



File No: 10/5/2023-IA.III

Government of India

Ministry of Environment, Forest and Climate Change

IA Division

\*\*\*



Date 08/05/2025



To,

Mr A Balamurali

IL&FS TAMIL NADU POWER COMPANY LIMITED

IL&FS Tamil Nadu Power Company Limited C. Pudhupettai (Post) Parangipettai (Via) Bhuvanagiri (TK) Cuddalore, CUDDALORE, TAMIL NADU, , 608502  
pc.maurya@itpclindia.com

Subject:

**Revision in the capacity of the Captive Port from 15 MMTPA to 5 MMTPA of with lighterage operation and associated facilities over an area of 47.35 Ha located at Kottattai Village, Bhuvanagiri Taluk, Cuddalore District, Tamil Nadu by M/s IL&FS Tamil Nadu Power Company Limited'-Environmental and CRZ Clearance regarding.**

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/TN/INFRA1/532888/2025 dated 14/04/2025 for grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 and CRZ notification, 2011 as amended thereof.

2. The particulars of the proposal are as below :

<b>(i) EC Identification No.</b>	EC25A3501TN5287789N
<b>(ii) File No.</b>	10/5/2023-IA.III
<b>(iii) Clearance Type</b>	Fresh EC
<b>(iv) Category</b>	A
<b>(v) Project/Activity Included Schedule No.</b>	7(e) Ports, harbors, breakwaters, dredging
<b>(vi) Sector</b>	INFRA-1
<b>(vii) Name of Project</b>	EC & CRZ Clearance for revised capacity from 15 MMTPA to 5 MMTPA Captive Port with Lighterage Operation and associated facilities at Kottattai Village, Bhuvanagiri Taluk, Cuddalore District, Tamil Nadu
<b>(viii) Name of Company/Organization</b>	IL&FS TAMIL NADU POWER COMPANY LIMITED
<b>(ix) Location of Project (District, State)</b>	CUDDALORE, TAMIL NADU
<b>(x) Issuing Authority</b>	MoEF&CC

3. The proposal is for seeking revision in the capacity of captive port from 15 MMTPA to 5 MMTPA with lighterage operation and associated facilities over an area of 47.35 Ha located at Kottattai Village, Bhuvanagiri Taluk, Cuddalore District, Tamil Nadu by M/s IL&FS Tamil Nadu Power Company Limited'.

4. The proposed Captive port is located in the East Coast of India, South of Pondicherry, at about 180 km south of Chennai city. The project site is located in Kottattai village, Bhuvanagiri Taluk, Cuddalore District, Tamil Nadu (11°31'21.75" N and 79°46'5.58" E). Tamil Nadu Maritime Board has defined the Port limits and approved 1.4 km of waterfront and 47.35 Ha (~117 acres) of coastal land (waste/vacant land) for the captive port.

5. The project/activity is covered under the category 'A' of item 7(e), i.e., 'Ports, harbours, breakwaters, dredging' of the schedule to the EIA Notification, 2006, and its subsequent amendments. The cost of the project is estimated to be Rs. 200.5 Cr.

6. The ToR proposal was considered in the 324th EAC meeting held on 19th-21st April 2023. The committee recommended the proposal for undertaking a detailed EIA/EMP report. Ministry granted the TOR vide letter No. 10/5/2023-IA.III dated 20-06-2023 for the revised capital coal handling capacity from 15 MTPA to 5 MTPA of Captive Jetty with Lighterage Operation without any capital dredging, breakwater, reclamation, or disposal with exemption to public hearing.

7. ITPCL obtained Environmental & CRZ Clearance for the setting up of Parangipettai Captive Port and a 40 MLD capacity Desalination Plant along with Intake & Outfall facilities vide letter bearing F.No.11-43/2010-IA.III dated October 29th, 2010. Further validity was extended up to October 28th, 2020, vide letter no F. No. 11-43/2010-IA.III dated February 27th, 2018. Consent to Establish (CTE) was obtained from TNPCB through Consent Orders No. 5495 and No. 5554 dated June 2011, and further validity was extended up to October 2020.

8. Public Hearing Details: The proposed project is exempted from public hearing as per OM dated March 18, 2021, as the project has implemented more than 50% in its physical form of construction from the earlier approved EC.

