



Mahathi Cuddalore Port and Maritime Private Limited (MCPMPL)

Expansion of Cuddalore Port, Cuddalore district, Tamil Nadu



Executive Summary

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Submitted by

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Table of Contents

1	Introduction	1
2	Project Site	1
3	Project Description.....	1
3.1	Need for the Development	1
3.2	Proposed Development Plan	2
3.2.1	Salient Features of Approved and Proposed Development	2
3.3	Proposed Cargo Handling Capacity.....	5
3.4	Proposed Land Use	5
4	Description of Environment	6
4.1	Terrestrial Environment	7
4.1.1	Meteorological Data	7
4.1.2	Ambient Air Quality	8
4.1.3	Ambient Noise Quality	8
4.1.4	Soil Quality	8
4.1.5	Inland Water Quality	8
4.2	Marine Environment	9
4.3	Coastal Regulation Zone.....	10
4.4	Socio-Economic conditions	10
5	Anticipated Environmental and Social Impacts with Mitigation Measures.....	10
5.1	Land Environment	10
5.2	Marine Environment	11
5.3	Water Environment.....	11
5.4	Air Quality	11
5.5	Air Modelling	12
5.6	Noise	12
5.7	Solid Waste Management	12
6	Analysis of Alternatives	12
7	Environmental Monitoring Programme	13
8	Additional Studies	13
9	Project Benefits.....	13
10	Environmental Management Plan.....	13
11	Environmental Budgetary Provisions.....	14
12	Project Cost	14
13	Social Upliftment Activities/CSR Activities	14

Exhibits

No table of figures entries found.Figures

Figure 3-1: Project Layout	6
Figure 4-1:Study Area and Sampling Locations	7

Tables

Table 3-1: Salient Features of Development Plan	2
Table 3-2: Traffic Forecast for Proposed Expansion Plan.....	5
Table 3-3: Traffic Forecast for Ship Building and Repair	5
Table 3-4: Land use Break up	5

1 Introduction

Cuddalore Port is an existing port located at the Uppanar Estuary a confluence of two rivers viz., Paravananar and Gadilam (through Buckingham Canal) with Bay of Bengal. The port at Cuddalore was an ancient anchorage (open roadstead) port developed and used by various regional kingdoms, subsequently by British and currently under administrative control of Tamil Nadu Maritime Board (TNMB).

TNMB obtained Environmental & CRZ Clearance from MoEFCC through vide File no. 10-35/2017-IA-III dated August 20, 2020 for transforming the Cuddalore port into all-weather Multi Cargo Handling Port with increase in cargo handling capacity upto 5.68 MTPA. TNMB on ground has developed all the proposed infrastructure including the berth construction, dredging and reclamation activities as per accorded EC & CRZ clearance.

M/s Mahathi Cuddalore Port and Maritime Private Limited (MCPMPL) has entered into a concession agreement with TNMB for development and operation of the Cuddalore Port under the PPP Model vide Agreement dated 04.07.2025. MCPMPL, obtained Transfer of Environmental and CRZ Clearance from Ministry of Environment, Forest and Climate Change (MoEFCC) vide EC Identification No. EC25A3501TN5833411T and order no. File No. 10-35/2017/-IA-III dated 01.12.2025

In the Present proposal, Cuddalore port is proposing for the increase in cargo handling capacity from 5.68 MTPA to 11.48 MTPA and ship building and repair activities within the notified port limits and obtained Terms of Reference (ToR) from MoEFCC vide EC Identification No. EC25A3501TN5833411T and order no. File No. 10-35/2017/-IA-III dated December 01,2025.

2 Project Site

The Cuddalore Port is located at the Uppanar Estuary a confluence of two rivers viz., Paravananar and Gadilam (through Buckingham Canal) with Bay of Bengal at latitude 11°42'22.43'' N and longitude 79°46'30.52''E with Sea and has Land area of 59.09 Ha (146.01 Ac) [which includes port backup area of 45.21 Ha (111.72 Ac) in the town survey number 1944 and shipbuilding area of 13.88 Ha (34.29 Ac)] in the survey numbers of 120 (Part/Subdivision 3), 121 (Part/Subdivision 1A, 1B, 1C, 1C1A, 1C1B, 1C2, 2, 3) and 131.

Existing port is located in an area of 111.72 Ac along which is completely in possession of Cuddalore Port and proposed shipbuilding area of 34.29 Ac is Private open scrub land without any settlements which will be acquired.

3 Project Description

3.1 Need for the Development

To meet the growing demand and align with Maritime India Vision (MIV) 2030, Cuddalore Port proposes development plan to enhance the port's capacity and infrastructure. The expansion will increase handling capacity from 5.68 MTPA to 11.48

MTPA through augmentation of existing facilities and creation of new berths, storage, utilities, and support infrastructure.

