

MINUTES OF THE 325th MEETING OF EXPERT APPRAISAL COMMITTEE FOR PROJECTS RELATED TO COASTAL REGULATION ZONE HELD ON 17th APRIL, 2023

The 325th meeting of the Expert Appraisal Committee for projects related to Coastal Regulation Zone was held on 17th April 2023 through Video Conferencing due to the prevalent pandemic situation. The list of Members presents in the EAC (CRZ) is at **Annexure**.

The deliberations held and the decisions taken are as under:

1.0 OPENING REMARKS OF THE CHAIRMAN

At the outset, Dr. Deepak Arun Apte, Chairman, EAC (CRZ) welcomed the Members of the EAC and requested Dr. H. Kharkwal, the Member Secretary of the EAC to initiate the proceedings of the meeting with a brief account of the activities undertaken by the Ministry under CRZ Division.

2.0 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

The Committee having noted that the Minutes of the 323rd meeting held on 23rd March, 2023 are in order and confirmed the same with suggestions that in case any typographical / grammatical errors are noticed in due course, the same may be corrected suitably.

RECONSIDERATION PROPOSALS

Item No. 3.1

Proposal for laying of pipeline for seawater intake for development of Centre of Coastal Aquaculture activities-857.11m and Marine outfall of length 1124.27m to discharge the treated water of 1400 KLD at Mulapolam, Sompeta Mandal, Srikakulam District, Andhra Pradesh by M/s National Fisheries Development Board (NFDB), - CRZ Clearance

[IA/AP/CRZ/415745/2023] [F.NO.11/11/2023-IA.III]

“The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of the data/information submitted is found to be false / misleading at any stage, the project will be rejected and Environmental and or CRZ Clearance given, if any, will be revoked at the risk and cost of the project proponent.”

The proposal was earlier considered by the EAC (CRZ) in its 320th meeting held on 07th February, 2023 and EAC suggested that the project proponent shall submit the additional information / inputs on proposed project is for standalone CRZ clearance for the construction of pipeline, clarity on proposal, whether aquaculture activity in within CRZ area or outside CRZ area and require clarification along with necessary documents, need to submit complete layout plan of the project in the CRZ area, the Beach Bore well system

proposed for the project which is not permissible activities as per CRZ Notification, details of Effluent Treatment System and quality and characteristic of untreated and treated water etc. The project proponent has now uploaded all documents / additional information on Parivesh Portal as desired by EAC and placed before the Committee. The project proponent and their consultant submitted reply on additional information desired by EAC earlier and made a detailed presentation of salient features of the project and informed that:

- (i) The proposal is for laying of pipeline for seawater intake for development of Centre of Coastal Aquaculture activities- 857.11 m and Marine outfall of length 1124.27 m to discharge the treated water of 1400 KLD at Mulapolam, Sompeta Mandal, Srikakulam, Andhra Pradesh.
- (ii) The project co-ordinates: Latitude: 18.52.14° and Longitude: 84.34.43° and involves aquaculture activities in 18.91 ha. (46.72 acres) area with the envisaged activities i.e. Multispecies Marine Fin Hatchery, Shrimp hatchery, Crab Hatchery, Marine Fish culture, Nursery for Marine fish, Nursery for Shrimps & crabs, Shrimp Culture, Effluent Treatment plant (ETP) etc.
- (iii) The proposed intake pipeline falls in CRZ-IA, CRZ-IB, CRZ-III (NDZ), CRZ-III, CRZ-IVA and outside CRZ area as per the CRZ notification, 2011 and is applicable as per Para 8 I (i) (b) of the said notification.
- (iv) The CRZ details of the proposed project site are as :

Description	CRZ Classification	Length in meter	Total Length in meter
Proposed Inlet pipeline	CRZ-IA	142.2	857.11
	CRZ-IB	128.26	
	CRZ –III (NDZ)	69.96	
	CRZ-III (200m to 500m from HTL)	306.27	
	CRZ-IVA	207.15	
	Outside CRZ	3.27	
Proposed Outlet Drain pipeline	CRZ-IA	132.36	1124.27
	CRZ-IB	164.16	
	CRZ –III (NDZ)	75.25	
	CRZ-III (200m to 500m from HTL)	305.10	
	CRZ-IVA	100.00	
	Outside CRZ	347.40	

- (v) Two types of sea water intake suction lines have been proposed i.e. Shallow Vertical Filter Point and Open sea water intake system, and outlet pipeline with 160 mm dia for a total length of 1124.27 meters proposed from ETP to the sea.
- (vi) The Sea water requirements into ponds is about 1500 KLD and domestic water requirements is about 1.8 KLD and source are Shallow Vertical Filter Point / Open well in non CRZ area.
- (vii) A pump house to accommodate four numbers of pumps each with a capacity of 20 hp have been planned to supply water to the reservoirs; for each intake system, there will be two pumps, one as working and the other as stand bye.

