 has recommended the proposed facilities to MoEF&CC under the provisions</p>
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	<p>of the CRZ Notification, 2011. It is reported that the construction of dry dock falls in CRZ II and CRZ I (between LTL & HTL) and CRZ IV area.</p> <p>Public hearing was conducted by KSPCB on 24.06.2016. Issues raised during public hearing were regarding unscientific dredging carried out at Naval Base, Vallarpadam Terminal and Cochin Shipyard Ltd.; losing of livelihood to the Fishermen; primary needs of the existing employees; etc. regarding fishing and dredging, PP clarified that fishing is prohibited in the Ernakulam Channel area near project site and there is no technical possibility that alluvial soil accumulation at Vembanad Lake due to the dredging activities by CSL, as depth of the backwater in the shipyard area is much more than that at Thevara area. It was also informed that CSL has conducted mathematical modelling for the sediment deposition and other necessary study for dredging activity at Ernakulam Channel. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.</p> <p>After detailed deliberations, the Committee 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:</p> <ul style="list-style-type: none"> (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 environmental clearance is subject to obtaining prior clearance for Wildlife from the Standing Committee of the National Board for Wildlife. (iii) <i>All the recommendations and conditions specified by Kerala Coastal Zone Management Authority vide letter no. 4232/A2/16/KCZMA/S&TD dated 18th August, 2016 shall be complied with.</i> (iv) 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. (v) 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. (vi) 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. (vii) Since Ernakulam Channel ultimately meets the sea and the discharge is planned to conform to marine quality standards, the project proponent shall get a marine biodiversity management plan prepared from the NIOS or any other marine biology specialist institution and implement the same. The plan should safeguard the biodiversity of the channel as also the biodiversity impacts as a result of confluence with the sea. (viii) The ground water shall not be tapped within the CRZ areas by the PP to meet with the water requirement in any case. (ix) Well designed drainage system shall be provided to dewater the dock while excavation. As proposed, extracted water will be released into the sea after
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	<p>necessary treatment. CGWB permission shall be obtained for dewatering the dock during construction.</p> <p>(x) Shrouding shall be carried out in the work site enclosing the dock area. This will act as dust curtain as well achieving zero dust discharge from the site. These curtain or shroud will be immensely effective in restricting disturbance from wind in affecting the dry dock operations, preventing waste dispersion, improving working conditions through provision of shade for the workers.</p> <p>(xi) Dust collectors shall be deployed in all areas where blasting (surface cleaning) and painting operations are to be carried out, supplemented by stacks for effective dispersion.</p> <p>(xii) The work space shall be maintained as per international standards for occupational health and safety with provision of fresh air respirators, blowers, and fans to prevent any accumulation and inhalation of undesirable levels of pollutants including VOCs.</p> <p>(xiii) The diesel generators (of capacity 250 KVA) shall be used as back-up power supply and shall be run only during power cuts. Low sulphur content fuel will be used for the generators and will be subjected to periodical maintenance and servicing. This will cut down on emission volume to a considerable extent. Also, the DG sets will be provided with mufflers for pollutant emission control.</p> <p>(xiv) 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>(xv) All measures shall be taken during the excavation activity as deemed necessary from the geotechnical investigation of the soil and ground water profile.</p> <p>(xvi) Construction activity related wastes (C & D waste) shall be disposed off as per Solid waste management rule, 2016.</p> <p>(xvii) All such solid and hazardous wastes including onboard wastes (while ships dock at the site) will be handled as per the Hazardous and other Waste (Management & Transboundary Movement) Rules, 2016.</p> <p>(xviii) Silt curtains shall be used to contain the spreading of suspended sediment during dredging within the dredging area.</p> <p>(xix) The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.</p> <p>(xx) Earth protection work shall be carried out to avoid erosion of soil from the shoreline/boundary line from the land area into the marine water body.</p> <p>(xxi) No ships docking at the proposed project site will discharge its on-board waste water untreated in to the estuary/ channel. All such wastewater load will be diverted to the proposed Contaminated Water Treatment Plant of the project site.</p> <p>(xxii) All effluent generated in the dry dock shall be drained in to the proposed on-site contaminated water treatment plant (CWTP) having capacity 500 KLD and equipped to treat the effluent into dischargeable standards. The oil-water separator</p>
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	<p>of the CWTP shall remove any unwanted oil & grease content from the effluent. The CWTP shall be equipped to treat such effluent including the bilge water and other ship discharges to meet the general standards for discharge of effluent in marine coastal areas before disposal in to the channel. Ballast water from ships shall be stored at the facility and will be used in refilling of same before release of ships back into water.</p> <p>(xxiii) Though the proposed project will not use TBT containing paints yet the ships docking for repair may have existing TBT paint layer. So blasting operations (surface cleaning) shall be extremely controlled and contained within the work site ensuring all accumulated solid waste and effluent are given standard treatments. The effluent/ dock flow shall be drained to the CWTP while the solid/ hazardous wastes shall be contained temporarily in site and timely disposed off through the CTSDf.</p> <p>(xxiv) Workers shall be strictly enforced to wear personal protective equipments like dust mask, ear muffs or ear plugs, whenever and wherever necessary/ required. Special visco-elastic gloves will be used by labour exposed to hazards from vibration.</p> <p>(xxv) In case of repair of any old vessels, excessive care shall be taken while handling Asbestos & Freon gas. Besides, fully enclosed covering should be provided for the temporary storage of asbestos materials at site before disposal to CTSDf.</p> <p>(xxvi) Safety training shall be given to all workers specific to their work area and every worker and employee will be engaged in fire hazard awareness training and mock drills which will be conducted regularly. All standard safety and occupational hazard measures shall be implemented and monitored by the concerned officials to prevent the occurrence of untoward incidents/ accidents.</p> <p>(xxvii) 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.</p>
9.3.4	<p>Extension and widening of the Jetty at Neil Island (Andaman and Nicobar Islands) by Andaman Lakshadweep Harbour Works – Environmental and CRZ Clearance – [1116/2015-IA-III]IA/AN/MIS/54013/2015</p> <p>The project authorities and their consultant (M/s Environmental System & Consultants & Ambiente Lab Solutions Pvt. Ltd.) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Terms of References (TORs) awarded during the 150th Meetings of the Expert Appraisal Committee (Infrastructure) held during 29th– 31st July, 2015 for preparation of EIA-EMP report. All the projects related to Ports and Harbour i.e. ≥5 million TPA of cargo handling capacity (excluding fishing harbours) are listed at 7(e) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.</p> <p>Andaman Lakshadweep Harbour Works have proposed for extension and widening of the Jetty at Neil Island (Andaman and Nicobar Islands). Existing RCC jetty of 40 x 10 m with approach Jetty of 280 m length (253x 4m + 27x6m) is capable of berthing smaller boats having draft of 2.5 m. In order to have higher transportation capacity at Neil, wider and longer jetty with proper space for turning circle to handle bigger boats of 3.5 m draft is required. Cost of project is Rs.</p>

35 Crore. The proposed project involves :

- (i) Solid approach (3.5 m long and 5.5 m wide) for connecting the extended portion of Jetty with land.
- (ii) Construction of RCC piled approach, 276 m long and 5.5 m wide, founded on two rows of piles to widen the existing piled approach of 280 m long.
- (iii) Widening of existing RCC jetty of 40.0 x 10 m by 5.5 m (thus, 40.0x 15.5 m).
- (iv) Extension of RCC jetty, 50.5 m long and 14.5 m wide, founded on RCC piles.
- (v) Capital dredging near berthing (from -2.5 m to -3.0 m) and at 120 m Turning Circle (from -4m to -5m), generating 38,000 cum dredge material, which will be disposed off in deep sea at about 1.5 km away from the dredging area.

It is reported that south Andaman Reserved Forest, Sir Hugh Rose Island (Chota Niel) and Wildlife Sanctuary (Turtle Nesting Ground) are located within 10 km distance. PP informed that the wildlife sanctuary is situated on the other side of the project location towards south east of Neil Island of project location at a distance of 7.7 km

The Committee suggested that methods for construction should be adopted in such a way that disturbance of the sea bed should be minimal. It was also suggested that while constructing jetty/piles, an independent monitoring should be carried out to check the impact and necessary measures shall be taken on priority basis if any adverse impact is observed. It was also suggested that in order to prevent sediment runoff into the sea, silt screen shall be provided near the any construction or where chances of debris can be washed. Besides, storage areas of sand and soil should be kept away from the sea. Wastewater and sewage should be allowed to dispose directly into sea after treatment. It should be treated and manage properly. The Committee also suggested that cargo storage area should be earmarked away from the sea and storage area should have pucca floor alongwith shed to control fugitive emissions.

Andaman and Nicobar Administration, Department of Environment & Forests vide letter no. APCCF/EPA/1/Vol XIV/272 dated 20th November, 2015 has recommended the proposed facilities to MoEF&CC. It is reported that the entire proposal /construction falls in the Inter Coastal Regulation Zone) CRZ- I and CRZ-IV areas.

The Committee deliberated upon the issues raised during the Public Hearing / Public Consultation meeting conducted by the Andaman Nicobar Pollution Control Committee on 20th February, 2016. The concerns were raised regarding depth of draft, construction of passenger shed, cargo shed, drinking water facility, sanitation facility, break water and repairing of old jetty etc. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.

After detailed deliberations, the Committee 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 environmental clearance is subject to obtaining prior clearance for Wildlife from

	<p>the Standing Committee of the National Board for Wildlife.</p> <p>(iii) As proposed, the Company shall not carry out any construction activity in the Eco-Sensitive area.</p> <p>(iv) 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.</p> <p>(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.</p> <p>(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.</p> <p>(vii) While constructing jetty/piles, an independent monitoring shall be carried out by Government Agency/Institute to check the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.</p> <p>(viii) In order to prevent sediment runoff into the sea, silt screen shall be provided near the any construction or where chances of debris can be washed. Besides, storage areas of sand and soil should be kept away from the sea.</p> <p>(ix) 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>(x) 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>(xi) 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. Marine ecology shall be monitored regularly also in terms of all micro, macro and mega floral and faunal components of marine biodiversity.</p> <p>(xii) Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.</p> <p>(xiii) 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.</p> <p>(xiv) Ships/barges shall not be allowed to release any oily bilge waste in the sea. Any effluents from the Jetty which have leachable characteristics shall be segregated and recycled/disposed as per SPCB guidelines.</p> <p>(xv) Municipal solid wastes and hazardous wastes shall be managed as per Municipal Solid Waste Rule, 2016 and Hazardous Waste Management Rule, 2016.</p>
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9.3.5

Upgradation of existing ship recycling yard at Alang Sosiya, Gujarat for undertaking safe and environmentally sound ship recycling operations by M/s Gujarat Maritime Board– Further consideration for Environmental and CRZ Clearance – [11-43/2014-IA-III]

The aforesaid proposal was considered by the Expert Appraisal Committee (Infrastructure-2) in its 8th meeting held during on 28th-29th July, 2016 and the Committee deferred the proposal. Now, PP has submitted following addl. Information:

i) List of all wastes to be generated alongwith quantity, type of storage and disposal method is as given below:

Waste	Sources	Expected Generation (t/yr*)	Category	Storage Facility	Disposal Option
Asbestos Containing Material (ACM)	Engine room, galley, cabin areas	~140	Hazardous	Thoroughly wetted, packed in leak proof labelled containers & stored in special rooms on plots till being sent TSDF	Disposed off in Hazardous Waste Landfill after solidification with cement.
Glass wool	Galley, Chilling systems	~3500	Non-Hazardous	Temporarily stored in designated rooms on plots till being sent to TSDF	Disposed off in Landfills for Non-Hazardous Wastes within TSDF
Poly-urethane foam (PUF) & Polystyrene (Thermocol)	Galley, Chilling systems	~200	Non-Hazardous	Stacked temporarily in designated areas on plots till being sent to TSDF	Incinerated in TSDF's incinerator
Sludge Residue and Contaminated Material	Fuel & oil tanks, ballast tanks, bilges	~600	Hazardous	Packed in covered drums or leak proof plastic bags which are stored in designated rooms on plots till being sent to TSDF	Incinerated in TSDF's incinerator
Plastics and Cables with Paint chips	Entire ship	~30	Hazardous as may contain PCBs	Packed in leak proof plastic bags which are stored in designated rooms on plots till being sent to TSDF	Unusable plastics & non-metallic paints incinerated. Metallic paints dumped in hazardous waste land-fill .

