



सत्यमेव जयते

File No: 10/55/2023-IA.III
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 29/12/2023



To,

Sri Ramachandra Murthy
CHENNAI PORT TRUST
V Floor, Centenary Building, No. 1, Rajaji Salai, Chennai, TamilNadu , Rajaji Salai, CHENNAI,
TAMIL NADU, Opp. to Reserve Bank of India, 600001
environment@chennaiport.gov.in

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

Sir/Madam,

This is in reference to your application for Grant of Terms of Reference under the provision of the EIA Notification 2006-regarding in respect of project DEVELOPMENT/IMPROVEMENT OF INFRASTRUCTURE FACILITIES AT CHENNAI PORT AUTHORITY submitted to Ministry vide proposal number IA/TN/INFRA1/440016/2023 dated 04/10/2023.

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO23A3503TN5194117N
(ii) File No.	10/55/2023-IA.III
(iii) Clearance Type	TOR
(iv) Category	A
(v) Project/Activity Included Schedule No.	7(e) Ports, harbors, breakwaters, dredging,7(e) Ports, harbors, breakwaters, dredging
(vi) Sector	INFRA-1
(vii) Name of Project	DEVELOPMENT/IMPROVEMENT OF INFRASTRUCTURE FACILITIES AT CHENNAI PORT AUTHORITY
(viii) Name of Company/Organization	CHENNAI PORT TRUST
(ix) Location of Project (District, State)	CHENNAI, TAMIL NADU
(x) Issuing Authority	MoEF&CC
(xi) Applicability of General Conditions	no
(xii) Applicability of Specific Conditions	no

3. The above mentioned proposal was considered by the Expert Appraisal Committee (EAC) in its 338th meeting on

24th August, 2023. The project proponent along with the EIA consultant M/s SV Enviro Labs & Consultants, Visakhapatnam has made a presentation through Video Conferencing and provided the following information:
4. The proposal is for Development / Improvement of 6 Infrastructure facilities at Chennai Port, Tamil Nadu by M/s Chennai Port Trust. The developmental activities are as following:

- (i) Improvement to the existing Jawahar Dock (East) Berths for handling bulk cargoes – Modernization (No Capacity addition);
- (ii) Improvement to the existing Bharthi Dock II Berth for handling bulk cargoes – Modernization (No Capacity addition);
- (iii) Relocation of existing Sand Trap and Capital Dredging – Modernization (No Capacity addition);
- (iv) Development of Multi level Car parking facility – New (No Capacity addition);
- (v) Development of Coastal Terminal at northern sheltering arm at east of Bharathi Dock turning circle – New (1MTPA);
- (vi) Development of Storage Sheds and Tank Forms as per the Land Use Plan of the Chennai Port – New (No Capacity addition).

5. The above said proposal earlier ToR was obtained by the Ministry vide letter no.F.no.10-127/2007-IA.III dated 05.02.2016 subsequently extension of ToR was obtained on 02.02.2019. Further public hearing was conducted on 24.04.2018 and obtained the DCZMA recommendations on 22.06.2020 subsequently TNCZMA recommendations obtained on 25.07.2022. however, the ToR issued on 05.02.2016 has expired as such is not valid and hence applied for obtaining the fresh ToR with a request to exempt the public hearing considering the above.

6. The project/activity is covered under category 'A' of item 7(e) i.e. 'Ports, harbours, break waters, dredging' of the schedule of the EIA notification, 2006. The total project cost is Rs. 590 Lakhs(approx.).

S.No	Landuse / Landcover	Area (ha)	Remarks, if any
1	Improvement to the existing Jawahar Dock (East) Berths for handling bulk cargoes;	14.35	CRZ-II
2	Improvement to the existing Bharthi Dock II Berth for handling bulk cargoes	1.11 9.03 0.84 1.88	SEA CRZ-II JETTY Non-CRZ
3	Relocation of existing Sand Trap and Capital Dredging;	12.50	SEA
4	Development of Multi level Car parking facility;	0.25 0.73	SEA CRZ-II
5	Development of Coastal Terminal at northern sheltering arm at east of Bharathi Dock turning circle;	0.50 0.48 9.68	JETTY SEA CRZ-II
6	Development of Storage Sheds and tank farms as per the land use plan of the Chennai Port.	7.99	CRZ-II

7. Terrain and topographical features: Chennai district forms part of coastal plains of Tamil Nadu. Major part of the district is having flat topography with very gentle slope towards east.