9. The details of existing and proposed components are as follows:

Details	Earlier Approved Proposal (All Weather Captive Port) as per EC Dated 29.10.2010	Present Proposal (Lighterage Captive Port)	Remarks
Land Area	47.35 Ha (117 acres)	47.35Ha(117 acres)	No change
Coal Handling capacity	15 MTPA	5 MTPA	Reduction in Coal handling capacity
Breakwaters	North Breakwater: 2,100 m South Breakwater: 1,150 m	No Breakwaters	Not required
Dredging	11.0 MCM	No dredging	Not required
Reclamation	1.0 MCM	No Reclamation using Dredged Materials. However, Site grading will be carried out as per requirement.	Reclamation not envisaged
Offshore Disposal of Dredged material	10 MCM	No Offshore Disposal of Dredged material.	No dredge disposal
Approach Channel	Length: 3,300 m Width: 160 m Depth (below CD): 16.1 m	No formation of dredged approach channel Natural Depth will be sufficient for lighterage	No dredging

operations.			
Length of Approach Trestle	452 m	428 m	Reduced the total length of 24m. The remaining length is 428m (195m completed and 233m yet to be completed.
Berth Length	600 m	165 m	Reduced revised berth will be 165m.
Covered conveyor system	From Coal berth to existing Transfer Tower 1 (TT1) at Thermal Power Plant Premises	Remain Same	No change
Buildings	Associated with Captive port including utility buildings etc.	Remain Same	No change
Captive Desalination Plant			
Capacity	40 MLD	Remain Same	No change
Technology	Reverse Osmosis	Remain Same	No change
Intake/Outfall System	Intake: between breakwaters; outfall: 1500 m from shore	Remain Same	No change
Water Requirement/ Discharge	Total seawater required: 33,000 m <sup>3</sup> /hr. The total quantity of return cooling water discharge from the proposed power plant and reject brine from the proposed desalination plant is around 24,062 m <sup>3</sup> /hr.	Remain Same	No change
Source	RW: Sea, Potable Water: Proposed Desalination Plant	Remain Same	No change

10. Land use/Landcover of project site: The Land use of the project site is an Industrial Land of 47.35 Ha. The existing land use of the project site is built up (Port facilities), Barren/ Waste Lands, Wetlands/Water bodies, and Plantation. The details of land use/ land cover are as follows:

Sl. No.	Classes	Area in Sq. Km.	Area in Ha
1	Built up (Port/TPP facilities)	0.06	6.13
2	Barren/Waste Lands	0.39	39
3	Wetlands/Water Bodies	0.0079	0.79
4	Plantation	0.014	1.43
Total		0.4719	47.35

11. Terrain and topographical features: The project site is having a flat/ plain terrain with varying levels/ a few undulations, and sea reclamation. The general topography of the project area is almost flat with an average ground elevation of about (+) 1.5 m CD. The drainage facilities are suitably provided for draining rainwater from the port area.

12. Details of water bodies, impact on drainage: The major water bodies are Perumal Eri 11.7 km west-northwest, Uppanar River 7.0 km west-northwest, Vellar River 3.0 km south, Buckingham Canal 3.1 km west, and Bay of Bengal- Adjacent. No impacts are envisaged on the rivers as they are all situated more than 2 km away from the port activities.

13. Water requirements: Water requirement during the construction phase is 500 KLD, which will be met through Tamil Nadu Water Supply and Drainage Board (TWAD) or from authorised suppliers. During the operational phase of the port, the water requirement is 107 KLD, which will be sourced from the desalination plant existing in the power plant (10 MLD capacity).

14. Waste Management: The estimated 22.81 TPA of domestic Municipal Solid waste during the construction phase and 13.69 TPA of domestic Municipal Solid waste during the operation phase shall be collected, stored, transported, and disposed of as per the Solid Waste Management (SWM) Rules, 2016. 1 TPA of Hazardous wastes (lubricants, paints,

compressed gases, and varnishes) shall be disposed of at the nearest Treatment, Storage and Disposal Facility (TSDF). Wastewater: Sewage generated from the construction workers' camp will be treated in the existing STP and ETP operating in the Thermal Power Plant premises. Wastewater generation from the port includes 107 KLD from port operations, dust suppression water from the coal stock yard, etc., containing mainly suspended particulates, and rain-washed roads and rooftops containing particulates. Plan for use of efficient technologies for coal handling at offshore anchorage vide their letter dated 22/4/2025 through their e-mail dated 22/4/2025 has submitted.