	Iron Scales	Entire ship	~1200	Non Hazardous	Packed in canvas bags & stored temporarily in designated covered enclosures	Sold off as melting scrap
	Broken glass	Living & working areas	~150	Non Hazardous	Packed in canvas bags & stored temporarily in designated enclosures till being sent to TSDF	Unsold material dumped in TSDF's land fill in manner such that broken glass does no come in contact with lining
	Rubber (non-contaminated)	Cabin areas	~100	Non Hazardous	Packed in canvas bags & stored temporarily in designated rooms or covered enclosures till being sent to TSDF	Dumped in hazardous waste land-fill
	Rubber (contaminated)	Cabin areas	~75	Hazardous	Packed in leak proof labelled bags & stored temporarily in designated rooms till being sent to TSDF	Dumped in hazardous waste land-fill
	Fibre glass	Cabin areas	~35	Non Hazardous	Packed in canvas bags & stored temporarily in designated covered enclosures on plots till being sent to TSDF	Unused material dumped in non-hazardous waste land-fill
	Rexene	Cabin areas	~50	Non Hazardous	Packed in canvas bags & stored temporarily in designated covered enclosures on plots till being sent to TSDF	Unused material incinerated in TSDF's incinerator
	Cardboard & packing material	Living & working areas	~40	Non Hazardous	Packed in canvas bags & stored temporarily in designated covered enclosures on plots till being sent to TSDF	Dumped in non-hazardous waste land-fill

Paint chips	Entire ship	~20	Hazardous	Packed in leak proof labelled bags & stored temporarily in designated rooms till being sent to TSDF	Dumped in hazardous waste land-fill
Waste	Sources	Expected Generation (t/yr*)	Category	Storage Facility	Disposal Option
Municipal solid wastes	Cabin areas	~1550	Non-Hazardous	Sorted into "Combustible" / "Non-Combustible" categories. Combustible wastes packed in labelled leak-proof containers. Non-combustible wastes packed in labelled canvas / jute bags. All bags stored temporarily in designated covered enclosures or rooms on plots temporarily till being sent to TSDF.	Combustible wastes incinerated. Non-combustible wastes dumped in TSDF's landfill for municipal solid wastes.
Cement Tiles	Cabin areas, engine room	~8800	Non-Hazardous	Stacked temporarily in designated enclosures on TSDF till they can be despatched to TSDF.	Used for repair of village roads. Unutilised tiles dumped in TSDF's landfill.
TOTAL		~16400			
Bilge water	Engine room, cargo pump rooms of tankers	~15700	Hazardous	5 – 30 m3 tank on each plot. 400 m3 tank at TSDF	Treated in TSDF's ETP. Recovered oil incinerated in TSDF's incinerator

ii) **Monitoring report of the existing work areas where asbestos is being removed, including meeting the general monitoring criteria:**

PP informed that two ship recycling plots, where asbestos removal was going on were selected. At each plot, monitoring was carried out at 2 locations: One location very near to the workers and 2nd location 4 ft away from the workers. It is reported that exposure of Asbestos fibres are within the permissible exposure limit of 1fibre/cc at Alang Shio Breaking yard.

iii) Following measures will be taken during asbestos handling in the open and within rooms.

- (i) Asbestos Containing Material (ACM) will be removed as part of "Ship Decontamination" prior to actual ship cutting.
- (ii) A dedicated trained Asbestos Removal Supervisor will oversee all ACM removal activities.
- (iii) Areas where ACM is present, will be identified & marked off as special areas for restricted entry to authorized workers only. Temporary air filtration and water sprinkling systems installed at these areas.
- (iv) The Supervisor will put up prominent slogans in large letters in prominent colours and symbols in such areas regarding potential hazards and spelling out proper work practices will also be displayed in the regulated areas.
- (v) Trained workers will put on special full body clothing, face masks & respirators before entering such special areas. Such workers will be certified to be medically fit.
- (vi) ACM will be thoroughly wetted before removal. Abrasive disc saws / compressed air will not be used to prevent generation of asbestos dust.
- (vii) As much as possible, large ACM portions shall be carefully removed without "breaking". ACM which is compounded in other material (e.g. flanges in pipes) will not be removed; such materials will be removed entirely without disturbing ACM.
- (viii) The removed ACM, shall be immediately packed in approved packaging system (double layered black polythene bag with thermal packing and labeling). Sub-assemblies which require further dismantling, shall be wrapped in leak-proof wrapping, while still wet.
- (ix) Asbestos work areas will be cleaned with heavy duty vacuum cleaners equipped with HEPA filters and the debris shall be packed in approved packaging system. The workers clothing shall also be vacuumed before they workers take them off.
- (x) The asbestos containing sub-assemblies, which require further working (and packed in leak-proof packing) will be carefully taken off the ship and taken inside special enclosures located on the ship-recycling plots.
- (xi) Atmospheric pressure inside these enclosures will be <outside pressure. These enclosures' air filtration systems will be provided with HEPA filters. There shall be arrangements for water sprinkling / spraying inside these enclosures also.
- (xii) The used protective clothing will be packed in labeled leak proof containers before being sent to the cleaners. The cleaners / washers are informed about need to take necessary protective measures. The Asbestos Removal Supervisor ensures that the procedures are strictly followed.
- (xiii) The removed ACM shall be carefully inventoried. The containers / bags of asbestos waste shall be temporarily stored in a secure room on the plots till they can be dispatched to Alang TSDF with proper documentation. Only, the TSDF's dedicated waste transportation vehicles shall be engaged in this task
- (xiv) At Alang TSDF, the containers of ACM waste shall be placed in a special masonry pit in the Hazardous Waste Land-fill. Each layer of ACM waste containers will be cemented over to ensure complete immobilization of the asbestos / ACM.

- iv) **Quantity of bilge and ballast water generation from ship.** Plan for transportation, treatment and disposal of bilge and ballast waters are as given below:

The upgraded yard will attract large number of tankers (which are likely to contain more bilge water), annual bilge water generation is expected to increase to ~15700 m³.

- ❖ Bilge water pumped out during “Ship Decontamination” prior to breaking.
 - ❖ Bilge water stored temporarily on plots in 5 – 30 m³ capacity tanks.
 - ❖ Bilge water transported to TSDF by road tankers.
 - ❖ Bilge water to be stored at TSDF in 400 m³ capacity tank.
 - ❖ TSDF has ETP of 30 m³/day capacity. Another module of similar size to be set up under expansion programme.
 - ❖ In ETP oily water treated by physico-chemical and biological means.
 - ❖ Recovered oil is incinerated in TSDF's incinerator. ETP sludge dried and dumped in TSDF's land-fill.
- Treated water used for dust suppression in landfills and roads

- v) **Action plan for conducting employees training program for likely to be exposed to asbestos and PCB removal work during the ship breaking:**

- ❖ GMB has developed special Environment, health and safety modules in support of GEPIL, National institute of Occupation health (NIOH) and other EHS experts in the field. GMB safety institute regularly conducts training programme on various subjects including safe handling of ACM & PCB.
- ❖ GMB has its own training centre located in Alang-Sosiya Ship Recycling Yard, where workers and other concerned personnel are imparted necessary training.
- ❖ GMB has developed detailed PCB disposal Method Manual, which is available at yard.

- vi) **Management plan to improve the marine biodiversity at the project site as given below:**

- ❖ Project area comprises Inter-tidal zone & area immediately landward of HTL.
- ❖ As part of upgradation programme, all landward part of all plots to have impervious pavement sloped towards settling pits provided with oil & grease trap to prevent flow of contaminated water to sea.
- ❖ Ballast water exchange mandatory for Beaching Permission to prevent introduction of invasive species with ballast water.
- ❖ Bilge water, which may contain oil, pumped out and sent to shore based ETP.
- ❖ Paint chips, a major cause of sediment pollution, collected to the maximum possible extent, bagged and sent to TSDF for proper disposal.
- ❖ To prevent pollution of sea by sewage, all ship recycling plots have sanitary toilets. Sanitary toilet blocks have been set up at several places in yard for use by other workers and visitors. Workers' barracks to have sewage treatment plant.
- ❖ With reduction of water pollution, project area to be recolonised by larval forms of plants & animals already present in sea water.
- ❖ Rocky outcrops present in inter-tidal zone to be preserved to the extent possible to