8. Details of water bodies, impact on drainage: Marina Beach-2km, Adayar river and Cooum river, Adyar River originates at the confluence (Thiruneermalai) of two streams that drains the upstream area of Chembarambakkam tank. It is a small river of 42 km length and a catchment of 800 Sq.km. The river carries flow all through 365 days of a year with an average discharge of 89.43MCM/Year at Kathipara Cause way. It drains the southern part of the district and remains flooded during monsoon. During the high tides, the back waters from the Bay of Bengal entered inland up to 3-4Km. Cooum is the other main river flowing through the central part of the district and carries only drainage water, which is highly polluted. It originates from the surplus waters from the Cooum tank in Tiruvallore taluk and the tanks, which are in enroute, discharge their surplus water into the river during flood season. The flow of Cooum river at Korattur is 40.2MCM/year for an average duration of 31 days in a year. OtteriNulla is another small stream flowing in the northern part of the city. Buckingham canal is man made for navigation purposes earlier, presently which acts as sewerage carrier in the city.

9. Water requirement: Water requirement during construction is 15 KLD and during operation is 70.865KLD and source is from CMWSSB.

10. Forest Diversion: The instant proposal will not involve any forest land and the Vedanthangal Bird Sanctuary is situated at 90 Km, Gunidy National Park is situated at 14 Km, Anna Zoological Park situated at 42 Km from the project site.

11. STP details: ChPA is having STP 40 KLD Capacity and construction of STP 90 KLD capacity is in progress.

12. Details of shore line change: As the present proposal is modernization to the existing infrastructure facilities, there will not be any shoreline changes to the adjacent shore on either side of the Port. However, regarding the relocation of Sand Trap proposal, a study is being conducted by CWPRS.

13. Details of channel, breakwaters, dredging, disposal and reclamation: As the present proposal is modernization to existing infrastructure facilities, the proposal does not involve new channel, breakwaters and reclamation. However, the relocation of Sand Trap proposal involves dredging to a depth of (-)18 to (-)22m below CD (Optimum size of the Sand Trap is 250 m x 500 m). The quantity of sand to be dredged is 8,24,000m³. The dredged materials will be dumped at the designated dumping site of the Port.

14. Handling of each cargo:

(i) Dr. Ambedkar Dock:

a	North Quay	General
b	West Quay 1	General/ Other Liquid Bulk
c	West Quay 2	General
d	Centre Berth	General
e	West Quay 3	General
f	West Quay 4	Passenger/Fertilizer
g	South Quay 1	Fertilizer/General
h	South Quay 2	Fertilizer/General

(ii) Second Container Terminal:

Berth 1	Containers
Berth 2	Containers
Berth 3	Containers

(iii) Jawahar Dock:

JD1	Food grains/General
JD2	Coal/Other/Liquid Bulk
JD3	Food grains/General
JD4	Other ores/Coal
JD5	Food grains/General
JD6	Other ores / Coal

(iv) Bharathi Dock:

BD1	Oil
BD2	Ore
BD3	Oil

(v) First Container Terminal:

CT1	Containers
CT2	Containers
CT3	Containers
CT4	Containers

15. Dust Preventive Measures: Windscreen developed along the areas where the cargoes stored as open storage. Regular water sprinkling on the roads to avoid spreading of dust particles. Green Plantation is being carried out wherever the area is more vulnerable to dust due to handling of cargoes.

16. Details of fishing activity: Adjacent to Chennai Port at northerside, a Fisheries harbor is available. The harbor was constructed during 1975 and the same is managed by Fishing Harbour Management Committee.

17. Land acquisition and R&R issues involved: no Land acquisition and R&R activities are involved.

18. Employment potential: As the project is towards an improvement to the existing facilities in lieu of stoppage of dusty cargo, there will be an employment opportunity to skilled and unskilled during the construction phase.

19. Benefits of the project: Improvement in the physical infrastructure, Improvement in social infrastructure, Employment and other Benefits, Financial benefits, social benefits.

20. Details of Court cases: No court case is involved in the proposed project.

21. PP mentioned that the above said proposal earlier ToR was obtained by the Ministry vide letter no.F.no.10-127/2007-IA.III dated 05.02.2016 subsequently extension of ToR was obtained on 02.02.2019. Further public hearing was conducted on 24.04.2018 and obtained the DCZMA recommendations on 22.06.2020 subsequently TNCZMA recommendations obtained on 25.07.2022. however, the ToR issued on 05.02.2016 has expired as such is not valid and hence applied for obtaining the fresh ToR with a request to exempt the public hearing considering the above.