- (viii) The total waste water generation will be 1400 KLD from ponds and will be send to Effluent Treatment System for treatment. After treatment, the treated water will be disposed of into the sea, after thoroughly following IS 7968:1976 standard.
- (ix) The project obtained Forest Clearance Stage-I clearance *vide* F. No.4-APB164/2022-VIJ/312 dated 30/04/2022.
- (x) There is one Schedule-I species *i.e Olive Ridley Sea Turtle* found at proposed pipeline area and has been proposed conservation plan.
- (xi) The NFDB (PP) has submitted application for CAA Permission for constructions of new aquaculture facilities for CAA approval *vide* F.No.55-17(01)/2020 dated 06/11/2020 and CAA suggested comply with the regulations as specified in various Provisions of CAA ACT, Rules, Regulations and guidelines.
- (xii) The Andhra Pradesh State Pollution Control Board has issued NOC *vide* Order No: 557/APPCB/CFE/RO-SKM/HO/2022, dated: 23/02/2022 and valid for a period of 7 years from the date of issue.
- (xiii) The estimated cost of project is ₹66.0 Crores. The Environmental Management Plan Budget for Capital Cost is about ₹32.5 Lakhs and for ₹13.5 Lakhs Recurring cost and and ₹25.0 Lakhs proposed for the Olive Ridley Turtle-Conservation Budget.
- (xiv) The Andhra Pradesh Coastal Zone Management Authority has recommended the proposal for CRZ clearance *vide* its Letter No. 341/CRZ/INF/2021-581 dated 15/11/2022.

2. Deliberations in the EAC:

The EAC deliberated on the proposal. The Committee noted that the pipeline activity is a permissible as per CRZ Notification 2011 and require prior CRZ clearance. The Committee suggested that PP shall ensure that the treated effluent discharge into sea / marine outfalls as per the prescribed standards of by CPCB / SPCB. The Committee also noted that the PP provided clarifications during presentation, however advised to PP forward immediately by e-mail an undertaking on there will not be any salt water ingress to the near area, no antibiotics or any banned chemicals will be used in the facility, revised 1:4000 scale map excluding the CRZ-III area prepared by an approved agency, written clarification incorporating Shallow Vertical Filter Point in place of Beach Bore Well and updated PPT incorporating all above points to all EAC Members, MoEFCC and APCZMA for a record. The same has been submitted by PP *vide* e-mail dated 18/04/2023, 26/04/2023 and circulated to all EAC members including MoEFCC. The Committee found the additional information submitted by the project proponent through e-mail dated 18/04/2023 and 26/04/2023 are to be satisfactory and accepted, while approving the minutes.

The Committee after detailed deliberations and based on the clarifications / information submitted by PP recommended the proposal for CRZ Clearance, subject to the following conditions:

- (i). All construction shall be strictly in accordance with the provisions of the CRZ Notification, 2011, as amended from time to time.
- (ii). Permission from Coastal Aquaculture Authority (CAA) should be obtained prior to commencement of project or activity.
- (iii). Forest Clearance should be obtained prior to commencement of project or activity.

- (iv). National Fisheries Development Board (NFDB) shall ensure that the treated effluent discharge is strictly as per norms specified by CPCB / SPCB.
- (v). There is no beach activity during the turtle nesting season from 1st January to 30th April of every year.
- (vi). Any temporary physical infrastructure setup and excavated material during laying of pipelines shall not be dumped in water bodies or adjacent areas and the site shall be restored to its original condition after completion of construction of work.
- (vii). No storage reservoir for sea water shall be permitted and only pipelines conveyance system shall be installed.
- (viii). No groundwater shall be extracted within the CRZ area to meet the water requirements during the construction and/or operation phase of the project.
- (ix). Permanent labour camp, machinery and material storage shall not be set up in the CRZ area.
- (x). All the conditions stipulated by the Andhra Pradesh Coastal Zone Management Authority for CRZ clearance 2011 *vide* letter No. 341/CRZ/INF/2021-581 dated 15/11/2022 and commitments made by the PP before the APCZMA and EAC shall be followed in letter and spirit.
- (xi). All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

Item No. 3.2

**Proposal for extending the disposal pipeline 42.2 Km in Savitri River / Bankot Creek from Owale Village, Tal. Mahad, District Raigad, Maharashtra by M/s Maharashtra Industrial Development Corporation (MIDC)
(IA/MH/CRZ/204815/2021) [F.NO.11/15/2021-IA.III]**

“The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of the data/information submitted is found to be false / misleading at any stage, the project will be rejected and Environmental and or CRZ Clearance given, if any, will be revoked at the risk and cost of the project proponent.”

