

F.No.10-54/2016-IA.III
Government of India
Ministry of Environment, Forest & Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Aliganj, JorBagh Road,
New Delhi - 3

Dated: 20th September, 2016

To

Shri Shri Ashok (CMPPD)
M/s Jawaharlal Nehru Port Trust
Jawaharlal Nehru Port Trust
Admin Building Sheva Uran Navi Mumbai

E-mail: howe@howeindia.com ; Fax.: +91(011) 26467557

Sub: Deepening and Widening of Existing Mumbai Harbour Channel and JN Port Channel (Phase II) at Tehsil Uran, District Raigarh, Maharashtra by M/s Jawaharlal Nehru Port Trust. – Finalization of ToR

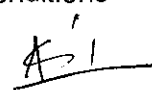
Ref.: Your online proposal no. IA/MH/MIS/56511/2016 dated 21.06.2016.

Sir,

Kindly refer your online proposal no IA/MH/MIS/56511/2016 dated 21.06.2016 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 deepening and widening of the existing Mumbai Harbour Channel and JN Port Channel (Phase II) at Tehsil Uran, District Raigarh, Maharashtra by M/s Jawaharlal Nehru Port Trust. In phase-II capital dredging, the channel will be dredged further to 15.9 m (Outer Channel) and 14.7 m (JN Port Channel) below chart datum to facilitate upto 12,500 TEU vessels with a static draft of 15 mtrs by using tidal window. Existing channel length is 33490 m and length of proposed channel is 35490 m. Existing width varies from 370 m to 800 m and proposed width varies from 450 m to 800 m. Existing depth of the channel varies from 13.1 m to 14.2 below CD and proposed depth varies from 14.7 m to 15.9 m below CD. Quantity of capital dredging will be 35.03 million cum. Out of which, total soil dredging will be 33.3 million cum and total rock dredging will be 1.73 million cum.

2. Draft Terms of Reference (TOR) have been discussed and finalized by the Expert Appraisal Committee (Infrastructure -2) in its 8th meeting held on **28-29 July, 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. 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.

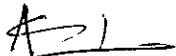


- iii. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
- iv. Recommendation of the SCZMA.
- v. Layout plan of existing and proposed Port.
- vi. The Marine biodiversity impact assessment report and management plan shall deal with all micro, micro 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.

3. These 'TORs' should be considered for the preparation of EIA / EMP report for deepening and widening of Existing Mumbai Harbour Channel and JN Port Channel (Phase II) at Tehsil Uran, District Raigarh, Maharashtra by M/s Jawaharlal Nehru 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, State Pollution Control Board, (SPCB) for public consultation. The SPCB shall conduct the public hearing/public consultation as per the provisions of EIA notification, 2006.

4. 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.*

5. 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,

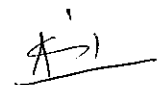

(A.N. Singh)
Scientist 'D'

Copy to:

- 1) The Additional Principal Chief Conservator of Forests, Regional Office (WCZ), Ministry of Environment, Forest and Climate Change, Nagpur.
- 2) The Chairman, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Opp. Cine Planet, Sion Circle, Mumbai-400 022.

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 tranquillity 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://moef.nic.in/Manual/Port and harbour>".

