



GOVERNMENT OF PUDUCHERRY
DEPARTMENT OF SCIENCE, TECHNOLOGY AND ENVIRONMENT
STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY
3rd FLOOR, PHB BUILDING, ANNA NAGAR, PUDUCHERRY – 605 005.
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File No: 536277/SEIAA/DSTE/PDY/2025 | 226

Puducherry, the

2 JUN 2025

To
The Executive Engineer,
Irrigation Division, Public Works Department,
Puducherry.

Sir,

Sub: SEIAA, Puducherry – Grant of CRZ Clearance to the Executive Engineer, Irrigation Division, Public Works Department, Puducherry, under the provision of the CRZ Notification, 2011 for Coastal Protection Measures on sea erosion for Pillaichavady (North) Chinnakalapet, Periyakalapet and Ganapathychettikulam in Puducherry – Reg.

Ref: i) Your Online Application No. IA/PY/CRZ/536277/2025 dated 03.05.2025 in PARIVESH Portal 2.0
ii) Letter No. 5362/DSTE/PCZMA/CRZ/CLR/2025/220 dated 22.05.2025
iii) Minutes of the 32nd SEAC Meeting held on 26.05.2025
iv) Minutes of the 27th SEIAA Meeting held on 29.05.2025

* * *

This has reference to your application cited (i) above submitted to the Puducherry Coastal Zone Management Authority seeking CRZ Clearance under the Coastal Regulation Zone (CRZ) Notification, 2011.

2. Salient details of the project are as under:

- (i) Over the past two years, Pillaichavady and adjoining northern coastal villages of Puducherry have faced alarming and rapidly worsening coastal erosion, with the sea encroaching into vital community spaces such as a cremation ground, temple wall, roads, work shelters and boat parking areas. This has severely impacted the livelihoods of local fishermen and endangered residential areas. Driven by fear of losing their homes and traditional livelihoods, the affected communities have persistently demanded immediate and sustainable coastal protection measures, staging hunger strikes, dharnas and submitting repeated representations to the Government of Puducherry and the Puducherry Coastal Zone Management Authority.

- (ii) Responding to the urgency, the PWD, Puducherry sought technical assistance from the National Centre for Coastal Research (NCCR) in Chennai, an attached office of Ministry of Earth Sciences, Government of India, to develop long-term coastal protection measures. NCCR conducted various studies including shoreline change analysis, sediment transport, wave dynamics, ecological assessments and socio-economic surveys to develop an effective and sustainable coastal protection solution specific to the region.
- (iii) Based on these studies and following extensive stakeholder consultations, a hybrid coastal protection solution comprising of transitional groyne field system combined with sand nourishment was recommended as the most effective immediate intervention, after examining alternatives such as offshore geotextile bags, sea wall, groynes and beach nourishment.
- (iv) The project involves design and construction of 24 groynes (9 longitudinal and 15 transitional) along the 3.75 km coastline. The design incorporates specific features to minimize downdrift erosion, including crest heights at HTL, limited extension to 3 m contour depth, transitional groynes at field boundaries and beach nourishment of 1,30,000 m³. The configuration details of the groyne field are as follows:

No.	Groyne Type	Length (m)	Spacing (m)	Latitude	Longitude
1	Transitional Short Groyne 1 – TG1	45	-	12° 0' 40.853" N	79° 51' 33.178" E
2	Transitional Short Groyne 2 – TG2	60	130	12° 0' 44.938" N	79° 51' 34.403" E
3	Transitional Short Groyne 2 – TG3	60	150	12° 0' 49.132" N	79° 51' 36.988" E
4	Transitional Short Groyne 2 – TG4	60	150	12° 0' 53.326" N	79° 51' 39.579" E
5	Longitudinal Groyne 1 – LG1	80	175	12° 0' 57.594" N	79° 51' 42.000" E
6	Longitudinal Groyne 1 – LG2	80	200	12° 1' 2.617" N	79° 51' 44.744" E
7	Longitudinal Groyne 1 – LG3	80	200	12° 1' 8.477" N	79° 51' 47.615" E
8	Longitudinal Groyne 1 – LG4	80	200	12° 1' 14.350" N	79° 51' 50.491" E
9	Transitional Short Groyne 2 – TG5	60	175	12° 1' 19.474" N	79° 51' 53.001" E

