

# 476.A

## IN THE HON'BLE NATIONAL GREEN TRIBUNAL, WESTERN ZONE, PUNE BENCH

IN

**APPEAL NO. 29 OF 2024**

### **IN THE MATTER OF:**

Paramparik Machimmar Bachav

Samajik Kruti Samittee

...Appellant

**Vs.**

Jawaharlal Nehru Port Authority & Ors.

...Respondents

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**476.B**

**IN THE HON'BLE NATIONAL GREEN TRIBUNAL, WESTERN ZONE,  
PUNE BENCH**

IN

**APPEAL NO. 29 OF 2024**

**IN THE MATTER OF:**

Paramparik Machimmar Bachav

Samajik Kruti Samittee

... Appellant

**Vs.**

Jawaharlal Nehru Port Authority & Ors.

... Respondents

**Counter Affidavit On Behalf of Ministry of Environment,**

**Forest and Climate Change (Respondent No.2)**

**MOST RESPECTFULLY SHOWETH:**

I, E. Thirunavukkarasu, S/o Shri M. Elangovan, aged about 56 years, resident of Nagpur, do hereby solemnly affirm and state as under :-

1. That I am working as Scientist 'E' in the Regional Office of the Ministry of Environment, Forest & Climate Change (hereinafter referred to as 'MoEF&CC') at Nagpur.
2. That I am authorized by the Competent Authority in the Ministry to swear the present affidavit on behalf of the MoEF&CC.



## 476.C

3. I submit that I deny all the allegations/averments mentioned in the Appeal filed by the Appellant except those that are specifically admitted in the counter affidavit filed.
4. That the Appellant herein has challenged the Environment and CRZ Clearance dated 15.03.2024 granted by the answering Respondent to the Jawaharlal Nehru Port Authority (hereinafter referred to as the "JNPA") for widening of the existing Container Berth at the Jawaharlal Nehru Port, Maharashtra.
5. The Appellant emphasized on the statement made by the Maharashtra Coastal Zone Management Authority (MCZMA) while recommending the project for CRZ Clearance that-

*"due to continuous ship movement, fisheries are not well developed in the area. Hence no significant impacts on fisheries is anticipated."*

In respect of this, the Appellant has alleged that the statement made by the MCZMA, as also available in the EIA Report is false.

6. That in this regard, the answering Respondent respectfully submits that under clause (v) of sub-section (2) of Section 3 of the Environment (Protection) Act, 1986, the Central Government has the power to make rules for carrying out the purposes of the said Act. While exercising the powers conferred by the Environment (Protection) Act, 1986, the answering Respondent had issued the Environment Impact Assessment (EIA)

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Notification vide S.O.60 (E) dated 27<sup>th</sup> January, 1994 mandating 32 categories of projects listed in Schedule- I for obtaining prior Environmental Clearance based on the investment criteria (originally it was Rs 50 crores, which was enhanced to Rs 100 crores). It is further submitted that the Environmental Impact Assessment (EIA) was made a statutory requirement for certain category of construction and development activities through amendment dated 07.07.2004 in the EIA Notification, 1994.

7. It is humbly submitted that under the Environment (Protection) Act, 1986 read with Environment (Protection) Rules, 1986, the answering Respondent has issued a Notification No. S.O. 1533(E) dated 14.09.2006 (hereinafter referred to as the "EIA Notification, 2006"), in suppression of the Notification No. S.O.60(E) dated 27<sup>th</sup> January, 1994.
8. It is further submitted that under the provisions of the EIA Notification, 2006, all new projects or activities listed in the Schedule to the EIA Notification, 2006 or the expansion or modernization of existing projects or activities listed in the said Schedule with addition of capacity beyond the limits specified for the concerned sector, i.e., projects or activities which cross the threshold limits after expansion or modernization or any change in product -mix in an existing manufacturing unit included in Schedule beyond the specified range, shall be undertaken in any

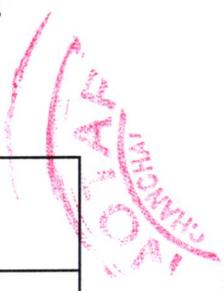


## 476.E

part of India, as applicable, only after receipt of the prior Environment Clearance from the Central Government or by the State Level Environment Impact Assessment Authority (“SEIAA”), as the case may be. It is submitted that the Central Government under sub-section (3) of Section 3 of the Environment Protection Act, 1986 and in accordance with the procedure specified in the EIA Notification, 2006, duly constitutes SEIAA in the States.

9. It is humbly submitted that the Schedule to the EIA Notification, 2006 lists out activities that require prior Environment Clearance from the answering Respondent or SEIAA, as the case may be. Therefore, the proposal for widening of the existing container berth (Cargo Handling Capacity of 22.1 MTPA) was received from the JNPA on 21.08.2023 for seeking prior Environment and CRZ Clearance from the answering Respondent under entry (7e) of the Schedule, which is as follows:-

	Project or Activity	Category with threshold limit		Conditions if any
		A	B	
(1)	(2)	(3)	(4)	(5)
7(e)	Ports, harbors, break waters, dredging	≥ 5 million TPA of cargo handling capacity (excluding fishing	< 5 million TPA of cargo handling capacity and/or ports/ harbours ≥10,000 TPA of	General Condition shall apply Note: 1. Capital dredging inside and outside the ports or harbors and channels are



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		harbours)	fish handling capacity	included; 2. Maintenance dredging is exempt provided it formed part of the original proposal for which Environment Management Plan (EMP) was prepared and environmental clearance obtained.
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10. It is respectfully submitted that the aforesaid proposal received from the JNPA was considered by the Expert Appraisal Committee [IA (Infra-1)] in its 333<sup>rd</sup> meeting held on 11<sup>th</sup> -12<sup>th</sup> August, 2023 wherein the Project Proponent submitted that the proposal will include the following facilities:-

- i. Increase of crane Rail span from 20 m to 30.50 m for 680 m berth length.
- ii. Increase of deck width of the berth by 15 m on land side for smooth vehicle maneuvering & for keeping vessels hatch covers.
- iii. Up-gradation and strengthening of existing 530m berth and 150 m wharf to accommodate design vessels of size 12200 TEU for which the facility was originally designed & commissioned.
- iv. Up-gradation of Fenders and Bollards.
- v. Repairs and strengthening of existing damaged portion of the berth structures.