3.2 Proposed Development Plan

In the Present proposal, Cuddalore port is proposing for the increase in cargo handling capacity from 5.68 MTPA to 11.48 MTPA and ship building and repair activities within the notified port limits with following developmental works:

- Construction of additional Two Bulk berths 2x270 (540m) berths and 200m extension of existing multipurpose berths (440m).
- Capital dredging to -16 m CD in the inner channel and -18m CD in the outer channel, to handle fully loaded Handymax, Supramax, and Panamax vessels.
- Proposed to handle the cargo including Coal, Cement, Fertilizers, Container, Cereals, Wood, Liquid cargo such as non-hazardous and Class A, B, C chemicals including Methanol, Ethylene Di Chloride, Sulphuric Acid 98%, Caustic Soda Lye 48%, Linear Alkyl Benzene, Acetic Acid, Palm Fatty Acid Distillate, Glycerine, Ethanol, Petcoke, Bitumen, Low Sulphur Fuel Oil, Marine Gas Oil (NFPA Class II or Class IIIA), Motor Spirit (Class 1A), HSD (Class B Chemical) and Furnace Oil etc., Iron Ore and Limestone.
- Development of stacking yards, storage yards, container freight station, and internal roads.
- Procurement and installation of port equipment and cargo-handling systems, including mobile harbour cranes, forklifts, and other supporting machinery.
- Ship building and repair facilities.
- Road and Rail connectivity

3.2.1 Salient Features of Approved and Proposed Development

The proposed development plan of Cuddalore Port is tabulated in **Table 3-1**.

Table 3-1: Salient Features of Development Plan

S. No	Description	Unit	Approved	Proposed	Total	Remarks
1	Multipurpose Berths	No.	2	1	3	Increase in quay length and depth
	Quay length	m	240 (120x2)	200	440	
	Depth	m	-11	-16	-16	
	Width	m	21	-	21	
2	Port craft berth/Wharf	No.	1	-	1	No change
	Length	m	300	-	300	
	width	m	30	-	30	
3	Bulk Berth	No.	-	2	2	Increase in quay length
	Length	m	-	540 (270x2)	540	
	Width	m	-	21	21	
4	Shipyard/repair jetty	m	-	1	1	New proposal
	Length	m	-	200	200	
	Width	m	-	21	21	

S. No	Description	Unit	Approved	Proposed	Total	Remarks
5	Increase Depth at Protected area/Inner channel	mCD	-11	-16	-16	Increase in depth
6	Increase Depth at unprotected area/outer channel	mCD	-11	-18	-18	Increase in depth
7	Ship Building and Repair Yard	Acres	-	34.29	34.29	New proposed area
8	Total Port area including Backup & shipyards	Acres	111.72	34.29	146.01	Increase in depth
9	Breakwater total	m	1045	0	1045	No change
	Breakwater North	m	395	0	395	
	Breakwater South		650	0	650	
10	Retaining walls North	m	180	0	180	No change
	South	m	230	0	230	No change
11	Turning Circle Diameter	m	310.0	90	400	Increase in diameter and depth
	Depth	mCD	-10	-16	-16	
12	Approach Channel Length	m	1500	5000	5000	Increase in approach channel length and width at Protected Area Curved portion of channel Unprotected
	Width	m	60	-	-	
	Protected Area/Inner Channel	m	-	100	100	
	Curved portion of channel/Inner Channel	m	-	130	130	
	Unprotected area/outer channel	m	-	160	160	
13	Cargo handling capacity	MTPA	5.68	5.8	11.48	Increase in cargo handling capacity
14	Capital Dredging	M. Cum	1.87	5.0	5.0	Capital dredging of 1.87 M.Cum is already carried out, now during expansion 5 M.cum of dredging will be carried out.
15	Capital dredge disposal/Level Raising/ Reclamation	M. Cum	1.87	5.0	5.0	During current expansion, reclamation at port back

S. No	Description	Unit	Approved	Proposed	Total	Remarks
						up area/beach nourishment (utilising 2 MCM for level raising and remaining 3 MCM for beach nourishment towards north side of north breakwater and south side of south breakwater)
16	Maintenance Dredge disposal	M. Cum	0.0187	0.237	0.237	Beach nourishment towards north side of north breakwater and south side of south breakwater
17	Cargo type	-	Coal, Cement, Fertilizers and Clean Cargo like containers	Coal, Cement, Fertilizers, container, Cereals, wood, clean cargo, Liquid cargo such as non-hazardous and Class A, B, C chemicals including Methanol, Ethylene Di Chloride, Sulphuric Acid 98%, Caustic Soda Lye 48%, Linear Alkyl Benzene, Acetic Acid, Palm Fatty Acid Distillate, Glycerine, Ethanol, Petcock, Bitumen, Low Sulphur Fuel Oil, Marine Gas Oil (NFPA Class II or Class IIIA), Motor Spirit (Class 1A), HSD (Class B Chemical) and Furnace Oil etc., Iron ore, Slag and Limestone		Change in cargo mix
18	Water requirement	KLD	100	-	100	Desalination plant
19	Desalination plant	KLD	100	-	100	No change, 100 KLD will be sufficient.

