



File No: 11/20/2024-IA.III
Government of India
Ministry of Environment, Forest and Climate Change
IA-III Section (CRZ)
Centralized Processing Centre - Green



Dated **01/08/2024**



To,

The Executive Engineer
Water Resource Department,
Coleroon Basin Division,
Railway Feeder Road, Chidambaram,
Cuddalore-608001, Tamil Nadu
Email: eepwdcdm@gmail.com

Subject:

Proposal for CRZ Clearance – Construction of Storm Water drain Channel in Paravanar River at Aruva Mooku, Cuddalore District, Tamil Nadu by O/o The Executive Engineer, WRD, Coleroon Basin Division, Railway Feeder Road, Chidambaram, District Cuddalore, Tamil Nadu – regarding

Sir/Madam,

This has reference to your proposal No. IA/TN/CRZ/460519/2024 dated 31/01/2024 on the above mentioned project proposal for CRZ Clearance in accordance with the provisions of the Coastal Regulation Zone (CRZ) Notification, 2011 issued under the Environment (Protection) Act, 1986.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for ‘Construction of Storm Water drain Channel in Paravanar River at Aruva Mooku, Cuddalore District, Tamil Nadu by O/o The Executive Engineer, WRD, Coleroon Basin Division, Railway Feeder Road, Chidambaram, District Cuddalore, Tamil Nadu’.

3. The proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure Development, Coastal Regulation Zone, Building/Construction and Miscellaneous projects, in its 365th meeting held on 16/05/2024. The Project Proponent (The Executive Engineer, WRD, Coleroon Basin Division, Cuddalore, Tamil Nadu) along with his EIA consultant (M/s Indomer Coastal Hydraulics (P) Ltd.) have made a presentation on above said proposal and informed the following salient features of the proposal, including the details provided in the application of the project, to EAC:

1.	Brief description of the Project	The instant proposal seeks CRZ Clearance as per
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		<p>CRZ Notification 2011 for the construction of storm drain channel with culvert bridges at Aruva Mooku region of Paravanar River originates from Perumal tank in Chidambaram and traverses north parallel to the coast.</p> <p>During the cyclones and peak monsoon seasons, the villages along the Paravanar River get flooded due to excess rainwater opened from Perumal Lake. The excess rainfall during monsoon triggers flood in Paravanar River near Aruva Mooku region. In order to discharge excess flood water into the adjoining Bay of Bengal in Cuddalore district, Tamil Nadu, PWD has proposed to construct a storm drain channel with associated facilities from Aruva Mooku, Paravanar River to Bay of Bengal.</p> <p>The technical aspects of the project have been done by IIT Madras and given the design and recommended for the implementation. It is for public welfare.</p>				
2.	Salient features / Components of the project activity	<p>The project activity includes the followings:</p> <ul style="list-style-type: none">· Cut open and construct storm drain channel - 1600m long.· Channel passing through CRZ Area.· Construction of 2 nos. culverts - One on the double lane road and another on tail end regulator.· Construction of Check dam across Paravanar River - To regulate the flood water into Sea.· Excavation is 4,64,300m³· 3,24,000m³ will be deposited in poramboke land within revenue boundary of Paravanar river low lying areas· 1,40,300m³ will be filled either side of retaining wall within the canal boundary limit.				
3.	CRZ Report/Maps prepared by	IRS Anna University, Chennai				
4.	<p>CRZ Categorization as per CRZ Report</p> <p>Project activity falls in CRZ -IA, CRZ-IB, CRZ- III, CRZ – III (NDZ), CRZ- IVB areas. Detailed breakup as follows:</p> <table><tr><td>Description</td><td>CRZ</td><td>Length</td><td>Area</td></tr></table>		Description	CRZ	Length	Area
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		Classification	(m)	(sq.m)
Proposed Retaining Wall		CRZ-IA	268.3	
		CRZ-IB	13.5	
		CRZ-III	148.8	
		NDZ	217.7	
		Outside CRZ	451.8	
Proposed Body Wall		CRZ-IB		234.3
		CRZ-IVB		1632.7
		NDZ		206.7
Proposed Storm Drain Channel		CRZ-IA	318.9	13726.5
		CRZ-IB	34.5	2487.2
		CRZ-III	144.6	29932.5
		NDZ	93.6	20348.3
		Outside CRZ	1008.4	104991.5
Proposed Single Lane Bridge with Regulator		CRZ-III		258.9
		NDZ		583.2
Proposed Two Lane Bridge		Outside CRZ		1163.2
5.	Applicability of EIA Notification 2006.	Not Applicable		
6.	NOC from SPCB	Not Obtained.		
7.	Certified Compliance Report from IRO (Expansion/Amendment Case)	Not Applicable since the proposed project is new.		
8.	Permissibility of project as per CRZ Notification 2011/2019 (as recommended by SCZMA along with the Clause)	3. (iv) (d) Measures to prevent sand bars, installation of tidal regulators, laying of storm water drains or for structures for prevention of salinity ingress and freshwater recharge based on carried out by any		