## 476.G

- vi. Underdeck repairs of the existing structure.
11. Thereafter, based on the recommendations of the EAC in its 333<sup>rd</sup> meeting, the Terms of Reference was issued to the Project Proponent vide letter dated 01.09.2023 for conducting public hearing and preparation of the Environmental Impact Assessment (EIA) Report/ Environmental Management Plan (EMP) in accordance with the provisions of the EIA Notification, 2006. Copy of the Terms of Reference issued by the answering Respondent vide letter dated 01.09.2023 is herewith attached and marked as **Annexure- I**.
12. It is humbly submitted that the Terms of Reference were issued to the JNPA to conduct various environmental studies that were to be made part of the EIA/ EMP Report. By way of ToR, the answering Respondent directed the JNPA to study the impact of dredging and dumping on marine ecology and draw up a management plan through the National Institute of Oceanography or any other institute specializing in marine ecology. The JNPA was further required to submit in its EIA Report the details of the fishing activity and likely impacts on the fishing activity due to the project.
13. That the EIA Report submitted to the answering Respondent indicated that as far as dredging for proposed widening of the berth is concerned, the Port will not require any further dredging



## 476.H

of access channel currently serving the port of Bombay. A new approach channel to the Nhava Sheva Port will be made from the Butcher Island turning circle. The EIA Report further recorded that from an environmental consideration, dredging may have potential impact on ocean currents and fishery resources. However, the Deputy Director of Fisheries, Government of Maharashtra has confirmed that the Bombay Harbour and the Sheva area are neither good fishing grounds nor major spawning grounds and the small amount of fishing activity by local villagers observed during a field visit to the site is strictly day fishing and does not account for a significant local source for the local villages. It was thus made clear that the dredging activity for the proposed project has no significant effect on the environment.

14. That as directed in the ToR issued to the JNPA, the Report on study of the impact of the proposed project on marine ecology and biodiversity around the Jawaharlal Nehru Port was prepared by the Council for Scientific and Industrial Research- National Institute of Oceanography and the same was submitted by the JNPA to the answering Respondent.

15. It is humbly submitted that thereafter, the application vide proposal No. IA/MH/INFRA1/458254/2024 dated 16.01.2024 was received by the answering Respondent for issuance of



## 476.I

Environment Clearance for the proposed project under the provisions of the EIA Notification, 2006. The EAC in its 356<sup>th</sup> meeting held on 6<sup>th</sup> & 7<sup>th</sup> February, 2024, while taking into account all the factors and the mitigation measures contributing to the EIA Report and the submissions made therein, recommended the proposal for the grant of Environment Clearance to the JNPA.

16. Subsequently, the Environment Clearance was granted by the answering Respondent vide letter dated 15.03.2024 for undertaking the said project in the State of Maharashtra. Copy of the Environment Clearance granted by the answering Respondent vide letter dated 15.03.2024 is annexed and marked as **Annexure-II**.

17. It is humbly submitted that the answering Respondent has imposed stringent project specific and general conditions to make sure that the fisheries in and around the project area are not harmed due to the said project in question.

18. For that, specific condition no. 9 regarding protection of the Marine ecology was particularly made part of the EC conditions for putting restrictions on the dredging activity and undertaking the construction project only in a confined matter so that the adverse affect on fisheries and marine ecosystem can be minimized. In addition to this, the answering Respondent, vide



## 476.J

specific condition no. 9.6 ensured that the marine ecology is monitored at regular intervals even after the grant of Environment Clearance. The specific condition no. 9 on marine ecology is detailed as follows:-

*“9.1 Dredging shall not be carried out during the fish breeding and spawning seasons.*

*9.2 Dredging, etc shall be carried out in the confined manner to reduce the impacts on marine environment.*

*9.3 The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.*

*9.4 While carrying out dredging, an independent monitoring shall be carried out through a Government Agency/ Institute to assess the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.*

*9.5 A detailed marine biodiversity management plan shall be prepared through the NIO or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity and submitted to and implemented to the satisfaction of the State Biodiversity Board and the CRZ authority. The report shall be based on a study of the impact of the project activities on the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, sub-tidal 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 standards survey methods and include underwater photography.*



## 476.K

9.6 *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 including all micro, macro and mega floral and faunal components of marine biodiversity.*

9.7 *The project proponent shall ensure that water traffic does not impact the aquatic wildlife sanctuaries that fall along the stretch of the river.”*

19. Therefore, in view of the above submissions made by the answering Respondent, it is evident that the Environment and CRZ Clearance for the project in question was granted by the Central Government taking all the aspects of conservation sustainable development into account and providing mitigation measures and several environmental safeguards by way of deliberations held during the EAC and meetings and conditions imposed on the JNPA for their due compliance.

20. Therefore, in view of the above submissions made by the answering Respondent, it is prayed that this Hon'ble Tribunal may take the Counter Affidavit on record and dismiss the present Appeal or pass any other appropriate order, which the answering Respondent shall duly comply with and thus, render justice.