	<p>provide habitat for crustaceans, molluscs & sessile organisms.</p> <ul style="list-style-type: none"> ❖ In fact, the Alang sea water is highly turbid that too is influenced with strong current and high tidal flux which does not support good amount of primary productivity. However, care is being taken to prevent any waste entering into to marine environment would a great help to the existing status though least productivity but will be maintained as per base line parameters. <p>vii) Layout plan indicating truck parking facility for easy accessibility of vehicles for transporting scrap and other materials and to relieve the traffic congestion around the yards. PP informed the following:</p> <ul style="list-style-type: none"> ❖ Alang-Sosiya Ship Recycling Yard does not required a dedicated Vehicle Parking Area as all vehicles are parked only inside the respective plots. ❖ Approach road and the service road running the length of the yard is 4-laned, rated for heavy goods vehicles. ❖ Trucks will directly enter the concerned plots to load / unload material and after completion of operations will leave the yard. <p>The Committee further suggested to construct pucca truck parking area to control dust emission.</p> <p>viii) Ground water analysis reports of the peizometer wells around the captive landfill site have been submitted.</p> <p>ix) Creek protection plan: PP informed the following:</p> <ul style="list-style-type: none"> ❖ 2 creeks cross Alang-Sosiya Ship Recycling Yard before discharging in the sea. <ul style="list-style-type: none"> ➤ Pasvivali Creek (~12 m wide) – close to the northern limit of ship recycling yard ➤ Manar Creek (~18 m wide) – in the northern half of the yard but south of Pasvivali creek. ❖ Average discharge in these creek during full monsoon season ~300 m³/s and ~500 m³/s respectively. ❖ The Alang coast as per Shore Line Changes maps prepared by NCSCM, Chennai for MOEFCC shows that this is stable coast hence as such it is not desirable to play with these creeks as the same were maintained naturally. ❖ Nevertheless following preventive measures will be taken for protection of the creeks: <ul style="list-style-type: none"> ➤ A distance of at least 25 m will be maintained between creek bank and ship recycling plot boundary ➤ A 7.5 m wide green belt will be developed on the land-ward side of the creeks' High Tide Line (HTL). 2 rows of <i>Pandanus sp.</i> {Screwpine (E), Kevda (H)} will be planted in this green belt extending for ~1.5 km from creek mouth. This indigenous species is already growing in the area. <p>x) Pollution load (in respect of air pollution, water pollution and solid waste) from the existing and proposed DG sets, vehicle repair centre/shop, Dhaba/restaurant, sanitation facilities etc shall be assessed and incorporated in the EIA report. PP has submitted following details:</p> <p style="text-align: center;"><u>TOTAL POLLUTION LOADS</u></p>
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	<p>❖ AIR POLLUTANTS</p> <ul style="list-style-type: none"> ➤ NO_x from LPG use in ship cutting : 290.77 kg/day ➤ NO_x from Incinerators : 136.86 kg/day (<i>both incinerators operating</i>) ➤ SO₂ from Incinerators : 73.61 kg/day (<i>both incinerators operating</i>) ➤ NO_x from material transport : 21.78 kg/day ➤ NO_x from DG sets : 65 kg/hr (<i>130 x 125 KVA DG sets running</i>) ➤ NO_x from cooking in eateries : 4.65 kg/day <p>❖ WASTE WATER</p> <ul style="list-style-type: none"> ➤ Ballast water : Few m³ to several thousand m³ per ship. ➤ Bilge water : ~15700 m³/year (<i>To be treated in ETP</i>) ➤ Sewage from plots : ~200 m³/day (<i>Disposed through septic tanks</i>) ➤ Sewage from public toilet blocks : ~540 m³/day (<i>Disposed through septic tanks</i>) ➤ Sewage from workers' barracks : ~3000 m³/day (<i>To be treated in STP</i>) ➤ Effluents from eateries : ~80 m³/day (<i>settled in tanks and water is used in plantation, residual will be sent to MSWlandfill</i>) ➤ Vehicle repair workshops : ~50 m³/day (<i>Gravimetric separation and sent to ETP</i>) <p>❖ SOLID WASTE</p> <ul style="list-style-type: none"> Kitchen waste : ~0.5 MT per day from dhabas (<i>Disposed off to Municipal landfill site</i>) Waste from sweeping : ~45 MT per month (<i>Disposed off to Municipal landfill site</i>) <p>xi) Location of dump site for capital and maintenance dredge materials to be furnished. Elaborate the scientific methods for dumping. PP has submitted the following:</p> <ul style="list-style-type: none"> ❖ 1 x 10⁶ m³ dredge spoils to be generated on account of capital dredging for each dry-dock. Dredge spoils to be mostly rocks. ❖ Rocks generated from dredging will be used for building road from existing southern end of SRY to Dry-dock 2 site, concrete paving of existing & proposed ship recycling plots. ❖ 0.1 x 10⁶ m³ dredge spoils to be generated on account of maintenance dredging for each dry-dock. Dredge spoils to be mostly mud & fine sand. ❖ Trailer-suction dredgers will be used for maintenance dredging. Dredge spoils to be directly pumped into hopper barges. ❖ When full barges will move to identified dredge spoil dumping area located beyond -20 m contour. Dredge spoils will be simply pumped overboard. <p>xii) Risk assessment for hazardous chemical storage facility. PP informed that :</p> <ul style="list-style-type: none"> ❖ LPG is only hazardous chemical stored in quantities exceeding threshold quantities on a regular basis. ❖ Other hazardous chemicals which are also handled at the ship-recycling yard are paint chips, asbestos & asbestos containing material, oil sludge, wastes containing Poly-Chlorinated Bi-phenyls etc., but the quantities involved are small and the wastes are stored only temporarily on the ship-recycling plots in dedicated enclosures / rooms and that too after being properly packed in labeled leak-proof containers, before being dispatched to the dedicated TSDF for proper disposal.
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- ❖ LPG is a “Flammable substance” , which “Ignites at Normal Temperature” and is “Explosive under Certain Conditions”.
- ❖ At the plots, LPG is stored under pressure in 19 kg cylinders. Each plot usually stores ~3 days LPG requirements (Max. 3.43 t). Each plot has its own LPG storage godown which is licensed by the Department of Explosives.

xiii) Action plan for existing and proposed dock to achieve zero waste spill is as given below:

- ❖ After dry-docking of ships, heavy duty canvas sheets will be placed on the dock floor. Paint on the ships’ external hulls will be removed to the maximum extent possible. The falling paint chips will and other solid debris will fall on the canvas sheets. The debris will be collected, sorted and packed for proper disposal.
- ❖ After decontamination of the ships, the floors of the dock will be cleaned. Initially fallen debris will be picked up manually or semi-mechanically. The floors will be washed by water jets. The contaminated water will flow into the drains at the sides and collect in the sumps. The sumps will be emptied.
- ❖ After ensuring that the dry dock has been cleared of all solid debris and spilled liquids, dock will be re-flooded for un-docking the decontaminated ship.

In fact, a dry-dock itself is a containment. There is no chance of release of hazardous waste to marine environment as it is mandatory for the dry dock to be thoroughly cleaned with mechanized vacuum system before flooding. In fact in Western-Europe and U.S.A, where the environmental legislations are very stringent, it is mandatory for naval vessels and nuclear powered ships & submarines to be recycled only inside dry docks as such ships contain large quantities of hazardous materials / chemicals.

xiv) **Regarding revalidation of the shoreline study, PP informed that :**

- ❖ **The Report “Coastal Zones of India” prepared by Space Applications Centre, ISRO Ahmedabad on behalf of Ministry of Environment and Forests, Govt. of India in 2012 has classified the stretch of coastline where Alang is located as “Stable” on basis of shoreline changes**
- ❖ **National Centre for Sustainable Coastal Management (NCSCM), Chennai, an Institute under Ministry of Environment, Forest and Climate Change, Government of India is mapping the coastline of India. These maps are updated at regular intervals. NCSCM’s studies have indicated that the coastline of Alang area is stable. The recent CRZ maps prepared by NCSCM for Alang during July 2015 also matches with their shoreline maps prepared in 2012-13.**
- ❖ **Probable impacts of the construction of dry docks at Alang on the coastline was studied through hydro-dynamic modeling by M/s Indomer Coastal Hydraulics Ltd., Chennai with bathymetry data and water current measurements taken during December, 2015.**

xv) **The hydro-dynamic model study on currents, near-shore sediment transport**

	<p>modelling studies, shoreline studies show that there are no visible impacts on the environment and the stabilization on the shoreline.</p> <p>Since marine water quality of the project area is poor, the Committee suggested them that proposed project should be planned/designed to improve the overall marine water quality of the sea atleast for Class SW-IV water (for harbour water) parameters. It was also suggested that while breaking the ship, boom (circular pneumatic type) should be placed around the ship to control the spillage. Proper storm water drainage system alongwith treatment facility should be provided along the project site.</p> <p>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 and CRZ clearance:</p> <ol style="list-style-type: none"> GMB shall implement the plan for upgradation of the existing ship recycling units in such a way that will help to improve the overall marine water quality of the sea atleast for Class SW-IV water (for harbour water) parameters i.e. pH range 6.5-9.0; Dissolved Oxygen 3.0 mg/l or 40 percent saturation value, which ever is higher; Colour and Odour: no noticeable colour or offensive odour; Floating Matters Oil, grease and scum (including Petroleum products) 10 mg/l; Fecal Coliform 500/100 ml (PAN) Not exceeding 1000/100 ml in 20 percent of samples in the year and in 3 consecutive samples in monsoon months; Biochemical Oxygen Demand (3 days at 27°C) 5 mg/l; Biochemical Oxygen Demand (BOD) (3 days at 27°C) 3 mg/l restricted for bathing. All the recommendations and conditions specified by Gujarat Coastal Zone Management Authority vide letter no. ENV-10-2016-99-E (T Cell) dated 8th June, 2016 shall be complied with. All details on waste management and handling as given in letter no. GMB/ENV/91(C)/JICA/5404 dated 19-7-2016 as submitted before the committee should also be provided to the State Pollution Control Board along with the application for consent and authorisation to enable them to verify compliance on site before the consents to operate , authorisation or any other permission to operate is given. An action plan shall be formulated, documented and implemented for the existing and proposed dock to ensure zero waste spill. 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. While breaking the ship, boom (circular pneumatic type) should be placed around the ship to control the spillage. Collection vehicles used for the collection and transportation of solid/liquid waste should be adequately designed to handle specific type of wastes and shall have protection against the leaking or spilling of solid waste or being blown or hurled from such vehicles. Safety and health requirements relating to occupational exposure to Asbestos, while ship breaking shall be in compliance with IS11456-1986 and subsequent amendments. Facility must ensure that workers are not exposed to air-borne asbestos concentrations in excess of prescribed Permissible Exposure Limits (PELs).
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	<p><i>viii)</i> There should be a safe working and operating procedures ensuring safe accessibility to all the areas and compartments of the ship and safe conditions for hot work.</p> <p><i>ix)</i> Hazardous waste inventory that identifies, quantifies and locates the type of waste on board should be carried out before the ship comes to the shore. Chemical safety data sheets should be made available for each hazardous substance that is identified. As per the High Power Committee, maintaining the complete inventory of hazardous wastes on board is a mandatory task for any ship owner. This inventory shall be submitted by the State Maritime Board to the SPCB to ensure safe disposal of hazardous waste. Further permissions for ship anchoring and beaching will be based on hazardous waste inventory. Removing and cleaning of liquids, fuels and oils: Before start of ship dismantling, all the liquid residues should be removed and cleaned from the ship. This process may continue during the entire ship dismantling process.</p> <p><i>x)</i> The hazardous wastes identified by the inventory data be properly removed and disposed. Dismantling plan should be drawn before start of the work. This plan forms the basis for sectional breaking of the ship Proper storage, breaking and disposal of waste: Waste obtained during dismantling should be sorted and segregated based on the type of waste and disposal option. Specific wastes from the ship breaking yard are as follows: / Asbestos / Polychlorinated biphenyls (PCBs) / Bilge and ballast waters / Oils and fuels / Metal cutting / Paints Removal and Disposal of Miscellaneous Ship Machinery</p> <p><i>xi)</i> The Company should perform air surveillance activities in work areas where asbestos is being removed, including meeting the general monitoring criteria, conducting initial exposure assessments, and performing daily and periodic monitoring. The facility must keep an accurate record of all measurements taken to monitor the workers' exposure to asbestos. Facility is required to conduct medical surveillance for all workers who, for a combined total of 30 or more days per year, are performing asbestos removal work or are exposed at or above the permissible exposure limit. This includes medical examination and consultation prior to beginning work, at least annually, and upon termination of employment. The facility must establish and maintain an accurate record for each worker subject to medical surveillance. These records must be maintained for the duration of the worker's employment, plus an additional 30 years.</p> <p><i>xii)</i> Company should provide, at no cost, a training program for employees likely to be exposed to asbestos removal work during the ship breaking.</p> <p><i>xiii)</i> The removal of paints and coatings, regardless of the process used, generates wastes that must be managed and disposed. The Company should implement procedures to ensure that all wastes are contained and stored in a manner that will prevent their release into the environment.</p> <p><i>xiv)</i> To ensure better safety and security of plots, open spaces (buffers) can be created for giving emergency access/ parking to/for fire tenders, installing water lines for emergency services, access to beach, anchoring rescue boats and dinghies.</p> <p><i>xv)</i> Truck parking facility should be provided for easy accessibility of vehicles for transporting scrap and other materials and to relieve the traffic congestion around the yards. The parking facility should have basic infrastructure like potable water, sanitation, resting, shops, eating joints, vehicle repair shops, fuelling stations, etc.,</p>
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	<p>for the drivers. It should also have accommodation for transporter companies/agents. To accommodate more number of vehicles the trucks can be parked angularly.</p> <p>xvi) Facility must ensure that workers are protected from exposure to airborne PCB concentrations. As per OSHA (Occupational Safety and Health Administration) regulations, governing exposure to PCBs in the workplace include two time-weighted averages for chlorodiphenyl.</p> <p>xvii) All encroachments shall be removed and suitably rehabilitated as proposed. The project proponents would provide for waste management from eateries, dhabas and other sources within the area of jurisdiction/ influence of the project.</p> <p>xviii) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.</p> <p>xix) Automatic /online monitoring system (24 x 7 monitoring devices) for air pollution as well as water pollution in respect of flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.</p>
9.3.6	<p>Group Housing “swami Bhumanandvihar” at village Jwalapur and Ranipur, Haridwar, Uttarakhand by NDR Constructions Pvt. Ltd. – Further consideration for Environmental Clearance – [F.No.21-3/2016-IA-III]</p> <p>The aforesaid proposal was considered by the Expert Appraisal Committee (Infrastructure-2) in its 8th meeting held during on 28th-29th July, 2016 and the Committee sought following additional information:</p> <ul style="list-style-type: none"> (i) Details of no. of floor alongwith builtup area to be constructed in each block to be furnished. (ii) Details of the development plan of the area in which the project is to be constructed is to be submitted along with information of availability of water , sewage lines, storm water drain and power (iii) Layout of parking plan indicating entry and exit points of vehicular movement as well as traffic management plan. Highlight the fire tender pathway. (iv) Details of landscaping along with plantation plan to be submitted (v) Revised water balance chart as per CPHEEO manual to be submitted. (vi) Details of source of water supply alongwith permission to be submitted. (vii) Excess treated sewage disposal plan/scheme to be submitted. (viii) Treatment scheme for sewage and its recycling mode. (ix) Details of rain water harvesting system to be furnished. Clarity on recharge pits, storage systems for rain water and use of appropriate filtration system for collected rain water to be detailed. (x) Calculation on sizing of solar water heating systems to be furnished. (xi) Details on solar lighting for common areas and landscaping to be provided (xii) Solid waste management plan alongwith area earmarked for solid waste management scheme. (xiii) Details energy conservation measures to be taken. taken (all points mentioned in the proposal such as orientation to support reduced heat gain, use of ASHRAE 90.1, use of ECBC compliant envelope measures to be supported through drawings and details in the proposal