		agency to be specified by MoEFCC. 3. (v) (b) Storm water drains and ancillary structures for pumping.
9.	EIA Consultants details	Indomer Coastal Hydraulics (P) Ltd., Chennai
10.	Baseline period for EIA	November 2020 to January 2021
11.	Applicability of Terrestrial and Marine EIA	Yes detailed EIA studies prepared covering Terrestrial and Marine environment.
12.	Anticipated impacts (mention page no of EIA)	Anticipated impacts are given in Chapter 4 of EIA report.
13.	Mitigation measures proposed (mention page no of EIA)	Mitigation measures are given in Chapter 4 of EIA report.
14.	Disaster Management Plan (mention page no of EIA)	Disaster Management Plan is given in 7 th Chapter of EIA report.
15.	Risk Assessment (mention page no of EIA)	Risk Assessment Plan is given in 7 th Chapter of EIA report.
16.	Total Project cost	81.13 Crores
17.	Is project located in erosion prone area (yes/no)	No. Project is not located in the erosion prone zone.
18.	If yes, specific the management plan proposed	Sand dune management plan is attached as annexure.
19.	EMP cost proposed (capital and recurring)	The appropriate budget cost may be considered.
20.	Forest Clearance requirement	NA
21.	Wildlife Clearance Requirement	NA
22.	Proposed Green Cover	During the excavation of the channel 1207 trees will be cut down in the area. Trees will be planted 10 times the numbers of which are cut down as a mitigation measure.
23.	Proposed budget for green cover development	50 Lakhs

24.	Rain water harvesting	NA
25.	Proposed budget for rainwater harvesting	NA
26.	Details of tree Cutting	During the excavation of the channel 1207 trees will be cut down in the area. Trees will be planted 10 times the numbers of which are cut down as a mitigation measure.
27.	Details of Compensatory afforestation proposed	During the excavation of the channel 1207 trees will be cut down in the area. Trees will be planted 10 times the numbers of which are cut down as a mitigation measure.
28.	Proposed energy conserving measures	NA
29.	Power Requirement and Source	NA
30.	Water requirement and source	6.5 KLD of water required for construction will be taken through Water Tankers from Government Department.
31.	Waste water Treatment and re- use	NA
32.	Solid Waste Generation	No solid waste will be generated.
33.	Solid Waste management	NA
34.	Hazardous waste Management	NA
35.	Resettlement and Rehabilitation	NA
36.	Employment generation	Temporary employment to about 15-20 workers during construction phase and more than 5 people during operational stage.
37.	Details of Litigation, If any	NA
38.	Details of Ground Water extraction	NA
39.	Benefits	Benefit to the people belonging in the surrounding villages, Refer EIA for More Details
40.	SCZMA Recommendation	TNSCZMA recommended the proposal to Ministry vide letter no. 959/EC.3/2024-1 dated 22/03/2024 as per CRZ Notification 2011.

