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File No: 11-93/2012.IA.III
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Date 11/12/2024



To,

R. N. Harikrishna
VISAKHAPATNAM PORT AUTHORITY
Chief Engineer, Administrative Office Building (AOB), Visakhapatnam Port Authority, Visakhapatnam
, Visakhapatnam, VISAKHAPATANAM, ANDHRA PRADESH, 530035
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Subject: Proposed Modernization of Existing Berth WQ 7 and 8 of Visakhapatnam Port, Visakhapatnam, located at Visakhapatnam, by M/s Visakhapatnam Port Authority – Amendment in Environmental and CRZ clearance regarding.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/AP/INFRA1/487347/2024 dated 12/07/2024 for grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC24A3501AP5349536N
(ii) File No.	11-93/2012.IA.III
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	7(e) Ports, harbors, breakwaters, dredging
(vi) Sector	INFRA-1
(vii) Name of Project	Proposed Modernization of Existing Berth WQ 7 and 8 of Visakhapatnam Port, Visakhapatnam
(viii) Name of Company/Organization	VISAKHAPATNAM PORT AUTHORITY
(ix) Location of Project (District, State)	VISAKHAPATANAM, ANDHRA PRADESH
(x) Issuing Authority	MoEF&CC
(xi) Applicability of General Conditions as per EIA Notification, 2006	No

3. The proposed proposal is for amendment in the Environmental and CRZ Clearance for “modernization (full mechanization) of existing berth WQ 7 & 8 of Visakhapatnam Port using MHC, Mobile hoppers, conveyors, silos and

wagon loading stations with safe and sound storage for handling 6.39 MMTPA cargo, located at Visakhapatnam Port, Visakhapatnam, Andhra Pradesh by Visakhapatnam Port Authority".The proposed project is located at longitude 83°16'28.62"E and latitude 17°42'49.49"N.

4. The total existing berth-backup area is 4.56acres (1.85 ha) for WQ 7 and 8 and further, in context to stockyards a dedicated storage area of 35.0 acres (14.16 ha) for shall be used. The berth backup area is existing in nature and is currently in operational state. The proposal of full mechanisation, using MHC, Mobile hoppers, conveyors, silos and wagon loadings with safe and sound storage will lead to efficient handling of cargo and thus will be attracting more potential customers in future. Transportation in WQ 7 and 8 has been proposed by means of wagon loading stations, which will be connected to existing main Vishakhapatnam railway lines for movement of cargo between port and hinterland.

5. The project/activity is covered under Category 'A' of item 7(e), Ports/Harbour/Break waters/dredging of Schedule of Environment Impact Assessment (EIA) Notification, 2006 (as amended) as the proposed project is handling the ≥ 5 million TPA of cargo capacity. The total cost of the project is Rs.288.47 Cr.

6. Initially, environment and CRZ clearance for construction of 3 berths WQ-6, WQ-8 and EQ10 in the northern arm of the inner harbour of Visakhapatnam Port trust, Andhra Pradesh by M/s Vishakhapatnam Port trust vide letter no.11-7/2009-IA.III dated 31st August, 2009. Further, Environmental and CRZ clearance was accorded to the project "Modernization of existing facilities and addition of new facilities entailing capacity at Visakhapatnam Port by M/s Visakhapatnam Port Trust vide letter F.No.11-93/2012-IA-III dated 25.05.2016. Subsequently, Amendment in Environmental and CRZ clearance for modernization of existing facility and addition of new facilities entailing capacity at Vishakhapatnam Port by M/s Vishakhapatnam Port Trust vide letter no.11-93/2012-IA-III dated 17th May, 2017. Thereafter, amendment in Environmental and CRZ Clearance for Modernization of existing facilities and addition of New facilities entailing capacity at Visakhapatnam Port by M/s Visakhapatnam Port Trust was accorded by the Ministry vide letter no. 11-93/2012-IA.III dated 16th November, 2018 and Amendment in Environmental and CRZ Clearance under 7(ii) clause of EIA Notification, 2006, regarding "operations of WQ-7&WQ-8 berths for handling B.F.Slag, Gypsum, Bauxite, Lime Stone, ilmenite sand, coking coal and ores other than Iron ore, manganese ore, Fertilizers, Coke (CP coke, Lam coke, and Pet coke), Steam Coal, Steel cargo, Project cargo, etc through semi-mechanized mode for a period of three years i.e. till 15th November 2024 was accorded by the Ministry vide letter no. 11-93/2012 IA.III dated 21/11/2022. The Consent to Operate was granted on 13.04.2022 vide no. APPCB/VSP/VSP/45/CFO/ HO/ 1933. 21.11.2022 for Development of WQ-7 & WQ-8 berth in the Northern arm of Inner harbor of Visakhapatnam Port Trust by the state pollution control board.

