F.No. 21-26/2016-IA-III
Government of India
Ministry of Environment, Forest & Climate Change
(I.A. Division)

Indira ParyavaranBhawan
Aliganj, Jorbagh Road,
New Delhi -110003

Telefax:011: 24695398
Dated: December, 2016

To,
Shri Suresh S P
Chief Engineer,
M/s V.O.Chidambaranar Port Trust
Enayam Port Administrative Office No. 16/243-1,
Main Road, Tuticorin-628004.

E-mail: ce@vocport.gov.in; Fax.: 0461-2354270;

Subject : Development of New Major Port at Enayam in Tamilnadu by M/s
V.O.Chidambaranar Port Trust.- TOR reg.


Sir,

Kindly refer your online proposal no IA/TN/MIS/59873/2016 dated 24th October, 2016 alongwith project documents including Form-I, Pre-feasibility Report and draft 'Terms of Reference' as per the EIA Notification, 2006. It is noted that proposal is for development of New Major Port at Enayam in Tamilnadu by M/s V.O. Chidambaranar Port Trust. The entire port will be developed in the reclaimed land along the coastline (seaside) using the dredged materials. Reclamation shall be carried out using dredged material in the backup area for providing landside facilities as follows: (i) Phase I (2017-2020): 93 ha (ii) Phase II (2021-2025): 166 ha (iii) Phase III (2025-2030): 120 ha. Dredging will be carried out at berthing area, turning circle, & approach channel. Material generated from dredging will be used for reclamation for development of operational areas. The estimated dredging quantities are as follows: Phase 1-10.12 million Cum; Phase 2-15.90 million Cum; Phase 3-18.34 million Cum. The proposed port construction involves offshore infrastructure namely Breakwater, Berths, container & multipurpose cargo terminal. Phase-wise proposed development of capacities & capacity generation as given below:

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Breakwater (m)</td>
<td>4639</td>
<td>2598</td>
<td>1667</td>
<td>8904</td>
</tr>
<tr>
<td>Dredging (Mn.Cum)</td>
<td>6.82</td>
<td>6.33</td>
<td>2.00</td>
<td>15.15</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Reclamation (Mn Cum)</th>
<th>3.30</th>
<th>9.40</th>
<th>6.39</th>
<th>19.09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reclamation Area (Ha)</td>
<td>93</td>
<td>156</td>
<td>130</td>
<td>379</td>
</tr>
<tr>
<td>Approach Channel</td>
<td>2100m long, 400m wide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Container Berths (16m draft - 18000 TEUS)</td>
<td>800m</td>
<td>2000m</td>
<td>1200m</td>
<td>4000m</td>
</tr>
<tr>
<td>Capacity (MTEUs / MTPA)</td>
<td>1.60 / 24</td>
<td>4.02 / 60.3</td>
<td>2.41 / 36.15</td>
<td>-</td>
</tr>
<tr>
<td>Solid bulk (Coal) (1,20,000 DWT)</td>
<td>-</td>
<td>400m</td>
<td>400m</td>
<td>800m</td>
</tr>
<tr>
<td>Capacity (MTPA)</td>
<td>-</td>
<td>3.30</td>
<td>3.30</td>
<td>-</td>
</tr>
<tr>
<td>Berths (Overall)</td>
<td>800m</td>
<td>2400m</td>
<td>1600m</td>
<td>4800m</td>
</tr>
<tr>
<td>Capacity (Overall) (MTPA)</td>
<td>24</td>
<td>63.60</td>
<td>39.45</td>
<td>127.05</td>
</tr>
<tr>
<td>Project cost (Rs)</td>
<td>6,575.2 Crore</td>
<td>11,536.9 Crore</td>
<td>9,457.9 Crore</td>
<td>27,570 Crore</td>
</tr>
</tbody>
</table>

i. New Six lane Road (9.50km) from NH 47 (Nagercoil- Trivandrum) has been proposed for the Enayam Port.

ii. New BG Railway link (11 km) connecting Enayam Port with the existing BG Track (Trivandrum – Kanyakumari) has been proposed from Palliyadi halt station.

2. Draft Terms of Reference (TOR) have been discussed and finalized by the Expert Appraisal Committee (Infrastructure -2) in its 11th meeting held on 24th - 25th November, 2016 for preparation of EIA/EMP report. The Committee prescribed the following TOR in addition to Standard TOR provided at Annexure-1 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. The EIA should address to all the three phases of the project
   vi. A justification may need to be provided on the reclamation area being more than the dredged area and the source and impact of additional reclamation material.
   vii. Since the project is linear, the study area should be fixed so as to include 15 Kms on all sides from the periphery.
   viii. Various Ports facilities with capacities for proposed project.
ix. Type of Cargoes to be handled in the Enayam Port and Operational / Material handling details.

x. Process flow sheet from Ships to outward transport

xi. Layout plan of proposed Port.

xii. Details of proposed Rail and Road corridor including mangroves, water bodies, agricultural land, plantations, residential etc vis-a-vis:
   a. Land classification
   b. Land title
   c. Revenue Record (maps)
   d. Land acquisition details
   e. Rehabilitation & Resettlement details
   f. Compensatory package for land oustees

xiii. There is a major fishing port at Colachel. The impact and management plan on this and other fishing activity may specifically be drawn up with the EIA.

xiv. 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.

xv. Details of air pollution control measures to be taken as well as cost to be incurred.