S. No	Description	Unit	Approved	Proposed	Total	Remarks
20	Power	KVA	373	3965	4338	Increase in power requirement
21	Effluent Treatment Plant	KLD		25	25	New proposal
22	Sewage Treatment Plant	KLD	-	3.5	3.5	New proposal

3.3 Proposed Cargo Handling Capacity

Based on the available hinterland the cargo forecast for the Cuddalore port has been worked out and same has been summarized in **Table 3-2** and **Table 3-3**.

Table 3-2: Traffic Forecast for Proposed Expansion Plan

S. No	Berth type	Cargo Mix	Cargo Handling Capacity (MTPA)
1	Multipurpose berth-1	Container cargo	1.33
2	Multipurpose berth-2	Liquid cargo such as non-hazardous and Class A, B, C chemicals including Methanol, Ethylene Di Chloride, Sulphuric Acid 98%, Caustic Soda Lye 48%, Linear Alkyl Benzene, Acetic Acid, Palm Fatty Acid Distillate, Glycerine, Ethanol, Petcoke, Bitumen, Low Sulphur Fuel Oil, Marine Gas Oil (NFPA Class II or Class IIIA), Motor Spirit (Class 1A), HSD (Class B Chemical) and Furnace Oil etc.	1.61
3	Bulk berth (two no)	Coal, Fertilizers, Cement, Clean cargo, Iron ore, slag and Limestone	8.54
Total			11.48

Table 3-3: Traffic Forecast for Ship Building and Repair

S. No	Location	Activity	Units/year
1	Ships (upto 50,000 DWT)	Building	20
		Repair	20
Total			40

3.4 Proposed Land Use

The proposed development will consist of material handling area, cargo storage/backup area, operational and utility area, internal connectivity, drainage, greenbelt and buildings etc. The proposed land use for development of Cuddalore port is given in **Table 3-4** and Project layout is shown in **Figure 3-1** and attached as **FD201**.

Table 3-4: Land use Break up

S. No.	Category	Area in Ac.	%
1	Bulk Storage yard	11.07	7.58
2	Container Area	12.31	8.43

S. No.	Category	Area in Ac.	%
3	Multi Storage Yard	7.96	5.45
4	Liquid Storage Area	8.28	5.67
5	CFS Area	1.46	1.00
6	Transit Shed	7.64	5.23
7	Buildings	1.16	0.79
8	Desalination plant	0.02	0.01
9	Common Utility Area	0.69	0.47
10	Parking Area	3.68	2.52
11	Road	17.1	11.71
12	Rail sliding area	7.01	4.80
13	Greenery / Landscaping	15.2	10.41
	Total	93.58	
14	Future Development area	18.14	12.40
	Total Port Backup area	111.72	
15	Shipbuilding and Repair area	34.29	23.51
	Grand Total	146.01	