The proposal was earlier considered by the EAC (CRZ) in its 224th meeting held on 24th September, 2019 and 263rd meeting held on 28th May, 2021 and Committee ***recommended that “as agreed upon in public consultation outfall location in the deep sea shall be identified with the help of NIO and the proposal should be submitted for extending the pipeline upto identified point in the deep sea for final discharge of CETP treated effluents. The Committee further recommended the proposal only for the construction of 2.2 Km long pipeline upto the proposed point of discharge but no discharge/release of effluents would be allowed in the pipeline until and unless the proposal for extension of pipeline upto deep sea point as per the recommendations of NIO is submitted to and approved by the Committee.”***

The project proponent has now uploaded all documents / additional information on Parivesh Portal as desired by EAC and placed before the Committee. The project proponent

and their consultant submitted reply on additional information desired by EAC earlier and made a detailed presentation of salient features of the project and informed that:

- (i) The proposal is for extending the disposal pipeline 42.2 Km in Savitri River / Bankot Creek from Owale Village, Tal. Mahad, District Raigad, Maharashtra by M/s Maharashtra Industrial Development Corporation (MIDC).
- (ii) Maharashtra Industrial Development Corporation (MIDC) have proposed to extend existing disposal HDPE pipeline of length 2.20 km from Owale to Gomendi, for disposal of Treated Effluent from Mahad, Addl. Mahad MIDC area to Savitri creek in order to sustain the water management in the area and provide proper dispersion of treated effluent in deep saline water under the Clean Environment Campaign of Government of India.
- (iii) It will carry treated industrial effluent from MIDC CETP into the Savitri creek by extending existing disposal pipeline by 2.20Km as per the rules & regulations pertaining to CRZ and quality of treated effluent.
- (iv) MIDC Intends to extend the existing disposal pipeline conveyance system (inside the creek) in order to convey and dispose treated waste water into deep sea off Savitri Creek, meeting the sea discharge norms.
- (v) The extension pipeline is of 630mm dia HDPE pipeline and will be laid 1m below the bed with anchors at 1m centre to centre.
- (vi) Proposed HDPE pipeline to be extended is of 2.20Km length. The capacity of disposal pipeline is 24 MLD and at present treated effluent of 7.5 MLD is being pumped in three shifts of 8 hrs.
- (vii) The extended HDPE disposal pipeline will be of 630mm dia, will be laid below 1m of bed surface with proper anchoring.
- (viii) The diffusers will be provided at disposal point to give jet velocity of 2 m/sec through the three port diffuser with 0.06m diameter each and separated at 4m.
- (ix) The entire extended pipeline of 2.20Km will be laid in the water through creek and falls under CRZ – IV area.
- (x) There are no Mangroves in the proposed extension alignment of the pipeline.
- (xi) The Maharashtra Coastal Zone Management Authority has recommended the above proposal for clearance vide their letter No. CRZ 2018/CR 360/TC 4, dated 14/02/2019.
- (xii) MIDC, Mahad approached CSIR-NIO to carry out the dilution and dispersion efficiency under present scenario of hydrodynamic condition for revalidating the proposed discharge point with respect to the recommendation of the EAC with The objectives of the project as:
 - Observation of prevailing hydrodynamics and specific physio-chemical parameters in the Savitri estuary,
 - Observation on the specific physio-chemical parameters in the CETP treated effluent, MIDC, Mahad,
 - Evaluation of dilution and dispersion efficiency on specific physio-chemical parameters by coupling the CETP treated effluent with prevailing scenario of water quality and hydrodynamics in the Savitri estuary.
 - To recommend adequate marine environmental management plan to minimize adverse impact on estuarine environment.
- (xiii) NIO has submitted their revised report stating that the “*The near-field dilution study through bounce jet model and far field dilution study through Hydrodyn-FLOSOFT and Hydrodyn-POLSOFT module is carried out for discharging 6 MLD treated effluent at 18° 03’ 47.62” N; 73° 18’ 51.50” E as recommended in the previous report.*”

- (xiv) The study reveals that there is no much deviation in dilution and dispersion of water quality as compared to previous observation and hence, is acceptable in this present scenario of hydrodynamics condition for discharging 6 MLD of effluent at the recommended discharge location which having average water depth of 7 m.
- (xv) The near-field and far-field dilutions, it is recommended that the treated effluents of 6 MLD generated by MIDC- CETP, Mahad may be released at 18° 03' 47.62" N; 73° 18' 51.50" E following the diffuser specifications as given herewith;
- Port diameter = 0.1214 m
 - No. of ports = 3
 - Angle of port = 15°
 - Distance between ports = 3.0 m
 - Port elevation from seabed = 1.0 m
 - Jet Velocity = 2.0 m/s
- The present assessment depicts that most of the major parameters in effluent quality are under the standards prescribed by concern authorities.
- (xvi) Site Latitude and Longitude: Starting point 18°04'17.9"N, 73°19'57.7"E, End point: 18°03'45.613"N, 73°18'52.404"E.
- (xvii) 5 KLD water will be required during construction phase. The source of water during construction phase will be MIDC/ Tanker water.
- (xviii) Power shall be sourced from D.G Set of 300 kVA capacity single/three phase 230/415 Volts, 50Hz A.C.
- (xix) The total cost of the project will be ₹11.69 crores and out of total the cost proposed for construction phase ₹99.97 Lakhs per annum and operational phase ₹43.75 Lakhs per annum.
- (xx) The Maharashtra Coastal Zone Management Authority has recommended the above proposal for clearance *vide* their letter No. CRZ 2018/CR 360/TC 4, dated 14/02/2019.