NOTATION

21. The answering Respondent craves liberty to file additional information, if any, till *pendente lite*.

DEPONENT  
(ई. थिरुनावुक्करसु)  
(E. Thirunavukkarasu)

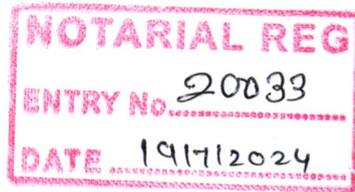
वैज्ञानिक 'ई' / Scientist 'E'  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय  
Ministry of Environment, Forest & Climate Change  
क्षेत्रीय कार्यालय, नागपूर-४४०००९  
Regional Office, Nagpur-440001

**VERIFICATION**

I, the aforementioned Deponent do hereby declare on this 19<sup>th</sup> day of July at Nagpur that the contents of the affidavit are true to my knowledge and belief and nothing material has been concealed therefrom.

DEPONENT  
(ई. थिरुनावुक्करसु)  
(E. Thirunavukkarasu)

वैज्ञानिक 'ई' / Scientist 'E'  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय  
Ministry of Environment, Forest & Climate Change  
क्षेत्रीय कार्यालय, नागपूर-४४०००९  
Regional Office, Nagpur-440001



SWORN BEFORE ME ON THIS 19<sup>th</sup>  
DAY OF July 2024 AT NAGPUR BY  
SHRI / SMT / K/ E- Thirunavukkarasu,  
R/o NAGPUR WHO HAS BEEN IDENTIFIED BY  
SHRI / SMT. Arundhodi Roy,  
ADVOCATE, NAGPUR

NOTARY  
GOVT. OF INDIA  
NAGPUR (M.S.) INDIA





सत्यमेव जयते

476.M

Annexure - I

File No: File no: 10/48/2023-IA.III

Government of India  
Ministry of Environment, Forest and Climate Change  
IA Division

\*\*\*



Dated 01/09/2023



To,

Shri Sunilkumar Vishnu Madhbhavi  
JAWAHARLAL NEHRU PORT TRUST  
Jawaharlal Nehru Port Trust Admin Building Sheva Uran Navi Mumbai Navi Mumbai, RAIGAD,  
MAHARASHTRA, , 400707  
cmppd.jnpt@gmail.com

**Subject:** Grant of Terms of Reference under the provision of the EIA Notification 2006-regarding.

**Sir/Madam,**

This is in reference to your application for Grant of Terms of Reference under the provision of the EIA Notification 2006-regarding in respect of project Widening of Existing Container Berth At Jawaharlal Nehru Port, Navi Mumbai, Maharashtra (Cargo Handling Capacity= 22.1 MTPA) submitted to Ministry vide proposal number IA/MH/INFRA1/426533/2023 dated 21/08/2023.

2. The particulars of the proposal are as below :

(i) ToR Identification No.	TO23A3501MH5915492E
(ii) File No.	File no: 10/48/2023-IA.III
(iii) Clearance Type	Fresh ToR
(iv) Category	A
(v) Project/Activity Included Schedule No.	7(e) Ports, harbors, breakwaters, dredging
(vi) Sector	INFRA-1
(vii) Name of Project	Widening of Existing Container Berth At Jawaharlal Nehru Port, Navi Mumbai, Maharashtra (Cargo Handling Capacity= 22.1 MTPA)
(viii) Name of Company/Organization	JAWAHARLAL NEHRU PORT TRUST
(ix) Location of Project (District, State)	RAIGAD, MAHARASHTRA
(x) Issuing Authority	MoEF&CC
(xii) Applicability of General Conditions	no
(xiii) Applicability of Specific Conditions	no

1. Widening of Existing Container Berth at Jawaharlal Nehru Port Authority, Navi Mumbai, Maharashtra

# 476.N

(Cargo Handling Capacity= 22.1 MTPA) by M/s Jawaharlal Nehru Port Authority.

2. The following will be Concessionaire scope of work the details are as following:
3. Increase of crane Rail span from 20 m to 30.50 m for 680 m berth length.
4. Increase of deck width of the berth by 15m on land side for smooth vehicle manoeuvring & for keeping vessels hatch covers.
5. Up-gradation and strengthening of existing 530m berth and 150m wharf to accommodate design vessels of size 12200 TEU for which the facility was originally designed & commissioned.
6. Up gradation of Fenders and Bollards may be necessary.
7. Repairs and strengthening of existing damaged portion of the berth structures as may be necessary.
8. Under-deck repairs of the existing structure wherever necessary.
9. The proposed project falls under Schedule 7(e), Ports, harbours, Category “A” of EIA Notification 2006. Total estimated civil cost of the project is about Rs. 87216 Lakh.
10. Land use/ Land cover of project site in tabular form:
  1. Terrain and topographical features: The district has three physiographic divisions i.e. (i) Coastal zone in west covers about 20% percent of the district (ii) Central zone covers about 1/3rd of the district, consisting of fertile land in low lying area (iii) Hilly zone in the eastern part highly uneven in altitude and covered with forest. This hill range is characterized by ruggedness and uneven topography, with crestline of peaks and saddles forming the eastern horizon. Ulhas, Panvel and Patalganga are the three main rivers in northern part. Kundalika River is the main river in central part whereas in the southern part Savitri River is the main river.
  2. Details of water bodies, impact on drainage: There will be no adverse impact on drainage system due to widening of existing berth terminals at JNPA.
  3. Water requirement: water will be required for Existing – 50 KLD and for Expansion-30 KLD. During operation Phase Existing – 50 KLD and for Expansion-30 KLD. Water supply from JNPA’s existing own source. No ground water extraction is there.
  4. Diversion of forest land: The project does not involve any diversion of forest land.
  5. The project is not located within 10 km of Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves, Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC:
  6. Details of CRZ: The project falls under CRZ-IVA, MCZMA recommendations is required.
  7. No shoreline changes No additional changes to the existing Channel, breakwaters no dredging required, marginal land reclamation.
  8. Land acquisition and R&R issues involved: No R&R issues involved in the instant proposal.
  9. Employment potential: during construction phase th project will generate 370 employments and during operational phase the project will generate employment of 375.
  10. Benefits of the project: The execution of the project brings overall improvement in the locality, neighborhood and the State by bringing industry, roads, employment and hence improving living standard and economic growth.
  11. Details of Court cases: No court case is involved in the proposed project.