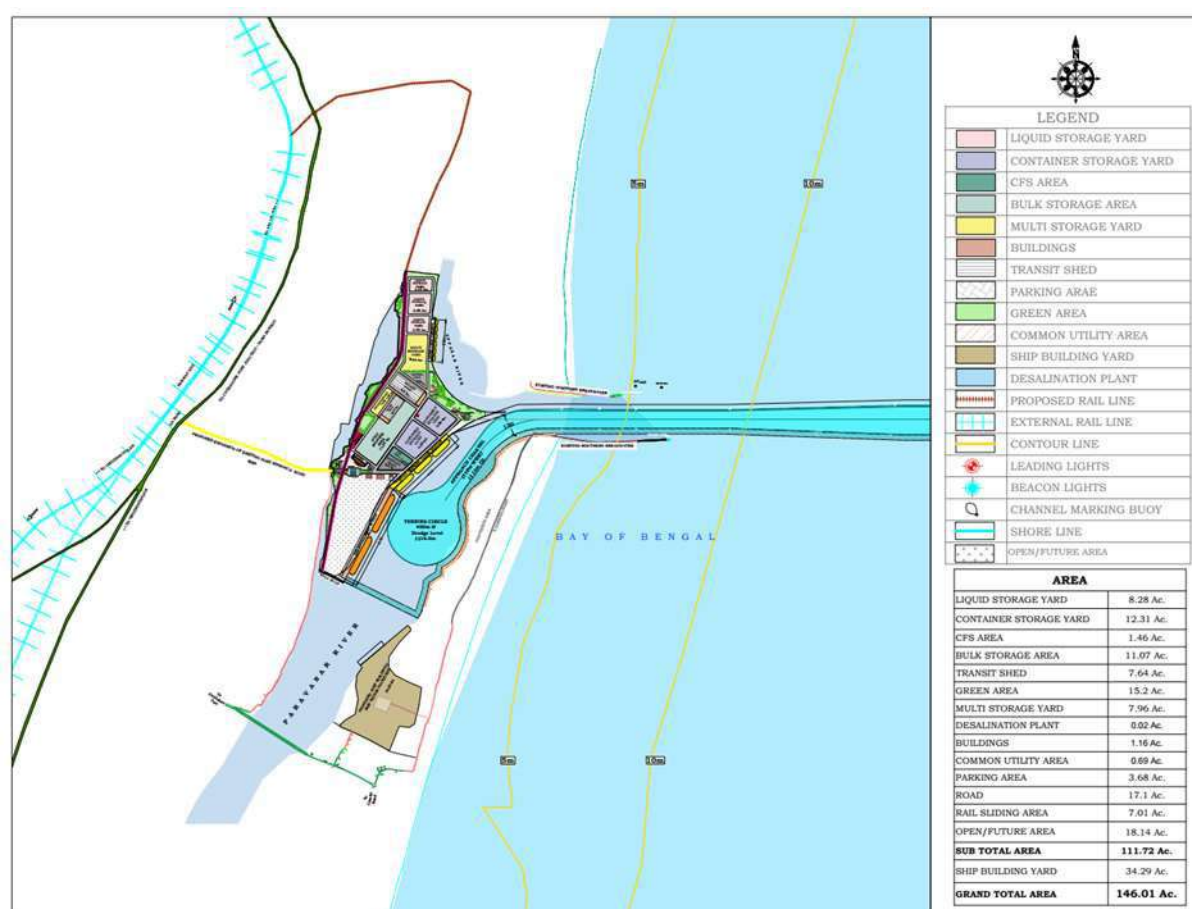


Figure 3-1: Project Layout

4 Description of Environment

An area covering 10 km radius for Primary baseline environmental survey and 15 km for secondary data collection from Cuddalore Port boundary has been earmarked as study area. The baseline survey for marine environment, ambient air quality, noise levels, water quality and soil quality were monitored during July to October, 2025 in the study area and sampling locations are shown in **Figure 4-1**.

