

MINUTES OF THE 331th MEETING OF EXPERT APPRAISAL COMMITTEE FOR PROJECTS RELATED TO COASTAL REGULATION ZONE HELD ON 21st JUNE, 2023.

The 331th meeting of the Expert Appraisal Committee (EAC) for projects related to Coastal Regulation Zone was held on 21st June, 2023 at IBP, MoEF&CC, New Delhi through Hybrid mode 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, 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 329th meeting held on 29th May, 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.

3.0 CONSIDERATION PROPOSALS:

The EAC (CRZ) considered proposals as per the agenda adopted for the 331st meeting. The details of deliberations held and decisions taken in the meeting are as follows:

Agenda 3.1

Proposal for Establishment of a new Lighthouse Tower and allied buildings at Chaumukh (Narayanpur Village), Baliapal, District-Balasore by Directorate General of Lighthouse and Lightship, Ministry of Port, Shipping and Waterways-CRZ Clearance

[IA/OR/CRZ/413840/2023; F.NO.11/10/2023-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.”

Earlier the proposal was examined by EAC in its 320th meeting held on 07/02/2023; wherein the Project Proponent along with his EIA consultant made a presentation on above said proposal. The EAC took note of following key parameters and salient features of the project as presented during the meeting as well as the details provided in the brief and application for this project:

- (i) The proposal is for Establishment of a new Lighthouse Tower and allied buildings at Chaumukh (Narayanpur Village), Baliapal, District-Balasore by Directorate General of Lighthouse and Lightship, Ministry of Port, Shipping and Waterways to provide visual navigational aids for the safety of the Mariners and local fisherman of the area.
- (ii) The development proposed over plot no.3531/3543 and Khata No.735. The kissam of the land is Gharabari. The total area is 1.10 ac. Construction involves setting up of a new lighthouse tower of 113 sq.m of base area with 12.0m circle and 45m height, staff buildings, internal road, pathways, water supply and sanitary arrangements and a compound wall which are required for the operation of light house.
- (iii) The proposed lighthouse project site as reported by IRS, Anna University Chennai under various CRZ are as:

Sl. No.	Description	CRZ-Classification	Area in sq. m	Total area in sq. m
1.	Proposed Project Site Boundary	CRZ-III (NDZ)	1321.44	4000.00
		CRZ-IVB	2678.56	
2.	Proposed Road	CRZ-III (NDZ)	152.57	375.00
		CRZ-IVB	222.43	
Total			4375.00	4375.00

- (iv) The fishermen community, within a radius of 18 nautical miles, will be benefited by establishment of Lighthouse at Narayanpur Village also be of economic boost for the local people who are involved in the fishing and marine activities.
- (v) The estimated cost of project is ₹9.0 Crores.
- (vi) The Odisha Coastal Zone Management Authority has recommended the proposal for CRZ clearance vide its Letter No. OCZMA/25/2022/149/OCZMA dated 06/09/2022 and Letter No.166/OCZMA dated 07/09/2022 as the activities are permissible vide Para 5.3 (i), 5.1.2 CRZ-IB (ii) and 5.4 CRZ-IV (iii) as per CRZ Notification 2019.

2. After detailed deliberation, the committee in its 320th meeting held on 07/02/2023 deferred the proposal and noted that the proposed project area falls

in CRZ-III (NDZ) and CRZ IVB creek area. However, as per submitted map of 1:4000 scale prepared by IRS, Anna University Chennai, the project location falls in water body i.e. CRZ-IVB creek. Thus revised maps were sought showing correct geographical location of the lighthouse site with CRZ classification and resubmit to the Ministry for reconsideration in next meeting.

3. Accordingly, proponent has submitted the followings through PRIVIESH portal and the same is deliberated by EAC in the present meeting.

- (i) As per the advice of EAC, the observation was taken up with IRS-Chennai, Anna University who have prepared the CRZ map and report for the project.
- (ii) IRS-Chennai submitted their report stating that there was no water stagnation in the area and as per approved CZMP map, LTL line is in the seaward side of proposed project boundary and goes parallel to the Coast. But as per approved CZMP of CRZ Notification 2019, it is indicated as CRZ IVB .
- (iii)As per CRZ notification 2019, CRZ-IV B areas shall include the water area and the bed area between LTL at the bank of the tidal influenced water body to the LTL on the opposite side of the bank, extending from the mouth of the water body at the sea up to the influence of tide, i.e., salinity of five parts per thousand (ppt) during the driest season of the year. But in this case, the CRZ-IVB category is towards landward side of LTL.
- (iv)The geographical location of Lighthouse mentioned on CRZ map is shown as per DGPS survey of IRS-Chennai.