# 476.O

12. The EAC based on the information submitted and clarifications provided by the project proponent and detailed discussions held on all the issues during its 333<sup>rd</sup> meeting during 11<sup>th</sup>-12<sup>th</sup> July, 2023 recommended the proposal for grant of Terms of Reference(TOR) with stipulated specific conditions along with other Standard ToR Conditions.

13. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other Miscellaneous projects) and hereby decided to grant Terms of Reference for the 'Widening of Existing Container Berth at Jawaharlal Nehru Port, Navi Mumbai, Maharashtra (Cargo Handling Capacity-22.1 MTPA) by M/s Jawaharlal Nehru Port Trust' and for preparation of EIA/EMP report with public consultations under the EIA Notification, 2006 as amended and CRZ Notification 2011, subject to strict compliance of the following specific conditions, in addition to all standard ToR conditions applicable for such projects.

14. This issues with the approval of the Competent Authority.

S. No.	Land use/Land cover	Area (ha)	%	Remarks, if any
1.	Non Forest Land	54	-	-

## Copy To

1. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Opp. PVR Cinema, Sion Circle, Mumbai-400 022.
2. Parivesh Portal.
3. Guard File.

**Annexure 1**

## **Specific Terms of Reference for (Ports, harbors, breakwaters, dredging)**

### **1. Specific Conditions**

S. No	Terms of Reference
1.1	<ol style="list-style-type: none"><li>1. PP shall submit the latest Certified EC compliance report by the concern IRO of the Ministry.</li><li>2. Importance and benefits of the project.</li><li>3. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.</li><li>4. Recommendation of the Maharashtra CZMA shall be obtained and submitted.</li><li>5. Submit superimposing of latest CZMP as per CRZ (2011) on the CRZ map.</li><li>6. Submit a complete set of documents required as per para 4.2 (i) of CRZ Notification, 2011.</li><li>7. Hydrodynamics study on impact of dredging on flow characteristics shall be carried out.</li><li>8. 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.</li></ol>

## 476.P

S. No	Terms of Reference
	<p>9. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).</p> <p>10. 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.</p> <p>11. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.</p> <p>12. 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.</p> <p>13. 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.</p> <p>14. Disaster Management Plan for the project shall be prepared and submitted.</p> <p>15. Details and status of court case pending against the project, if any.</p> <p>16. 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.</p> <p>17. A tabular chart with index for point-wise compliance of above ToRs. The specific ToRs as recommended above are 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.</p> <p>18. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent, based on the commitments made during the public hearing, shall include all the activities required to be taken to fulfill these commitments in the Environment Management Plan along with cost estimates of these activities, in addition to the activities proposed as per recommendations of EIA Studies and the same shall be submitted to the ministry as part of the EIA Report. The EMP shall be implemented at the project cost or any other funding source available with the project proponent.</p> <p>19. In pursuance of Ministry's OM No stated above the project proponent shall add one annexure in the EIA Report indicating all the commitments made by the PP to the public during public hearing and submit it to the Ministry and the EAC.</p>

### Standard Terms of Reference for (Ports, harbors, breakwaters, dredging)

#### 1 Project details

S. No	Terms of Reference
1.1	Reasons for selecting the site with details of alternate sites examined/rejected/selected on merit with

## 476.Q

S. No	Terms of Reference
	comparative statement and reason/basis for selection.
1.2	The examination should justify site suitability in terms of environmental angle, resources sustainability associated with selected site as compared to rejected sites.
1.3	The analysis should include parameters considered along with weightage criteria for short-listing selected site.
1.4	Submit the status of shore line change at the project site
1.5	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.
1.6	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
1.7	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.

### 2 Land use, Land Acquisition and R&R

S. No	Terms of Reference
2.1	Details of the land use break-up for the proposed project. Details of land use around 10 km radius of the project site.
2.2	Submit details regarding R&R involved in the project

### 3 ESZ, CRZ, International Boundary and Acts

S. No	Terms of Reference
3.1	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.
3.2	Erosion and accretion study at the mouth of the creek which is adjacent to the proposed site be carried out and submitted
3.3	Detailed modelling studies to understand whether the selected site can withstand severe cyclones and develop design in accordance to due safety measures.
3.4	Submit superimposing of latest CZMP as per CRZ Notification (2011) on the CRZ map. And also submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scales.

S. No	Terms of Reference
3.5	Submit a complete set of documents required as per para 4.2 (i) of CRZ Notification, 2011.
3.6	Hydrodynamics study on impact of dredging on flow characteristics shall be carried out.
3.7	A detailed study on the impact of proposed activity on marine ecology and marine biodiversity with specific focus on the corals, mangroves and Mud flats in the proximity of the site should be conducted and required mitigation plan be submitted.
3.8	A management plan for the area under which mangroves are or likely to be removed and compensatory mangrove plantation plan be submitted.