4. The Committee deliberated the proposal based on the information provided/presented by the proponent. After deliberation, the Committee has noted that project activity is permissible as per CRZ Notification, 2011 and TNSCZMA has also recommended the proposal.

5. The Committee also noted that engineering design for the channel and associated structure has been prepared and recommended by the IIT Madras and the 1600 meter long storm water channel does not have any provision of maintenance road on its both sides which will be required for future maintenance. Further, no provision of vegetative protection to the adjoining areas of the channel is made which, in the event of any break in channel due to natural calamity, may help in controlling the inundation of the adjoining agricultural lands. The Committee also suggested a thick green cover on both the sides of the channel will be essential for this purpose.

6. Furthermore, Committee was of the opinion that seeing the extent of the flood and possible high siltation in the area proper functioning of proposed storm drain channel needs to be ensured by regular maintenance of the channel under supervision and regular pre monsoon monitoring through a nationally reputed institute like IIT or IISER. The Committee also suggested that the proposed green belt should be implemented in consultation of Forest Department along the banks of the channel and approach road also created to ensure the proper maintenance of green belts. Moreover, periodic monitoring of adjacent coastal water quality in the area should be done through nationally reputed institute in the field and report should be submitted to IRO. In response, proponent has agreed the same.

7. The Committee, after detailed deliberations and considering the submissions made by the project proponent, has recommended the proposal for CRZ Clearance as per CRZ Notification, 2011, subject to certain specific conditions, as stipulated during its 365th meeting held on 16/05/2024 other than standard conditions.

8. Based on the recommendation of the Tamil Nadu Coastal Zone Management Authority and considering the submissions made by the project proponent, the Ministry of Environment, Forest and Climate Change, in acceptance of the recommendations of the Expert Appraisal Committee (CRZ), hereby accords CRZ Clearance to the project for **“Construction of Storm Water drain Channel in Paravanar River at Aruva Mooku, Cuddalore District, Tamil Nadu by O/o The Executive Engineer, WRD, Coleroon Basin Division, Railway Feeder Road, Chidambaram, District Cuddalore, Tamil Nadu”** under the provisions of the CRZ Notification, 2011 and amendments thereto, subject to the compliance of terms and conditions as under:-

Specific Conditions

S. No	Specific Conditions
1	All construction shall be strictly in accordance with the provisions of the CRZ Notification, 2011, as amended from time to time.
2	The discharge during monsoon and non-monsoon period to be monitored for understanding the

S. No	Specific Conditions
	effectiveness of drain in mitigating flood in adjacent areas.
3	The morphological changes adjoining newly opened drain into sea should be monitored and report to be submitted to IRO.
4	At least 100 meter wide Green belt shall be developed along both the banks of the channel using indigenous species suitable for the area in consultation with Forest Department and proper maintenance road along the storm drain also created to ensure access for proper maintenance of channel and green belts.
5	Proponent should prepare SOP to ensure the proper functioning of proposed storm drain channel and submitted to concern IRO.
6	The PP should conduct periodic (once in a year) third party monitoring through a nationally reputed institute like NIOT / NCESS / NIO / IIT / IISER to ensure the effectiveness of the project and submit the report to IRO.
7	Any temporary physical infrastructure setup and excavated material during the construction of project shall not be dumped in water bodies or adjacent areas, construction material and structures/scaffoldings erected for construction at site shall be cleared immediately after finishing construction and it shall be ensured that no construction waste, garbage and machinery or equipment are left post construction.
8	No groundwater shall be extracted within the CRZ area to meet the water requirements during the construction and/or operation phase of the project.
9	Topsoil excavated during construction activities shall be stored for use in horticulture / landscape development etc. within the project site.
10	All the condition stipulated by Tamil Nadu Coastal Zone Management Authority (TNCZMA) vide letter No. 959/EC.3/2024-1, dated 22/03/2024 and commitments made by the PP before the TNCZMA and EAC shall be followed in letter and spirit
11	All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

General Conditions

S. No	General Conditions
1	Management of solid waste in accordance with the Solid Waste Management Rules, 2016 shall be strictly implemented.
2	‘Consent to Establish’ and /or ‘Consent to Operate’ shall be obtained from State Pollution Control Board under the provisions of Air (Prevention and Control of Pollution) Act, 1981 and / or the Water (Prevention and Control of Pollution) Act, 1974, as may be applicable.