2. Deliberations in the EAC:

The Committee made detailed deliberation on the proposal. The Committee noted that the activity is a permissible as per CRZ Notification 2011. However, suggested that the PP should follow the recommended discharge location as suggested by NIO and also ensure that the treated effluent discharge is strictly as per norms specified by CPCB / SPCB. The Committee found the additional information submitted by the project proponent to be satisfactory.

The Committee after detailed deliberations and based on the clarifications / information submitted by PP recommended the proposal for CRZ Clearance, subject to the following conditions:

- (i) All construction shall be strictly in accordance with the provisions of the CRZ Notification, 2011, as amended from time to time.
- (ii) MIDC should follow the recommended discharge location as suggested by NIO.
- (iii) MIDC shall ensure that the treated effluent discharge is strictly as per norms specified by CPCB / SPCB.
- (iv) The pipeline where crossing of water body / river / creek areas should be laid through Horizontal Directional Drilling (HDD) method.
- (v) Any temporary physical infrastructure setup and excavated material during laying of pipelines shall not be dumped in water bodies or adjacent areas

and the site shall be restored to its original condition after completion of construction of work.

- (vi) No storage reservoir for sea water shall be permitted and only pipelines conveyance system shall be installed.
- (vii) No groundwater shall be extracted within the CRZ area to meet the water requirements during the construction and/or operation phase of the project.
- (viii) Permanent labour camp, machinery and material storage shall not be set up in the CRZ area.
- (ix) As a part of EMP, the institute like Indian Institute of Science Education and Research (IISER) Pune will be provided with state of art laboratory equipment that can be used for high quality academic and research purpose.
- (x) All the conditions stipulated by the Maharashtra Coastal Zone Management Authority for CRZ clearance 2011 vide its Letter No. CRZ 2018/CR 360/TC 4, dated 14/02/2019 and commitments made by the PP before the Maharashtra CZMA and EAC shall be followed in letter and spirit.
- (xi) All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

FRESH PROPOSALS

Item No. 3.3

Proposal for Construction of Pedestrian Suspension Bridge on River Mithi, Mumbai by Mumbai Metropolitan Regional Development Authority (MMRDA)- CRZ Clearance [I/MH/CRZ/419258/2023] [F.NO.11/18-2023-IA.III]

“The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false / misleading at any stage, the project will be rejected and Environmental and or CRZ Clearance given, if any, will be revoked at the risk and cost of the project proponent.”

The project proponent submitted documents and their consultant made a detailed presentation of salient features of the project and informed that:

- i) The proposed proposal for Construction of Pedestrian Suspension Bridge on River Mithi, Mumbai by Mumbai Metropolitan Regional Development Authority (MMRDA).
- ii) Proposed pedestrian suspension bridge located near BKC Mumbai and bridge connects the City Park on BKC side and Maharashtra Nature Park on Dharavi side.
- iii) The coordinates of project limits are as:

Point	Latitude	Longitude
A	19° 3'23.51"N	72°51'16.35"E
B	19° 3'22.02"N	72°51'14.25"E
C	19° 3'02.96"N	72°51'26.79"E
D	19° 3'04.50"N	72°51'28.64"E

- iv) The proposed project envisages construction of Main Suspension Cables and Wind Guys Cables, Anchor Block, Bridge Pylon, Suspenders, Deck of Bridge, Saddle, Allied structure at BKC side, Allied Structure at MNP side.
- v) The total land requirement is about 7972 m² and out of that BKC park side-3490 m² and Mahim Nature Park Side-4480 m².
- vi) The salient features are: Span of Bridge (L)-506.50 m, Height of Tower above Deck (h1)-35.26 m, Height of Pylons-51.25 m, Height of Tower below Deck (ho)-16.0m, Clear Width (Passage C/C)-3.5 to 6m, Live Load-400 Kg/m², Basic Wind Speed-44 m/s and construction period about-18 months.
- vii) The location of proposed Suspension bridge falls in CRZ-IA (50m buffer zone of Mangrove), CRZ-II and outside CRZ as per CRZ notifications, 2011.as:

CRZ	Above Ground		On Ground	
	Length (m)	Area (m ²)	Length (m)	Area (m ²)
CRZ- I A	1665.05	3230.35	-	-
CRZ-IA (50 m Mangroves Buffer Zone)	710.56	1566.19	14.10	-
CRZ- IB	13.04	35.17	-	-
CRZ - II	317.42	542.38	61.73	2688.07
Outside CRZ	144.59			1666.12

- viii) The estimated cost of the project is ₹116 crores, out of total cost estimated for Environmental Management Plan is about 473.43 lakhs.
- ix) The Maharashtra State Coastal Zone Management Authority (MSCZMA) has recommended the proposal for CRZ clearance 2019 *vide* letter No. CRZ2022/CR 136/TC 4, dated 14/02/2023.