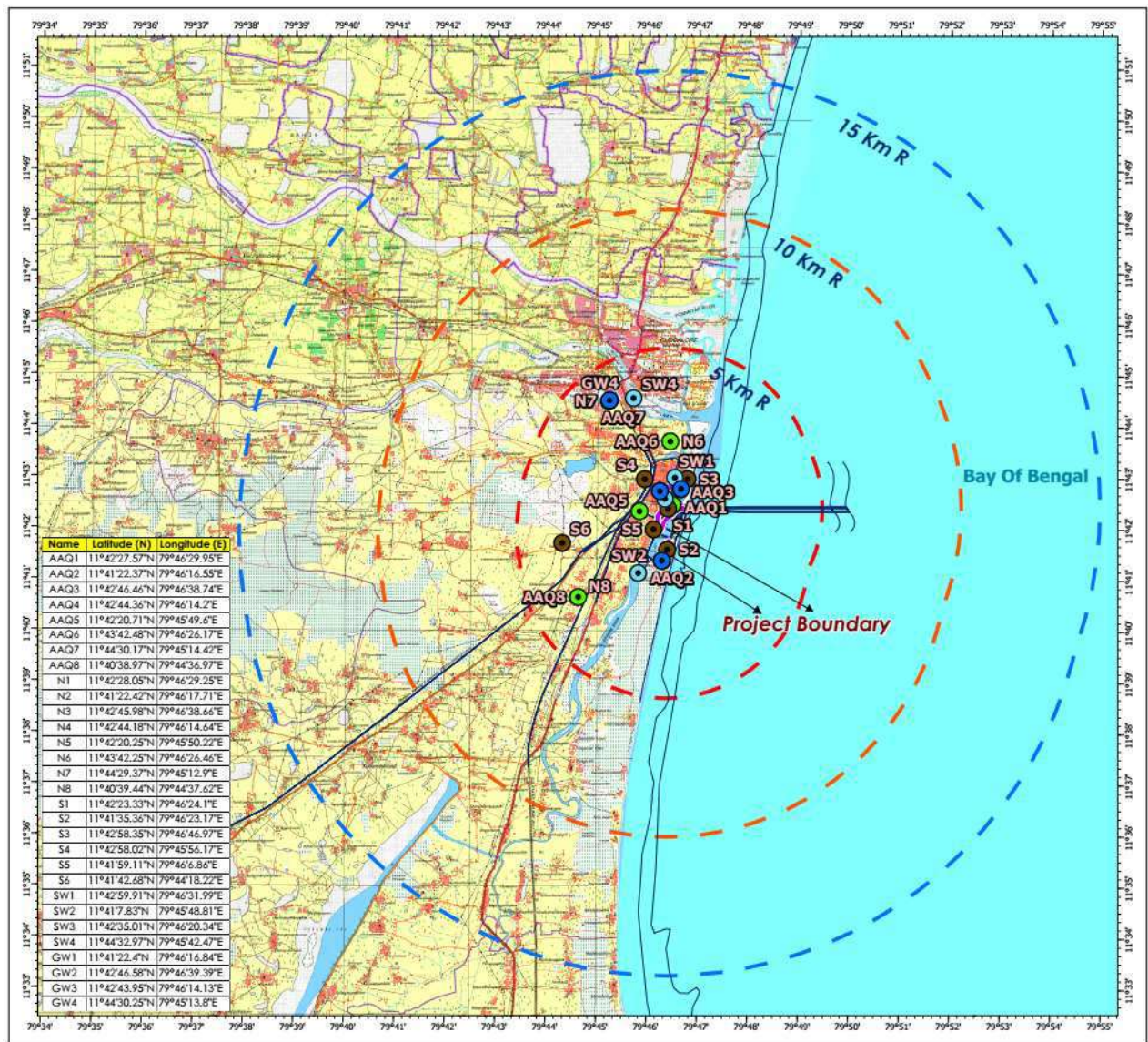


Figure 4-1: Study Area and Sampling Locations

4.1 Terrestrial Environment

4.1.1 Meteorological Data

- Daily Maximum temperature during the study period is 35.9 °C and minimum temperature is 32.2 °C.
- Maximum and Minimum relative humidity of 84% and 71 % were recorded at 8:30 hours in the months of October and July.
- Maximum and minimum relative humidity of 78% and 64% were recorded at 17:30 hours in the months of October and July.
- Maximum and minimum rainfall of 272.2 mm and 62.6 mm were recorded in the months of October and July.
- Mean Wind Speed during this season was 5.8 kmph.
- The predominant wind direction is Southeast (SE).

4.1.2 Ambient Air Quality

Ambient air quality in the study area was assessed at eight monitoring locations during the study period. A total of 12 parameters were monitored in line with the National Ambient Air Quality Standards (NAAQS). All monitoring and analysis activities were conducted using standard procedures prescribed by the Central Pollution Control Board (CPCB).

- PM₁₀ ranged between 36.4 µg/m³ to 42.9 µg/m³. NAAQS stipulated standard for PM₁₀ for 24 hr is 100 µg/m³.
- PM_{2.5} values varied from 18.5 µg/m³ to 28.5 µg/m³ NAAQS stipulated standard for PM_{2.5} for 24 hr is 60 µg/m³.
- SO₂ values varied from 9.4 µg/m³ to 19.8 µg/m³. NAAQS stipulated standard for SO₂ for 24 hr is 80 µg/m³.
- NO₂ ranged between 15.4 µg/m³ to 29.1 µg/m³. NAAQS stipulated standard for NO₂ for 24 hr is 80 µg/m³.
- O₃ were found to be below detectable limits in all the locations. NAAQS stipulated standard for O₃ for 8 hourly is 100 µg/m³.
- Hydrocarbons such as Benzene and Benzo (a) pyrene were found to be below detectable limits in all the locations.
- Rest of the parameters are below detectable limits
- All values were observed to be within NAAQS limits.

4.1.3 Ambient Noise Quality

Baseline ambient noise quality has been established by monitoring noise levels at 8 locations.

Day equivalent noise levels (L_d) at project site (industrial area) are 42.5 dB(A) and at other residential areas ranged between 42.4 dB(A) to 45.7 dB(A). Night equivalent noise levels (L_n) at project site are 37.4 dB(A) and other residential areas ranged between 34.7 dB(A) to 39.8 dB(A). It is observed that the day and night equivalent noise levels at all locations are well within the prescribed CPCB standards

4.1.4 Soil Quality

Soil sampling carried out at 8 locations. The study area predominantly features sandy loam texture. pH levels ranged between 7.22 and 7.96 indicating "alkaline" in nature. EC ranged from 99 to 191.7 µmhos/cm, Water Holding Capacity is between 20.4 % to 22.4 %, Heavy Metals such as copper Cu (2.78 to 3.98 mg/kg), Iron (Fe) (4.32 to 5.87 mg/kg), Lead (Pb) (1.23 to 1.67 mg/kg). Macro Nutrients Available Nitrogen (76 to 168 kg/ha) is observed to be low while Potassium (78.6 to 140 kg/ha) and Phosphorus (79.5 to 165 kg) are high indicating moderate fertility.

