



सत्यमेव जयते

File No: 10/55/2021-IA.III  
Government of India  
Ministry of Environment, Forest and Climate Change  
IA Division

\*\*\*



Date 04/09/2024



To,

Shri Shekhar B Lagwankar  
NEW MANGALORE PORT AUTHORITY  
Administration Office Building, New Mangalore Port Authority Panambur, Mangalore, , DAKSHINA  
KANNADA, KARNATAKA, Panambur, 575010  
chiefengineer@nmpt.gov.in

**Subject:** The proposal is for development of Multipurpose Cargo Berth (Berth No.17) at Panambur village, Suratkal Taluk, Mangalore, Dakshina Kannada by Project Proponent M/s New Mangalore Port Authority–Environmental and CRZ Clearance reg.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/KA/INFRA1/472985/2024 dated 24/06/2024 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.	EC24A3501KA5561399N
(ii) File No.	10/55/2021-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	Development of Multipurpose Cargo Berth (Berth No. 17) at New Mangalore Port Authority
(viii) Name of Company/Organization	NEW MANGALORE PORT AUTHORITY
(ix) Location of Project (District, State)	DAKSHINA KANNADA, KARNATAKA
(x) Issuing Authority	MoEF&CC
(xi) Applicability of General Conditions as per EIA Notification, 2006	No

3. NMPT intends to develop the existing multipurpose deep draft Berth No 14 for handling container through mechanization. The Port will no longer have other deep draft berth general cargo to handle the large ships of 60,000 DWT

and above. Therefore, port has proposed to develop an additional deep draft general cargo berth in between Berth no.8 and no.13, named as Berth No.17. Geo-coordinates of project site are Latitude 12°22'29.17"N, Longitude 74°49'1.69"E.

4. The berth is proposed to handle RO-RO/Cruise ships bunkering cargo ships iron ore fines/concentrate, fertilizers, river sand, bentonite, gypsum, machinery, steel coil etc. at the proposed new berth No. 17 for handling capacity of 9 MMTPA. The proposed berth will construct in an area of 2.5 acres (1 ha) of water area adjacent to existing berth No.8 and 30 acres (approximate) of Port land will be utilized for storage of cargo handled at proposed berth.

S.No	Facility	Size and Dimension
1	Length of the Berth	348m
2	Width of the Berth	26m
3	Approach trestles	10m with, 2nos
4	Deck Elevation	Berthing Jetty: Deck level-(+)4.66m Approach Jetty: Deck level -(+)4.66m Dredging level for Berthing structure -(-)15.10m CD

5. The proposed project falls under 7(e), Category-A, Ports, Harbors, breakwater, dredging as per EIA notification 2006. Total Project Cost is Rs.21,391 Lakhs.

6. Terms of References (TOR) Details: The ToR proposal was considered in the 283rd EAC meeting held on 15th December, 2021 the committee recommended for grant of ToR, Ministry granted the ToR vide letter No.10/55/2021-IA.III dated 6th January, 2022.

7. Public Hearing Details: Public hearing was conducted on 07th July 2023 at the Meeting Hall, Office of Deputy Commissioner, 2nd Floor, Mangaluru, Dakshina Kannada District, Karnataka presided by the Deputy Commissioner.

8. Landuse/Landcover of project site: The Port has a total land area of 1960 Acres and water spread area of about 330 Acre. Out of which 2.5 acres (1 ha) of water area will be used for construction of berth adjacent to existing berth No.8 and 12ha (30 acres) of Port land which will be utilized for storage of cargo handled at proposed berth. Proposed project is located in New Mangalore Port Trust (NMPT) Port limit and Customs Notified Area.

9. Terrain and Topographical features: The area of the landward side shows an undulating topography. New Mangalore Port is an all-weather major port at Panambur, Mangalore in Karnataka state in India. Entire project is in waterfront area. There will be no change in the drainage pattern due to proposed project.

10. Water requirements: During construction, water will be required 100 KLD and will met from tankers from Mangalore City Corporation. During operation phase, 10 KLD water will be required and it will be arranged through Mangalore City Corporation.

