To,

The Chairman,
M/s Mormugao Port Trust,
Headland Sada,
Goa

E-mail: mptgoa@mptgoa.com; Phone: 0832-2521100;

Subject: Deepening of approach channel for capsize vessels at Mormugao Port by M/s Mormugao Port Trust – Environmental and CRZ Clearance reg.


Sir,

This has reference to your online proposal no IA/GA/MIS/34476/2014 dated 15th December, 2015 alongwith project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report regarding above mentioned project.

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

3.0 The material to be dredged will mainly consist of silt and clay. A small quantity of weathered rock may be encountered. The total quantity to be dredged will be about 15.40 million cum. Most of the dredging work will be undertaken with a Trailer Suction Hopper Dredger (TSHD). A Cutter Suction Dredger (CSD) will also be deployed for hard material and weathered rock if encountered. Blasting will not be involved. The dredged material will be dumped in the designated dumping ground suggested by CWPRS. The channel has been designed for 185,000 DWT bulk carriers. The typical dimensions of design vessels area is as given below.
Vessel size (DWT) | Length (m) | Beam (m) | Draft (m) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>185,000 (bulk carrier)</td>
<td>300</td>
<td>45.0</td>
<td>18.5</td>
</tr>
</tbody>
</table>

The proposed depth of the channel has been arrived at as follows:
Draft for 185,000 DWT vessels: 18.50 m
Under keel clearance: 1.30 m
Total depth required: 19.80 m.

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

5.0 Public hearing under Para 7 III Stage (3) (i) (cc) of the EIA Notification, 2006.

6.0 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.

7.0 The proposal was considered by the Expert Appraisal Committee (Industry) in its meetings held during 29th September, 2014–1st October, 2014, 24th – 26th June, 2015 and 21st –22nd December, 2015 respectively. Project Proponent and the EIA Consultant namely WAPCOS Ltd, Gurgaon, have presented EIA / EMP report as per the TOR. EAC has found the EIA / EMP Report and additional information to be adequate and in full consonance with the presented TORs. The Committee recommended the proposal for environmental clearance.

8.0 As per the recommendations of EAC, the Ministry of Environment, Forest & Climate Change hereby accords Environmental and CRZ Clearance for the above-mentioned project 'Deepening of approach channel for capsize vessels at Mormugao Port by M/s Mormugao Port Trust', under the provisions of the Environment Impact Assessment Notification, 2006 & Coastal Regulation Zone (CRZ) Notification, 2011 and amendments thereto and Circulars issued thereon and subject to the compliance of the following specific conditions, in addition to the general conditions mentioned below:

A. SPECIFIC CONDITIONS:

i) 'Consent for Establish' shall be obtained from State Pollution Control Board under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.

ii) All the recommendations and conditions specified by Goa Coastal Zone Management (GCZMA) vide letter no. GCZMA/5/15-16/2012 dated 27.11.15 shall be complied with.

iii) As proposed, blasting shall not be used in the dredging.

iv) Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life, particularly benthos. This shall be prevented

Page 2 of 5
by suitable precautions and also by providing necessary mechanisms to trap the spillage.

vi) The quality of treated effluents, solid wastes, emissions and noise levels and the like, from the project area must conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.

vii) Dredging, etc will be carried out in the confined manner to reduce the impacts on marine environment.

viii) Dredged material shall be disposed safely in the designated areas as per CWPRS recommendations, a disposal area of 2 x 2 km, is at 2 locations at a distance of 11 km and 14 km, north from the outer approach channel at a depth of about -27 m CD and in no case shall be disposed in the marine environment.

ix) As proposed, the effluent from workshops, oil storage, etc. will contain oil and grease particles which shall be treated in an oil skimmer and suitably disposed after treatment or will be sold to registered recyclers.

x) Dredging shall not be carried out during the fish breeding season.

xi) It shall be ensured by the Project Proponent that the activities does not cause disturbance to the fishing activity, movements of fishing boats and destruction to mangroves during the construction and operation phase.

xii) As proposed, environmental monitoring programme shall be implemented. Marine biodiversity shall be monitored and monitoring report shall be sent to the respective Regional Office of MoEF&CC.

xiii) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.

xiv) 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.

a. The Company shall have a well laid down Environment Policy approved by the Board of Directors.

b. The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/ deviation/violation of the environmental or forest norms/ conditions.

c. The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.

d. To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/ violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

B. GENERAL CONDITIONS:

(i) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.
(ii) Full support shall be extended to the officers of this Ministry/Regional Office at Nagpur by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.

(iii) A six-monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Nagpur regarding the implementation of the stipulated conditions.

(iv) Ministry of Environment, Forest and Climate Change or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.

(v) The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.

(vi) In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment, Forest and Climate Change.

(vii) The project proponents shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.

(viii) A copy of the clearance letter shall be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/representation has been made received while processing the proposal.

(ix) A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries Centre and Collector’s Office/ Tehsildar’s office for 30 days.

9.0 These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EPA Notification 1994, including the amendments and rules made thereafter.

10.0 All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972, etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

11.0 The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest and Climate Change at http://www.envfor.nic.in. The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Nagpur.
12.0 This Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project.

13.0 Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.

14.0 Any appeal against this Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

15.0 A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.

16.0 The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEFCC, the respective Zonal Office of CPCB and the SPCB.

17.0 The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEFCC by e-mail.

Copy to:

1. The Secretary, Department of Environment, Govt. of Goa - 403001, Goa.
2. Chairman, Central Pollution Control Board, Pariwesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi – 110 032.
3. The Chairman, Goa State Pollution Control Board, Dempo Towers, 1st Floor, EDC Plaza, Patto, Panaji, Goa - 403001.
4. The Chief Conservator of Forests (Central), Ministry of Environment & Forest, Regional Office (SZ), Kendriya Sadan, IVth Floor, E & F Wing, 17th Main Road, Koramangla, Bangalore 560 034, Karnataka.
5. Joint Secretary (IA-II), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Guard File/Record File.

(A N Singh) 
Scientist D

(A N Singh) 
Scientist D