15. Tree cutting and Greenbelt development: The proposed project envisages the cutting of 25 trees (0.001 Ha). A Greenbelt of width 15m shall be developed in an area of 4.6 Ha (10% of the total area), and 11500 local/ native tree species shall be planted for the same.

16. Diversion of forest land: The project does not involve any forest area. Therefore, forest clearance is not required.

17. Pichavaram mangrove forest is located at a distance of 6.3 km SSE, and Pichavaram mangroves spread over an area of around 1471.33 ha have been identified as an Ecologically Important Area by the MoEF&CC and are notified as a wildlife sanctuary. The Pichavaram Mangrove Forest was designated as a "wetland of international importance" by the Ramsar Convention in July 2022. The Schedule-I species reported are Indian Fox, Indian peafowl, Asian Chameleon, Common Indian Cobra, Common Monitor Lizard, and Olive Ridley Sea Turtle. The reported nearest Turtle nesting area from the boundary is Saamiyar pettai, which is ~2.28 km north, and Mudasalodai, which is ~3.2 km south. The rest of the places are more than 3 km north of the proposed project boundary.

18. The proposed project site is not located in proximity to the Critically Polluted area as identified by the CPCB.

19. Rainwater Harvesting: It is proposed to have direct use of rainwater by the construction of a sump through filters, including collecting and storing the rainwater for future productive use. A Rooftop rainwater harvesting system of storage capacity 1 cubic meter has been proposed for the project.

20. Energy conservation measures with estimated savings: The off-grid rooftop solar PV system shall be used for solar power harnessing with an installation capacity of 0.13 MW.

21. CRZ Area Details: The CRZ mapping of the project area is carried out by the Institute of Remote Sensing (IRS), Anna University, Chennai, during November 2023 as per CRZ notification 2011. The proposed facilities, namely Admin Building, Canteen, Dispensary, Ambulance, Fire Station Building, Parking, Port Operation Building, Pump House, Sea Pump House - 2, Substation, Underground Sump, Water Storage Tank, and Port facility boundary completely fall in CRZ-III (200m to 500m from ITL). The Belt Conveyor passes through CRZ-IA, CRZ-IB, CRZ-III (200m to 500m from HTL), CRZ-III (No Development Zone), CRZ-IVA, with the remaining length outside CRZ. Approach bund falls in CRZ-IA, CRZ-IB and CRZ-III (No Development Zone). Proposed extension of Trestle and Berth falls in CRZ-IVA as per approved CZMP (Map Nos. TN 85 & TN 86).

Description	CRZ-Classification	Area in Sq. m.	Total Area in Sq. m.
Approach Bund	CRZ-IA	509.34	1263.20
	CRZ-IB	456.32	
	CRZ-III (No Development Zone)	297.54	
Berth	CRZ-IVA	2805.01	2805.01
Extension of Trestle	CRZ-IVA	695.85	695.85
Admin	CRZ-III(200m to 500m from HTL)	672.78	672.78
Canteen	CRZ-III (200m to 500m from HTL)	1037.61	1037.61
Dispensary Ambulance	CRZ-III (200m to 500m from HTL)	224.98	224.98
Fire Station Building	CRZ-III (200m to 500m from HTL)	672.22	672.22
Parking	CRZ-III (200m to 500m from HTL)	804.79	804.79
Port Operation Building	CRZ-III (200m to 500m from HTL)	1036.23	1036.23
Port Facilities Boundary	CRZ-III (200m to 500m from HTL)	16311.93	16311.93
Pump House	CRZ-III (200m to 500m from HTL)	99.32	99.32

Sea Pump House-2	CRZ-III (200m to 500m from HTL)	425.72	425.72
Substation	CRZ-III (200m to 500m from HTL)	481.13	481.13
Underground sump	CRZ-III (200m to 500m from HTL)	151.81	151.81
Water storage tank	CRZ-III (200m to 500m from HTL)	383.00	383.00
Belt Conveyor	CRZ-IA	178.94	1565.00
	CRZ-IB	114.98	
	CRZ-III (200m to 500m from HTL)	254.26	
	CRZ-III (No Development Zone)	90.50	
	CRZ-IVA	518.75	
	Outside CRZ	407.57	

The proposal was appraised and granted CRZ recommendations from the Tamil Nadu State Coastal Zone Management Authority (TNSCZMA) vide their letter Lr. No. P1/1828/2024- dated 10-02-2025 for capacity optimization from 15 to 5 MTPA. DCZMA recommendations vide their letter Lr. No. DEE/TNPCB/CUD/CRZ/F.1826/2024 dated 18-11-2024.

