

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

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

Dated: 31st March, 2017

To

The Chairman
M/s Jawaharlal Nehru Port Trust
Admin Building Sheva Uran,
Navi Mumbai (Maharashtra)

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

Subject: Deepening and Widening of existing Mumbai Harbour Channel and Jawaharlal Nehru Port Channel (Phase II) at Tehsil Uran, District Raigarh, Maharashtra by M/s Jawaharlal Nehru Port Trust - Environmental and CRZ Clearance - reg.

Ref.: Your online proposal no. IA/MH/MIS/56511/2016 dated 04.02.2017.

Sir,

This has reference to your online proposal No. IA/MH/MIS/56511/2016 dated 04.02.2017, submitting to this Ministry along with project documents including Form-I, Terms of References, Pre-feasibility Report, EIA/EMP Report, recommendations of SCZMA, for grant of Environmental and CRZ Clearance in term of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 and Coastal Regulation Zone (CRZ) Notification, 2011, under the Environment (Protection) Act, 1986.

2.0 The Ministry of Environment, Forest and Climate Change has examined the application. It is noted that the proposal is for deepening and widening of existing Mumbai Harbour Channel and Jawaharlal Nehru Port Channel (Phase II) at Tehsil Uran, District Raigarh, Maharashtra promoted by M/s Jawaharlal Nehru Port Trust (JNPT). Both JNPT and Mumbai Port share a common navigation channel for a substantial part of its length. Till 2012, the depth of the channel was (-) 11 m CD and the depth alongside berth at JNP was (-) 13.50 m CD. With increasing cargo handling requirements, consequent expansion in its capabilities and competition from neighboring ports, JNPT has been called upon to handle new generation container vessels with wider beam and deeper drafts. JNPT conceptualized the capital dredging of channel in two phases to enable the movement of these new generation vessels. In Phase - I, the channel depth was increased from (-) 11 m CD to (-)13.1m in JNPT area and (-) 14.20 m CD in outer channel to facilitate handling vessels of 14 m draft (about 6000 TEU) with utilization of tidal window. The channel length was increased from 29.5 km to 33.5 km. JNPT is contemplating to undertake the Phase II dredging of the approach channel to facilitate handling vessels with larger drafts. Details of dredging to be carried out as given below:

S.N.	Attribute	Existing Channel	Proposed Channel
1	Length	33490 m	35490 m
2	Width	Varies from 370 m to 800 m	450 m to 800 m.

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3	Depth	13.1 m to 14.2 m below CD	14.7 m to 15.9 m below CD
4	Total soil to be dredge	-----	33.3 million cum
5	Total rock to be dredged (Rock dredging will be done with the help of cutter suction dredger and controlled blasting)	-----	1.73 million cum

3.0 A total of 6 million cum of annual maintenance dredging will be carried out. Cost of project is Rs.2029 crore. Following methods will be used for widening and deepening of the JNP Channel and Mumbai harbour:

- a) Trailer Suction Hopper Dredger, (TSHDs) can be deployed for a great number of operations, because they are amongst the most flexible dredging plant available.
- b) Cutter Suction Dredger (CSDs) is largely used in the dredging of harbours and fairways as well as for land reclamation projects when harder material needs to be dredged. They are also used when the distance between the dredging and disposal areas is shorter than the distances covered by trailing suction hopper dredgers.
- c) Underwater controlled drilling and blasting rock will be carried out between the area C-D, D-E & E-F of the proposed alignment for widening and deepening.

4.0 It is proposed to dispose off the dredged material at the pre designated site DS-3. Dispersion studies were carried out by CWPRS (Central Water and Power Research Station) for site DS3 to ascertain the suitability of the site as a dumping site. As per study conducted by IIT Mumbai, it is suggested that the dredged material cannot be used in reclamation.

5.0 There is an archeological monument viz. Elephanta caves categorized under (i) & (iii) criteria of World Heritage Sites of UNESCO, which is located at a distance of 1.60 km from JNPT end and 29 km from sea end.

6.0 Biodiversity management plan will be prepared from the NIO or any marine Ecology related institute of repute, for conservation of marine ecology prior to commencement of the dredging project. Steps will be taken to control fugitive emissions in the port area. 3 nos. of continuous ambient air quality monitoring stations and one mobile station will be installed in the port area. Continuous water quality monitoring station will be installed to monitor the quality of water before discharging into sea. As proposed, under CSR program, a total of Rs. 100 Crore funds has been allocated for construction of a new jetty at Village, Nhava sea wall of 3.5 km from Elephanta Structure, Miscellaneous works, training, conservation of marine ecology, distribution of fishing nets through Committee headed by District Collector.