4. After detailed deliberation, the Committee has noted that as per the CRZ 1:4000 scale map submitted, the project location fall in water body i.e., CRZ-IVB creek. Since, the proposed activity is not permissible in water areas, the committee informed the project proponent to revise the project location which is permissible as per notification. Project proponent agreed to revise the project sites as opined by EAC. The Committee also noted the PP not taking any serious efforts in addressing essential clarifications sought by the Ministry and project is getting delayed. Hence, suggested attention from higher authority of PP side to submit the proposal as per notification. Accordingly, the committee deferred the proposal.

Agenda 3.2

Establishment of a new Lighthouse at Chandinipal, Dhamra of Bhadrak District by the Ministry of Port Shipping and waterways by M/s directorate of Lighthouse and Lightships, Kolkata-CRZ Clearance

[IA/OR/CRZ/285343/2022; F. NO.11/34/2022-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.”

Earlier the proposal was examined by EAC in its 307th meeting held on 24/08/2022; wherein the Project Proponent along with his EIA consultant made a presentation on above said proposal. The EAC took note of following key parameters and salient features of the project as presented during the meeting as well as the details provided in the brief and application for this project:

- (i) The proposal is for CRZ clearance to the project for Construction of lighthouse tower and allied buildings at Chandnipal, Bhadrak, Odisha by the Directorate of Lighthouse and Lightships, Ministry of Ports, Shipping and Waterways.
- (ii) The Directorate General of Lighthouses and Lightships (DGLL) is responsible for Establishment, Operation and Maintenance of Aids to Marine Navigation along the Indian Coast at par with the international standards since India is a Member of International Association of Marine Aids to Navigation and Lighthouse Authority (IALA) / International Maritime Organization (IMO).
- (iii) To meet this requirement, new lighthouses are being established and Maipura, Bhadrak is one such lighthouse which has been approved by CACL (Central Advisory Committee on Lighthouses).
- (iv) The fishermen community, within a radius of 18 nautical miles, will be immensely benefited by establishment of Lighthouse at Dhamra.
- (v) The Lighthouse of Chandnipal will not only provide much needed visual navigational aid for safety of mariners and fisherman in the Dhamra Region but also be of economic boost for the local people who are involved in the fishing and marine activities.
- (vi) The factors based on which the locations are identified i.e: Un-obstructed seamless coverage, the distance from coastline, any other tall structures in the vicinity of the proposed site, connectivity with road, availability of commercial power supply, request from any port / local authorities, basic amenities for staff, who will be posted for operation.
- (vii) Proposed location of lighthouse at Dhamra: The requisite land plot identified /earmarked at a suitable place, having size of 40 Mtr. X 80 Mtr. from the following forest land:

Khatta No.	Plot No.	Extent	Forest	Position
64	177	3320 sq.m	3320 sq.m	Lat: 20°47'27.117" N Long:86°56'27.517" E

- (viii) The total Cost of project is ₹9.0 Crores.

- (ix) The CRZ clearance for the said project was earlier accorded by the Govt. of India, Ministry of Environment & Forests (IA Division) vide letter no. 11-119/2008-IA-III dated 26th October 2010.
- (x) The project could not be started due to delay in diversion of forest land due to various clearances. The forest land was handed over on 30/7/2021 by the Forest Department and the CRZ clearance was expired in the due course.
- (xi) The Odisha Coastal Zone Management Authority has recommended the proposal for CRZ clearance vide its Letter No. OCZMA/9/2022/84/OCZMA dated 04/06/2022 as per CRZ Notification, 2019.

2. After detailed deliberation, the Committee in its 307th meeting held on 24/08/2022 deferred the proposal and noted that the proposed project site is located in CRZ IA area and such setting of light house is not a permitted activity. It is also noted that other prohibited associated activities like buildings are also proposed in CRZ IA area. Accordingly, the Committee desired that State CZMA should provide recommendations as CRZ notification for light house. The Committee the asked following additional essential information from the project proponent to take up the proposal:

- (i) The project proponent shall undertake alternate site analysis and identify alternate sites wherein light house and other associated activities are permitted as per the CRZ Notification, 2019 and shouldn't be located in flooding areas.
- (ii) Recommendation from Odisha CZMA as per CRZ Notification, 2019 on the alternate site.
- (iii) State CZMA may be asked to inform reasons for recommending prohibited activities in the Ecologically Sensitive Areas/CRZ IA