7. Now the Vishakhapatnam Port Authority has made an online application vide proposal no: IA/AP/INFRA1/487347/2024 dated 12/07/2024 seeking amendment in the existing EC and CRZ Clearance for modernization (full mechanization) of existing berth WQ 7 & 8 of Visakhapatnam Port using MHC, Mobile hoppers, conveyors, silos and wagon loading stations with safe and sound storage for handling 6.39 MMTPA cargo, located at Vishakhapatnam Port Authority by Vishakhapatnam Port Authority under the 7(ii) of the EIA Notification, 2006.

8. The details of the existing and proposed expansion development details are as following:

Details	Units	WQ 7 and 8			Remarks
		Existing	Proposed	Final	
Cargo Capacity	MMTPA	6.39	0	6.39	No Change
Berth Area & Intermediate Storage area	Acres(ha)	4.56 (1.85)	0	4.56(1.85)	No Change
Cargo Storage Area	Acres(ha)	0	35(14.16)	35(14.16)	Change
Conveyor length with SCR	Km	0	5.82	5.82	2 conveyors with SCR
Railway Length	Km	0	3.10	3.10	Change
Silo	Tonne	0	1000 T	1000 T	Change
Cargo Type		Fertilizers, Manganese ore, Iron ore, CP Coke, LAM coke,	-	Coking coal, Limestone, Mn ore, Bauxite, Gypsum , B.F.	No Change

		PET Coke, Steel and project cargo, Gypsum, Bauxite, Limestone, Coking coal, B.F. Slag, ilmenite sand		Slag, Iron ore, Ilmenite sand and other bulk cargo	
Cargo Handling Mechanism		Conventional	Full mechanization	Full mechanization	Change

9. Proposed specifications of WQ 7 and WQ 8 Modernization are following.

Sr.No	Description	Proposed Specification
1	SUL at Berth	2 Nos. of 2000 TPH rated capacity Grab Unloader
2	Belt Feeder	2 Nos of 2000 TPH Reversible Belt Feeder
3	Transportation to storage	Two Streams Conventional troughed belt conveyors – one stream for two SULs , rated Capacity is 4000 TPH with interchangeable flow direction
4	Storage yard	Three rows will be planned for stacking as (a) 380 X 45 X6 (b)300 X 45 X6 (c)225 X 45 X6
5	Equipment	2 Nos. Stacker/Reclaimer; rated capacity: 4000 TPH (stacking) and 4000 TPH (reclaiming) & Transfer Tower
6	Conveyor System	Conventional troughed belt conveyors, reversible type, 2belt feeder conveyor streams each rated for 4000 TPH (stacking) and 4000 TPH (reclaiming).
7	Transportation from storage to Wagon Loading Station	Conventional troughed belt conveyors – one stream, rated capacity: 3600 TPH
8	Wagon Loading Station	1 No. of storage silo with 1000 Tones capacity;

10. Land use/Land cover of project site:

S.No	Land Use	Sum of Area (Ha)	Percentage (%)
1	Arable Land	326.1	0.8%
2	Bay of Bengal	13912.9	35.0%
3	Industrial	4092.5	10.3%
4	Inner Harbour	214.5	0.5%
5	Kailasakonda Forest	2384.5	6.0%
6	Kambalakonda RF	2936.9	7.4%
7	Lake/reservoir/tank/canal	148.4	0.4%
8	Land with or without scrub	6443.8	16.2%
9	Mangroves	31.7	0.1%
10	Meghadri Gedda	199.9	0.5%
11	Plantation	27.9	0.1%
12	Sandy area	91.6	0.2%
13	Sitakonda Reserve Forest	297.8	0.7%
14	Urban	8135.4	20.5%
15	Yerrakonda RF	485	1.2%
Grand Total		39728.9	100.0%