7.0 The Maharashtra Coastal Zone Management Authority (MCZMA) has recommended the project vide their letter No.CRZ-2016/CR-386/TC-4 dated 6th February, 2017. The project area falls in the Zone-IV as per CRZ notification, 2011.

8.0 The ToR was awarded to the project by the MoEF&CC vide letter No.10-54/2016-IA-III dated 20th September, 2016.

9.0 Public Hearing was held on 23rd January, 2017.

10.0 All the projects related to Ports, Harbour and dredging are listed at 7 (e) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.

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11.0 The proposal was considered by the Expert Appraisal Committee (Infrastructure-2) in its meetings held during 13-15 February, 2017. The project proponent and the EIA Consultant namely M/s Fine Envirotech Engineers, 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 grant of Environmental and CRZ Clearance.

12.0 As per the recommendations of EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental and CRZ Clearance to the project for 'Deepening and Widening of existing Mumbai Harbour Channel and Jawaharlal Nehru Port Channel (Phase II)' at Tehsil Uran, District Raigarh, Maharashtra promoted by M/s Jawaharlal Nehru Port Trust, under the provisions of the EIA Notification, 2006 and CRZ Notification, 2011, and amendments/circulars issued thereon, and subject to the specific and general conditions as under:-

A. SPECIFIC CONDITIONS:

- (i) 'Consent to 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 stipulated by the Maharashtra Coastal Zone Management Authority (MCZMA) vide their letter No. CRZ-2016/OR-386/TC-4 dated 6th February, 2017, shall be strictly complied with.
- (iii) Control drilling and blasting shall be done for dredging of rock bed at designated stretch.
- (iv) Dredging shall not be carried out during the fish breeding season.
- (v) Dredging, etc shall be carried out in the confined manner to reduce the impacts on marine environment.
- (vi) Dredged material shall be disposed safely in the designated areas i.e. DS-3 as per CWPRS recommendations.
- (vii) Shoreline shall 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.
- (viii) While carrying out dredging, 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.
- (ix) The project proponent shall prepare biodiversity management plan, from the NIO or any marine Ecology related institute of repute, for conservation of marine ecology prior to commencement of the dredging project. 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.
- (x) 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 by suitable precautions and also by providing necessary mechanisms to trap the spillage.

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- (xi) 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.
- (xii) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.
- (xiii) As committed, 3 nos. of continuous ambient air quality monitoring stations shall be installed and one mobile station shall be provided in the port area. Continuous water quality monitoring station shall be installed to monitor the quality of water before discharging into sea.
- (xiv) 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.
- (xv) Measures shall be taken to control and recover the accidental spills of fuel and cargo handle.
- (xvi) 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 Regional Office, MoEF&CC along with half yearly compliance report.
- (xvii) Ship /vessels calling at the jetty shall not be permitted to dump wastes/bilge water during the berthing period.
- (xviii) Vessels visiting the facility shall meet emission standards as per MARPOL.
- (xix) The project proponent shall have own Environment Management Cell having qualified persons with proper background.
- (xx) The project proponent shall prepare operating manual in respect of all activities. It shall cover all safety & environment related issues and system. Measures shall be taken for protection. One set of environmental manual shall be made available at the project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office.

B. GENERAL CONDITIONS:

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

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- (vi) The project proponent 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.
- (vii) 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.
- (viii) 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.

13.0 The above stipulations would be enforced among others under the provisions of the 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 the EIA Notification 1994, including the amendments and rules made thereafter.

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

15.0 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.

16.0 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.

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

18.0 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.

19.0 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.

20.0 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



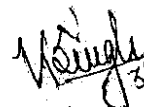
periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB.

21.0 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 MoEF&CC by e-mail.


(Dr. Vinod K. Singh)
Scientist D
31/3/2017

Copy to:-

- 1) The Principal Secretary, Environment Department, Government of Maharashtra, 15th Floor, New Administrative Building, Mantralaya, Mumbai - 400 032.
- 2) The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forests and Climate Change, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur - 440001.
- 3) The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
- 4) The Chairman, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Opp. Cine Planet, Sion Circle, Mumbai-400 022.
- 5) Monitoring Cell, Ministry of Environment Forest and Climate Change, Indira Paryavaran Bhavan, Jorbagh Road, New Delhi.
- 6) Guard File/ Record File/ Notice Board.


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31/3/2017