11. Diversion of forestland: The project does not involve tree cutting and diversion of forestland. The project is not located within 10 km of Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves etc. the project is not located within the Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MOEF&CC.

12. NIO has been conducted the site specific biodiversity conservation study based on the study, site specific conservation and mitigation plan has been prepared for the Mangroves, Peacock, Indian Fox, Marine Sea turtles, Sharks, and Marine mammals with the capital budgetary provision of 60 lakhs and recurring cost of 40 lakhs for the implementation of biodiversity conservation and mitigation plan.

13. Waste Management: The municipal waste generated during the project construction phase shall be of the order of only 50 to 100 kg/day. Unsuitable material will be disposed at the designated location. Municipal solid waste generated will be disposed through the concerned Municipal Authorities. The solid waste generation during the construction phase will consist of biodegradable waste such as food waste and non- biodegradable waste such as packaging materials, plastic, metal item, etc. All recyclable items shall collect and sold to authorize recyclers. STP details: Approx. 8 KLD sewage generated from the Berth No. 17 will be treated in existing 1.2 MLD STP. Hence, no new STP is proposed. Further, Port operation activities solid waste shall be adequately collected and managed in accordance with the relevant Indian laws, IFC PSs and IFC EHS guidelines for Waste Management Facilities. Solid Waste Management: New Mangalore Port Authority installed Solid waste management system with shredder and vermicomposting units. This vermicomposting units produce the round 150-kg organic manure per day which will be used for horticulture and Port gardens at NMPA.

Segregation of waste at the source is carried out. The organic waste is used for vermiculture and inorganic waste is disposed at designated location of MCC. To ensure better environment, the management has declared NMPA as “No Plastic Zone” in the year 2013 to till now. Port is under the process of implementation of self-management of waste whereas, organic waste will be used for the preparation of manure and inorganic waste will be disposed through authorized recyclers.

14. CRZ details: In order to comply with CRZ Notification, 2019 detailed HTL/LTL demarcation studies were conducted with respect to the project site by Institute of National Centre for Sustainable Coastal Management (NCSCM). The proposed Berth No.17 is falling in CRZ IV B and 1.7 Ha back up area falls under CRZ II area out of 12 ha back up area behind the berth for the storage of cargo. Karnataka State Coastal Zone Management Authority vide letter no. FEE 313 CRZ 2023 dated 14.03.2024 recommended the proposal and forwarded to the Ministry.

15. Details of shore line change: As per shoreline change Atlas of Karnataka, Map No. 48L13NW prepared by Space Application Centre, ISRO, Ahmedabad. The proposed project area is a stable coast. Capital Dredging: It is proposed to deepen the area in front of proposed Berth No.17. Dredging activity shall be carried in front of proposed Berth No. 17 and its approach up to (-) 15.10 m. The depth in front and approach of the proposed Berth No. 17 is considered as-15.10 m CD and the dredging quantity was calculated by using Hypack software. The dredging quantity is assessed as 146594 cubic meter, approx.1,50,000 cubic meter. Maintenance Dredging: Average cost of dredging for the previous 3 years is collected from the Port, which worked out to be Rs. 39.03 crores per annum. Average Maintenance dredging cost per meter length is applied to Berth No. 17. No Break water or Reclamation is required. Disposal Point: The dredged material will be disposed into the offshore existing dumping ground at 12°57 '34" N and 74°41'41"E.

16. Handling of cargo: During the initial stages of operation of Berth No.17, it will be handling only the displaced cargo from Berth No.14 after that berth’s conversion into a container terminal, i.e primarily iron ore fines/ concentrates and other dry bulk like fertilisers, limestone, gypsum etc. The details of traffic projection of each cargo in tonnes.