22. EAC observed that the activities are proposed within the port limit and during public hearing, no major environmental issues were raised therefore Public Hearing can be exempted.

23. The EAC, based on the information submitted and clarification provided by the project proponent and detailed discussions held on all the issues during 338th meeting during 24th August, 2023 and recommended the proposal for grant of Terms of Reference (ToR) with stipulated specific conditions along with other Standard ToR Conditions with exemption of public hearing and referred the matter to Ministry to take further decision in the matter.

24. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other Miscellaneous projects) and hereby decided to grant Terms of Reference for the 'Development / Improvement of 6 Infrastructure facilities; (i) Improvement to the existing Jawahar Dock (East) Berths for handling bulk cargoes – Modernization (No Capacity addition); (ii) Improvement to the existing Bharthi Dock II Berth for handling bulk cargoes – Modernization (No Capacity addition); (iii) Relocation of existing Sand Trap and Capital Dredging – Modernization (No Capacity addition); (iv) Development of Multi level Car parking facility – New (No Capacity addition); (v) Development of Coastal Terminal at northern sheltering arm at east of Bharathi Dock turning circle – New (1MTPA); (vi) Development of Storage Sheds and Tank Forms as per the Land Use Plan of the Chennai Port – New (No Capacity addition) at Chennai Port, Tamil Nadu by M/s Chennai Port Trust' and for preparation of EIA/EMP report with exemption of public hearing under the EIA Notification, 2006 as amended and CRZ Notification 2011, subject to strict compliance of the following specific conditions, in addition to all standard ToR conditions applicable for such projects.

25. The project proponent shall submit the detailed final EIA/EMP report prepared as per TOR including issues raised during earlier Public Hearing to the Ministry for considering the proposal for environmental clearance before expiry of validity of ToR.

26. The consultants involved in preparation of EIA/EMP report after accreditation with Quality Council of India/National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/Laboratories including their status of approvals etc. vide notification of the MoEF dated 19th July, 2013.

27. The prescribed TOR would be valid for a period of four years for submission of the EIA/EMP Reports.

28. This issues with the approval of Competent Authority.

Copy To

1. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai - 600 032.
2. The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional Office Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam Chennai – 34.
3. PARIVESH Portal.
4. Guard File.

Annexure 1

Specific Terms of Reference for (Ports, Harbors, Breakwaters, Dredging)

1. Specific Conditions

S. No	Terms of Reference
1.1	<ol style="list-style-type: none"> 1. Importance and benefits of the project. 2. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale. 3. Recommendation of the Tamil Nadu CZMA shall be obtained and submitted. 4. Submit superimposing of latest CZMP as per CRZ (2011) on the CRZ map. 5. Submit a complete set of documents required as per para 4.2 (i) of CRZ Notification, 2011. 6. Location of the dredge material, if any will be disposed shall be indicate in the KML file and the layout maps overlay on the approved CZMP map shall be submitted and site suitability study shall be conducted. 7. Hydrodynamics study on impact of dredging on flow characteristics shall be carried out. 8. Study the impact of dredging and dumping on marine ecology and draw up a management plan through the NIO or any other institute specializing in marine ecology. 9. The types of Cargos proposed to be handled at the port shall be submitted product wise and quantity wise. 10. The impacts study on the hazardous materials handling and storage in worst case scenario shall be submitted along with the EIA/EMP report. 11. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract). 12. A certificate from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users. 13. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project. 14. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project. 15. An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. 16. Disaster Management Plan for the project shall be prepared and submitted. 17. A specific financial provision be made to the National Disaster Management Authority for infrastructure upgradation as a part of EMP. A general proposal regarding the same be sought from NDMA and provision for the same be made in EIA-EMP and accordingly provided to NDMA. Accordingly, EMP budget will be prepared. 18. Risk analysis and its management plan for handling different types of liquid cargos (if handling) shall be conducted and submitted.