4.1.5 Inland Water Quality

Groundwater samples were analysed at four locations. The pH ranged from 7.5 to 7.9. Total Dissolved Solids (TDS) were observed between 1538 to 1790 mg/l. Chloride concentrations were observed between 118 to 665 mg/l. Total Alkalinity ranged between 186 mg/l to 192 mg/l. Total hardness (as CaCO₃) ranged between 258 mg/l to 745 mg/l. Key parameters including sodium, potassium, fluoride, and

nitrate were found to be within permissible limits, while heavy metals and cyanides were below acceptable limits.

Surface water quality was assessed at four locations. The pH ranged from 7.8 to 8.1, indicating a neutral nature. Electrical Conductivity (EC) was found to be in the range of 1863 $\mu\text{mhos/cm}$ to 3056 $\mu\text{mhos/cm}$. Total Dissolved Solids (TDS) found to be 870 mg/l to 1594 mg/l. Chloride concentrations are between 875 mg/l at to 1357 mg/l. other parameters such as alkalinity, macronutrients (NPK), fluoride, and heavy metals and cyanides were found to be below acceptable limits.

4.2 Marine Environment

The marine environmental conditions around Cuddalore Port were studied through water and sediment sampling at ten locations. Surface water temperatures ranged from 30.3°C and 31.4°C while bottom layers were slightly cooler at 29.8°C and 31°C. pH levels across all depths were alkaline, ranging from 8.2 to 8.3. Salinity varied between 33.5 PSU to 34.5 PSU at the surface and 34 PSU to 35 PSU at the bottom. Turbidity and total suspended solids were little higher at the bottom, at some locations. TDS concentrations were high, ranging from 33,450 and 34,530 mg/L at the surface and 34,020 to 39,800 mg/L at the bottom. Dissolved Oxygen (DO) ranged from 5.44 to 7.20 mg/L at the surface and 4.40 to 5.93 mg/L at the bottom, while BOD and COD values were higher in bottom layers. Nutrient levels such as total nitrogen, sulphates, nitrates, nitrites, ammonia, and reactive silicates showed moderate to elevated concentrations, with slightly higher values at depth. Major ions like chlorides, sodium, and potassium were consistently high across all samples. Heavy metals including Copper (Cu) concentrations ranged from 1.46 to 4.03 mg/L at the surface and 1.33 to 4.38 mg/L at the bottom. Zinc (Zn) levels varied between 3.53 and 7.11 mg/L at the surface and 7.21 to 13.81 mg/L at the bottom. Iron (Fe) concentrations ranged from 47.30 to 90.12 mg/L at the surface and 52.88 to 105.01 mg/L at the bottom. Other heavy metals such as lead, mercury, and selenium were below detection limits with bottom layers generally showing higher values.

Primary productivity values ranged from 1.09 to 2.24 g C/m²/day. The phytoplankton community is represented by three main classes: Dinophyceae, Bacillariophyceae, and Cyanophyceae strongly dominated by diatoms. Zooplankton community was represented by Copepoda, crustacean larvae, Chaetognatha, Appendicularia, Tintinnida, and polychaete larvae.

Sediment analysis showed that sand was dominant at most stations (>80%). Sediment pH ranged from 7.5 to 8.2. Total Organic Carbon (TOC) varied between 1.54 and 2.67 mg/kg. Total Nitrogen ranged from 0.13 to 0.35 mg/g. Total Phosphorus varied between 0.07 and 0.17 mg/g. Potassium concentrations ranged from 329 to 380 mg/g. Iron (Fe) showed comparatively high concentrations, ranging from 4754 to 7722 $\mu\text{g/g}$. Copper (Cu) concentrations ranged from 134 to 193 $\mu\text{g/g}$. Zinc (Zn) varied between 590 and 1059 $\mu\text{g/g}$.

Macrobenthos was dominated by Polychaetes followed by Bivalves, Gastropods, and Crustaceans. Meiobenthos was Foraminiferans, Nematodes, Ostracodes, and Harpacticoids.

Floral species were represented by *Neltuma juliflora*, *Vachellia nilotica*, *Azadirachta indica*, *Borassus flabellifer*, *Delonix regia*, *Albizia saman* etc. 7 mammal species, 29 bird species, 17 herpetofauna species were recorded in study area.

4.3 Coastal Regulation Zone

Physical demarcation of HTL, LTL and delineation of CRZ boundaries for the project site were carried out by Council of Scientific and Industrial Research - National Institute of Oceanography (CSIR-NIO), Goa, R.C Visakhapatnam which is one of the MoEF&CC authorized agencies. Project site does not contain environmentally sensitive areas such as National parks / marine parks, sanctuaries, wildlife habitats, corals / coral reefs. Facilities proposed such as berths, reclamation/level raising area, cargo handling and storage facilities and ship repair and building facility are falling in CRZ IB, CRZ II, CRZ III, CRZ IVA and CRZ IVB. The activities proposed within CRZ area are permissible as per CRZ notification, 2011.