Timeline	FY 30	FY 40
Details of Cargo proposed to be handle		
IOF/IOC	3.32	3.67
Fertilizer	0.47	0.52
Rock Phosphate	0.53	0.59
Gypsum	0.29	0.32
River sand	0.35	0.39
Raw sugar	0.25	0.28
Wheat	0.13	0.14
Edible oil	0.21	0.23
Total	5.55	6.14

17. PP has submitted details of berths along with cargo handling during 2023-24 and explained that though there is a spare capacity at NMPA in terms of cargo handling yet the port require deep draft berth of 14 meter for handling bigger draft vehicle as many of the existing berths are of lower draft .Only multipurpose deep draft berth no.14 with the port has been handed over to the PPP operators for handling containers to mechanisation Therefore, there is deep draft berth to handle the large ships of 60000 DWT or more (Paramax i.e 14 mtr draft). Therefore this deep draft berth is proposed. The PP has also submitted the cargo profile for the proposed berth.

18. Dust preventive measures: Fugitive dust may emit from material transport by truck. Construction material shall be transported through covered trucks. Dust will be suppressed by water sprinkling. Cargo will be transferred after covering the trucks, Tarpaulin will be used and overloading will be avoided.

19. Further, for smooth movement of the traffic near vicinity of the port NHAI under Bharatmala Scheme is developing 4 lane roads in NH75 connecting Bangalore via Hassan, Shirid Ghat, Bantwal cross road at NH 73 and connects NH-66 in Mangalore. The proposed project will facilitate the increase in traffic movement to the port and New Mangalore port is well connected with NH-66, 75 and NH-169. These National Highways are sufficient to cater the traffic demand of Berth No.17. The NH 66(4 lane road) is passing through the port area around 3 KM.

20. IRO-Bangalore, MoEF&CC monitored the port on 13.03.2024 and issued the Certified EC and CRZ compliance report vide letter no. EP/12.1/578/KAR907 dated 08.04.2024.

21. Employment Potential: Construction Phase: The proposed project will give employment of about 100 to 150 persons. Although the workforce requirement will be temporary in nature, it will be met from the local population. Operational Phase: The operation phase of the proposed development will also provide opportunities for employment mostly in the skilled and semi-skilled categories directly and indirectly to the tune of 1000 Nos. This will enhance the income of the people associated with subcontracting business.

22. Land acquisition and R&R issues involved: The proposed project activities are planned within existing port area. No Rehabilitation and Resettlement is involved in the proposed project. Hence, hence no land acquisition is required.

23. Benefits of the project: There will be direct and indirect benefits to the country as well as the port. This will trigger development of major and minor industries, processing units, employment potential in the hinterland apart from sizeable income to the port exchequer and Government of India from the EXIM trade.

24. Details of Court cases: No Court Cases are pending against the proposed project.

25. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 368th meeting held on 04th July, 2024 and recommended the project for grant of environment clearance for 'development of Multipurpose Cargo Berth (Berth No.17) at Panambur village, Suratkal Taluk, Mangalore, Dakshina Kannada by Project Proponent M/s New Mangalore Port Authority' with specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects.

26. 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 Environmental and CRZ Clearance for 'development of Multipurpose Cargo Berth (Berth No.17) at Panambur village, Suratkal Taluk, Mangalore, Dakshina Kannada by Project Proponent M/s New Mangalore Port Authority' under the EIA Notification, 2006 as amended subject to strict compliance of the following specific conditions, in addition to all standard conditions applicable for such projects.

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

#### **Copy To**

- 1.The Secretary, Forest, Environment & Ecology Department, Karnataka Government Secretariat, Room No. 448, 4th Floor, Gate No. 2, M. S. Building, Bangalore-560001.
- 2.The Deputy Director General of Forests (C), Ministry of Environment, Forests and Climate Change, Regional Office (SZ), Kendriya Sadan, 4th Floor, E&F Wing, 17th Main Road, Koramangala II Block, Bangalore – 34.
- 3.The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum office Complex, East Arjun Nagar, Delhi – 32.
- 4.Member Secretary, Karnataka Pollution Control Board, 6,7,8 & 9 Floor (Public Utility Building), Netaji Subhash Chand Building, M. G. Road, Bangalore – 1.
5. Guard File
6. IA-Division, Monitoring Cell, MoEFCC, New Delhi – 3.
7. Guard File/Record File.
8. Notice Board.