2. Deliberations in the EAC:

The Committee after detailed deliberations suggested that the PP shall submit additional information / inputs in respect of the following:-

- (i). The NOC from Mahim Nature Park.
- (ii). Detail Plan of pathway connectivity for pedestrian from Sion station all the way to the Pedestrian Suspension Bridge. The plan should be such that it is access controlled to prevent hawkers and vehicles.
- (iii). Emergency evacuation plan and Bridge Safety Plan need to be submitted.
- (iv). Details of load Carrying Capacity of construction of Pedestrian Suspension Bridge need to be submitted.
- (v). Since the proposal also emphasizes on its use for bird watching and mangrove watching, Committee could not see value of this purpose considering extremely polluted nature of the river below. Bridge is also expected to facilitate disposal of more garbage directly in to the river. Thus, a detailed plan as to how MMRDA aims to clean the river below and how this can be used as bird watching facility needs to be provided.

- (vi). Need to submit cleaning plan of the surrounding CRZ area with coordination to other State Government Department agencies.
- (vii). Senior Officer has to attend the meeting in future.

The proposal was accordingly deferred.

Item No. 3.4

Proposal for extension of 630 mm dia HDPE effluent pipeline from existing diffuser upto disposal point in Karambavane Creek Lote Parshurame MIDC Chiplun District Ratnagiri by M/s Maharashtra Industrial Development Corporation (MIDC)- CRZ Clearance

[IA/MH/CRZ/403420/2022] [F.NO.11/19-2023-IA.III]

“The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false / misleading at any stage, the project will be rejected and Environmental and or CRZ Clearance given, if any, will be revoked at the risk and cost of the project proponent.”

The project proponent submitted documents and their consultant made a detailed presentation of salient features of the project and informed that:

- (i). The proposed proposal for extension of 630 mm dia HDPE effluent pipeline from existing diffuser upto disposal point in Karambavane Creek Lote Parshurame MIDC Chiplun District Ratnagiri by M/s Maharashtra Industrial Development Corporation (MIDC).
- (ii). MIDC have proposed to extend existing disposal HDPE pipeline of length 2.56 km from existing diffuser to disposal point suggested by NIO (17° 34' 56.48" N; 73° 24' 39.7" E) for disposal of Treated Effluent from Lote-Parshuram industrial area MIDC to Karambhavne creek.
- (iii). The capacity of disposal pipeline is 25 MLD and at present treated effluent of 3.5 MLD is being pumped. It is proposed to reach 10 MLD as there will be proposed expansion of the Lote MIDC area.
- (iv). MIDC Intends to extend the existing disposal pipeline conveyance system (inside the creek) in order to convey and dispose treated waste water into the deep saline water off Karambhavne Creek, meeting the sea discharge norms.
- (v). The proposed pipeline: 2.56 km in Creek and adjusting pipeline: 7.48 km (1.42 km in Creek and 6.06 km on land).
- (vi). The extension pipeline is of 630 mm dia HDPE pipeline and will be laid 2 m below the bed with anchors at 2m Centre to Centre.
- (vii). No Mangroves will be cut or disturbed during execution of the project.
- (viii). The NIO recommendation for the project as:
 - Near-field dilution was studied using buoyant jet model and far-field dilutions were estimated by 2D numerical model.
 - For the 10 MLD effluent, the model study suggests that dilutions of 65-100 times can be achieved at the DP.

- Far-field dilution study reveals that the plume would move parallel to the coast and chances of reaching the coast are remote.
 - The BOD concentrations at 100 m from the outfall would be reaching near ambient conditions.
 - Hence it is suggested that 10 MLD effluent treated to the standards of MPCB can be released at a location (**17° 34' 56.48" N; 73° 24' 39.7" E**), through a diffuser having 3 ports (each port should have 0.15 m dia) separated by 4 m, which is 2.56 km downstream from the present release location where depth of 7 m CD is available.
 - If establishment of diffuser is difficult in the above said location, the position can be shifted to other location with the same depth within 50 m radius.
 - The jet velocity should be maintained at 2 m/s.
 - The port should make 15° angle and should be aligned in the ebb current direction.
 - The diffuser should be perpendicular to the estuarine bank and the ports should be aligned towards downstream.
 - Pipeline should be laid in the estuary starting from the present release location, if laying on the land is difficult.
 - The proposed location should be monitored periodically at least once in 2 year.
- (ix). The capacity of disposal pipeline is 25 MLD and at present treated effluent of 3.5 MLD is being pumped in three shifts of 8 hours to be disposed off at Karbavne creek Vashishti River at a point as suggested by National Institute of Oceanography (NIO).
- (x). The Common Effluent Treatment Plant is designed for capacity of 10MLD with Primary, secondary and tertiary treatment system. The plant receives combined wastewater, consisting of both domestic and industrial waste from the various Industries in the area. The wastewater generated by all industrial units is conveyed to CETP through an underground pipeline network.
- (xi). The total 250 permanent employment likely to be generated by the project.
- (xii). The estimated cost of the project is ₹24.71 crores and out of total the cost proposed for construction phase ₹7.0 Lakhs per annum and operational phase ₹68.00 Lakhs per annum.
- (xiii). The Maharashtra State Coastal Zone Management Authority (MSCZMA) has recommended the proposal for CRZ clearance *vide* letter No. CRZ 2022/CR 83/TC 4, dated 03/10/2022.