PP has submitted the addl. information. PP informed that there are 8 nos. of blocks/towers in the group housing project. Tower-wise floor details are as provided below:

- 1.) Tower A = 9 Floors (B+S+G+9)
- 2.) Tower B = 9 Floors (B+S+G+9)
- 3.) Tower C1 = 9 Floors (B+S+G+9)
- 4.) Tower C2 = 9 Floors (B+S+G+9)
- 5.) Tower D = Three Floors (G + 3)
- 6.) EWS = Three Floors (G + 3)
- 7.) Institutional = Three Floors (S+3)
- 8.) Commercial/Convenient Shopping = Two Floors (G+2)

Total built-up area of the project is 46,221.44 sqm. **PP informed that the location of project site has been earmarked on the City Development Plans of the area which shows the current availability of storm water drain network, water supply line and sewage network.** The construction of proposed project will complete in approx.. 3-4 years and it is expected to be covered within Municipal limits by the time project will be operationalized. The parking plan indicating entry, exit, vehicular movement and fire tender pathway has been submitted. The total water requirement from Municipal water supply will be approx. 388.5 m³/day. Out of which, fresh water requirement will be 231 KLD for domestic purpose and remaining water requirement will be met from treated/recycled water, which will be used for flushing, horticulture and DG set cooling. **Sewage will be treated in the STP** based on FAB technology (with tertiary treatment) for treatment of waste water generated from the project. The treated effluent from STP will be re-used for flushing, horticulture & DG cooling. Dual plumbing plan depicting separate fresh water supply line, waste water/sewage line and flushing/treated effluent line has been submitted. It is proposed to provide 18 rain water harvesting pits for artificial ground water recharge. Total 115 solar panels of size 2 x 1 m is proposed for solar water heating system. Approx. 300 sqm of area will be provided for solid waste management within the premises which will include area for segregation, composting (@0.1 sqm/person) and Organic Waste Converter. The inert waste from group housing project will be sent to dumping site at Jwalapur. For conservation of energy, ECBC norms will be followed. The Committee suggested them to provide solar based electric power to each flat atleast for two bulbs/light and one fan.

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

A. Construction Phase

- (i) The Projects Proponents shall obtain all necessary clearance / permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- (ii) Construction site should be adequately barricaded before the construction begins.
- (iii) The building envelope for all air conditioned buildings / spaces shall be complied with the ECBC. Roofs and opaque walls should comply with the maximum assembly U

	<p>factor or the minimum insulation R-value as well as lighting systems and equipment shall comply with the provisions of Energy conservation building Code.</p> <p>(iv) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.</p> <p>(v) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.</p> <p>(vi) Sewage shall be treated in the STP based on FAB technology (with tertiary treatment). The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling.</p> <p>(vii) As proposed, 18 rain water harvesting pits for artificial ground water recharge shall be installed as per CGWB guidelines.</p> <p>(viii) Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, 300 sqm of area shall be provided for solid waste management within the premises which will include area for segregation, composting (@0.1 sqm/person). The inert waste from group housing project will be sent to dumping site at Jwalapur.</p> <p>(ix) Solar based electric power shall be provided to each flat for atleast two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.</p> <p>(x) A First Aid Room will be provided in the project both during construction and operations of the project.</p> <p>(xi) All the top soil excavated during construction activities should be stored for use in horticulture/ landscape development within the project site.</p> <p>(xii) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.</p> <p>(xiii) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environmental (Protection) prescribed for air and noise emission standards.</p> <p>(xiv) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.</p> <p>(xv) As proposed, no ground water shall be used during construction / operation phase of the project.</p> <p>(xvi) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of fire fighting equipment etc as per National Building Code including protection measures from lightening etc.</p> <p>B. Operation Phase</p> <p>(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG sets may be decided with in consultation with State Pollution Control Board.</p> <p>(ii) Fresh water requirement from Municipal water supply shall not exceed 231 KLD.</p> <p>(iii) The quantity of fresh water usage, water recycling and rainwater harvesting shall be</p>
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	<p>measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.</p> <ul style="list-style-type: none"> (iv) The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP. (v) No sewage or untreated effluent water would be discharged through drains or otherwise into the river Ganga or its Tributaries. (vi) Solid waste management shall be collected, treated disposed in accordance with the Municipal Solid Waste (Management & Handling) Rules, 2016. (vii) Rain water harvesting structure 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 mater, oil and grease. The borewell for rainwater recharging should be kept at least 5 mts. above the highest ground water table. (viii) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. (ix) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. (x) The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.
9.3.7	<p>Establish a Marina “AHOY Marina” to facilitate small Boat/ Yacht/Craft parking and maintenance in Mormugao Port Trust Water Spread Area at Village Nauxim, District North Goa, Goa by M/s Kargwal Constructions Private Limited – Further consideration for Finalization of ToR – [F.No.10-38/2016-IA-III]</p> <p>The aforesaid proposal was considered by the Expert Appraisal Committee (Infrastructure-2) in its 6th meeting held during 23^d– 24th May, 2016 and the Committee sought following additional information:-</p> <ul style="list-style-type: none"> i) Alternative Site Analysis ii) Environmental advantages of the proposed site. iii) CRZ classification of the area. iv) Consent of Mormugao Port Trust for the proposed project. <p>PP has submitted the above mentioned information. PP informed that 10 sites were identified and the environmental weightage of each site have been evaluated by spatial survey and ground trothing exercise by MTP. The project location at Nauxim has been found suitable amongst the other proposed sites. PP submitted the copy of demarcation map of HTL prepared by Institute of Remote Sensing, Anna University for the proposed construction of marine. It is reported that site falls in CRZ I as intertidal. A copy of lease deed was already signed on 12th October, 2010 for establishing the Marina with MPT.</p>

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. Various marina facilities with capacities for proposed project.
- vi. Layout plan of proposed marina facilities.
- vii. Study the impact of dredging on the shore line.
- viii. Action plan for disposal of dredged soil and rocks.
- ix. Dispersion modelling for the dumping of the dredge materials shall be carried out. The study report shall be incorporated.
- x. Details of air pollution control measures to be taken as well as cost to be incurred.
- xi. Total water consumption and its source. Wastewater management plan.
- xii. Details of Environmental Monitoring Plan.
- xiii. A detailed marine biodiversity impact assessment report and management plan shall be drawn up through the NIOS or any other Institute of repute on marine ecology and biodiversity. The report shall study the intertidal biotopes, corals and coral communities, sea grasses and sea weeds, subtidal habitats, fishes, other marine fauna including turtles, birds and other marine animals including mammals as also the productivity . Data collection and impact assessment shall be as per standard survey methods.
- xiv. Disaster Management Plan for the above terminal.
- xv. Layout plan of existing and proposed Greenbelt.
- xvi. Status of court case pending against the project.
- xvii. A tabular chart with index for point wise compliance of above TORs.
- xviii. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

It was recommended that 'TORs' along with Public Hearing prescribed by the Expert Appraisal Committee (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.

9.3.8	<p>Erection & Commissioning of Conveying System at GMB-Pindara Jetty, Village: Virpur, Tal: Kalyanpur, Gujarat by M/s Bombay Minerals Ltd - Further consideration for Finalization of ToR – [F.No.10-33/2016-IA-III]</p> <p>M/s Bombay Minerals Ltd has submitted revised proposal for restoration and expansion of Gujarat Maritime Board (GMB) Pindara Jetty and allied facilities of handling of Mineral Cargo. Cargo handling capacity will be 1.5 Million TPA through conveyor belt. Proposal attracts the Forest (Conservation) Act, 1980 and Wildlife (Protection) Act, 1972. Erection of conveyor belt will pass through ecological sensitive area. Proposed project activity fall under Marine Sanctuary (0.8 ha.) and Ecological Sensitive Area (3.68 ha.). Cost of the project is Rs. 8.0 crore. Project requires total area of 4.49 ha of which includes Marine Sanctuary area of 0.81 ha – Pindara Jetty area & its Eco-Sensitive Zone area of 3.68 ha.</p> <p>After deliberation, the Committee sought following additional information:</p> <ul style="list-style-type: none"> i. Layout map for the proposed establishment. Eco-sensitive areas should also be indicated. ii. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale. iii. CRZ classification of the project area. iv. Environmental advantages of the proposed site. <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>
9.3.9	<p>Installation of Two Incinerators and Capacity Enhancement of Existing Landfill Facility at existing Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF) at plot number D-43, Dahej Industrial Estate, Taluka Vagra, Dist. Bharuch M/s Bharuch Enviro Infrastructure Limited – Further consideration for Finalization of ToR – [F.No.10-43/2016-IA-III]</p> <p>The aforesaid proposal was considered by the Expert Appraisal Committee (Infrastructure-2) in its 7th meeting held during 29th June, 2016 and the Committee sought following additional information:</p> <ul style="list-style-type: none"> (i) PP has to submit an adequacy report prepared by IIT Delhi for the existing landfill structure to take the additional load vis – a-vis height of landfill. <p>PP has submitted the copy of stability analysis report for increasing the height of hazardous waste landfill at Dahej Gujarat by Department of Civil Engineering, Indian Institute of Technology, Delhi. The stability analysis reveals that the final cover system of the landfill having height of 31.8m is stable with proposed side slopes of 1V:4H and berms of 3m width at every 8m height interval. The stability analysis also reveals that the base liner system of the landfill is stable for landfill height of 31.8m.</p>