**Annexure 1**

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

## 1. Specific Conditions

S. No	EC Conditions
1.1	Back up storage area for proposed berth no. 17 shall be reoriented in order to ensure exclusion of vegetation tree growth area as far as possible. Accordingly revised backup area layout shall be submitted to the ministry with copy to the IRO for monitoring of the implementation. Balance area of the backup having Prosopis sp trees shall be afforested with suitable native species.
1.2	IRO-Bangalore, MoEF&CC monitored the port on 13.03.2024 and issued the Certified EC and CRZ compliance report vide letter no.EP/12.1/578/KAR 907 dated 08.04.2024 and noted some partial compliances and non-compliances. PP shall ensure that the conditions of the ECs which has not yet been complied with or partially complied shall be complied within next 6 months and compliance report shall be submitted along with 6 monthly monitoring report.
1.3	Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2019. No construction works other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
1.4	Storage of items shall be strictly in accordance with the provisions of CRZ notification. The items not permissible under CRZ notification shall not be stored in backup area falling in CRZ area.
1.5	NIO has conducted the site-specific biodiversity conservation plan with the capital budgetary provision of 60 lakhs and recurring cost of 40 lakhs for the implementation of biodiversity conservation and mitigation plan. The conservation plan shall also include afforestation of unused backup area having prosopis sp growth and shall be implemented in consultation with the state forest department. In addition, during implementation period if any specific mitigation measures recommended by the Forest department the same shall be implemented and the status of the compliance shall be submitted to the Concern IRO, MoEFCC along with the EC compliance report.
1.6	For smooth movement of the traffic near vicinity of the port. Under Bharatmala Scheme NHAI is developing 4 lane roads in NH75 connecting Bangalore via Hassan, Shirid Ghat, Bantwal cross road at NH 73 and connects NH-66 in Mangalore. The proposed project will facilitate the increase in traffic movement to the port and New Mangalore port is well connected with NH-66,75 and NH-169. These National Highways are sufficient to cater the traffic demand of Berth No.17. The NH 66(4 lane road) is passing through the port area around 3 KM.
1.7	Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2019. No construction works other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
1.8	All the recommendations and conditions specified by the Karnataka State Coastal Zone Management Authority (KCZMA) vide letter No FEE313 CRZ 2023 dated 14.03.2024.
1.9	The approach road shall be constructed strictly follow the Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area and road should be built on stilts.
1.10	Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
1.11	Necessary approvals be taken during implementation and commissioning from statutory bodies

S. No	EC Conditions
	concerned
1.12	No underwater blasting is permitted.
1.13	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.
1.14	The total storage area is 12 ha out of which 1.7ha falls under the CRZ II area, No storage area shall be allowed in the CRZ area. The storage area shall be placed outside of the CRZ area, with the minimum distance of 200m.
1.15	PP shall ensure the loading and unloading process shall not cause any spillage in the water and storm water drains should be built to collect spillage , if any
1.16	Cargo., handling area shall be provided with the adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
1.17	Effective and efficient pollution control measures like covered conveyors/stacks (IOF/IOC, Gypsum and other bulk cargo) with fogging/back filters and water sprinkling commencing from ship unloading to stacking to evacuation shall be undertaken. Coal and iron ore stack yards shall be bounded by thick two tier green belt with proper drains and wind barriers wherever necessary
1.18	Garland drains and collection pits of adequate capacity shall be provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off and disposed only after treatment.
1.19	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.
1.20	Risk assessment for spill scenarios and Disaster Management Plan as prepared shall be in place in the environment Management cell of the port authority with all SOP's for various scenarios.
1.21	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.
1.22	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.
1.23	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.