22. IRO, MoEF&CC, Chennai has conducted the site visit and issued the Certified Compliance Report vide letter bearing F. No. EP/12.1/2/2010-11/TN/487 dated 26-03-2025.

23. Details of shoreline change: The shoreline/coastline changes, such as erosion/ accretion, are usually expected due to the construction of marine structures such as a jetty, approach trestle, etc. As per the shoreline change map prepared National Shoreline Assessment System (N-SAS), March 2022, the captive port falls under lower to Moderate accretion. The following offshore construction activities are proposed in the captive Port: approach trestle of length 428m (360m constructed, 68m yet to be constructed), proposed Coal berth of 165m. The existing status of shoreline change due to erosion/ accretion along the Coast has been studied by Indomer Coastal Hydraulics (P) Limited. The satellite imagery reveals that the shoreline is subjected to accretion over a period of years from 2003 to 2022. As per the shoreline change assessment, it can be inferred that the coast has been experiencing both accretion and erosion in the past years.

24. Details of fishing activity in the vicinity: The construction of coal berths and, approach trestle is likely to impact the fishing activity near the port. The nearest fishing hamlets are 23. There are 9 fish landing centres, fishermen in the area operate motorised and non-motorised fishing boats. Fishermen with motorised boats generally go up to 50 miles in the sea for fishing. Safe navigation routes will be earmarked for movement of fishing vessels and the route will be finalised in consultation with fish landing authorities and fishing communities. However, necessary sign boards and marker buoys shall be installed, and interactions shall be initiated with the fishing community about the marker buoys indicating the areas of operation so that they may avoid those areas during construction period. Storm water drainage network is planned to facilitate the proper drainage pattern of the area and the requirements of local villagers for tide water and boat movement has been duly considered in the drainage plan. Hence, no hindrance to fishing activity is anticipated during construction and operation phases.

25. Employment Potential: The proposed project will provide direct as well as indirect employment to the locals. The employment potential from the construction phase plan is estimated to be ~125, and during the operation phase is estimated to be ~75. There will be a huge demand for a skilled, semi-skilled, and unskilled workforce during the operation phase of the Port, and it is imperative that mostly local people are employed based on their skills and educational qualifications. The proposed project is likely to have a positive impact on the socio-economic condition of the region overall. With the addition of this employment potential, the indirect employment will be increased manyfold.

26. Land acquisition and R&R issues involved: TNMB has approved 1.4 km of waterfront and 117 acres of coastal land for the captive port. The allotment of land with port limits for the development of the captive port has already been notified by the Tamil Nadu Gazette. There is no additional land is required for the proposed modernization. Therefore, no land acquisition or rehabilitation and resettlement is envisaged.

27. Benefits of the project: Due to the proposed modification of Parangipettai port, apart from the surrounding region adjoining states would also get maximum benefits. The benefits may be realized either as upcoming of industries such as thermal power plants, mineral-based plants, small-scale industries, and their allied ancillary units. Other benefits would be the generation of either direct or indirect employment for the local people. The connectivity will also improve the eco-

tourism facility, which will provide employment to the local people. The proposed project is likely to have a positive impact on the socio-economic conditions of the region. People will have higher incomes due to direct as well as indirect employment and will have higher earnings and buying capacities. The benefits would be the generation of either direct or indirect employment for the local people. The project construction and operation will generate revenue for the State and Central Government by way of payment of royalty, tax, and sharing of port revenue. In addition to the above, port development will attract investments into the region and thereby contribute to the economic growth of Cuddalore District and Tamil Nadu State. The proposed project is likely to have a positive impact on the socio-economic condition of the region overall.

28. Details of Court cases: The instant proposal does not involve any court cases/ litigation.

29. PP submitted their plan for use of efficient technologies for coal handling at offshore anchorage vide their letter dated 22/4/2025 through their e-mail dated 22/4/2025. The plan was examined by the EAC members at the time of drafting of minutes of meeting and were in principle agreed to.

30. The EAC, based on the information submitted and clarifications provided by the project proponent and detailed discussions held on all the issues during the 399th meeting on 21st-22nd April 2025, recommended the project for grant of environmental and CRZ clearance with stipulated specific conditions along with other Standard EC Conditions.