S. No	Terms of Reference
	<p>19. Detailed modelling studies to understand whether the selected site can withstand severe cyclones and develop design in accordance to due safety measures.</p> <p>20. Erosion and accretion study at the mouth of the creek which is adjacent to the proposed site be carried out and submitted.</p> <p>21. A detailed study on the impact of proposed activity on marine ecology and marine biodiversity with specific focus on the corals, mangroves and mud flats in the proximity of the site should be conducted and required mitigation plan be submitted by a nationally reputed institute.</p> <p>22. A management plan for the area under which mangroves are or likely to be removed and compensatory mangrove plantation plan be submitted.</p> <p>23. Details and status of court case pending against the project, if any.</p> <p>24. A tabular chart with index for point-wise compliance of above ToRs. The specific ToRs as recommended above are in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.</p> <p>25. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent, based on the commitments made during the public hearing, shall include all the activities required to be taken to fulfill these commitments in the Environment Management Plan along with cost estimates of these activities, in addition to the activities proposed as per recommendations of EIA Studies and the same shall be submitted to the ministry as part of the EIA Report. The EMP shall be implemented at the project cost or any other funding source available with the project proponent.</p> <p>26. In pursuance of Ministry's OM No stated above the project proponent shall add one annexure in the EIA Report indicating all the commitments made by the PP to the public during public hearing and submit it to the Ministry and the EAC.</p>

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

1. Project Details

S. No	Terms of Reference
1.1	Reasons for selecting the site with details of alternate sites examined/rejected/selected on merit with comparative statement and reason/basis for selection.
1.2	The examination should justify site suitability in terms of environmental angle, resources sustainability associated with selected site as compared to rejected sites.
1.3	The analysis should include parameters considered along with weightage criteria for short-listing selected site.
1.4	Submit the status of shore line change at the project site
1.5	A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.

S. No	Terms of Reference
1.6	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
1.7	Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry.

2. Land Use, land Acquisition And R&r

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

3. Esz, Crz, International Boundary And Acts

S. No	Terms of Reference
3.1	Examine and submit detail of land use around 10 km radius of the project site and map of the project area and 10 km area from boundary of the proposed/existing project area, delineating project areas notified under the wild life (Protection) Act, 1972/critically polluted areas as identified by the CPCB from time to time/notified eco-sensitive areas/interstate boundaries and international boundaries.
3.2	Erosion and accretion study at the mouth of the creek which is adjacent to the proposed site be carried out and submitted
3.3	Detailed modelling studies to understand whether the selected site can withstand severe cyclones and develop design in accordance to due safety measures.
3.4	Submit superimposing of latest CZMP as per CRZ Notification (2011) on the CRZ map. And also submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scales.
3.5	Submit a complete set of documents required as per para 4.2 (i) of CRZ Notification, 2011.
3.6	Hydrodynamics study on impact of dredging on flow characteristics shall be carried out.
3.7	A detailed study on the impact of proposed activity on marine ecology and marine biodiversity with specific focus on the corals, mangroves and Mud flats in the proximity of the site should be conducted and required mitigation plan be submitted.
3.8	A management plan for the area under which mangroves are or likely to be removed and compensatory mangrove plantation plan be submitted.

4. Remote Sensing & Gis

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

5. Forest And Wildlife

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

6. Water Environment/quality Analysis/ Hydrology And Water Bodies

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

7. Waste Management, Drainage And Stps

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

8. Terrain And Topography

S. No	Terms of Reference
8.1	Submit the details of terrain, level with respect to MSL, filling required, source of filling materials and transportation details etc.
8.2	Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale along with the recommendation of the SCZMA.
8.3	Details of bathymetry study.
8.4	Details of ship tranquillity study.
8.5	The ecologically fragile area including CRZ 1A area etc. shall be demarcated and superimposed on the layout plan and submitted.

9. Road/transport Connectivity And Traffic Measures

S. No	Terms of Reference
9.1	Examine road/rail connectivity to the project site and impact on the existing traffic network due to the proposed project/activities
9.2	A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
9.3	Details of handling of each cargo, storage, transport along with spillage control, dust preventive measures.
9.4	In case of coal, mineral cargo, details of storage and closed conveyance, dust suppression and prevention filters.
9.5	An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA.

10. Rain Water Harvesting

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

11. Baseline Data

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

12. Air Environment

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

13. Environment Management/ Monitoring, Mitigative Measures And Risk Assessment Details

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

14. Court/ Litigation Records

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

15. Environment Responsibility

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

S. No	Terms of Reference
	the EIA Report. The EMP shall be implemented at the project cost or any other funding source available with the project proponent.

Additional Terms of Reference

N/A