4.4 Socio-Economic conditions

In the study area of 15 km radius, 144 villages and 2 municipal wards in Cuddalore and Villupuram districts of Tamil Nadu and Puducherry States.

- The census study has been carried out for the 15 Km Radius, there are 121756 households, and population is 503332 out of which male population is 49.86% and female population is 50.14%. The sex ratio of the study area is 1006 females over 1000 males.
- The literate population in the study area constitute to be 71.84% of the total population.
- The Working population in the project study area is 208711 which are around 41.47% and non-working population in the 4294621 which are 58.53 %.
- In the project study area fishermen households are 9321, and population is 33,329 from 15 villages of Cuddalore district.

5 Anticipated Environmental and Social Impacts with Mitigation Measures

The proposed Cuddalore Port expansion may cause environmental and social impacts during construction and operation. These impacts have been identified, and suitable mitigation measures are planned.

5.1 Land Environment

Existing port is located in an area of 45.21 ha (111.72 Ac) and was in complete possession of Cuddalore Port and proposed development is within the existing port land only. Shipbuilding and repair activity was proposed in an area of 13.88 ha (34.29 Ac) belongs to private owners and same shall be acquired.

Potential impacts include spillage of construction materials and contamination from industrial waste during operations. However, such impacts can be prevented by adopting appropriate mitigation measures which are described below.

Mitigation Measures:

- Land use changes as per the proposed development within port limits.
- Waste will be segregated and transported using trained personnel and compliant vehicles.

5.2 Marine Environment

Activities like dredging, berth construction, Sub-sea pipeline for desalination plant may disturb marine habitats. However, such disturbance can be prevented by adopting appropriate mitigation measures which are described below.

Mitigation Measures:

- Limit dredging rates and use closed grab dredgers to reduce sediment spread.
- Prevent chemical spills and runoff from construction sites.
- Monitor marine water, sediment, and ecology before and during dredging.
- Control waste and sewage discharge from ships.
- Treat oily wastewater through oil-water separators before discharge.

5.3 Water Environment

During construction, untreated domestic and industrial wastewater, along with runoff carrying solvents, paints, or metals, may cause water stagnation and contaminate nearby surface and groundwater. In the operation phase, bilge oil from ships and accidental cargo spills pose major risks to marine water quality. However, such impacts can be prevented by adopting appropriate mitigation measures which are described below.

Mitigation Measures:

- No untreated wastewater will be discharged on land or into surface water.
- Adequate drainage with separate collection for stormwater, wash water, and wastewater will be provided to prevent contamination.
- A 3.5 KLD STP and 25 KLD ETP will treat sewage and effluents, respectively.
- Specialized handling systems will minimize spill risks; accidental spills will be contained, collected, and treated.
- Stormwater from cargo areas will be managed to avoid marine pollution.

5.4 Air Quality

Activities such as site levelling, drilling and material transport may impact air quality due to exhaust emissions, dust suspension, and traffic congestion along public roads. However, such impacts can be prevented by adopting appropriate mitigation measures which are described below.

Mitigation Measures:

- Cover vehicles transporting soil and aggregates with tarpaulins; restrict stoppage near settlements.
- Provide PPEs like dust masks and enclosures for workers engaged in drilling and welding.

5.5 Air Modelling

AERMOD (steady-state Gaussian model) was used to predict pollutant concentrations. Results indicate that predicted levels remain within National Ambient Air Quality Standards (NAAQS).

Operational Phase Mitigation Measures:

- Ensure vessel emissions comply with MARPOL standards.
- Cover cargo trucks/rail with tarpaulins and conduct regular emission checks.
- Restrict entry of vehicles without valid Pollution Under Control (PUC) certificates and highly polluting vehicles.
- Green belts around the port to reduce air and noise pollution.
- Ambient air quality monitoring will be continued during master plan development.
- Conduct regular health monitoring/checkup for sensitive groups such as workers and nearby residents.

5.6 Noise

Construction activities may elevate ambient noise levels due to machinery, vehicle movement, and pile driving. However, such impacts can be prevented by adopting appropriate mitigation measures which are described below.

Mitigation Measures:

- Provide PPEs like earplugs and earmuffs to workers exposed to high noise levels.
- Install acoustic enclosures, vibration dampers, and insulators on noisy equipment.

5.7 Solid Waste Management

Solid waste will be generated during construction and operation phases of the project. Necessary mitigation measures will be provided.

Mitigation Measures:

- Solid waste will be managed as per Solid Waste Management Rules, 2026.
- Hazardous waste will be managed as per Hazardous and Other Wastes Rules, 2016 (as amended).
- Appropriate management for garbage. Solid waste disposal will be implemented.