#### 4 Remote Sensing & GIS

S. No	Terms of Reference
4.1	Analysis should be made based on latest satellite imagery for land use with raw images.

#### 5 Forest and Wildlife

S. No	Terms of Reference
5.1	Submit the present land use and permission required for any conversion such as forest, agriculture etc.
5.2	land acquisition status, rehabilitation of communities/ villages and present status of acquiring Forest and Agricultural activities.
5.3	Submit details of the trees to be cut including their species and whether it also involves any protected or endangered species.
5.4	Measures taken to reduce the number of the trees to be removed should be explained in detail.
5.5	Submit the details of compensatory plantation.
5.6	Explore the possibilities of relocating the existing trees.
5.7	Examine the details of afforestation measures indicating land and financial outlay
5.8	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.
5.9	The identification of species/ plants should be made based on the botanical studies.

#### 6 Water Environment/Quality Analysis/ Hydrology and Water Bodies

## 476.S

S. No	Terms of Reference
6.1	Examine the details of water requirement, impact on competitive user, treatment details, use of treated waste water. Prepare a water balance chart.
6.2	Examine and submit the water bodies including the seasonal ones within the corridor of impact along with their status, volumetric capacity, quality likely impacts on them due to the project.
6.3	Submit the details of fishing activity and likely impacts on the fishing activity due to the project.
6.4	Specific study on effects of construction activity and pile driving on marine life

### 7 Waste Management, Drainage and STPs

S. No	Terms of Reference
7.1	Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area
7.2	Examine details of Solid waste generation treatment and its disposal.
7.3	Details of oil spill contingency plan.
7.4	Details of the layout plan including details of channel, breakwaters, dredging, disposal and reclamation.

### 8 Terrain and Topography

S. No	Terms of Reference
8.1	Submit the details of terrain, level with respect to MSL, filling required, source of filling materials and transportation details etc.
8.2	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.
8.3	Details of bathymetry study.
8.4	Details of ship tranquillity study.
8.5	The ecologically fragile area including CRZ 1A area etc. shall be demarcated and superimposed on the layout plan and submitted.

### 9 Road/Transport Connectivity and Traffic measures

S. No	Terms of Reference
9.1	Examine road/rail connectivity to the project site and impact on the existing traffic network due to the proposed project/activities

# 476.T

S. No	Terms of Reference
9.2	A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
9.3	Details of handling of each cargo, storage, transport along with spillage control, dust preventivemeasures.
9.4	In case of coal, mineral cargo, details of storage and closed conveyance , dust suppressionand prevention filters.
9.5	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.

## 10 Rain Water Harvesting

S. No	Terms of Reference
10.1	Details of rainwater harvesting and utilization of rain water.

## 11 Baseline data

S. No	Terms of Reference
11.1	Examine baseline environmental quality along with projected incremental load due to the proposedproject/activities.

## 12 Air Environment

S. No	Terms of Reference
12.1	The air quality monitoring should be carried out according to the notification issued on 16th November, 2009.

## 13 Environment Management/ Monitoring, Mitigative Measures and RiskAssessment details

S. No	Terms of Reference
13.1	Examine separately the details for construction and operation phases both for EnvironmentalManagement Plan and Environmental Monitoring Plan with cost and parameters.
13.2	Submit details of a comprehensive Risk Assessment and Disaster Management Plan includingemergency evacuation during natural and man-made disasters.
13.3	Details of desalination plant and the study for outfall and intake

**14 Court/ Litigation records**

S. No	Terms of Reference
14.1	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

**15 Environment Responsibility**

S. No	Terms of Reference
15.1	As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent, based on the commitments made during the public hearing, specific studies shall include all the activities required to be taken to fulfill these commitments in the Environment Management Plan along with cost estimates of these activities, in addition to the activities proposed as per recommendations of EIA Studies and the same shall be submitted to the ministry as part of the EIA Report. The EMP shall be implemented at the project cost or any other funding source available with the project proponent.

**Additional Terms of Reference**

1. A detailed draft EIA/EMP report shall be prepared in terms of the above additional TOR and should be submitted to the State Pollution Control Board for Public Hearing. Public Hearing to be conducted for the project in accordance with the 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 shall be conducted based on the TOR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the website.
2. The project proponent shall submit the detailed final EIA/EMP report prepared as per TOR to the Ministry for considering the proposal for environmental clearance before expiry of validity of TOR.
3. 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 dated 19<sup>th</sup> July, 2013.
4. The prescribed TOR would be valid for a period of four years for submission of the EIA/EMP Reports.

**Annexure 2****Signature Not Verified**Digitally Signed by : Dr Amardeep Raju  
Member Secretary, MoEFCC (EC)

Date: 01/09/2023



सत्यमेव जयते

File No: File no: 10/48/2023-IA.III  
 Government of India  
 Ministry of Environment, Forest and Climate Change  
 IA Division

\*\*\*



Date 15/03/2024



To,

JAWAHARLAL NEHRU PORT TRUST  
 Jawaharlal Nehru Port Trust Admin Building Sheva Uran Navi Mumbai-400707  
 cmppd.jnpt@gmail.com

**Subject:** Widening of Existing Container Berth at Jawaharlal Nehru Port, Navi Mumbai, Maharashtra (Cargo Handling Capacity of 22.1 MTPA). The project site is located at Village Nhava, Navi Mumbai, District Raigad, and State Maharashtra by M/s Jawaharlal Nehru Port Authority- Environmental and CRZ clearance-regarding.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/MH/INFRA1/458254/2024 dated 16/01/2024 for grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC24A3501MH5578747N
(ii) File No.	File no: 10/48/2023-IA.III
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	7(e) Ports, harbors, breakwaters, dredging
(vi) Sector	INFRA-1
(vii) Name of Project	Widening of Existing Container Berth At Jawaharlal Nehru Port, Navi Mumbai, Maharashtra (Cargo Handling Capacity= 22.1 MTPA)
(viii) Name of Company/Organization	JAWAHARLAL NEHRU PORT TRUST
(ix) Location of Project (District, State)	RAIGAD, MAHARASHTRA
(x) Issuing Authority	MoEF&CC
(xi) Applicability of General Conditions as per EIA Notification, 2006	No

3. The above mentioned proposal was considered in the 356th EAC meeting held on 06th-07th February, 2024. The project proponent along with the EIA consultant M/s Mantec Consultants Pvt. Ltd. Noida made a presentation in the

Ministry and provided the following information before the Committee.