31. 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 'reduction of the cargo handling capacity from 15 MMTPA to 5 MMTPA and completion of remaining Trestle and Berth (68m Trestle and 165m Berth) for the captive jetty with lighterage operations and associate facilities without capital dredging and break water as cost-effective option at Parangipettai port over an area of 47.35 Ha located at Kottattai Village, Bhuvanagiri Taluk, Cuddalore District, Tamil Nadu by M/s IL&FS Tamil Nadu Power Company Limited' under EIA notification, 2006 and CRZ notification, 2011 as amended, subject to strict compliance of the following specific conditions, in addition to all standard conditions applicable for such projects.

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

#### **Copy To**

1. The Principal Secretary, Department of Environment and Forests, First Floor, Panagal Building, Saidapet, Chennai - 600 015, Tamil Nadu.
2. The Deputy Director General of Forests (C), Ministry of Environment and Forests, Integrated Regional Office, 1st Floor, Additional Office Block for GPOA, Shastri Bhawan, Haddows Road, Nungambakkam, Chennai – 600006.
3. The Chairman, CPCB, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32.
4. The Chairman, Tamil Nadu Pollution Control Board, No. 76, Mount Salai, Gundy, Chennai.
5. IA, Monitoring Cell, Ministry of Environment Forest and Climate Change, Indira Paryawaran Bhawan, Jorbagh, New Delhi-110003.
6. PARIVESH Portal.
7. Guard File.

#### **Annexure 1**

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

##### **1. Specific Conditions**

<b>S. No</b>	<b>EC Conditions</b>
<b>1.1</b>	

S. No	EC Conditions
	The grant of Environmental Clearance (EC) shall be subject to the outcome of the court proceedings.
1.2	The Project Proponent (PP) shall conduct health impact studies through a reputed institute to assess the effects on the local community and evaluate the effectiveness of proposed mitigation measures.
1.3	The Project Proponent (PP) shall conduct training and capacity building for personnel involved in oil spill response and hazardous waste management.
1.4	Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2011.
1.5	All the storage proposed in the CRZ area shall be in line with the CRZ notification, 2011.
1.6	No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
1.7	There should not be any groundwater extraction in the CRZ areas.
1.8	1. Considering the presence of the Pichavaram Mangrove Forests, an Ecologically important area, a wildlife sanctuary and a wetland of international importance the project proponent shall prepare a Mangrove Conservation Plan in consultation with institutes of National repute like NCCR/NIOT/NIO and the state forest department and submit the same to the IRO of MoEF&CC along with its first 6 monthly compliance report. Plan shall include the steps to be taken up for maintenance of the mouth of the Vellar river to improve the tidal exchange and to ensure the growth of the mangroves of Pichavaram forests. Plan shall be implemented at the project cost and status of implementation of the plan shall be submitted to IRO in subsequent 6 monthly compliance reports.
1.9	The project proponent shall prepare the wildlife conservation and mitigation plan with the nationally reputed institute like ZSI, WII or any other nationally reputed institute and submit it to the IRO of MoEFCC along with its First 6 monthly compliance report. The plan shall be implemented at the project cost and the status of the implementation of the same shall be submitted along with subsequent the six monthly EC and CRZ compliance report. All recommendations made in the wildlife conservation plan shall be implemented in consultation with the state forest department. The user agency shall also implement the recommendations made by the state forest department if any w.r.t. wildlife conservation plan.