2. Deliberations in the EAC:

The Committee made detailed deliberation on the proposal. The Committee noted that the activity is a permissible as per CRZ Notification 2011. However, suggested that the PP should follow the recommended discharge location as suggested by NIO and also ensure that the treated effluent discharge is strictly as per norms specified by CPCB / SPCB. The Committee found the additional information submitted by the project proponent to be satisfactory.

The Committee after detailed deliberations and based on the clarifications / information submitted by PP recommended the proposal for CRZ Clearance, subject to the following conditions:

- (i). All construction shall be strictly in accordance with the provisions of the CRZ Notification, 2011, as amended from time to time.

- (ii). MIDC should follow the recommended discharge location (17° 34' 56.48" N; 73° 24' 39.7" E) as suggested by NIO.
- (iii). MIDC shall ensure that the treated effluent discharge is strictly as per norms specified by CPCB / SPCB.
- (iv). The pipeline where crossing of water body / river / creek areas should be laid through Horizontal Directional Drilling (HDD) method.
- (v). Any temporary physical infrastructure setup and excavated material during laying of pipelines shall not be dumped in water bodies or adjacent areas and the site shall be restored to its original condition after completion of construction of work.
- (vi). No storage reservoir for sea water shall be permitted and only pipelines conveyance system shall be installed.
- (vii). No groundwater shall be extracted within the CRZ area to meet the water requirements during the construction and/or operation phase of the project.
- (viii). Permanent labour camp, machinery and material storage shall not be set up in the CRZ area.
- (ix). All the conditions stipulated by the Maharashtra Coastal Zone Management Authority for CRZ clearance 2011 *vide* its Letter No. CRZ 2022/CR 83/TC 4, dated 03/10/2022 and commitments made by the PP before the Maharashtra CZMA and EAC shall be followed in letter and spirit.
- (x). As a part of EMP, the institute like Indian Institute of Science Education and Research (IISER) Pune will be provided with state of art laboratory equipment that can be used for high quality academic and research purpose.
- (xi). All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

Item No. 3.5

Proposal for Construction of Muthamizh Arignar Dr. Kalaignar Pen Monument in Bay of Bengal, Off the Coastal of Marina Beach near Triplicane Village, Chennai District by the Public Works Department, Government of Tamil Nadu-CRZ Clearance. [IA/TN/CRZ/425137/2022] [F.NO.11/20/2023-IA.III]

“The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of the data/information submitted is found to be false / misleading at any stage, the project will be rejected and Environmental and or CRZ Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The project proponent submitted documents and their consultant made a detailed presentation of salient features of the project and informed that:

- (i) The proposal is for Construction of Muthamizh Arignar Dr. Kalaignar Pen Monument in Bay of Bengal, Off the Coastal of Marina Beach near Triplicane Village, Chennai District by the Public Works Department, Government of Tamil Nadu for promoting tourism.
- (ii) As per CRZ Notification 2011 the activity shall require clearance from MoEF&CC after being recommended by the concerned CZMA as per Para 4 (ii) (j) construction of

- memorials/ monuments and allied facilities by the concerned State Government in CRZ-IV (A) areas, in exceptional cases, with adequate environmental safeguards etc.
- (iii) The Terms of Reference (ToR) was considered in 307th EAC meeting held on 24th August 2022, in the Ministry of Environment, Forest and Climate Change, New Delhi. TOR was granted on 15th September, 2022 with specified conditions.
 - (iv) The Public Hearing was conducted on 31/01/2023 by District Collector Chennai at Kalaivanar Arangam, 1 Wallahjah Road Anna Salai Triplicane, Chennai, Tamil Nadu.
 - (v) The proposed project falls under CRZ IA, CRZ II, and CRZ IV-A. The CRZ Classification as:

S.No.	Description	Area in Sq.m	CRZ classification
1	Pen Pedestal	2263.08	CRZ IV-A
2	Pedestrian Pathway Above Sea	2073.01	CRZ IV-A
3	Lattice Bridge Above Beach & Land	1856.00	CRZ IA, Partially-CRZ-II, and CRZ IV-A
4	Pedestrian Pathway in Beach	1610.60	CRZ II
5	Pedestrian Pathway from Muthamizh Arignar Dr. Kalaignar Memorial to Bridge through beach	748.44	CRZ II
Total area		8551.13	

- (vi) The centre coordinates of the proposed site as per IRS Map are:

S. No.	Latitude	Longitude
A	13° 3'53.794"N	80°17'9.182"E
B	13° 3'55.109"N	80°17'11.732"E
C	13° 3'54.365"N	80°17'16.132"E
D	13° 3'53.725"N	80°17'19.908"E
E	13° 3'52.008"N	80°17'30.015"E
F	13° 3'51.537"N	80°17'32.802"E

- (vii) The Pen Monument is 30 m height (6 m pedestal above the HTL).
- (viii) The total length of the Bridge: Over the Land and intertidal area-290 m (220 m in CRZ II and 70 m in CRZ IA Intertidal area (No construction), Over the Sea-360 m – CRZ IVA and width of the Bridge is 7.0 m.
- (ix) The water requirement: **Construction Phase:** The total water requirement will be ~ 15 KLD (Domestic:~5 KLD, Construction purpose: ~ 10 KLD) and source of water is through Metro water tankers and **Operation Phase:** Domestic: ~ 5 KLD and supplied through water dispensers for drinking purpose.
- (x) **The power requirement: Construction Phase:** 500 kVA and sourced from TANGEDCO and 125 kVA for power backup, **Operation Phase:** Power supply and DG backup for lighting load, 100 kV Sourced from TANGEDCO. The DG set will be equipped from existing Memorial (which got its clearance from TNSCZMA dated

06/01/2021 and it is under construction. Approximately 185 Kw will be generated through solar panels, which will be installed on the roof of the lattice bridge.