11. Terrain and topographical features: The project location is at an elevation of 0 m to 13 m w.r.t the mean sea level (MSL) as per Digital Elevation Map (DEM) prepared based on the Global (Shuttle Radar Topography Mission) SRTM 1 Arc-Second (~30m) Global Data. The study area comprises majorly of coastal plain and Pediment Pedi plain complex. The higher coverage of Red Loamy soils predominates with 69.9% of the villages in the district, followed by Sandy Loamy soils.

12. Details of water bodies, impact on drainage: The project is located in Inner harbour of Vishakhapatnam Port. VPA has an existing STP of 10 MLD and the sewage and effluent generated during the operation phase will be collected and directed to a single point with existing available sewage line of VPA. The storm water drain network inside the terminal will be constructed and connected with outfall and for dump ponds in the coal stockyard, all drained water is collected in the dump ponds for settlement of suspended solids. Additionally, R.C.C. drains between the coal stacks, on either side of the stacker / reclaimers tracks will be constructed and raised by 250 mm above the surrounding ground to minimize entry of coal but intermittent 500 mm wide×250 mm deep openings will be provided at 5 m centres to allow drainage of the surface water from the surrounding ground.

13. Water requirements, sources (during construction and operation phases) and NOC: During the construction phase, the project necessitates 44 KLD of water. Upon reaching the operational phase, water requirements shift significantly: 830 KLD is allocated for dust suppression, 5.6 KLD for potable purposes, and 14 KLD for gardening activities. Notably, during the operational phase, water for dust suppression and gardening will be sourced from STP treated wastewater, ensuring sustainable water management practices are adhered to throughout the project's lifecycle.

14. Diversion of Forest land: No additional land area involved in the proposed expansion. The project is located within 6.13 Km NE from ESZ of Kambalkonda Wildlife Sanctuary. NBWL clearance obtained on 24.11.2016.

15. Waste Management Plan:

Solid waste	Labours on site	13 TPA	Authorized vendors
E-waste	Office Block	0.5 TPA	Buy Back/Authorized agency
Used Lead acid batteries	Cranes	1 TPA	Buy Back/Authorized agency
Used Oil	DG sets	2 KL per annum	Authorized Re-processors
Ballast water	Vessels	16 KL per annum	Authorized Re-processors

16. STP details: There is existing 10 MLD STP within Vishakhapatnam Port Authority for wastewater treatment.

17. VPA in coordination with GVMC has already installed Grit Chambers at the public city sewers before entering the Port Harbour water bodies to control floating material entering to Marine waters. VPA regularly cleaning the floating material using floating trash barriers, JCB, BOB Cat and Trucks which is finally sent to M/s lindal Urban Waste Management Limited (15 MW Waste to Energy plant). Inert wastes will be sent to M/s GVMC Dumping Yard located at Kapuluppada.

18. Details of tree cutting and Green belt development: No tree cutting involved. The implementation plan for Greenbelt involves dedicating a 2-hectare area, incorporating a 5-meter-wide greenbelt along its boundary. The initiative aims to enhance the environmental landscape by introducing 5000 tree saplings through a new plantation effort.

19. Energy conservation measures with estimated saving: Vishakhapatnam Port Authority has previously established a 10MW solar power facility, which is supplying electricity within the port area. VPA is the first major port run entirely on solar power from 2016 through a 10 MW Solar power plant and 770 KWP Roof top Solar power plant installed at a cost of 65 Crores. In addition to the above, VPA has also engaged M/s GUVNL (Gujarat Urja Vikas Nigam Limited) for preparation of Feasibility report for an additional 5 MW Solar power plant. VPA proposed for additional 240 KWP capacity Roof Top Solar power plant . Also, 2 Nos of new CNG Buses hired at a cost of Rs.1.17 Cr for transportation as Green Port In iterative on 05-01-2024.