4. Initially Environmental clearance was accorded in the name of Nhava Sheva Port by Ministry of Environment & Forest vide Office Memorandum no. J-11013/21/88-1A dated 16th Sept 1988 for entire development of Nhava Sheva Port. JNP Container Berth with a quay length of 680 m was constructed in 1989, subsequently the port was renamed as Jawaharlal Nehru Port Trust (JNPT) on 26th May 1989. The Environmental Clearance for Port was issued as per the extant rules prevailing then i.e. 1988 prior to the EIA notification 1994. The JNPT has a valid Consent for Operations (CFO) issued by Maharashtra State Pollution Control Board (MSPCB), vide consent No. Format 1.0/CAC/ UAN/No.0000097172/CR-2103001085 dated 19th March 2021. The consent for operation of JNPA Container Terminal berth having length of 680 m is valid up to 30.09.2025. Further PP submitted the vide letter no. PPD/VPPL/MoEF&CC/2023 dated 04.09.2023 inter-alia stating that vide gazette of India (S.O.4504 (E) dated 29th October, 2021 the provisions of the Major Port Authorities Act, 2021 have come into force. Subsequently, the Central Government in pursuance of Major Port Authorities Act, 2021 constituted the Board of Jawaharlal Nehru Port Authority with effect from January 2022 vide Gazette Notification G.S.R No.59(E) dated 31st January, 2022. As per Gazette Notification of Government of Maharashtra dated 12th July, 2022, 'Jawaharlal Nehru Port Trust' is changed to 'Jawaharlal Nehru Port Authority'.

5. The instant proposal is for 'widening of existing container berth at Jawaharlal Nehru Port, Navi Mumbai, Maharashtra (Cargo Handling Capacity of 22.1 MTPA). The project site is located at Village-Nhava, Navi Mumbai, District-Raigad, and State-Maharashtra by M/s Jawaharlal Nehru Port Authority'. The expansion proposal will have the following facilities:

- (i) Increase of crane Rail span from 20 m to 30.50 m for 680 m berth length.
- (ii) Increase of deck width of the berth by 15 m on land side for smooth vehicle maneuvering & for keeping vessels hatch covers.
- (iii) Up-gradation and strengthening of existing 530m berth and 150 m wharf to accommodate design vessels of size 12200 TEU for which the facility was originally designed & commissioned.
- (iv) Up-gradation of Fenders and Bollards.
- (v) Repairs and strengthening of existing damaged portion of the berth structures.
- (vi) Underdeck repairs of the existing structure.
- (vii) The proposal is for Widening of Existing Container Berth at Jawaharlal Nehru Port, Navi Mumbai, Maharashtra (Cargo Handling Capacity= 22.1 MTPA).

6. The proposed project falls under 7(e)-Ports, harbours, break waters, dredging Category-A, as per EIA notification 2006. The total cost of the existing project is Rs.675.34 crores, proposed project cost is Rs.196.82 crores and the total cost of the project is Rs. 872.16 crores. The ToR for the proposal was granted by the Ministry on 01/09/2023

7. Public Hearing: The public hearing was conducted on 01st December, 2023 at project site, Bahuuddeshiya Sabhagruha, Sec.-02, J.N.P.T colony, Jawaharlal Nehru Port Authority, Tal-Uran and Dist. Raigarh. Maharashtra.

8. Landuse land cover: Land use/ Land cover of project site is as following:

S.no	Landuse/Land cover	Area(ha)	Percentage (%)	Remarks, if any
1	Non Forest Land	54	-	-

9. Terrain and topographical features: The district has three physiographic divisions i.e. (i) Coastal zone in west covers about 20% percent of the district (ii) Central zone covers about 1/3rd of the district, consisting of fertile land in low lying area (iii) Hilly zone in the eastern part highly uneven in altitude and covered with forest. This hill range is characterized by ruggedness and uneven topography, with crestline of peaks and saddles forming the eastern horizon. Ulhas, Panvel and Patalganga are the three main rivers in northern part. Kundalika River is the main river in central part whereas in the southern part Savitri River is the main river.

10. Details of water bodies, impact on drainage: the instant proposal is for widening of Existing Container Berth. There will be no adverse impact on drainage system due to widening of existing berth terminals at JNPA.

11. Water requirements: Total water requirement for existing would be 50 KLD and 30 KLD for expansion phase which will be sourced from M/s Maharashtra Jeevan Pradhikaran / City and Industrial Development Corporation of Maharashtra

## 476.X

Limited (CIDCO) through JNPA and no ground water is envisaged.

12. Diversion of Forest Land: The project does not involve any diversion of forest land. The project is not located within 10 km of Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves etc and Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC.

13. Waste Management: 10 MT/Day Solid Waste Management Facility commissioned in the month of February 2021 as per SWM rule 2016 for port users, Port Township and certain villages within port estate. All ships bound for JNPA are registering in Swachh Sager Portal and Port Reception Facility are being provided as requested. Reception facilities for MARPOL annex - 1, 2, 5 & 6 are provided to vessels calling JNPA. STP details: The treated sewage water of STP is being used for the gardening purpose of JNPA township and about 1 MLD treated water is being used which reduced the burden on use of drinking water. The port has further planned to increase use of recycled water for tank farm area.