	<p>After detailed deliberations on the proposal, the Committee <i>recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity</i> and the following TOR in addition to <i>Standard ToR</i> for preparation of EIA-EMP report:</p> <ol style="list-style-type: none"> Importance and benefits of the project. 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. Details of various waste management units with capacities for the existing and proposed project. List of waste to be handled and their source along with mode of transportation. Other chemicals and materials required with quantities and storage capacities. Details of temporary storage facility for storage of hazardous waste at project site. Details of pre-treatment facility of hazardous waste at TSDF. Details of air Emission, effluents, hazardous/solid waste generation and their management. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract) Ground water analysis report of Piezometer wells around the landfill site. Process description along with major equipments and machineries, process flow sheet (quantative) from waste material to disposal to be provided Hazard identification and to perform a robust risk assessment and draw up a management plan Layout maps of proposed Solid Waste Management Facilities indicating storage area, plant area, greenbelt area, utilities etc. Action plan to control and monitoring of dioxin and furon from the incineration process. Management and disposal of incinerated ash. Details of effluent treatment and recycling process. Detailed Environmental Monitoring Plan as well as Post Closure Monitoring Plan. 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. A tabular chart with index for point wise compliance of above TORs. <p>It was recommended that 'TORs' along with Public Hearing prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.</p>
9.3.10	Expansion of Marine Terminal of Essar at Vadinar in Taluka Khambalia of District

Jamnagar (Gujarat) by M/s Vadinar Oil Terminal Limited – Further consideration for Environmental and CRZ Clearance – [F.No.10-121/2008-IA-III]

The above project proposal was recommended by EAC (Infrastructure) in its meeting held on 18th -20th November, 2015. The Committee noted that the State Level Eco-Sensitive Zone Monitoring Committee (SESZMC), Gujarat vide letter no Env-10-2015-254-E dated 8th June, 2016 has recommended the project proposal. State Level Eco-Sensitive Zone Monitoring Committee (SESZMC), Gujarat vide letter no ENV-10-2015-254-E dated 8th June, 2016 has recommended the said project proposal to MoEF&CC. The Committee also deliberated on the comments of CRZ Div.

PP clarifies that the 130 m length of trestle is falling in the eco-sensitive area of the marine park and the same are listed in the permitted activities of CRZ Notification, 2011. Further, PP has submitted following statement in a tabular form indicating categorisation of the proposed activity as per CRZ Notification:

Classification & Definition	Permitted /Regulated Activity	Notification reference	Remarks
CRZ – 1 A : Area in between Low tide line (LTL) & High tide line (LTL) where ecologically sensitive areas such as Corals, Mangroves, Mudflats, National Parks/Sanctuaries are located	Pipelines, Conveying systems including transmission lines are permitted. Construction of Trans harbour sea link without affecting the tidal flow of water.	CRZ Notification'2011. Paragraph No.8, Point No.I (i) b & e, Page No.45.	For carrying pipelines, trestle is proposed beyond LTL i.e. more than 10m water depth and that area would be considered as CRZ-IV A. <u>Even if that area is considered as CRZ-1 A ,the pipelines are permitted as per CRZ Notification.</u>
CRZ-IV A: Area from LTL to 12 Nautical miles in the seaward side	All water front related activities are permitted except discharge of Untreated effluent/ Sewage, Ballast water, Ship washes.	CRZ Notification'2011. Paragraph No.8, Point No.IV (a), Page No.48	Trestle carrying the pipelines which is a water front related activity is a permitted activity.
Eco-sensitive Zone (ESZ) of Marine National Park & Sanctuary (MNP &MS) : 200m buffer zone from the MNP&MS boundary towards seaward side.	Erection of conveying systems and pipelines (Oil and sea water intake, treated effluent) on trestle or sub-surface	MoEF Notification (S.O.No.2561 E) on ESZ of MNP & MS issued on 22-08-2013. • Paragraph No.3, Page No.33 • Annexure-D, S.no.32, Page No.54	Permitted activity - ESZ declared under EP Act with inputs/ suggestions/ comments of the wildlife wing of MoEF taken prior to declaration. The notification released after public consultation as well as recommendation of an expert committee.

	<p>Laying pipelines through National parks & Sanctuaries as per EIA Notification'2006</p> <p>Oil & Natural gas pipelines (Petroleum Products, Crude) passing through National parks & sanctuaries including Coral reefs, ecologically sensitive areas – are permitted & considered as Category A projects</p> <p>EIA Notification '2006</p> <ul style="list-style-type: none"> Item No.6 (a) , Page 15 <p>Permitted activity.</p>
	<p>After detailed deliberation, the Committee noted that the proposed trestle falling in the eco-sensitive is a permitted activity as per CRZ notification, 2011. The Committee recommended the proposal for EC and CRZ clearance alongwith following additional specific condition:</p> <p>i. PP shall obtain prior clearance for construction of the trestle from the Standing Committee of the National Board for Wildlife.</p>
9.3.11	<p>Expansion of existing jetty and intake and outfall pipeline for sea water intake for proposed Thermal Power Plant at village Akri Moti, Ta: Abdasa, District Kuchchh (Gujarat) by M/s Sanghi Industries Ltd – Reconsideration for Environmental and CRZ Clearance – [F.No.1196/2012-IA-III]</p> <p>Proposal was considered by the EAC (Infrastructure) in its meeting held on 28th February-1st March, 2014 and the Committee recommended the proposal for grant of environmental clearance after receipt of the Stage – I Forest Clearance. Further, proposal was referred to the EAC (Infra-2) with the comments of CRZ Division. The Committee noted that existing public hearing was conducted for 2 x 600 MW (Phase-I) coal based Thermal Power Project on 27.02.2009. It is not mentioned in the public hearing proceedings that expansion of Jetty is the part of thermal power plant project. Therefore, the Committee recommended that PP should conducted public hearing for proposed expansion of jetty project. It was also suggested to incorporate the following observations of CRZ Div. in the EIA report:</p> <p>(i) The Said Project site that falls in Akri Moti which is located along Kharo creek is a Mudflat region that is categorized as CRZ-I(A) as per CRZ notification. The EIA report at page 3-4 indicates that marshy land (mudflat) which is 38% of the land cover. There is a need to assess the biological activity in these mudflats which are highly bio-diverse. The EIA report is silent on the soil quality of the area and is based on only literature review that is indicated in item 1.5.7.at page 1.13 of the EIA report.</p> <p>(ii) The area has good vegetation of mangroves (page 1.12 of EIA report). The RO Office, Bhopal has given diversion of mangrove forest land for the above activity. However, the CRZ Notification, 2011 does not provide for reclamation / development activities other than those permissible in the notification in the mangrove/mudflat region which are classified as CRZ – I(A) (para 8(I), CRZ – I item (i) (a) to (f)).</p> <p>(iii) Further, as per the EIA report page 1-12 there are sand dunes in the region which also needs to be taken into consideration as they are classified as CRZ-I(A).</p> <p>(iv) The EIA report, HTL demarcation have been prepared in 2010-2011. It may not be</p>

	<p>appropriate to rely upon such old data (more than 5 years) for deciding upon developmental activities in the CRZ area as the coastal environment is highly dynamic and biologically rich.</p> <p>(v) Large scale dredging and reclamation is involved it is not clear if reclamation is being carried out outside CRZ are for the thermal power plant. The CRZ map indicating the location of thermal power plant is not available in the record. Reclamation is permissible in the CRZ area only for port related activities (pl. refer para 3 (iv)).</p> <p>(vi) The HTL demarcation carried out by NCSCM should be relied upon as MoEF&CC has undertaken the CRZ demarcation through NCSCM.</p> <p>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>
9.3.12	<p>Proposed Greenfield facility for import of 5 MMTA LNG Floating Storage Unit (FSU) and handling facility within Krishnapatnam Port Ltd., Nellore (Andhra Pradesh) by M/s LNG Bharat Pvt. Ltd. – Reconsideration for Environmental and CRZ Clearance – [F.No.1127/2013-IA-III]</p> <p>Proposal was considered by EAC (Infra-2) in its meeting held on 29th June, 2016 and the Committee recommended the proposal for EC & CRZ clearance. Further, proposal was referred to the EAC (Infra-2) with the comments of CRZ Division. The Committee deliberated on the comments of CRZ Division. Basically they have highlighted two issues i.e. (i) shoreline changes and (ii) usage of condensate.</p> <p>2. In response, PP informed that LNG Bharat Pvt. Ltd. proposes to handle LNG by utilizing the existing POL berth within the Krishnapatnam Port, which has been approved and received environmental clearance and CRZ clearance for Krishnapatnam port (Phase II) vide F. No. 11-62/2009-IA III dated 13th November, 2009. The proposed project is located within approved port limits.</p> <p>3. The fresh water produced due to atmospheric moisture condensation during regasification process of the LNG will be about 1000 m³/day and the same shall be utilised for utility, fire water purposes and dust suppression measures at the coal handling area within the port premises. It was also informed that capacity of proposed GTG is 16 MW.</p> <p>After detailed deliberations, the Committee recommended the project for environmental and CRZ clearance and stipulated the following additional specific conditions:</p> <ul style="list-style-type: none"> i) The foreshore facilities shall be set up in the stable / low or medium eroding site as demarcated in the shoreline change map by NCSCM. Further, NCSCM shall be authorize to monitor the project during construction and operation phase so as to ensure that the foreshore facilities cause minimum or no impact to the geomorphological systems. ii) The fresh water produced (1000 m³/day) due to atmosphereic moisture condensation during regasification process of the LNG shall be utilised for utility, fire water purposes and dust suppression measures at the coal handling area within the port premises.

9.3.13	<p>Development of 7 integrated facilities within the existing Kandla Port Trust limit at Kutch, Gujarat by M/s Kandla Port Trust – Environmental and CRZ Clearance – [F.No.11-82/2011IA-III]</p> <p>Proposal was considered by EAC (Infra-2) in its meeting held on 29th June, 2016 and the Committee recommended the proposal for EC & CRZ clearance. Further, proposal was referred to the EAC (Infra-2) with the comments of CRZ Division. The Committee deliberated on the comments of CRZ Division.</p> <p>After detailed deliberations, the Committee recommended the project for environmental and CRZ clearance and stipulated the following additional specific conditions:</p> <ul style="list-style-type: none"> i) The foreshore facilities shall be set up in the stable / low or medium eroding site as demarcated in the shoreline change map by NCSCM. Further, NCSCM shall be authorize to monitor the project during construction and operation phases so as to ensure that the foreshore facilities cause minimum or no impact to the geomorphological systems. ii) The PP should take measures to ensure that construction material/debris (mortar, cementing material, etc.) do not fall in the water. Construction material including labour camps should be located at adequate distance from CRZ areas. iii) Dredged materials should be analyzed for presence of contaminants and also to decide the disposal options. Monitoring of dredging activities should be conducted and the findings should be shared with the Gujarat SPCB and Regional office of the Ministry. iv) PP in consultation with GCZMA should prepare a regional strategic impact assessment report with a special focus on region where the PP started construction without permission. The cost towards this study should be borne by the PP. v) A comprehensive and integrated conservation plan including detailed bathymetry study and protection of creeks/mangrove area including buffer zone, mapping of co-ordinates, running length, HTL, CRZ boundary should be put in place. The plan should take note of all the conditions of approvals granted to all the project proponents in this area, and the reported cases of disappearance of mangroves near project site. The preservation of entire area to maintain the fragile ecological conditions should be a part of the plan in relation to the creek and mangrove conservation.
2nd Day	
9.4.1	<p>Expansion of group housing project "Park Belles" at Survey/Khasra No. 69 GHA, 80 KHA, 80 KA, Property no. 178 Village Sinola, Parwadoon, Mussoorie Diversion Road, District Dehradun (Uttarakhand) by M/s SARA Eminent - Environmental Clearance - [F.No.21-4/2016-IA-III]</p> <p>M/s SARA Eminent has proposed for Expansion of group housing project "Park Belles" at Survey/Khasra No. 69 GHA, 80 KHA, 80 KA, Property no. 178 Village Sinola, Parwadoon,</p>