20. Details of Rain Water Harvesting: Rainwater harvesting have not been incorporated into this proposed project, as it pertains to the enhancement of existing facilities.

21. CRZ classification of the Development: The CRZ report along with 1:4000 and 1:25000 scale CRZ maps has been prepared by NCSCM one of the MoEF&CC authorized agency as per the study CRZ classification of the development is as following.

22. The detailed HTL/LTL demarcation studies were conducted to the project site by Institute of National Centre for Sustainable Coastal Management (NCSCM) as per the CRZ notification, 2011. The details are as following.

Description	CRZ Classification	Area in ha.	Applicable CRZ Clauses
WQ 7 and WQ8 Berth and Backup area	CRZ II	1.85	3(iv)a,8II(i),4(i)a
Proposed Conveyor (*Given is total conveyor length for all proposed berths)	CRZ II	3717.02	3(iv)a,4(i)a,4(ii)d
WQ 7 and 8 Railway Line	CRZ II	1367.45	3(iv)a, 4(i)a

23. Andhra Pradesh State Coastal Zone Management Authority (APSCZMA) appraised the proposal and recommended the proposal vide letter no.532/CRZ/CON/2023 dated 12/04/2024 recommended and forwarded to the Ministry.

24. IRO, Vijayawada Issued a Certified EC Compliance Report in respect of Modernization of existing facility and addition of new facilities entailing capacity at Vishakhapatnam Port by M/s Vishakhapatnam Port Trust. Vide letter no. IRO/VIJ/EPA/EC-A/101/10-111/2022 dated 01.07.2024.

25. Details of shoreline changes: The proposed project has been planned on shore and there is no dredging and reclamation involved. Further, VPA has an existing Oil Spill Contingency plan which is being followed on site. No new disposal envisaged for proposed project.

26. Land acquisition and R&R issues involved: No new land acquisition and R&R involved in project.

27. Employment potential: The proposed project will generate employment of 456 no. of persons during construction phase and 60 persons during operation phase of project.

28. Benefits of the project: the instant project will create the employment and enhanced economic and livelihood status people.

29. Details of Court cases: VPA is currently involved in a case at the National Green Tribunal (NGT), originally filed at the Principal Bench in Delhi and subsequently transferred to the Southern Zone, Chennai, under OA No. 105 of 2023 SZ. The upcoming hearing for this case is scheduled for 5th August, 2024.

30. The EAC, taking into account the submission made by the project proponent, had a detailed deliberation in its 370th EAC meeting on 23rd-24th July, 2024 and recommended the proposal for Amendment (as mentioned in Para 8-10 above) in the Environmental Clearance and CRZ clearance issued vide letter no. 11-7/2009-IA.III dated 25th May, 2016 w.r.t Proposed Modernization of Existing Berth WQ 7 and 8 of Visakhapatnam Port, Visakhapatnam, located at Vishakhapatnam, by M/s Vishakhapatnam Port Authority under 7(ii) of the EIA Notification, 2006 and CRZ Notification, 2011 as amended with the following specific conditions.

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

Copy To

1. The Principal Secretary, Department of Forests & Environment and Chairman, Govt. of Andhra Pradesh, A.P. Secretariat, Velagapudi, Amaravathi, A.P- [522503](#).
2. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi — 32
3. The Member Secretary, AP Pollution Control Board, Chalamalavari Street, Kasturibaipet, Vijayawada — 520 010.
4. Inspector General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Vijayawada Green House Complex, Gopalareddy Road, Vijayawada – 520010, Andhra Pradesh.
5. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi-03.
6. Guard File/Record File
7. Notice Board.

