

F.No.10-32/2018-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 3

Date: 13th June, 2018

To,

M/s Jawaharlal Nehru Port Trust
Jawaharlal Nehru Port Trust Administration Building,
Sheva, Uran, Navi Mumbai - 400 707 (Maharashtra)
Email: cmppd.jnpt@gmail.com

Subject: Environmental Clearance for balance work of 4th Container Terminal & Marine Container Terminal at JNPT by M/s Jawaharlal Nehru Port Trust - Terms of Reference - reg.

Sir,

This has reference to your proposal No. IA/MH/MIS/75011/2018 dated 17th May, 2018, submitted to this Ministry for seeking Terms of Reference (ToR) in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986.

2. The proposal for grant of Terms of Reference (ToR) to the project 'Environmental Clearance for balance work of 4th Container Terminal & Marine Container Terminal' at JNPT by M/s Jawaharlal Nehru Port Trust was considered by the Expert Appraisal Committee (Infra-2) in its 31st meeting held on 29-30 May, 2018.

3. The details of the project, as per the documents submitted by the project proponent, and also as informed during the above said meeting, are as under:-

- (i) In line with the capacity augmentation plans the fourth container terminal was conceptualized by JNPT to be developed on Build Operate Transfer (BOT) basis. M/s CES carried out the feasibility study for the same in 2006 which was updated by M/s Axis Bank in association with M/s STUP Consultants in 2007 - 08 followed by global tender process in 2010. The project was awarded to M/s Port of Singapore Authority (PSA) in 2011 after a competitive bidding process.
- (ii) Owing to extraneous factors M/s PSA could not sign the agreement even after repeated extensions (amounting to more than a year) provided by JNPT for the same and the tender was discharged in 2012.
- (iii) JNPT has been granted Environmental Clearance for 4th Container Terminal and Marine Container Terminal vide letter No. 10-81/2008-IA-III by the Ministry of Environment, Forest & Climate Change on 26.02.2014, which is valid till 28.07.2018.
- (iv) The construction of Phase-I of Fourth Container Terminal project commenced from 23rd December, 2014 after financial closure and other compliances of the Concession Agreement. The construction works under Phase-I was completed and the entire facility is put to operation by 22nd December 2017,



within the stipulated time period of 3 years for commencement of Phase-I operations. As per the Concession Agreement, Phase-II works shall be commenced immediately after achieving the traffic of 2.4 MTPA and complete the balance work by December 2022.

- (v) The validity of the Environment Clearance for the project is expiring by 28th July, 2018. As such the JNPT has applied for the fresh ToR for fresh EC for the balance works of the Fourth Container Terminal and Marine Chemical Terminal project at JNPT.
- (vi) The details of balance works of 4th Container Terminal & Marine Container Terminal at JNPT is as under:

A. Civil Infrastructure:

Sr. No.	Project Scope as preapproved Environment Clearance	Phase-I	New TOR for Balance Work in Phase-II
(i)	Berth: Berth length of 2000m x 61m	1000 m x 61 m Completed	1000 m x 61 m
(ii)	Dredging: In Maneuvering area (-)13.1 m CD and Berth pockets (-) 16.5 m CD	Approx. 110 Ha. Area dredged including berth pockets Completed 10 Million Cu M	Approx. 100 Ha. Dredging up to 16.5m below CD 9 Million Cu. M.
(iii)	Approach Bridges : Approach Bridges Adequate Nos.	05 Nos. Completed	05 Nos. Completed
(iv)	Reclamation: Reclamation are about (200 Ha.) for development of storage yard, internal roads, railway, railway container depot, parking area, office and other operational building, container terminal gate complex etc.	110 Ha. Completed	90 Ha
(v)	Road and Rail Connectivity :		
	Up to 12 lane connecting road (4.8 km) up to NhavaSheva Police Station	12 lane access road filling completed and 6 lane in	Additional 6 lane road to be completed
	Rail Container Depot for evacuation by Rail	One rail yard with 4 loop lines - Completed	Rail yard with additional 2 loop lines

B. Equipment:

Sr. No.	Project Scope as per approved Environment Clearance	Phase-I	New TOR for Balance Work in Phase-II
(i)	Rail Mounted Quay Cranes (RMQC) at least 24 Nos.	9 Installed (balance arriving)	12 Nos.
(ii)	Rubber Tyred Gantry Cranes	18 Installed	36 Nos.