14. Details of tree cutting: The proposed project does not involve any trees cutting.

15. Energy conservation measures with estimated saving: 4.10 MWp. 38% of avg. power requirement is from renewable energy. Upcoming solar plants of 1.5MWp storage type is proposed.

16. CRZ Details: The entire project alignment falls under CRZ IV(A) Area as Per CRZ Notification 2011. Maharashtra Coastal Zone Management Authority vide letter no. CRZ2022/CR 312/TC4 dated 14th February, 2023 recommended the proposal.

17. Details of Shoreline changes: The instant proposal will not having any additional changes to the existing Channel, shoreline changes, breakwaters, dredging and land reclamation.

18. Land acquisition and R&R issues involved: The project for widening of existing container berth at Jawaharlal Nehru Port Authority at Sheva, Navi Mumbai. No R&R issues involved in the instant proposal.

19. Employment potential: During construction Phase the proposed project will get 10 persons job opportunity permanently and will get 360 persons will get contractual employment. During operational stage total 15 persons will get permanent job opportunity and 360 persons will get contractual employment.

20. Benefits of the project: Modernizing and expanding the port's infrastructure is essential to keep pace with global standards and technological advancements in the maritime industry. This includes upgrading container terminals, enhancing transportation connectivity, and improving logistics efficiency. JNPA is facing congestion issues due to its high utilization. Expanding the port can help alleviate congestion, reduce waiting times for vessels, and enhance the overall operational efficiency of the port. The expansion of JNPA will lead to increased economic activity in the region, which, in turn, can create jobs and stimulate economic development in the surrounding areas.

21. Details of Court cases: The proposed project does not involve any court cases.

22. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 356th meeting on 06th-07th February, 2024 recommended the proposal for grant of Environmental and CRZ Clearance subject to all specific and standard conditions applicable for such projects.

23. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other miscellaneous projects) and hereby decided to grant of environmental and CRZ Clearance for 'Widening of Existing Container Berth at Jawaharlal Nehru Port, Navi Mumbai, Maharashtra (Cargo Handling Capacity of 22.1 MTPA). The project site is located at Village Nhava, Navi Mumbai, District Raigad, and State Maharashtra by M/s Jawaharlal Nehru Port Authority' under the EIA notification, 2006 as amended and CRZ Notification, 2011 subject to strict compliance of the following specific conditions, in addition to all standard conditions applicable for such projects.

24. This issues with the approval of the Competent Authority.

**Copy To**

1. Principal Secretary Environment & Climate Change Department, Government of Maharashtra, Mantralaya, Mumbai – 32.
2. The Deputy Director General of Forests (C) Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur- 440001.
3. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32.
4. The Member Secretary, Maharashtra Pollution Control Board, Kalpatru Point, Sion Circle, Sion (East), Mumbai-400 022, Maharashtra.
5. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi
6. Parivesh Portal.
7. Guard File/Monitoring File/Website/Record File.

**Annexure 1****Specific EC Conditions for (Ports, Harbors, Breakwaters, Dredging)****1. Specific Conditions**

S. No	EC Conditions
1.1	<p>i Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.</p> <p>ii. All the recommendations and conditions specified by the Maharashtra Coastal Zone Management Authority vide letter no.CRZ2022/CR 312/TC4 dated 14th February, 2023 shall be implemented.</p> <p>iii. The Project Proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.</p> <p>iv. Necessary approvals to be taken during implementation and commissioning from statutory bodies concerned.</p> <p>v. Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.</p> <p>vi. No underwater blasting is permitted.</p> <p>vii. Necessary approvals be taken during implementation and commissioning from statutory bodies concerned.</p> <p>viii. Continuous monitoring of the ecological characteristics of the habitat during and after the construction, to assess the changes in the water quality, coastal hydrology, bottom contamination and diversity &amp; abundance of marine organisms. The report of the monitoring report shall be submit to the concern IRO, MoEF&amp;CC along with six monthly report.</p> <p>ix. All the commitments made to the public during public hearing/public consultation meeting shall be satisfactorily implemented and adequate budget provision shall be made accordingly.</p> <p>x. All the commitments made as part of EMP with the budget provisions shall be implemented.</p> <p>xi. The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the port area at least at four locations (one within and three outside the port area at an angle of 120°each), covering upwind and downwind directions.</p> <p>xii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed fugitive emission standards.</p> <p>xiii. The project proponent shall submit monthly summary report of continuous stack emission and</p>

S. No	EC Conditions
	<p>air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&amp;CC, Zonal office of CPCB and Regional Office of SPCB along with sixmonthly monitoring report.</p> <p>xiv. Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high level of particulate matter such as around loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.</p> <p>xv. Risk assessment for spill scenarios and Disaster Management Plan as prepared shall be in place in the environment Management cell with all SOP's for various scenarios.</p> <p>xvi. 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.</p> <p>xvii. Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.</p> <p>xviii. All the recommendations mentioned in the risk assessment report, disaster management plan and safety guidelines shall be implemented.</p> <p>xix. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&amp;R, wildlife and forest conservation/protection measures including the NPV, Compensatory Aforestation etc, either proposed by the project proponent based on the social impact assessment and R&amp;R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also be implemented and become part of EMP.</p>

#### Standard EC Conditions for (Ports, harbors, breakwaters, dredging)

#### 1. Statutory Compliance

S. No	EC Conditions
1.1	Construction activity shall be carried out strictly according to the provisions of CRZ Notification, 2011 and the State Coastal Zone Management Plan as drawn up by the State Government. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
1.2	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
1.3	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