Annexure 1

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

1. Specific Conditions

S. No	EC Conditions
1.1	Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2011. No construction work/activity other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
1.2	All the recommendations and conditions specified by the Andhra Pradesh Coastal Zone Management Authority vide letter no. 532/CRZ/CON/2023 dated 12/04/2024 shall be implemented.
1.3	DFO, Vishakapatnam vide letter no.Rc.no.700/2023-TO dated 31/08/21 while granting the NOC recommended several mitigation measures the pp shall comply the all recommendations made by the DFA, Vishakapatnam later in spirit and the status of the compliance of the same shall be submit to the concern IRO, MoEF&CC along with the six monthly EC and CRZ clearance.
1.4	All the storage proposed in the CRZ area shall be in line with the CRZ notification, 2011. No storage is allowed other than the products mentioned in the CRZ notification, 2011 in the CRZ area.No mangrove shall be cut or affected due to port construction.
1.5	As the proposed project is located near to the notified ESZ of Kambalkonda Wildlife Sanctuary, PP shall prepare the marines ecological studies with the NIO or any nationally reputed institute who is having the experience and shall prepare the conservation plan in consultation with the state forest department and all recommendations made in that study pp shall comply later in spirit and the status of the compliance of the same shall be submit to the concern IRO, MoEF&CC along with the six monthly EC and CRZ clearance.
1.6	A continuous monitoring programme covering all the seasons on various aspects of the coastal and marine environs need to be undertaken by a competent organization available in the State or by entrusting to the National Institutes/renowned Universities/accredited Consultant with rich experiences in marine science aspects. Monitoring should include seaweeds, sea grasses, mudflats, sand dunes, fisheries, mangroves and other marine biodiversity components as part of the management plan. The report of the monitoring report shall be submitted to the concern IRO, MoEF&CC along with six monthly report.
1.7	Construction spoils including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dump sites for such materials must be secured so that they shall not leach into the ground water. The non-usable bitumen spoils shall be disposed off in a deep trench providing clay lining at the bottom and filled with soil at the top (for at least 0.5m).
1.8	The PP shall construct a garland drain, with catch pits of appropriate capacity at appropriate distance, all around the stockyards to prevent runoff of any contaminants waste into the nearby water bodies/sea. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards. Processed effluents/any wastewater shall not be allowed to mix with storm water, storm water drain shall be provided on tank farm, and solvent transfer through pumps.
1.9	The closed conveyor gallery along with the junction/transfer towers shall be provided with dust suppression systems (DSS). Dust suppression systems with water sprinklers/fogging system shall be provided to prevent the fugitive dust emissions during handling, transfer and storage. Further, wind screens shall be installed to prevent/arrest/controls the fugitive emissions.

S. No	EC Conditions
1.10	Spillage of fuel/engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life, particularly benthos. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage.
1.11	Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
1.12	Emergency response system for oil spillage and oil spill contingency plan, any other hazardous material spillages shall be in place at the site level. The mock drill in this regard shall be conducted regularly and the same shall be documented and made available during inspections of local pollution control board, port authorities and MoEF&CC.
1.13	The risk assessment and management plan being drawn up with regards to the environmental impacts of natural disasters, oil spills and other waste, dredging and dumping on marine ecology shall scrupulously implemented. It shall be ensured that the marine ecology in the area of influence shall not affect. The monitoring and compliance status of the marine ecology management plan shall be submitted along with the six monthly EC compliance reports.
1.14	The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the port area at least at four locations (one within and three outside the port area at an angle of 120°each), covering upwind and downwind directions.
1.15	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed fugitive emission standards.
1.16	Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high level of particulate matter such as around loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
1.17	Environmental and CRZ clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of Andhra Pradesh, National Green Tribunal and any other court of law, if any as may be applicable to this project.

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

S. No	EC Conditions
	carried out in Coastal Regulation Zone area.
1.2	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
1.3	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

2. Air Quality Monitoring And Preservation

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

3. Water Quality Monitoring And Preservation

S. No	EC Conditions
3.1	The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
3.2	Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality. Silt curtains shall be used to contain the spreading of suspended sediment during dredging within the dredging area.
3.3	No ships docking at the proposed project site will discharge its on-board waste water untreated in to the estuary/ channel. All such wastewater load will be diverted to the proposed Effluent Treatment Plant of the project site.
3.4	Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.
3.5	The project proponents will draw up and implement a plan for the management of temperature differences between intake waters and discharge waters.
3.6	Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage.
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.

S. No	EC Conditions
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.

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

10. Environment Responsibility

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

11. Miscellaneous

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

S. No	EC Conditions
	furnishing the requisite data / information/monitoring reports.
11.14	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
11.15	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

12. Specific Conditions

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

Additional EC Conditions

N/A