- (xi) The Solid Waste: **Construction Phase:** Approximately 45.0 kg/day of municipal waste will be generated in premises will be disposed in municipal corporation bins on daily basis, **Operation Phase:** Approximately 98.0 kg/day of municipal waste will be generated in the premises shall be disposed through municipal/corporation bins on daily basis. All the domestic sewage facilities will be provided in the Muthamizh Arignar Kalaignar Memorial.
- (xii) The INS Adyar (defence installation) 0.81 Km from the project site.
- (xiii) A greenbelt programme will improve the ecological condition of the region. The greenbelt area is 921 Sq.m (10.77%) out of the total area 8551.00 Sq.m.
- (xiv) Environment Management Plan: Social Environment: Fishermen can engage in their fishing activities even during the construction period. It will become an internationally acclaimed landmark tourism site. Overall aesthetics of the project site and around the Marina Beach will be improved and its positive impacts - direct and indirect employment will be generated.
- (xv) Marine Ecology: The proposed project doesn't involve any dredging and construction methodology utilise modernized equipment for piling operations for the foundation of the project, using encased drilling equipment. Debris trap, silt curtain will be used to prevent spillage of debris and waste into the sea.
- (xvi) The pedestrian bridge has been designed so as not to disturb the movement of fishing boats. Pillars spacing -16 m) (Height from sea level to pedestrian bridge 6.0m). The lattice bridge has been designed so that no pillars will be erected in the CRZ IA area of about 70 mts. There is clear passage for all the marine fauna to have access to the sandy areas including turtles, fishing boats and human movement.
- (xvii) For sand accumulation and Erosion, no dredging is required for proposed project; as it is open construction in situ piling. Due to the use of modern construction equipment, there will be no concrete spillage.
- (xviii) Sporadic nesting of sea turtle has been reported from Ennore to Tiruvanmiyur coastal area. However, care will be taken to monitor the nesting during the construction and mitigation measures will be implemented. During the nesting period of Olive Ridley Turtles i.e. from January to March no construction activity will be carried out in CRZ IA area and adjacent beaches. No illumination will be done during night time.
- (xix) The road connectivity to the project site and impact on the existing traffic network and Emergency Evacuation Plan during natural calamity/manmade is prepared by Joint Venture of CUBE and IIT Madras by analysing present and anticipated traffic.
- (xx) Major concerns during the Public Hearing and its compliance:

Major concerns during the PH and Post Public Hearing representations	Compliance by PP
Impact on Marine Ecology and fishing potentiality	The impact on various aspects of ecology among the marine life, life of turtles, prawns etc., have been studied in detail by accredited experts and researchers and based on their recommendation; all necessary steps would be taken to minimize the impact on ecology due to this project.

Shoreline Analysis with erosion and accretion	From the studies and report of NCCR, the project coastal region is Low Accretion Zone.
Construction of structures in CRZ IA	The construction in CRZ 1A is through stilts and lattice bridge without any obstruction to natural flow of water or sediments or marine organisms.
Affecting the livelihood of the fishermen	The proposed project doesn't affect livelihood of fishermen, as fishing vessels can operate beyond bridge region and bridge is constructed on pillars with large spans of around 16 m for free flow of water, sediment and marine organisms.
Financial and Social Impacts	All the opinions are noted, it will become an internationally acclaimed landmark tourism site, positive impacts – Direct and Indirect employment will be generated and overall aesthetics of the project site in and around the Marina Beach will be improved.

- (xxi) Total Manpower requirement during the Construction Phase: 100 and Operation Phase:30.
- (xxii) The total cost of the project ₹81 Crore.
- (xxiii) The Tamil Nadu State Coastal Zone Management Authority (TNSCZMA) has recommended the proposal for CRZ clearance *vide* letter No. 2914/EC.3/2023-1, dated 06/04/2023.

2. Deliberations in the EAC:

The EAC deliberated on the proposal. The Committee noted that the activity is a permissible as per CRZ Notification 2011 and require prior CRZ clearance; Erosion and accretion should continue to be monitored by NCCR and NOC should be obtained from INS Adyar which is 0.81 Km away from the project site. The Committee also noted the representations received pre and post Public Hearing by the Ministry and forwarded to the PP, deliberated / discussed in detail during the meeting along with letters provided by State Forest and Ministry of Fisheries, Animal Husbandry and Dairying (Departments of Fisheries) and different Association on the points raised in representations. As the PP intimated that some court cases notice / intimation has been received on the project but no stay / direction has been given by any of the Courts, however, the Committee suggested that, if any court directions related to the project is received, the PP shall act according to the court directions. The Committee also advised to PP should submit immediately revised road connectivity and Traffic Management Plan and Crowd Management Plan & Emergency Evacuation Plan (EEP), plan of dedicated pathway for the rescue team and during emergency, entry shall be controlled by the automated system. The same has been submitted by PP *vide* e-mail dated 18/04/2022 and circulated to all EAC members including MoEF&CC. The Committee found that the additional information submitted by the project proponent through e-mail is satisfactory and considered.