6 Analysis of Alternatives

Cuddalore Port is already an operational port; hence, no alternative site was considered for the proposed expansion plan. The development includes capacity enhancement, additional berths and provision of port infrastructure within the project boundary.

7 Environmental Monitoring Programme

A comprehensive monitoring programme has been designed to track environmental parameters post-project. Monitoring is essential to identify potential impacts, assess environmental health, and enable timely corrective measures.

8 Additional Studies

- **Risk Analysis**

Risks linked to handling multipurpose, liquid, were assessed. Mechanized loading/unloading systems are planned for safe operations.

- **Disaster Management Plan**

DMP was prepared to mitigate hazards and ensure safety of people, property, and the environment during construction and operations.

- **Oil Spill Contingency Plan**

Oil Spill Contingency Plan was developed to ensure quick, effective response, staff training, and protection of sensitive ecological and socio-economic areas.

- **Social Impact Assessment (SIA)**

No, resettlement or rehabilitation is envisaged, as there are no settlements within the project site. Temporary impacts on nearby communities during construction, such as air pollution and noise, will be managed through dust control measures and installation of noise barriers. To prevent disturbance to fishermen, signboards will be placed near construction zones to keep them informed of ongoing activities.

- **Biodiversity Assessment study**

A total of 107 plant species were recorded in the study area, and none are listed under the IUCN threatened category. No mangrove species were observed at the port site. Among the 53 fauna species reported, four species are listed in IWPA schedule for which conservation plan is considered.

9 Project Benefits

- Enhance socio-economic conditions by attracting new investments and improving infrastructure in surrounding areas.
- Through social upliftment activities, Cuddalore port proposed to provide education support, skill training activities, organizing medical camps and other allied welfare initiatives.
- During the construction phase, around 500 workers will be employed. Once operational, the port is expected to generate approximately 1205 workers will be employed (Direct 82 and Indirect 123).

10 Environmental Management Plan

The environment management plan consists of Greenbelt Development Plan; Biodiversity Management Plan; Wildlife Conservation Awareness Programme;

Exploring Renewable Source of Energy in terms of Solar and Wind. Occupational health and Safety etc., Apart from these the designed inbuilt components such as Air pollution abatement measures, water and wastewater treatment measures, Storm water management Plan, Stockyard runoff management plan, Noise abatement measures, Solid and hazardous waste management measures, selection of suitable outfall locations etc., which will ensure effective environment management.

11 Environmental Budgetary Provisions

The budgetary estimate for Capital Environmental Management Cost for Proposed development is ~INR 64.80 crores and the annual budgetary estimate during operational phase is ~INR 3.86 crore.

12 Project Cost

The estimated project cost aligned with the proposed Master Plan is **₹ 650.0 crore**.

13 Social Upliftment Activities/CSR Activities

Cuddalore Port is deeply committed to supporting the community and promoting sustainable development. The company integrates social upliftment activities as a core business model, adopting a holistic approach that directly benefits the communities it impacts.

Through this approach, Cuddalore Port fosters balanced growth, ensuring that development aligns with both ecological and economic stability.

The key social upliftment activities include the following:

- Education Support
- Healthcare Programme
- Sustainable Livelihood Programme such as sanitation and drinking Water Initiatives
- Other welfare activities like skill training programs, promoting sports by providing equipment, tree plantations etc.
- Community Infrastructure Development etc.



FD 201

LEGEND

	LIQUID STORAGE YARD
	CONTAINER STORAGE YARD
	CFS AREA
	BULK STORAGE AREA
	MULTI STORAGE YARD
	BUILDINGS
	TRANSIT SHED
	PARKING AREA
	GREEN AREA
	COMMON UTILITY AREA
	SHIP BUILDING YARD
	DESALINATION PLANT
	PROPOSED RAIL LINE
	EXTERNAL RAIL LINE
	CONTOUR LINE
	LEADING LIGHTS
	BEACON LIGHTS
	CHANNEL MARKING BUOY
	SHORE LINE
	OPEN/FUTURE AREA

AREA

LIQUID STORAGE YARD	8.28 Ac.
CONTAINER STORAGE YARD	12.31 Ac.
CFS AREA	1.46 Ac.
BULK STORAGE AREA	11.07 Ac.
TRANSIT SHED	7.64 Ac.
GREEN AREA	15.2 Ac.
MULTI STORAGE YARD	7.96 Ac.
DESALINATION PLANT	0.02 Ac.
BUILDINGS	1.16 Ac.
COMMON UTILITY AREA	0.69 Ac.
PARKING AREA	3.68 Ac.
ROAD	17.1 Ac.
RAIL SLIDING AREA	7.01 Ac.
OPEN/FUTURE AREA	18.14 Ac.
SUB TOTAL AREA	111.72 Ac.
SHIP BUILDING YARD	34.29 Ac.
GRAND TOTAL AREA	146.01 Ac.





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