Mussoorie Diversion Road, District Dehradun, Uttarakhand. Initially approval from MDDA has been taken for carried out construction on 10603.911 m² (having built up area 19258.01 m²)(Ground + 06 floors, Tower A & B) vide letter no. MDDA/SL/LTR/1542/13-14, dated 22.05.2014. Now, following is the configuration of the existing and proposed expansion:

Parameters	Approved from MDDA (G+6)	Proposed addition (7-9)	Total after expansion (G+9)
Plot Area (Sq. m)	10603.911	720	11232.911
Net Plot Area (Sq. m)	10359.641	--	11079.641
Ground Coverage (sq.m)	2168.196	--	2168.196
F.A.R	11309.943	4200.767	15510.71
Built up area including basements (m ²)	19258.01	4786.792	24288.51 (without EWS)
Dwelling Units (No)	54	18	72

The committee suggested them to submit certificate from the Government Institution/Agency that existing structure will take the additional load of 3 floors. It was also suggested to give details of minimum setbacks area of the proposed project. It is reported that Raja Ji National Park is located at a distance of 16 km. River Ganga is flowing at a distance of 37.5 km. Total water requirement is 104 KLD. Out of which fresh water requirement is 64 KLD. Discrepancy observed in the water balance chart. Therefore, the Committee suggested them to submit revised water balance. 60 KLPD sewage treatment plant will be installed. Solid waste generation will be 237 kg/day. 199 ECS will be provided in parking area. Area earmarked for greenbelt is 1472.60 sq.m.

After detailed deliberation, the Committee sought following additional information:

- (i) Certificate from the Government Institution/Agency that existing construction is structurally safe to take load of 3 additional floors.
- (ii) Give details of minimum setbacks area of the proposed project.
- (iii) Layout plan indicating road, greenbelt, drainage, sewer line, etc in different colour to be furnished.
- (iv) Details of the development plan of the area in which the project is to be constructed and submitted alongwith information of availability of water , sewage lines, storm water drain and power.
- (v) Layout of parking plan indicating entry and exit points of vehicular movement as well as traffic management plan. Highlight the fire tender pathway.
- (vi) Revised water balance chart as per CPHEEO manual to be submitted.
- (vii) Details of source of water supply alongwith permission to be submitted.
- (viii) Excess treated sewage disposal plan/scheme to be submitted.
- (ix) Treatment scheme for sewage and its recycling mode.
- (x) Details of rain water harvesting system to be furnished. Clarity on recharge pits, storage systems for rain water and use of appropriate filtration system for collected rain water to be detailed.
- (xi) Calculation on sizing of solar water heating systems to be furnished.
- (xii) Details on solar lighting for common areas and landscaping to be provided
- (xiii) Solid waste management plan alongwith area earmarked for solid waste management scheme.
- (xiv) Details energy conservation measures to be taken. taken (all points mentioned in

	the proposal such as orientation to support reduced heat gain, use of ASHRAE 90.1, use of ECBC compliant envelope measures to be supported through drawings and details in the proposal
9.4.2	<p>Expansion of captive jetty facility in Revdanda Creek at Salav, Dist. Raigad, Maharashtra by M/s JSW Salav Port Pvt Ltd- Finalization of ToR – [F.No.10-60/2016-IA-III]</p> <p>As per form1, PP has mentioned the details of environmental sensitivity considering 10 km distance from the project site instead of 15 km distance. During presentation, PP could not produce toposheet of the project area.</p> <p>Therefore, the Committee recommended that PP should submit fresh form1 with authentic data.</p>
9.4.3	<p>Modernization of Chennai Airport (Phase-II), Chennai (Tamil Nadu) by M/s Airports Authority of India - Finalization of ToR – [F.No.10-61/2016-IA-III]</p> <p>The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP report. All the projects related to 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 Airports Authority of India has proposed for Modernization of Chennai Airport (Phase-II), at Tehsil Sriperumbudur, District Kanchipuram, Chennai, Tamil Nadu. Cost of project is Rs. 2587.00 Crore. Total airport area is 1,301.28 acres. It is reported that National Parks Guindy National Park (3.0 km, E) Forests Pulikkuradu RF (4.0 km, SW) Nanmangalam RF (4.7 km, S) Tambaram RF (5.5 km, SW) Nallur RF (7.3 km, WSW) Vandalur RF (9.1 km, SSW) Pudupper RF (11.0 km, W) Water Bodies Adayar River (passing through airport in NW side) Kuvam river (5.9 km, N) Chembarambakkam Tank (7.3 km, W) Sea Bay of Bengal (8.7 km, E) Red Hills Lake (14.1 km, N) are located at a distance of 10 km.</p> <p>The present proposal involves Modernization of old Terminals (T2&T3) and other old terminal. The existing passenger capacity of the Chennai Airport is 10 million Domestic and 4 million International passengers. The passenger capacity after modernization of the Chennai Airport will be 30 million pax per annum. The proposed Chennai airport modernization project includes the following activities :</p> <ol style="list-style-type: none"> 1) Demolition and reconstruction of old domestic terminal (T2), 2) Demolition and reconstruction of old international terminal (T3), 3) Re-construction of airside corridor for seamless integration, 4) Interfacing provision in the new terminal for future connection of tunnel from satellite terminal. 5) Augmentation of contact bays,

	<p>6) Development of multi-level car parks,</p> <p>7) Development of integrated common user cargo complex, after demolishing the old unused terminal at Meenambakkam.</p> <p>8) Development of contact bays for category E cargo freighters etc.</p> <p>After detailed deliberations on the proposal, the Committee <i>recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity</i> and the following TOR in addition to <i>Standard ToR</i> for preparation of EIA-EMP report:</p> <ol style="list-style-type: none"> i. Importance and benefits of the project. ii. The EIA should include a para wise compliance report of all earlier environmental clearances. As per circular dated 30th May, 2012 issued by MoEF, a certified report by Regional Office, MoEF&CC on status of compliance of conditions on existing unit to be provided in EIA-EMP report. iii. Copy of consent to establish and consent to operate for the existing airport facilities. 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. Copy of application submitted for clearance from NBWL. vi. Distance of Pallavaram forest from the project site. vii. Layout maps of proposed project indicating runway, airport building, parking, greenbelt area, utilities etc. viii. Cost of project and time of completion. ix. The Environmental Impact Assessment report should study the impacts of all subsidiaries, consequential and lateral developments anticipated as a result of project implementation and draw up a management plan accordingly. It should also conduct a robust analysis of traffic movement in the approach roads and the impacts along with the management plans. 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. Use xi. Details of emission, effluents, solid waste and hazardous waste generation and their management. Air quality modelling and noise modelling shall be carried out for the emissions from various types of aircraft. xii. Classify all Cargo handled as perishable, explosive, solid, petroleum products, Hazardous Waste, Hazardous Chemical, Potential Air Pollutant, Potential Water Pollutant etc. and put up a handling and disposal management plan. 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 project proponents will attempt to optimise the Diesel power generation requirements and provide a justification in the EIA report.
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	<p>xvi. Action plan for handling and disposal of construction and demolition waste as per Municipal waste rules, 2016.</p> <p>xvii. The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area.</p> <p>xviii. Fuel tank farm and its risk assessment.</p> <p>xix. 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> <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 '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>
9.4.4	<p>Improving the capacity utilization of OR-I & OR-II berths at Visakhapatnam Port Trust (Andhra Pradesh) by M/s Visakhapatnam Port Trust - Finalization of ToR – [F.No.1062/2016-IA-III]</p> <p>The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP report. All the projects related to Ports and Harbour i.e. ≥ 5 million TPA of cargo handling capacity (excluding fishing harbours) as well as capital dredging are listed at 7(e) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.</p> <p>M/s Visakhapatnam Port Trust has proposed for modernization of its existing facilities and creation of new facilities for OR-I & OR-II berths at Visakhapatnam Port Trust, Andhra Pradesh. The total length of the existing two berths OR-I and OR-II is 374 m. The proposed development is planned to operate atleast one Handymax and one Panamax vessel or two Panamax vessels simultaneously so that length of additional berth required is 240 m. Overall length of proposed berth will be increased from 374 m to 606 m. This will keep 90 m clear gap from fertilizer berth. Hence, cargo handling (POL products) capacity will be increased from 3.28 MTPA to 9.81 MTPA after implementation of the project. Cost of project is Rs. 193.31 Crore. It is reported that Kambalakonda wild life sanctuary is located at a distance of 8.61 km. Following activities will be carried out :</p> <ul style="list-style-type: none"> (i) Construction of proposed additional oil berth of length 180 m in between fertilizer berth and OR-II. (ii) Dismantling of existing berthing structure and reconstruction of new OR-I and OR-II with facilities.