	(RTGC) at least 72 Nos.	(balance arriving)	
(iii)	Rail Mounted Gantry Cranes (RMGC) at least 08 Nos.	4 Installed	04 Nos.
(iv)	Tractor Trailers at least 240 Nos.	85 T.T. Provided (balance arriving)	120 Nos.

C. Associated Facilities:

Sr. No.	Project Scope as preapproved Environment Clearance	Completed in Phase-I	New TOR for Balance Work in Phase-II
(i)	Electrification	Completed	To be Completed
(ii)	Water Supply, Drainage and Sewerage facilities	Completed	To be Completed
(iii)	Associated Computer and software network	Installed	To be Installed
(iv)	Fire Fighting facilities	Installed	To be Installed
(v)	Adequate Safety arrangement at the Terminal	Completed	To be Completed

vii. Project cost/investment is Rs. 7915.3 Crores.

4. The project/activity is covered under category 'A' of item 7 (e) i.e. 'Ports, harbours, break waters, dredging' of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level.

5. The EAC, in its 31st meeting held on 29-30 May, 2018, after detailed deliberations, recommended the project for grant of ToR 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. As per the recommendation of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords ToR to the project 'Environmental Clearance for balance work of 4th Container Terminal & Marine Container Terminal' at JNPT by M/s Jawaharlal Nehru Port Trust for preparation of the Environmental Impact Assessment (EIA) Report and Environmental Management Plan (EMP) with the following specific and general conditions in addition to Standard ToR provided at **Annexure -1**:

- (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) Submit a complete set of documents required as per para 4.2 (i) of CRZ Notification, 2011.
- (v) Certified Compliance Report issued by the MoEF&CC, Regional Office or concerned Regional Office of Central Pollution Control Board or the Member Secretary of the respective State Pollution Control Board for the conditions stipulated in the earlier environmental clearance issued for the project along

with an action taken report on issues which have been stated to be partially complied or non/not complied.

- (vi) The project proponents shall satisfactorily address to all the complaints/suggestions that have been received against the project till the date of submission of proposals for Appraisal.
- (vii) The EIA would provide an item wise compliance of the proposals to the ECBC norms.
- (viii) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point.
- (ix) A certificate from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- (x) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- (xi) A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- (xii) The Air Quality Index shall be calculated for base level air quality.
- (xiii) The EIA would study the impact of dewatering and draw up an action plan for disposal of the excess water.
- (xiv) The EIA would study the impact of Demolition and conformance to the Construction and Demolition Rules under the E.P. Act 1986.
- (xv) The E.I.A. would include a chapter on how the project conforms to the C.R.Z. management plan being drawn up by the State Government in compliance to NGT orders.
- (xvi) Various Dock and shipbuilding facilities with capacities for existing and proposed project.
- (xvii) Study the impact of dredging on the shore line.
- (xviii) A detailed impact analysis of rock dredging.
- (xix) Study the impact of dredging and dumping on marine ecology and draw up a management plan through the NIO or any other institute specializing in marine ecology.
- (xx) 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.
- (xxi) Details of Emission, effluents, solid waste and hazardous waste generation and their management in the existing and proposed facilities.