S. No	EC Conditions
1.24	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality/fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
1.25	Records of regular dredging shall be maintained with periodic survey data.
1.26	Sediment analysis of harbor at identified locations shall be analyzed and records for past and present period shall be maintained.
1.27	Sediment concentration should be monitored fortnightly at source and disposal location of dredging while dredging.
1.28	Periodical study on shoreline changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report.
1.29	A site specific biodiversity conservation plan including mitigation measures prepared by NIO specifically for the Mangroves, Peacock, Marine Sea turtles, Sharks, and Marine mammals shall be implemented later in spirit in consultation with the state forest department. In addition, during implementation period if any specific mitigation measures recommended by the Forest department the same shall be implemented and the status of the compliance shall be submitted to the Concern IRO, MoEFCC along with the EC compliance report.
1.30	All the recommendations mentioned in the Marine ecology report prepared by NIO, Goa shall be implemented and the compliance of the recommendations shall be submitted to the concern IRO, MOEF&CC along with the six monthly EC compliance report.
1.31	The project proponents would also inventories the floral composition of the biota of marine and intertidal biotopes and draw up a detailed marine bio diversity conservation management plan based on possible impacts. The management plan shall be submitted also to the State Biodiversity Board and implemented to their satisfaction during the project cycle.
1.32	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.
1.33	All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented
1.34	A continuous monitoring programme covering all the seasons on various aspects of the coastal and marine environs need to be undertaken by a competent organization available in the State or by entrusting to the National Institutes/renowned Universities/accredited Consultant with rich experiences in marine science aspects. Monitoring should include sea weeds, sea grasses, mudflats, sand dunes, fisheries, mangroves and other marine biodiversity components as part of the management plan.
1.35	Necessary arrangements for the treatment of the effluents and solid wastes/ facilitation of reception facilities under MARPOL must be made and it must be ensured that they conform to the standards

S. No	EC Conditions
	laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986. The provisions of Solid Waste Management Rules, 2016, E- Waste Management Rules, 2016, and Plastic Waste Management Rules, 2016 shall be complied with.
1.36	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&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&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also be implemented and become part of EMP.

**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, 2019 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. Air Quality Monitoring And Preservation**

S. No	EC Conditions
2.1	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.
2.2	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.
2.3	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,



S. No	EC Conditions
	preventing waste dispersion, improving working conditions through provision of shade for the workers.
2.4	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.
2.5	The Vessels shall comply the emission norms prescribed from time to time.
2.6	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.
2.7	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.

### 3. Water Quality Monitoring And Preservation

S. No	EC Conditions
3.1	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.
3.2	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.
3.3	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.
3.4	Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.
3.5	The project proponents will draw up and implement a plan for the management of temperature differences between intake waters and discharge waters.
3.6	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.

S. No	EC Conditions
3.7	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.
3.8	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.
3.9	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.
3.10	No diversion of the natural course of the river shall be made without prior permission from the Ministry of Water resources.
3.11	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.

#### 4. Noise Monitoring And Prevention

S. No	EC Conditions
4.1	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.
4.2	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.
4.3	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.
4.4	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.

#### 5. Energy Conservation Measures

S. No	EC Conditions
5.1	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;
5.2	Provide LED lights in offices and project areas.

#### 6. Waste Management

S. No	EC Conditions
6.1	Dredged material shall be disposed safely in the designated areas.
6.2	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.
6.3	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.
6.4	The solid wastes shall be managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
6.5	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.
6.6	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.
6.7	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.
6.8	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.

#### 7. Green Belt

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

#### 8. Marine Ecology

S. No	EC Conditions
8.1	Dredging shall not be carried out during the fish breeding and spawning seasons.
8.2	Dredging, etc shall be carried out in the confined manner to reduce the impacts on marine environment.

S. No	EC Conditions
8.3	The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.
8.4	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.
8.5	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.
8.6	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.
8.7	The project proponent shall ensure that water traffic does not impact the aquatic wildlife sanctuaries that fall along the stretch of the river.

### 9. Public Hearing And Human Health Issues

S. No	EC Conditions
9.1	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.
9.2	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.
9.3	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.
9.4	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.
9.5	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

S. No	EC Conditions
9.6	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.
9.7	Occupational health surveillance of the workers shall be done on a regular basis.