S. No	General Conditions
3	Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of Competent Authority.
4	All liquid waste arising from the proposed development will be disposed of as per the norms prescribed by Central / State Pollution Control Board. There shall not be any disposal of untreated effluent into the sea / coastal water bodies. It shall be ensured that the wastewater generated is treated in the STP as committed by the project proponent. The treated waste water shall be reused for landscaping, flushing and / or HVAC cooling purposes etc. within the development. The project proponent should also make alternate arrangement for situation arising due to malfunctioning of STP. There shall be regular monitoring of standard parameters of the effluent discharge from STP under intimation to the SPCB.
5	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
6	A copy of the clearance letter shall be uploaded on the website of the concerned State Coastal Zone Management Authority/State Pollution Control Board. The Clearance letter shall also be displayed at the Regional Office, District Industries Centre and Collector's Office/ Tehsildar's office for 30 days.
7	A six-monthly monitoring report shall need to be submitted by the project proponent to the concerned Regional Office of this Ministry regarding the implementation of the stipulated conditions.
8	The Ministry of Environment, Forest & Climate Change or any other Competent Authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.
9	Full co-operation shall be extended to the officials from the Regional Office of MoEF&CC, during monitoring of implementation of environmental safeguards stipulated. It shall be ensured that documents/data sought pertinent is made available to the monitoring team. A complete set of all the documents submitted to MoEF&CC shall be forwarded to the concerned Regional Office of MoEF&CC.
10	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.
11	The Ministry reserves the right to add additional safeguard measures subsequently, if considered necessary, and to take action to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner, including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, for non-compliance.
12	All other statutory clearances such as the approvals for storage of diesel from Chief

S. No	General Conditions
	Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponent from the respective Competent Authorities.
13	The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded CRZ Clearance and copies of clearance letters are available with the State Pollution Control Board (SPCB) and may also be seen on the website of the Ministry of Environment, Forest and Climate Change at https://parivesh.nic.in/ . The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the concerned Regional Office of this Ministry.
14	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
15	The proponent shall upload the status of compliance of the stipulated conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB.
16	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the project proponent along with the status of compliance of clearance conditions and shall also be sent to the respective Regional Office of the Ministry by e-mail.

9. This Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

10. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the CRZ clearance, if implementation of any of the above conditions is not found satisfactory.

11. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

12. Any appeal against this CRZ clearance 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.

13. 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.

14. This is issued with the approval of the Competent Authority.

(Dr. H. Kharkwal)

Scientist 'E' (CRZ)

Copy To

1. The Director, Department of Environment, Government of Tamil Nadu, No.1, Jeenu Road, Panagal Building, Ground Floor, Saidapet, Chennai-600015, Tamil Nadu.
2. The Deputy Director General, Ministry of Environment Forest and Climate Change, Integrated Regional Office, Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai – 600034, Tamil Nadu.
3. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Anna Salai, Guindy Industrial Estate, Race View Colony, Guindy, Chennai-600032, Tamil Nadu.
4. The Member Secretary, Tamil Nadu Coastal Zone Management Authority, Department of Environment, No.1, Jeenu Road, Panagal Building, Ground Floor, Saidapet, Chennai-600015, Tamil Nadu.
5. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
6. Guard File/ Record File/ Notice Board/MoEF&CC Website.

(Dr. H. Kharkwal)

Scientist 'E' (CRZ)