- (xxii) The existing project should avail of and submit consent to operate from the State Pollution Control Board.
- (xxiii) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xxiv) Wastewater Management Plan.
- (xxv) Details of Environmental Monitoring Plan.
- (xxvi) To prepare a detailed biodiversity impact assessment report and management plan through the NIOS or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity. The report shall study the impact on the rivers, estuary and the sea and include the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, subtidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standard survey methods.
- (xxvii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.
- (xxviii) Disaster Management Plan for the above terminal.
- (xxix) Layout plan of existing and proposed Greenbelt.
- (xxx) Status of court case pending against the project.
- (xxxi) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018 shall be prepared and submitted along with EIA Report.
- (xxxii) A tabular chart with index for point wise compliance of above ToRs.

General Guidelines

- (i) The EIA document shall be printed on both sides, as far as possible.
- (ii) All documents should be properly indexed, page numbered.
- (iii) Period/date of data collection should be clearly indicated.
- (iv) Authenticated English translation of all material provided in Regional languages.
- (v) The letter/application for EC should quote the MoEF&CC File No. and also attach a copy of the letter prescribing the ToR.
- (vi) The copy of the letter received from the Ministry on the ToR prescribed for the project should be attached as an annexure to the final EIA-EMP Report.

- (vii) The final EIA-EMP report submitted to the Ministry must incorporate the issues mentioned in ToR. The index of the final EIA-EMP report, must indicate the specific chapter and page no. of the EIA-EMP Report where the specific ToR prescribed by the Ministry. Questionnaire related to the project (posted on MoEF&CC website) with all sections duly filled in shall also be submitted at the time of applying for EC.
- (viii) Grant of ToR does not mean grant of EC.
- (ix) The status of accreditation of the EIA consultant with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.
- (x) On the front page of EIA/EMP reports, the name of the consultant/consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed ToRs (ToR proposed by the project proponent and additional ToR given by the MoEF&CC) have been complied with and the data submitted is factually correct (Refer MoEF&CC Office memorandum dated 4th August, 2009).
- (xi) While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through which the samples have been got analysed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the Environment (Protection) Act, 1986 and the rules made there under (Please refer MoEF&CC Office Memorandum dated 4th August, 2009). The project leader of the EIA study shall also be mentioned.
- (xii) All the ToR points as presented before the Expert Appraisal Committee (EAC) shall be covered.

6. The above ToR should be considered for the project 'Environmental Clearance for balance work of 4th Container Terminal & Marine Container Terminal' at JNPT by M/s Jawaharlal Nehru Port Trust, in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The Committee exempted Public hearing as per para 7(ii) of the EIA Notification, 2006 for preparation of EIA/EMP Report.

7. The project proponent shall submit the detailed final EIA/EMP prepared as per ToRs to the Ministry for considering the proposal for environmental clearance within 3 years as per the MoEF&CC O.M. No.J-11013/41/2006-IA-II(I) (P) dated 08.10.2014.

8. The consultants involved in 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. vide Notification of the MoEF&CC dated 19.07.2013.

9. The prescribed ToR would be valid for a period of three years for submission of the EIA/EMP Reports.

10. This ToR is subject to the final outcome of the final outcome/legal opinion on the Order dated 22nd November, 2017 of Hon'ble NGT in the Original Application No. 424 of 2016 (Earlier O.A. No. 169 of 2015) and Original Application No. 11 of 2014 in the matter of M/s. Mehdad & Anr V/s Ministry of Environment, Forests & Climate Change & Ors and Shamsunder Shridhar Dalvi & Ors. V/s Govt. of India & Ors.

11. This issues with the approval of Competent Authority.


(Kushal Vashist)
Director

Copy to:

The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th Floor, Opp. Cine Planet, Sion Circle, Mumbai - 400 022 (Maharashtra).

7(e): STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR PORTS, HARBOURS AND 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. In case of coal, mineral cargo, details of storage and closed conveyance, dust suppression and prevention filters.
- xiii. Submit the details of fishing activity and likely impacts on the fishing activity due to the project. Specific study on effects of construction activity and pile driving on marine life.
- 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. The Public Hearing should be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.
- xxviii. 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.
- xxix. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- xxx. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- xxxi. 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>".