	<p>(iii) Construction of protection wall with length of 30 m shall be constructed at end of OR-I berth on seas side.</p> <p>(iv) Widening of western arm channel by 12 m along the alignment of the proposed new development.</p> <p>(v) Increase the dredge depth from (-) 10.70 m to (-) 16.10 m.</p> <p>After detailed deliberations on the proposal, the Committee <i>recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity</i> and the following TOR in addition to <i>Standard ToR</i> for preparation of EIA-EMP report:</p> <ol style="list-style-type: none"> i. Importance and benefits of the project. ii. A separate chapter on status of compliance of Environmental Conditions granted by State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by RO, MoEF&CC on status of compliance of conditions on existing port 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. Copy of application submitted for clearance from NBWL. 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 existing and proposed Port. ix. 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. x. Details of air pollution control measures to be taken as well as cost to be incurred. xi. Action plan for dismantling of existing berthing structure including disposal of debris, construction and demolition waste as per Municipal Solid Waste Management Rule, 2016. xii. Total water consumption and its source. Wastewater management plan. xiii. Details of Environmental Monitoring Plan. xiv. 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. xv. Disaster Management Plan for the above terminal. xvi. Layout plan of existing and proposed Greenbelt. xvii. Status of court case pending against the project. xviii. A tabular chart with index for point wise compliance of above TORs. xix. 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
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	<p>form of tabular chart with financial budget for complying with the commitments made.</p> <p>It was recommended that 'TORs' along with Public Hearing prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.</p>																																										
9.4.5	<p>Development of Offshore and onshore LPG import facility at Okha, Jamnagar District (Gujarat) by M/s Energy Infrastructure India Limited (EIL) – Amendment in ToR – [F.No.11-33/2014-IA-III]</p> <p>MoEF&CC vide letter no 11-33/2014 IA III dated 9th December, 2014 has issued TOR for preparation of EIA/EMP report for development of Offshore and onshore LPG import facility at Okha, Jamnagar District (Gujarat).</p> <p>Now, PP has requested for amendment in the existing TOR for following revised configuration of the project :</p> <table border="1"> <thead> <tr> <th>S.N.</th><th>Description</th><th>ration at the time of issuance of TOR</th><th>Revised Project configuration (Application submitted on 10th August 2016)</th></tr> </thead> <tbody> <tr> <td>1</td><td>Offshore and Onshore project location</td><td> <p>OFFSHORE 1st Phase: Lat 22° 29' 22" N Long 69° 03' 02" E (CBM Location)</p> <p>2nd & 3rd Phase: Lat 22° 32' 26" N Long 69° 03' 13" N (CALM & FSO location)</p> <p>ONSHORE Arambhada Village, DevbhoomiDwarka District, Gujarat</p> </td><td> <p>OFFSHORE 1st Phase CBM Deleted</p> <p>2nd and 3rd Phase - No change in CALM and FSO location</p> <p>ONSHORE No change in location</p> </td></tr> <tr> <td>2</td><td>Number of Phases</td><td>3 Phases</td><td>2 Phases</td></tr> <tr> <td>3</td><td>Proposed Volume</td><td> <p>1st Phase- Upto 0.25 MMTPA</p> <p>2nd Phase- Upto 0.45 MMTPA</p> <p>3rd Phase- 0.45 MMTPA</p> </td><td> <p>1st Phase- Upto 1.5 MMTPA</p> <p>2nd Phase- Upto 2.5 MMTPA</p> </td></tr> <tr> <td>4</td><td>Submarine Pipeline</td><td>12" subsea pipeline</td><td>18" subsea pipeline</td></tr> <tr> <td>5</td><td>Mooring system</td><td> <p>1. Conventional Buoy Mooring (CBM) in 1st Phase</p> <p>2. CALM Buoy in 2nd phase</p> </td><td> <p>1. CBM deleted</p> <p>2. CALM Buoy in 1st phase</p> </td></tr> <tr> <td>6</td><td>Land for onshore terminal</td><td>104 Acres</td><td>91 Acres</td></tr> <tr> <td>7</td><td>Onshore Storage Tanks</td><td> <p>1. 3 x 1400 MT mounded storage tanks</p> <p>2. 6x150 MT elevated bullets</p> </td><td> <p>1. No change</p> <p>2. Deleted</p> </td></tr> <tr> <td>8</td><td>Truck Loading Gantry</td><td>1x8 nos</td><td>2x8 nos</td></tr> <tr> <td>9</td><td>Cross Country Pipeline connectivity for distribution</td><td>Envisaged in 3rd Phase (to be laid as a separate project)</td><td>Envisaged in 2nd Phase (to be laid as a separate project)</td></tr> </tbody> </table>			S.N.	Description	ration at the time of issuance of TOR	Revised Project configuration (Application submitted on 10 th August 2016)	1	Offshore and Onshore project location	<p>OFFSHORE 1st Phase: Lat 22° 29' 22" N Long 69° 03' 02" E (CBM Location)</p> <p>2nd & 3rd Phase: Lat 22° 32' 26" N Long 69° 03' 13" N (CALM & FSO location)</p> <p>ONSHORE Arambhada Village, DevbhoomiDwarka District, Gujarat</p>	<p>OFFSHORE 1st Phase CBM Deleted</p> <p>2nd and 3rd Phase - No change in CALM and FSO location</p> <p>ONSHORE No change in location</p>	2	Number of Phases	3 Phases	2 Phases	3	Proposed Volume	<p>1st Phase- Upto 0.25 MMTPA</p> <p>2nd Phase- Upto 0.45 MMTPA</p> <p>3rd Phase- 0.45 MMTPA</p>	<p>1st Phase- Upto 1.5 MMTPA</p> <p>2nd Phase- Upto 2.5 MMTPA</p>	4	Submarine Pipeline	12" subsea pipeline	18" subsea pipeline	5	Mooring system	<p>1. Conventional Buoy Mooring (CBM) in 1st Phase</p> <p>2. CALM Buoy in 2nd phase</p>	<p>1. CBM deleted</p> <p>2. CALM Buoy in 1st phase</p>	6	Land for onshore terminal	104 Acres	91 Acres	7	Onshore Storage Tanks	<p>1. 3 x 1400 MT mounded storage tanks</p> <p>2. 6x150 MT elevated bullets</p>	<p>1. No change</p> <p>2. Deleted</p>	8	Truck Loading Gantry	1x8 nos	2x8 nos	9	Cross Country Pipeline connectivity for distribution	Envisaged in 3 rd Phase (to be laid as a separate project)	Envisaged in 2 nd Phase (to be laid as a separate project)
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	<p>After detailed deliberation, the Committee recommended the proposal for amendment in the TOR with following additional TOR:</p> <ul style="list-style-type: none"> (i) PP shall submit map duly authenticated by Chief wildlife warden showing marine sanctuary features vis-à-vis project location. (ii) Recommendations or comments of the Chief Wildlife warden to be submitted . (iii) Copy of application for clearance from NBWL (If applicable). (iv) Impact of project on marine sanctuary shall be assessed. Mitigation measures shall be suggested. (v) Impact of transportation through truck shall be assessed. Air quality modelling shall be carried out for vehicular movement. (vi) Effort shall be made to transport gas through pipeline instead of truck movement. (vii) A detailed marine biodiversity impact assessment report and management plan shall be drawn up through the NIOS or any other Institute of repute on marine ecology and biodiversity. The report shall study the intertidal biotopes, corals and coral communities, sea grasses and sea weeds, subtidal habitats, fishes, other marine fauna including turtles, birds and other marine animals including mammals as also the productivity . Data collection and impact assessment shall be as per standard survey methods. <p>Other TOR issued vide MoEF&CC's letter dated 9th December, 2014 will remain same.</p>																				
9.4.6	<p>Matheran Passenger Ropeway at Village-Bhutivali, Tehsil: Karjat, District-Raigad, Maharashtra by M/s Matheran Ropeway Private Limited (MRPL) – Finalization of ToR – [F.No.10-63/2016-IA-III]</p> <p>MoEF vide letter no 18-2/2006-IA III dated 21st May, 2008 has granted environmental clearance to M/s Matheran Ropeway Pvt. Ltd. for installation of ropeway project. Validity of EC has been expired.</p> <p>Now, PP has submitted fresh application for installing Matheran Passenger Ropeway at Village-Bhutivali, Tehsil: Karjat, District-Raigad, Maharashtra. Most of the project falls inside the ESZ. Details of project are as given below:</p> <table border="1"> <thead> <tr> <th>Area required for</th><th>Total Area (In sq. m)</th></tr> </thead> <tbody> <tr> <td>Lower Terminal Station-A</td><td>2000</td></tr> <tr> <td>Intermediate Station-B</td><td>1000</td></tr> <tr> <td>Upper Terminal Station-C</td><td>22000</td></tr> <tr> <td>Ropeway Length-a</td><td>4400</td></tr> <tr> <td>Right of Way-b</td><td>5</td></tr> <tr> <td>Ropeway Corridor-D (aXb)</td><td>22000</td></tr> <tr> <td>Area of fowers-E</td><td>520</td></tr> <tr> <td>Total (A+B+C+D+E) = F</td><td>27,720 sq. m</td></tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Land Categorization</th><th>Area (In Sq. m.)</th></tr> </thead> <tbody> </tbody> </table>	Area required for	Total Area (In sq. m)	Lower Terminal Station-A	2000	Intermediate Station-B	1000	Upper Terminal Station-C	22000	Ropeway Length-a	4400	Right of Way-b	5	Ropeway Corridor-D (aXb)	22000	Area of fowers-E	520	Total (A+B+C+D+E) = F	27,720 sq. m	Land Categorization	Area (In Sq. m.)
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Forest Land	25720
Private Land	2000
Total	27520 Sq. m.

Forest clearance (stage-I approval) has been obtained for diversion of 2.572 hectares (25720 sq. m.) Apart from the above land, PP also own another 10 acre at the base station for providing organized vehicle parking, food court and other related activities. Cost of project is Rs. 50 Crore. During operation phase, total water requirement is 68 KLD. Wastewater generation is 57 KLD and treated in the STP. Total waste generation is 600 kg/day.

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. Route map of proposed ropeway project.
- v. Layout maps of proposed project indicating Location of upper station and lower station, building, food court, parking, greenbelt area, utilities etc.
- vi. Numbers of persons/projections of tourist.
- vii. Cost of project and time of completion.
- 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. Use
- ix. Details of Emission, effluents, solid waste and hazardous 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. The E.I.A. should specifically address to vehicular traffic management.
- 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.

	<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>
9.4.7	<p>4th container terminal and marine container terminal at JNPT by M/s Jawaharlal Nehru Port Trust – Amendment in Environmental Clearance – [F.No.10-81/2008-IA-III]</p> <p>MoEF vide letter no 10-81/2008 IA III dated 29th July, 2008 has granted EC and CRZ clearance to M/s Jawaharlal Nehru Port Trust for 4th container terminal and marine container terminal at JNPT with following specific condition no (vi) of EC:</p> <p>“the reclamation of the port area shall be carried out with the dredge material. Dredged material shall not be dumped into the sea. No reclamation shall be carried outside the port limits.”</p> <p>PP informed that the port had carried out the mathematical and physical model studies of the proposed 4th Container Terminal through CWPRS, Pune in year 2005-06, wherein they have recommended that the dredged material shall be disposed off at DS-3 location approved by MoEF&CC for capital dredging project of JNP.</p> <p>Now, PP has requested to amend specific condition No (vi).</p> <p>After detailed deliberation, the Committee sought following additional information :</p> <ul style="list-style-type: none"> i) Quantity of dredge material to be generated. ii) Quantity of materials required for reclamation. Mode of transportation. iii) Characteristics of dredged materials to be submitted. iv) Recommendation of the SCZMA <p>The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.</p>
9.4.8	<p>Development of LNG Terminal at Mundra Port, Kutchch (Gujarat) by M/s GSPC LNG Ltd – Amendment in Environmental and CRZ Clearance – [F.No.10-2/2009-IA-III]</p> <p>MoEF&CC vide letter no 10-2/2009 IA III dated 6th March, 2014b has granted EC&CRZ clearance to M/s GSPC LNG Ltd. for development of LNG Terminal at Mundra Port, Kachch, Gujarat. M/s GSPC LNG Ltd. has to supply gas in the GSPL gas grid network, which is approx.. 16 Km away from LNG terminal. Laying of 16 km long pipeline will be undertaken by M/s GSPL gas. Now PP wants to transfer the EC &CRZ clearance to M/s GSPL gas for laying 16 km long pipeline and operation.</p> <p>After detailed deliberation, the Committee sought following addl. information :</p>