#### 10. Environment Responsibility

S. No	EC Conditions
10.1	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.
10.2	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.
10.3	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.
10.4	Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

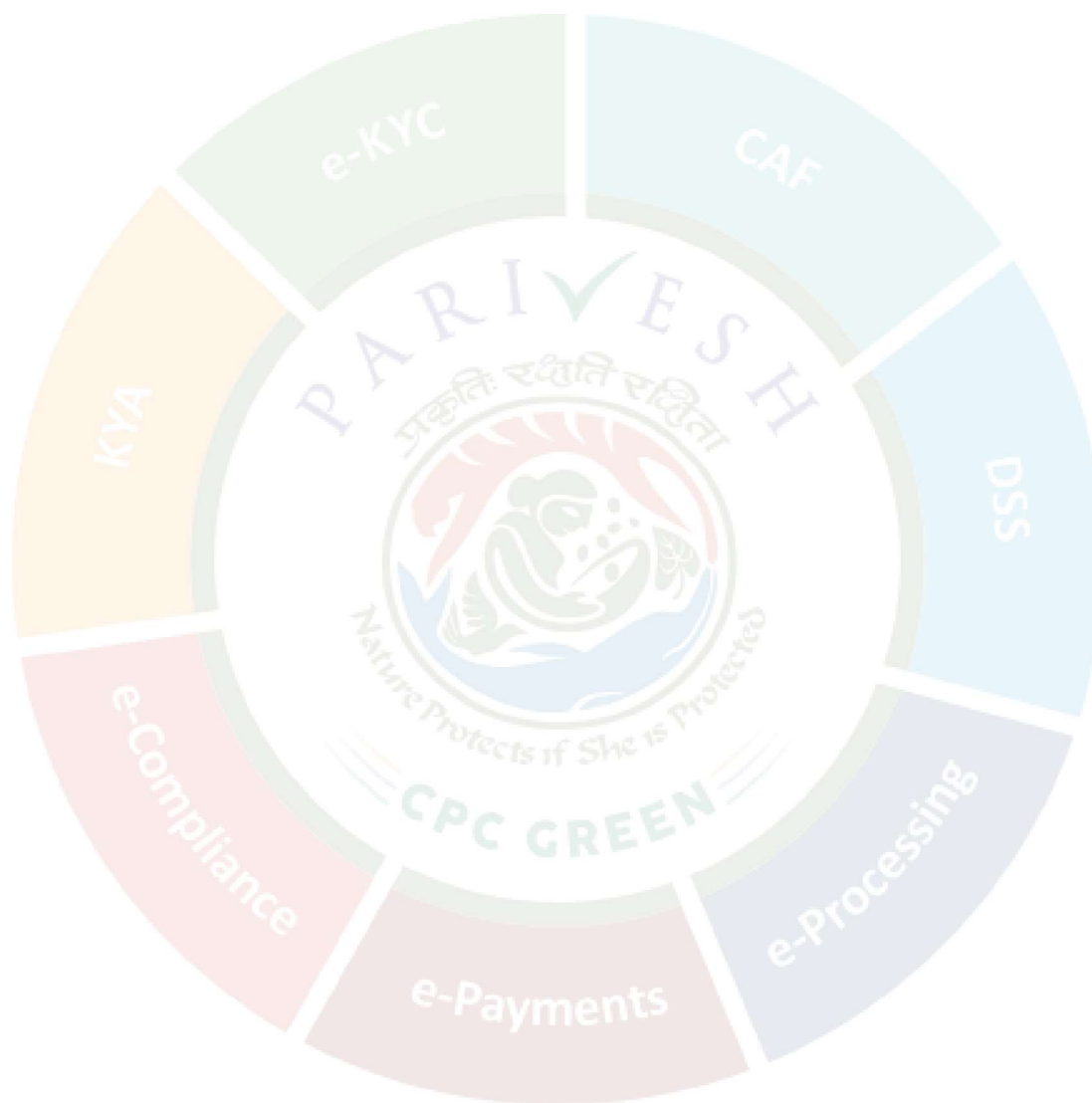
#### 11. Miscellaneous

S. No	EC Conditions
11.1	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.
11.2	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.
11.3	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.

S. No	EC Conditions
11.4	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.
11.5	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.
11.6	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.
11.7	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
11.8	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.
11.9	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).
11.10	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.
11.11	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.
11.12	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
11.13	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 furnishing the requisite data / information/monitoring reports.
11.14	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.
11.15	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.

## 12. Specific Conditions

S. No	EC Conditions
12.1	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.



Signature Not Verified

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

Date: 04/09/2024