10	Transitional Short Groyne 2 – TG6	60	150	12° 1' 24.067" N	79° 51' 55.439" E
11	Transitional Short Groyne 2 – TG7	60	150	12° 1' 28.994" N	79° 51' 57.688" E
12	Transitional Short Groyne 2 – TG8	60	150	12° 1' 33.848" N	79° 51' 59.889" E
13	Transitional Short Groyne 2 – TG9	60	150	12° 1' 38.420" N	79° 52' 1.927" E
14	Longitudinal Groyne 1 – LG5	80	175	12° 1' 44.347" N	79° 52' 4.590" E
15	Longitudinal Groyne 1 – LG6	80	200	12° 1' 50.216" N	79° 52' 7.402" E
16	Longitudinal Groyne 1 – LG7	80	200	12° 1' 56.087" N	79° 52' 10.204" E
17	Transitional Short Groyne 2 – TG10	60	175	12° 2' 0.850" N	79° 52' 12.598" E
18	Transitional Short Groyne 2 – TG11	60	150	12° 2' 5.441" N	79° 52' 15.186" E
19	Transitional Short Groyne 2 – TG12	60	150	12° 2' 9.995" N	79° 52' 17.694" E
20	Transitional Short Groyne 2 – TG13	60	150	12° 2' 14.664" N	79° 52' 20.263" E
21	Longitudinal Groyne 1 – LG8	80	175	12° 2' 19.276" N	79° 52' 22.650" E
22	Longitudinal Groyne 1 – LG9	80	200	12° 2' 25.045" N	79° 52' 25.530" E
23	Transitional Short Groyne 2 – TG14	60	175	12° 2' 29.725" N	79° 52' 27.760" E
24	Transitional Short Groyne 1 – TG15	45	130	12° 2' 33.595" N	79° 52' 29.661" E

(v) Total cost of the project is Rs. 33.07 Crores/-

(vi) The project area is falling in CRZ-IB, CRZ- II, CRZ – IVA. As per CRZ Notification 2011, vide para 3 (i)(a), 3(iv)(b) and 4(i)(f) erosion control measures based on scientific studies including Environmental Impact Assessment are permitted activity. According to paragraph 4.2(ii)(c), SEIAA is the designated authority for granting CRZ Clearance for Erosion Control Measures specified under paragraph 4(i)(f). The Ministry's OM dated 26/04/2022, S. No. 5 of the table, also affirms the same.

3. The Hon'ble NGT's vide order dated 11.04.2022, directed against raising new hard structures for coastal erosion control pending the preparation of the Shoreline Management Plan in the CZMP of 2019. Accordingly, the present project adopts a hybrid solution integrating soft and hard engineering elements. The Government of Puducherry's revised Shoreline Management Plan, approved by the PCZMA on 01.10.2024, specifically recommends this

transitional groyne system with sand nourishment for the affected coast of Pillaichavady, Kalapet and Ganapathy Chettikulam villages. The present proposal ensures alignment with the SMP and compliance with NGT directives.

4. The project proponent submitted the application for CRZ Clearance through the PARIVESH 2.0 portal under Proposal No. IA/PY/CRZ/536277/2025 dated 03.05.2025. The tenure of PCZMA expired on 02.01.2025 and a proposal for its reconstitution has been submitted to the MoEFCC. In accordance with the MoEFCC amendment to the CRZ Notification, 2011 [S.O. 1393(E) dated 03.05.2017], which empowers the Department of Environment in Union Territories to recommend CRZ proposals in the absence or non-operation of the CZMA, the Department of Science, Technology and Environment, Government of Puducherry, after detailed scrutiny has recommended the proposal to SEIAA for issuance of CRZ clearance vide letter dated 22.05.2025.

5. The proposal has been appraised by the State Level Expert Appraisal Committee (SEAC) in its 32nd SEAC Meeting held on 26.05.2025 as per the prescribed procedure under the CRZ Notification, 2011 based on the mandatory documents enclosed with the application viz. EIA, EMP, Risk Assessment and DMP Report of NCCR, Chennai and the CRZ Maps prepared by IRS, Anna University, Chennai. The SEAC after due diligence, decided to recommend the proposal to SEIAA for issue of CRZ Clearance subject to specific conditions applicable for this project as mentioned in the Minutes of SEAC Meeting.

6. The proposal was examined by the SEIAA in its 27th meeting held on 29.05.2025. After due deliberation, SEIAA accepted the recommendations of SEAC and PCZMA and decided to proceed with the issuance of CRZ Clearance for the project with the following specific conditions along with other General Conditions as mentioned in the Minutes of the SEIAA Meeting.