	<p>i) Recommendation of the SCZMA to be submitted.</p> <p>The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.</p>									
9.4.9	<p>Expansion of PWD Chembur Project at S. No. -469 (A), Chembur, Mumbai, Maharashtra by M/s Joynest Premises Pvt. Ltd. - Environmental Clearance – [F.No.21-57/2014-IA-III]</p> <p>PP presented their case in the 142nd EAC meeting 7th – 9th September, 2015. However, lack of clarity in the project proposal and its recommendation, Authority again referred to the EAC (Infra-2) for their recommendations.</p> <p>The proposal is for redevelopment of the plot earlier reserved for Beggars’ Home locally known as Beggars’ Home on Ramkrishna Chemburkar Marg, Chembur, Mumbai Maharashtra by M/s. Joynest Premises Pvt. Ltd. as the Concessionaire (formally known as Zeal Ventures Pvt. Ltd). PP informed that this is a Public Private Participation (PPP) project by the Govt. of Maharashtra. The public purpose reservations i.e. Govt. offices, male & female Beggars’ home, Auditorium, ITI, and Hostels are being proposed under the PPP scheme. The Concessionaire will construct the said buildings on site for the Govt. of Maharashtra. Now, PP informed that proposed project is divided into two parts i.e. PWD component and other is Sale component. For PWD part, MoEF vide letter no J-12011/05/2006 IA III dated 11th September, 2006 has already granted environmental clearance to M/s PWD under 1994 notification. During presentation, PP informed partly project is completed and remaining under construction.</p> <p>Regarding Sale Component, SEIAA, Maharashtra vide letter no SEA 2212/CR-40/TC-2 dated 17th May, 2013 has granted environmental clearance. Total plot area of the sale component is 40,000 m². PP informed that the present application involves change in layout of proposed buildings with minor change in the construction area. PP also confirmed that the proposed project is not pending with SEIAA, Maharashtra.</p> <p>Revised configuration of the proposed project is as given below:</p> <p>:</p> <table><tr><th>DETAILS</th><th>AS PER 17.05.2013</th><th>PROPOSED</th></tr><tr><td>Area</td><td>FSI – 99,070.50 Non FSI – 49,814.18 Total construction area – 1,48,884.68</td><td>FSI - 99,071.26 Non FSI - 49,412.97 Total construction area - 1,48,484.23</td></tr><tr><td>Building configuration</td><td>Building no 1 to 10 – 2B+stilt+14 floors Building no 11 to 19 – 2B + stilt + 7 floors</td><td>Wing A: 2B + G + 14 Fl. Wing B: 2B + G + 14 Fl. Wing C: 2B + G + 14 Fl. Wing D: 2B + G + 14 Fl. Wing E: 2B + G/St + 14 Fl. Wing F: 2B + St + 14 Fl. Wing G: 3B + G/St + 14 Fl. Wing H: 3B + G/St + 14 Fl. Wing I: 3B + G/St + 14 Fl. Wing J: 2B + St + 14 Fl. Wing K: 2B + St. LG + G + 15 Fl.</td></tr></table>	DETAILS	AS PER 17.05.2013	PROPOSED	Area	FSI – 99,070.50 Non FSI – 49,814.18 Total construction area – 1,48,884.68	FSI - 99,071.26 Non FSI - 49,412.97 Total construction area - 1,48,484.23	Building configuration	Building no 1 to 10 – 2B+stilt+14 floors Building no 11 to 19 – 2B + stilt + 7 floors	Wing A: 2B + G + 14 Fl. Wing B: 2B + G + 14 Fl. Wing C: 2B + G + 14 Fl. Wing D: 2B + G + 14 Fl. Wing E: 2B + G/St + 14 Fl. Wing F: 2B + St + 14 Fl. Wing G: 3B + G/St + 14 Fl. Wing H: 3B + G/St + 14 Fl. Wing I: 3B + G/St + 14 Fl. Wing J: 2B + St + 14 Fl. Wing K: 2B + St. LG + G + 15 Fl.
DETAILS	AS PER 17.05.2013	PROPOSED								
Area	FSI – 99,070.50 Non FSI – 49,814.18 Total construction area – 1,48,884.68	FSI - 99,071.26 Non FSI - 49,412.97 Total construction area - 1,48,484.23								
Building configuration	Building no 1 to 10 – 2B+stilt+14 floors Building no 11 to 19 – 2B + stilt + 7 floors	Wing A: 2B + G + 14 Fl. Wing B: 2B + G + 14 Fl. Wing C: 2B + G + 14 Fl. Wing D: 2B + G + 14 Fl. Wing E: 2B + G/St + 14 Fl. Wing F: 2B + St + 14 Fl. Wing G: 3B + G/St + 14 Fl. Wing H: 3B + G/St + 14 Fl. Wing I: 3B + G/St + 14 Fl. Wing J: 2B + St + 14 Fl. Wing K: 2B + St. LG + G + 15 Fl.								

		Wing L: 2B + St. LG + G + 15 Fl. Wing M: 2B + St. + 15 Fl. Wing N: 2B + St. + 7 Fl. Wing O: 3B + St. + 1 Fl. Wing P: 3B + St. LG + G. Wing Q: 3B + St. LG + G. Wing R: 2B + St. LG + G. Wing S: 2B + St. LG + G. Wing T: 2B + St. + 1 Fl..
Expected residents	4355 Nos.	4632 Nos.
RG area	RG on ground : 10,000 sq.m	RG on ground : 10,000 sq.m
Total water requirement	671 KLD (STP capacity : 480 KLD)	623 KLD (STP capacity : 450 KLD)
Solid waste generated	Dry waste : 871 kg/day Wet waste : 1307 kg/day	Dry waste : 902 kg/day Wet waste : 1168 kg/day
Energy	Connected load : 17940.86 KW Maximum demand : 9793.10 KW	Connected load : 17, 475 KW Maximum demand : 9,927KW

Area breakup is as given below:

S.N	DESCRIPTIONS	DETAILS (Sq.m)
1	Total Plot Area	40,000
2	Permissible FSI	1.85
3	Permissible FSI	74,000
4	Fungible BUA for Residential	23,966.28
5	Fungible BUA for Non Residential	1,104.98
6	Total Fungible BUA	25,071.26
7	Total BUA Proposed	99,071.26

Total water requirement is 623 KLD. Out of which, fresh water requirement from MCGM water supply is 348 m³/day and remaining water requirement (275 m³/day) will be met from treated effluent/recycled water/rainwater harvesting. A total of 3 STPS (having capacity @ 200 KLPD, 150 KLPD; 100 KLPD) will be installed at three different locations. Treated wastewater will be

	<p>used for flushing, car washing, horticulture and fire water make up. Remaining treated wastewater (ranges from 140 KLD to 160 KLD) will be discharged into drain. For rain water harvesting, pp has proposed to install 140 KL capacity tanks at five locations (Total 694 KL Capacity). Quantity of Bio-degradable solid waste generation is 1168 Kg/day. Quantity of non-bio-degradable waste generation is 902 kg/day. Biodegradable matter will be composted in OWC for which area earmarked is 80 m².the Committee suggested them that 80 m area seems to be small. Around 300 m² space needs to be demarcated for solid waste management. The organic waste will be treated in OWC and the manure will be used for landscaping at site as per requirement and remaining will be handed over. Recyclable waste like paper, glass, plastic cans etc. will be sold to vendor and remaining will be handed over to local authority for final disposal. DG sets (2 x 500 KVA) will be installed as standby power during operation phase. The Committee suggested them to install DG set (1 x 500 KVA) as standby arrangement. Extra standby power requirement should be met from solar power. The Committee suggested them to provide solar based electric power to each flat atleast for two bulbs/light and one fan.</p> <p>After detailed deliberations, the Committee found additional information adequate and recommended the project for environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:</p> <p>A. Construction Phase</p> <ul style="list-style-type: none"> (i) The Projects Proponents shall obtain all necessary clearance / permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws. (ii) Construction site should be adequately barricaded before the construction begins. (iii) The proponents would seek a clearance from the CGWA for ground water abstraction and dewatering from basements while doing excavation. Ground water recharge would be as per CGWA guidelines and as approved by them. (iv) The building envelope for all air conditioned buildings / spaces shall be complied with the ECBC. Roofs and opaque walls should comply with the maximum assembly U factor or the minimum insulation R-value as well as lighting systems and equipment shall comply with the provisions of Energy conservation building Code (v) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done. (vi) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan. (vii) Sewage shall be treated in the STP based on MBBR technology (with tertiary treatment). The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling. (viii) As proposed, 140 KL capacity rain water harvesting tanks at five locations (Total 694 KL Capacity) shall be installed as per CGWB guidelines. (ix) Solid waste shall be segregated into wet garbage and inert materials. Wet garbage
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	<p>shall be composted in Organic Waste Converter. As proposed, 300 sqm of area shall be provided for solid waste management within the premises which will include area for segregation, composting (@0.1 sqm/person). The inert waste from group housing project will be sent to be landfill.</p>
(x)	Solar based electric power shall be provided to each flat for atleast two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.
(xi)	A First Aid Room will be provided in the project both during construction and operations of the project.
(xii)	All the top soil excavated during construction activities should be stored for use in horticulture/ landscape development within the project site.
(xiii)	Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
(xiv)	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environmental (Protection) prescribed for air and noise emission standards.
(xv)	DG set (1 x 500 KVA) shall be installed as a standby arrangement. Extra standby power requirement should be met from solar power.
(xvi)	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
(xvii)	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of fire fighting equipment etc as per National Building Code including protection measures from lightening etc.
	B. Operation Phase
(i)	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
(ii)	Fresh water requirement from Municipal water supply shall not exceed 231 KLD.
(iii)	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
(iv)	The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
(v)	Solid waste management shall be collected, treated disposed in accordance with the Municipal Solid Waste (Management & Handling) Rules, 2016.
(vi)	Rain water harvesting structure 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 mater, oil and grease. The borewell for rainwater recharging should be kept at least 5 mts. above the highest ground water table.
(vii)	Solar power shall be used for lighting in the apartment to reduce the power load on

	<p>grid. Separate electric meter shall be installed for solar power.</p> <p>(viii) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.</p> <p>(ix) The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.</p>
9.4.10	<p>Deepening of approach channel for capsized vessels at Mormugao Port by M/s Mormugao Port Trust.- TOR reg.</p> <p>MoEF&CC vide letter 10-23/2014 dated 9th February, 2015 has issued environmental clearance to M/s Mormugao Port Trust. for the above mentioned project. Hon'ble NGT, Pune Bench vide order dated 2nd September, 2016 has quashed and set aside the EC letter dated 9th February, 2016.</p> <p>Now, M/s Mormugao Port Trust has submitted the fresh application for award of Terms of Reference. The proposed project is for deepening the outer channel from 14.40m to 19.80m and inner basin and turning circle from 14.10 to 19.50 m. This will facilitate navigation of Capsized vessels at any state of tide. Cost of project is Rs. 380 Crore. The total quantity to be dredged will be about 15.40 million cum. Most of the dredging work will be undertaken with a Trailer Suction Hopper Dredger (TSHD). A Cutter Suction Dredger (CSD) will also be deployed for hard material and weathered rock if encountered. It was informed that no land acquisition and R & R are involved in the project. No mangroves are at the project site. PP informed that so far, 55% work has been completed. PP also informed that following studies have been carried out recently:</p> <ul style="list-style-type: none"> (i) During dredging period, marine water and sediments samples were collected and analysed for the capital dredging area and dumping locations on fortnightly basis. (ii) For identifying the location of spoil ground for the dredged material and siltation pattern, requisite study was carried out by CWPRS, Pune in February and May, 2015. <p>The Committee agreed to use the above mentioned data /studies in the EIA report.</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"> 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&CC on status of compliance of conditions on existing port 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.

	<ul style="list-style-type: none"> v. Layout plan of existing and proposed Port. vi. 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. vii. Study the impact of dredging on the shore line. viii. A detailed impact analysis of rock dredging. ix. Action plan for disposal of dredged soil and rocks. x. Dispersion modelling for the dumping of the dredge materials shall be carried out. The study report shall be incorporated. xi. Disaster Management Plan. xii. Status of court case pending against the project. xiii. A tabular chart with index for point wise compliance of above TORs. 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. <p>It was recommended that 'TORs' along with Public Hearing prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report</p>
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LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 9th MEETING OF EAC (INFRASTRUCTURE-2) HELD ON 21st – 22nd September, 2016

S.N.	Name	Designation	Attendance
1	Prof. T. Haque	Chairman	P
2	Shri K. Gowarappan	Member	P
3	Dr. Yashpal Singh	Member	P
4	Dr. AyiVaman N. Acharya	Member	P
5	Dr. S.K. Bhargava	Member	A
6	Dr. Chandrahas Deshpande	Member	A
7	Shri A.P. Singh	Member	P
8	Ms. Mili Majumdar	Member	A
9	Prof. Dr. Sanjay Gupta	Member	P 1 st day

10	Dr. R Deoliya	Member	A
MOEF&CC Representative			
11.	Shri A. N. Singh	Joint Director & Member Secretary	P