S. No	EC Conditions
1.10	The Construction activity shall not disturb the Vellar river, as the river mouth helps to drain large flood during northeast monsoon rain and cyclone. The tidal exchange through Vellar river mouth also supports the mangroves nested with Pitchavaram. The river mouth has to be maintained along with its natural hydrology and tidal prism and hence appropriate remedial action programme to keep the mouth open shall be monitored regularly and details shall be submitted to the Ministry.
1.11	As proposed by the PP a Greenbelt of width 15m shall be developed in an area of 4.6 Ha (10% of the total area), and 11500 local/ native tree species shall be planted for the same.
1.12	Lighterage operations shall be avoided during rainy seasons.
1.13	i. All the recommendations and conditions specified by the Tamil Nadu Coastal Zone Management Authority (TNSCZMA) vide letter No. P1/1828/2024 dated 10.02.2025 shall be complied with.
1.14	All liquid waste arising from the proposed development will be disposed of as per the norms prescribed by the Central/State Pollution Control Board. There shall not be any disposal of untreated effluent into the sea/coastal water bodies. It shall be ensured that the wastewater generated is treated in the STP as committed by the project proponent. The treated waste water shall be reused for landscaping, flushing, and/or HVAC cooling purposes, etc. within the development. The project proponent should also make alternate arrangements for situations arising due to malfunctioning of STP. There shall be regular monitoring of standard parameters of the effluent discharge from STP under intimation to the SPCB.
1.15	i. There shall be no intermediate coal storage facilities and the conveyor from the coal berths to the plant site shall be enclosed conveyor system to ensure minimum pollution due to coal dust and other suspended matter.
1.16	Installation of Modern high-tech mechanism during Lighterage operations like self-propelled barges, floating cranes, transfer vessels, and specialized connectors like roll-on/roll-off discharge facilities etc shall be explored while implementing the project.
1.17	The wind net should be erected in the upwind direction to reduce wind speed hitting the coal stock. The wind net should not be erected as a rigid structure. It should be allowed to get sagged in order to avoid the swirling effect.
1.18	Coal handling area shall be provided with the adequate number of high-efficiency dust extraction

S. No	EC Conditions
	systems. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
<b>1.19</b>	Storage of the cargo shall be accommodated with a Stacker reclaimed inside provided with DFS (Atomized Automatic Sprinkling System) including peripheral drainage system, internal roads, firefighting system, etc.
<b>1.20</b>	As proposed the project shall not construct the breakwater and no dredging activity shall be carried out.
<b>1.21</b>	Effective safeguard measures, such as regular water sprinkling, shall be carried out in critical areas prone to air pollution and having a high level of particulate matter such as around loading and unloading points 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
<b>1.22</b>	The project proponent shall install at least 4 systems to carry out 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.
<b>1.23</b>	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 with the prescribed fugitive emission standards.
<b>1.24</b>	The project proponent shall abide by all the commitments and recommendations made in Form-II, EIA/EMP report, and also that have been made during their presentation to EAC.
<b>1.25</b>	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 laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986. The provisions of the Solid Waste Management Rules, 2016. E-Waste Management Rules, 2016, and Plastic Waste Management Rules, 2016 shall be complied with.
<b>1.26</b>	The Hazardous waste generated shall be properly collected and handled as per the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

S. No	EC Conditions
1.27	The wastewater generated from the activity shall be collected, treated, and reused properly.
1.28	No Solid Waste will be disposed of in the Coastal Regulatory Zone area. The Solid Waste shall be properly collected, segregated, and disposed as per the provision of Solid Waste Management Rules, 2016.
1.29	The project proponent shall install necessary oil spill mitigation measures in the shipyard.
1.30	No hazardous chemicals shall be stored in the Coastal Regulation Zone area.
1.31	Project Proponent shall strive to enhance the Green Belt beyond 33% and that the trees planted in this regard would be planted under the campaign "एक_पेढ़_माँ_के_नाम", and the details of the trees planted would be uploaded on the portal <a href="https://merilife.nic.in">https://merilife.nic.in</a> .
1.32	Necessary approvals be taken during implementation and commissioning from statutory bodies concerned.
1.33	The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.

#### 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. 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 SO <sub>2</sub> and NO <sub>x</sub> in reference to SO <sub>2</sub> and NO <sub>x</sub> 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, 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

S. No	EC Conditions
	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.
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.
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/

S. No	EC Conditions
	accidents.
<b>9.5</b>	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
<b>9.6</b>	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.
<b>9.7</b>	Occupational health surveillance of the workers shall be done on a regular basis.

## 10. Environment Responsibility

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

## 11. Miscellaneous

S. No	EC Conditions
<b>11.1</b>	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.
<b>11.2</b>	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

S. No	EC Conditions
	Government who in turn has to display the same for 30 days from the date of receipt.
<b>11.3</b>	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.
<b>11.4</b>	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.
<b>11.5</b>	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.
<b>11.6</b>	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.
<b>11.7</b>	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
<b>11.8</b>	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.
<b>11.9</b>	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).
<b>11.10</b>	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.
<b>11.11</b>	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.
<b>11.12</b>	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
<b>11.13</b>	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.
<b>11.14</b>	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.

S. No	EC Conditions
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.