7. Accordingly, CRZ Clearance is granted to the above project under the provisions of CRZ Notification, 2011 and its subsequent amendments subject to strict compliance of the following Specific and General conditions:

I. SPECIFIC CONDITIONS:

1. This CRZ Clearance to the project is primarily under the provisions of CRZ Notification, 2011. It does not tantamount to approval / clearance / permission etc. required to be obtained under any other Acts / Rules / Subordinate legislation as applicable to the project.

2. All the conditions specified by the DSTE vide letter No. 5362/DSTE/ PCZMA/CRZ/ CLR/2025/220 dated 22.05.2025 shall be strictly complied with.
3. The project shall strictly adhere to the CRZ Notification, 2011 and the directives of the Hon'ble NGT to avoid unauthorized hard structures and to comply with Shoreline Management Plan (SMP).
4. The project proponent shall ensure that the construction of groynes aligns with the Shoreline Management Plan (SMP) prepared for erosion-prone areas, as mandated by the Hon'ble National Green Tribunal (NGT) order dated 11.04.2022. The SMP shall be referenced to guide the placement and configuration of the groynes, ensuring minimal adverse impacts on sediment transport and neighboring areas.
5. The groynes shall be constructed with a transition in both directions and shall not extend beyond the 3-meter contour line as specified. The crest elevation of the groynes must be maintained at HTL. A beach nourishment volume of 1,30,000 cubic meters shall be added to the groyne compartments to support sediment management and prevent downstream erosion.
6. The Project Proponent shall submit the outputs of site-specific modelling studies to PCZMA. These outputs should validate the design parameters, assess the effectiveness of the proposed hybrid solution (transition groynes with sand nourishment) and ensure no adverse impact on adjacent coastal stretches.
7. A detailed sand nourishment implementation plan, including the quantity of sand to be deposited, source of sand, method and timing of deposition, frequency of nourishment cycles and monitoring mechanisms, shall be submitted to PCZMA.
8. The Project Proponent shall ensure earmarking of adequate funds for the periodic sand nourishment component of the project. A dedicated budget plan for initial implementation and subsequent maintenance cycles shall be submitted to PCZMA.
9. The Project Proponent shall allocate a dedicated budget for long-term maintenance and sand nourishment cost in its annual budget, ensuring consistent release and utilization of funds each year. These earmarked funds for sand nourishment shall under no circumstances be diverted for any other purpose. The PWD shall report the year-wise expenditure on sand nourishment to the PCZMA by the end of each financial year.
10. The Project Proponent shall implement a long-term shoreline monitoring program, including sediment transport studies and beach profile assessments. Adaptive management interventions, such as beach nourishment, shall be undertaken as needed.
11. The project proponent shall implement continuous monitoring of sediment transport and shoreline changes within the project area to assess the effectiveness of the groyne structures and beach nourishment through reputed expert institutions. A comprehensive monitoring report shall be submitted semi-annually to the PCZMA for review and guidance. In case the implemented measures lead to unanticipated erosion or ecological

- disturbance in adjacent areas, the project proponent shall undertake suitable corrective actions as directed by PCZMA, based on expert recommendations.
12. The Project Proponent shall ensure that all recommendations and mitigation measures outlined in the approved Environmental Impact Assessment (EIA), Environmental Management Plan (EMP), Risk Assessment and Disaster Management Plan (DMP) reports are implemented in letter and spirit during the execution and operational phases of the project.
 13. Appropriate biodiversity conservation measures shall be implemented to minimize the impact of construction activities on marine and coastal ecosystems. Any construction-related disturbances must be mitigated through the implementation of an environmental management plan, including monitoring of sensitive species in collaboration with local biodiversity experts.
 14. Post-nourishment ecological monitoring shall be conducted to assess habitat health. Measures to enhance marine biodiversity, prevent invasive species proliferation and restore degraded areas shall be implemented in consultation with marine ecologists.
 15. Marine construction activities shall be scheduled outside the breeding seasons of ecologically sensitive marine fauna. Minimal seabed disturbance must be ensured and sensitive marine habitats must be physically demarcated and protected.
 16. Long-term water quality monitoring shall be carried out, with corrective measures such as circulation enhancement implemented if water stagnation or quality deterioration is observed.
 17. Silt curtains shall be deployed during marine works to prevent sediment dispersion. Wastewater generated on-site must be treated appropriately. Water quality monitoring shall be conducted at prescribed intervals and submitted to PPCC and PCZMA.
 18. Project Proponent shall ensure that trucks and other vehicles transporting dredged sand must cover the load with tarpaulin or similar material to prevent spillage and dust emissions. Proper vehicle maintenance and designated loading/unloading zones must be used. Any spillage or dust pollution shall be immediately remediated.
 19. Dust suppression methods, emission control for machinery and regular ambient air quality monitoring shall be implemented throughout construction. Monitoring reports shall be submitted to PPCC and PCZMA on a quarterly basis.
 20. Construction shall be restricted to designated working hours. All machinery shall be regularly maintained to reduce noise and noise barriers must be installed near sensitive receptors if necessary.
 21. Construction debris and other solid waste shall be collected, stored and disposed of as per prevailing rules. Hazardous waste must be handled by authorized agencies. Efforts must be made to recycle and reuse materials wherever feasible.
 22. The proponent shall establish and implement disaster resilience protocols to protect the project site and surrounding areas during adverse weather conditions. These protocols