#### 2. Specific Conditions

# 476.AA

S. No	EC Conditions
2.1	
2.2	i Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.

### 3. Air Quality Monitoring And Preservation

S. No	EC Conditions
3.1	The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the project area at least at four locations, covering upwind and downwind directions.
3.2	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed emission standards.
3.3	Shrouding shall be carried out in the work site enclosing the dock/proposed facility area. This will act as dust curtain as well achieving zero dust discharge from the site. These curtain or shroud will be immensely effective in restricting disturbance from wind in affecting the dry dock operations, preventing waste dispersion, improving working conditions through provision of shade for the workers.
3.4	Dust collectors shall be deployed in all areas where blasting (surface cleaning) and painting operations are to be carried out, supplemented by stacks for effective dispersion.
3.5	The Vessels shall comply the emission norms prescribed from time to time.
3.6	Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
3.7	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

### 4. Water Quality Monitoring And Preservation

# 476.BB

S. No	EC Conditions
4.1	The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
4.2	Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality. Silt curtains shall be used to contain the spreading of suspended sediment during dredging within the dredging area.
4.3	No ships docking at the proposed project site will discharge its on-board waste water untreated in to the estuary/ channel. All such wastewater load will be diverted to the proposed Effluent Treatment Plant of the project site.
4.4	Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.
4.5	The project proponents will draw up and implement a plan for the management of temperature differences between intake waters and discharge waters.
4.6	Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage.
4.7	Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
4.8	Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused for horticulture, flushing, backwash, HVAC purposes and dust suppression.
4.9	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 should be obtained.
4.10	No diversion of the natural course of the river shall be made without prior permission from the Ministry of Water resources.
4.11	All the erosion control measures shall be taken at water front facilities. Earth protection work shall be carried out to avoid erosion of soil from the shoreline/boundary line from the land area into the marine water body.

## 5. Noise Monitoring And Prevention

S. No	EC Conditions
5.1	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
5.2	Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.

# 476.CC

S. No	EC Conditions
5.3	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
5.4	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

## 6. Energy Conservation Measures

S. No	EC Conditions
6.1	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
6.2	Provide LED lights in offices and project areas.

## 7. Waste Management

S. No	EC Conditions
7.1	Dredged material shall be disposed safely in the designated areas.
7.2	Shoreline should 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 reports.
7.3	Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they 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.
7.4	The solid wastes shall be managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
7.5	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
7.6	A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
7.7	Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.
7.8	Oil spill contingency plan shall be prepared and part of DMP to tackle emergencies. The equipment and recovery of oil from a spill would be assessed. Guidelines given in MARPOL and Shipping Acts for oil spill management would be followed. Mechanism for integration of terminals oil contingency plan with the overall area contingency plan under the co-ordination of Coast should be covered.

# 476.DD

## 8. Green Belt

S. No	EC Conditions
8.1	Green belt shall be developed in area as provided in project details with a native tree species in accordance with CPCB guidelines.
8.2	Top soil shall be separately stored and used in the development of green belt.

## 9. Marine Ecology

S. No	EC Conditions
9.1	Dredging shall not be carried out during the fish breeding and spawning seasons.
9.2	Dredging, etc shall be carried out in the confined manner to reduce the impacts on marine environment.
9.3	The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.
9.4	While carrying out dredging, an independent monitoring shall be carried out through a Government Agency/Institute to assess the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.
9.5	A detailed marine biodiversity management plan shall be prepared through the NIO or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity and submitted to and implemented to the satisfaction of the State Biodiversity Board and the CRZ authority. The report shall be based on a study of the impact of the project activities on the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, sub-tidal 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 standards survey methods and include underwater photography.
9.6	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 including all micro, macro and mega floral and faunal components of marine biodiversity.
9.7	The project proponent shall ensure that water traffic does not impact the aquatic wildlife sanctuaries that fall along the stretch of the river.

## 10. Public Hearing And Human Health Issues

S. No	EC Conditions
10.1	The work space shall be maintained as per international standards for occupational health and safety with provision of fresh air respirators, blowers, and fans to prevent any accumulation and inhalation of undesirable levels of pollutants including VOCs.

# 476.EE

S. No	EC Conditions
10.2	Workers shall be strictly enforced to wear personal protective equipments like dust mask, ear muffs or ear plugs, whenever and wherever necessary/ required. Special visco-elastic gloves will be used by labour exposed to hazards from vibration.
10.3	In case of repair of any old vessels, excessive care shall be taken while handling Asbestos & Freon gas. Besides, fully enclosed covering should be provided for the temporary storage of asbestos materials at site before disposal to CTSDF.
10.4	Safety training shall be given to all workers specific to their work area and every worker and employee will be engaged in fire hazard awareness training and mock drills which will be conducted regularly. All standard safety and occupational hazard measures shall be implemented and monitored by the concerned officials to prevent the occurrence of untoward incidents/ accidents.
10.5	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
10.6	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
10.7	Occupational health surveillance of the workers shall be done on a regular basis.

## 11. Environment Responsibility

S. No	EC Conditions
11.1	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
11.2	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
11.3	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
11.4	Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

## 12. Miscellaneous

# 476.FF

S. No	EC Conditions
12.1	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
12.2	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
12.3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
12.4	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
12.5	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
12.6	The criteria pollutant levels namely; PM2.5, PM10, SO2, NOx (ambient levels) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
12.7	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
12.8	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
12.9	No further expansion or modifications in the project shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
12.10	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
12.11	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
12.12	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
12.13	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by

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S. No	EC Conditions
	furnishing the requisite data / information/monitoring reports.
12.14	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
12.15	Any appeal against this EC 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.



Signature Not Verified

Digitally Signed by : Dr Amardeep Raju  
Member Secretary, MoEFCC (EC)

Date: 15/03/2024