xvi. Total water consumption and its source. Wastewater management plan.

xvii. Study the impact of dredging on the shore line.

xviii. A detailed impact analysis of rock dredging.

xix. Action plan for disposal of dredged soil and rocks.

xx. Dispersion modelling for the dumping of the dredge materials shall be carried out. The study report shall be incorporated. Details of Environmental Monitoring Plan.

xxi. Modeling study on the impact of Port Layout on coastal erosion & accretion in the adjoining beaches on either side, sediment movement etc and mitigation measures.

xxii. The project proponents will get a detailed marine biodiversity impact assessment report and a management plan drawn up through the NIOS or any other marine biology specialist institution of repute and implement the same. The plan should include the management of marine and intertidal biotopes, corals and coral communities, sea grasses and sea weeds, subtidal habitats, fishes, other marine flora and fauna including turtles, birds and marine mammals as also productivity.

xxiii. Traffic Management Study on the impact of Trucks movement through Highway NH-47 and Wagon Movement through Main Railway line due to the traffic load of Enayam Port


xxv. Layout plan of existing and proposed Greenbelt.
xxvi. Status of court case pending against the project.
xxvii. A tabular chart with index for point wise compliance of above TORs.
xxviii. 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.

2. These 'TORs' should be considered for development of New Major Port at Enayam in Tamil Nadu by M/s V. O. Chidambaranar Port Trust in addition to all the relevant information as per the 'General Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The EIA/EMP as per TORs should be submitted to the Chairman, Tamil Nadu Pollution Control Board, (TNPCB) for public consultation. The SPCB shall conduct the public hearing/public consultation as per the provisions of EIA notification, 2006.

3. You are requested to kindly submit the final EIA/EMP prepared as per TORs and incorporating all the issues raised during Public Hearing / Public Consultation to the Ministry for considering the proposal for environmental clearance within 3 years as per the MoEF O.M. No. J-11013/41/2006-IA.II (I) dated 8th October, 2014.

4. The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India / National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/Laboratories including their status of approvals etc.

(A.N. Singh)
Scientist ‘D’

Copy to:

1) The Member Secretary, Tamil Nadu Pollution Control Board, No. 76, Mount Salai, Gundy, Chennai, Tamil Nadu.

2) Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (SEZ), 1st and 2nd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai – 34
STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR PORT, HARBOURS INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

i. Reasons for selecting the site with details of alternate sites examined/rejected/selected on merit with comparative statement and reason/basis for selection. The examination should justify site suitability in terms of environmental angle, resources sustainability associated with selected site as compared to rejected sites. The analysis should include parameters considered along with weightage criteria for short-listing selected site.

ii. Details of the land use break-up for the proposed project. Details of land use around 10 km radius of the project site. Examine and submit detail of land use around 10 km radius of the project site and map of the project area and 10 km area from boundary of the proposed/existing project area, delineating project areas notified under the wild life (Protection) Act, 1972/critically polluted areas as identified by the CPCB from time to time/ notified eco-sensitive areas/interstate boundaries and international boundaries. Analysis should be made based on latest satellite imagery for land use with raw images.

iii. Submit the present land use and permission required for any conversion such as forest, agriculture etc. land acquisition status, rehabilitation of communities/ villages and present status of such activities.

iv. Examine and submit the water bodies including the seasonal ones within the corridor of impacts along with their status, volumetric capacity, quality likely impacts on them due to the project.

v. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area

vi. Submit the details of terrain, level with respect to MSL, filling required, source of filling materials and transportation details etc.

vii. Examine road/rail connectivity to the project site and impact on the existing traffic network due to the proposed project/activities. A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.

viii. Submit details regarding R&R involved in the project

ix. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale along with the recommendation of the SCZMA.

x. Submit the status of shore line change at the project site

xi. Details of the layout plan including details of channel, breakwaters, dredging, disposal and reclamation.

xii. Details of handling of each cargo, storage, transport along with spillage control, dust preventive measures.
xiii. Submit the details of fishing activity and likely impacts on the fishing activity due to the project.

xiv. Details of oil spill contingency plan.

xv. Details of bathymetry study.

xvi. Details of ship tranquility study.

xvii. Examine the details of water requirement, impact on competitive user, treatment details, use of treated waste water. Prepare a water balance chart.

xviii. Details of rainwater harvesting and utilization of rain water.

xix. Examine details of Solid waste generation treatment and its disposal.

xx. Details of desalination plant and the study for outfall and intake.

xxi. Examine baseline environmental quality along with projected incremental load due to the proposed project/activities.

xxii. The air quality monitoring should be carried out according to the notification issued on 16th November, 2009.

xxiii. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.

xxiv. Submit details of a comprehensive Risk Assessment and Disaster Management Plan including emergency evacuation during natural and man-made disasters

xxv. Submit details of the trees to be cut including their species and whether it also involves any protected or endangered species. Measures taken to reduce the number of the trees to be removed should be explained in detail. Submit the details of compensatory plantation. Explore the possibilities of relocating the existing trees.

xxvi. Examine the details of afforestation measures indicating land and financial outlay. Landscape plan, green belts and open spaces may be described. A thick green belt should be planned all around the nearest settlement to mitigate noise and vibrations. The identification of species/plants should be made based on the botanical studies.

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

xxviii. Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website “http://moaf.nic.in/Manual/Port and harbour”.

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