The Committee after detailed deliberations and based on the clarifications / information submitted by PP recommended the proposal for CRZ Clearance, subject to the following conditions:

- (i) All construction shall be strictly in accordance with the provisions of the CRZ Notification, 2011, as amended from time to time.

- (ii) NOC should be obtained from INS Adyar prior to commencement of construction.
- (iii) Monitoring of Erosion and accretion studies should be conducted and same should be submitted to Regional Office.
- (iv) Any temporary physical infrastructure setup and excavated material during construction of the project shall not be dumped in water bodies or adjacent areas and the site shall be restored to its original condition after completion of construction of work.
- (v) The road connectivity and Traffic Management Plan as submitted to implemented in totality and compliance report should be submitted to Regional Office.
- (vi) The Crowd Management Plan & Emergency Evacuation Plan (EEP) as submitted to be implemented in totality and compliance report should be submitted to Regional Office on six monthly basis.
- (vii) Management of the visitors will be strictly through access controlled and regulated to maintain the number of visitors at any given point of time as stated in the crowd management plan
- (viii) There will be no construction activity in the areas of turtle nesting, if any, during the turtle nesting season from 1st January to 30th April of every year.
- (ix) No groundwater shall be extracted within the CRZ area to meet the water requirements during the construction and/or operation phase of the project.
- (x) Permanent labour camp, machinery and material storage shall not be set up in the CRZ area.
- (xi) The project proponents will certify that there is no legal restriction on the proposed project activities at the proposed site.
- (xii) The Project Proponent should comply order / direction, if any, issued by Hon'ble Court / tribunal on the project.
- (xiii) This CRZ Clearance letter is subject to final order of the Hon'ble National Green Tribunal (Southern Zone) I.A. No. 181/2022 and other cases, if any.
- (xiv) All the conditions stipulated by the Tamil Nadu Coastal Zone Management Authority for CRZ clearance 2011 *vide* letter No. 2914/EC.3/2023-1, dated 06/04/2023 and commitments made by the PP before the TN CZMA and EAC shall be followed in letter and spirit. An expert monitoring committee should be set up during implementation of the project.
- (xv) All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

Item No. 3.6

Proposal for Extension of validity in CRZ Clearance of Mumbai Trans Harbour Link (MTHL) project by Mumbai Metropolitan Region Development Authority (MMRDA). [IA/MH/CRZ/411891/2022] [F.NO.11-65/2012-IA.III]

The document for the proposal for Extension of validity in CRZ Clearance of Mumbai Trans Harbour Link (MTHL) project by Mumbai Metropolitan Region Development Authority (MMRDA) has submitted, made a detailed presentation of the project and informed that project was accorded CRZ clearance proposal *vide* letter No. F.No.11-65/2012-IA-III dated 25th January, 2016 and requested for extension of validity of the above CRZ Clearance by another 3 years i.e. till 24/01/2026 (total 10 years).

2. The PP intimated that the project is in progress and about 90% progress is achieved till date. The PP also intimated that the extension for validity of CRZ clearance has been recommended by Maharashtra Coastal Zone Management Authority (MCZMA) *vide* their letter No. CRZ 2022/CR 185/TC 4, dated 09/12/2022.

3. The Committee took note that the extension for validity of CRZ clearance has been recommended by MCZMA. The committee also noted that the PP has also submitted last six month compliance report for the conditions of CRZ clearance granted for the record of the Ministry as same submitted to IRO. The Committee was also informed that the project proponent had applied to the MCZMA before the expiry of the validity of said clearance i.e. 25/01/2023.

4. The EAC made detailed deliberation on the proposal and decided to make a site visit in the first half of May 2023 to understand the current status of the project and proposal was accordingly deferred.

4.0. Any other item with the permission of the Chair.

The meeting ended with a Vote of Thanks to the Chair.

Annexure

List of the Expert Appraisal Committee (CRZ) Members participated during Video Conferencing (VC) Meeting held on 17th April 2023.

S. No.	Name of Members	Designation
1.	Dr. Deepak Arun Apte	Chairman
2.	Dr. M.V. Ramana Murthy	Member
3.	Dr. Manoranjan Hota	Member
4.	Shri S. Jeyakrishnan	Member
5.	Shri M.S. Negi	Member
6.	Prof. V. K. Jain	Member
7.	Prof. A.K. Pachauri	Member
8.	Shri Sham Wagh	Member
9.	Dr. Niraj Sharma	Member
10.	Shri P.K. Mishra	Member
11.	Shri R.S.P. Verma	Member
12.	Dr. H. Kharkwal	Member Secretary