should include measures to safeguard fishermen, vessels and coastal infrastructure in the event of storms or high tides.

23. The groynes and associated structures must be inspected regularly. Emergency repairs shall be executed promptly after storm events.
24. The proponent shall engage with local communities, particularly the fishing community, to address concerns regarding the project and its impact on local livelihoods. A grievance redressal mechanism shall be established to promptly address community concerns, ensuring transparency and accountability throughout the project implementation.
25. The project shall not obstruct traditional fishing routes and landing areas. Work schedules must be communicated to local fishing communities in advance and temporary alternative landing sites shall be provided where access is hindered.
26. The project proponent shall monitor community benefits and implement programs for livelihood enhancement of affected populations, particularly traditional coastal communities. A stakeholder engagement plan shall be maintained throughout the project lifecycle.
27. The project shall implement a traffic management plan, including designated routes for construction vehicles, adequate signage and prior public notification of any major traffic diversions or disruptions.
28. All workers shall be provided with adequate Personal Protective Equipment (PPE). Mandatory safety training and regular OHS audits must be conducted. An emergency response plan must be in place and shared with local authorities.
29. The project proponent shall constitute a monitoring committee with officials from concerned line departments including Fisheries, DSTE (PPCC & PCZMA) and expert members in coastal engineering to monitor the project execution and outcomes.

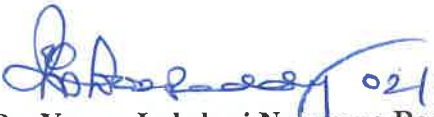
II. GENERAL CONDITIONS:

1. The Project Proponent shall make public the CRZ clearance granted for their project by prominently advertising it in at least two local newspapers of the District, 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. The press releases shall mention that the copy of the clearance letter is available in the website of the Project Proponent and PCZMA. The copy of the press release should be forwarded to the PCZMA.
2. The Project Proponent shall submit a copy of CRZ Clearance to the District Collector's Office, Tehsildar's Office, Office of the concerned Commune Panchayat / Municipality, PCZMA and other relevant offices of the Government, who in turn shall display it at the office for 30 days. Copy of the CRZ Clearance shall also be submitted to the Regional office of MoEF&CC.

3. The copy of the CRZ Clearance letter shall be displayed on the website of the Project Proponent and PCZMA.
4. Officials from the Regional office of MoEF&CC, SEIAA and PCZMA who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/ data by the project proponents during their inspection.
5. The project proponent shall submit six monthly reports on the status of compliance of the stipulated CRZ clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional office of MoEF&CC, SEIAA and PCZMA. This shall also be put on the website of the company / organization by the proponent.
6. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by SEIAA.
7. The SEIAA reserves the right to add additional safeguard measures subsequently, if found necessary and to take action including revoking of the CRZ clearance 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.
8. All other statutory clearances such as the approvals for storage of diesel from Chief 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 proponents from the respective competent authorities.
9. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and CRZ Notification, 2011.
10. Any appeal against this 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.

III. VALIDITY:

The validity of this CRZ Clearance is for **Ten years** from the date of issue.


02/06/25
Dr. Yasam Lakshmi Narayana Reddy, IAS
Special Secretary – cum – Director, DSTE
Member Secretary, SEIAA

Copy to:-

1. The Development Commissioner – cum - Secretary to Government (Environment), Chief Secretariat, Puducherry.
2. The Chairman, State / UT Level Environment Impact Assessment Authority, Puducherry.
3. The Chairman, State / UT Level Expert Appraisal Committee, Puducherry.
4. The Member Secretary, Puducherry Coastal Zone Management Authority, Puducherry.
5. The Member Secretary, Puducherry Pollution Control Committee, Puducherry.
6. The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (SEZ), Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai – 600 034.
7. Standing Guard File.