3. Thereafter, the project was placed before the Committee in its 320th meeting held on 07/02/2023 based on the additional information/documents uploaded on Parivesh Portal; wherein PP has informed the followings:

- (i) The proposed site for establishment of lighthouse was verified with the approved CZMP2019 and found that the site falls in CRZ-IA ESA area due to the presence of Garmal PRF which was also mentioned in the CRZ study (1:4000 scale map) report carried out by the Anna University, Chennai.
- (ii) When the site is verified with the land use map of that area, it is found that the site is demarcated as CRZ-IB (Inter-Tidal Area).
- (iii) Odisha CZMA considered the proposal for grant of CRZ clearance based on the area as CRZ-I(B) classification after receipt of Forest Diversion NOC and recommended the proposal to MoEF&CC as it is located in CRZ-I area as per para 8(ii) (b) the approved CZMP-2019.
- (iv) The proposal was earlier accorded CRZ clearance by MoEF&CC, Government of India *vide* letter No.11-119/2008-IA-III dated 26/10/2010 based on CRZ Notification, 1991, but the project could not executed within the valid period due to delayed in forest diversion process and after receipt of NOC (forest diversion) from Forest Department, Government of Odisha

the project proponent applied for a fresh clearance as per CRZ Notification, 2019 as CZMP 2019 has been approved for Odisha State.

4. After detailed deliberation, the committee in its 320th meeting held on 07/02/2023 reiterated earlier decision that the proposed project site is located in CRZ IA area and such setting of light house is not a permitted activity as per the CRZ Notification, 2019 and should not be located in flooding areas. The EAC also advised to PP as well as OCZMA to respond Ministry letter dated 8th December 2022 that the OCZMA recommended the non-permissible activity of the said project as per CRZ Notification 2019, which also has not in line with the approved CZMP 2019. If a project location other than the CRZ IA area needs revision in approved CZMP 2019 and recommendation of OCZMA to need to be forwarded as per permissible activity of CRZ Notification 2019 and also revision in CZMP 2019 and the proposal is accordingly deferred. The Ministry also intimated to EAC that the neither response nor revision in the part of CZMP 2019 was received from OCZMA.

5. As per the request of Project Proponent, the matter has been considered in the present meeting. However, project proponent has informed in the meeting that the revised CZMP as directed by the EAC is under process and requires additional time. The Committee also noted the PP is not taking any serious efforts for submitting the reply for such nationally important project, causing delay and need attention from higher authority of PP side. Accordingly, the proposal has been deferred and project proponent has been advised to expedite the process for revision in CZMP.

Agenda 3.3

Proposal for setting up of 5 MLD desalination plant at Ganjam by Grasim Industries Pvt. Ltd- CRZ Clearance regarding

[IA/OR/CRZ/418559/2023; F.NO.11/12/2023-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.”

Earlier the proposal was examined by EAC in its 323rd meeting held on 23/03/2023; wherein the Project Proponent along with his EIA consultant made a presentation on above said proposal. The EAC took note of following key parameters and salient features of the project as presented during the meeting as well as the details provided in the brief and application for this project:

- (i) The proposal is for CRZ clearance to the project for setting up of 5 MLD desalination plant at Ganjam by Grasim Industries Pvt. Ltd.
- (ii) The distance of Intake Channel: LFP 1 to river = 10m and Outfall Pipeline: LFP 1 to LFP 2 = 2422m (Across river), LFP 2 to diffuser = 800 m.
- (iii) The proposed Marine facilities is as:

Parameter	UTM Coordinate (Zone 45)		Geographical Coordinates (WGS - 84)	
	X (m)	Y (m)	Latitude, N	Longitude, E
LFP 1 – River side (for intake and outfall)	294996	2143819	19°22'40.98"	85°02'53.02"
Intake Channel Distance from LFP 1 into River = 10 m Depth = 0.2 m CD	294991	2143811	19°22'40.72"	85°02'52.84"
LFP 2 – Open sea (for outfall) Distance of outfall pipeline across the river, i.e., LFP 1 to LFP 2 = 2422 m	296697	2142487	19°21'58.30"	85°03'51.80"
Brine Reject Outfall Distance from LFP 2 to diffuser = 800 m Depth = 8.9 m CD	297096	2141794	19°21'35.90"	85°04'05.70"

- (iv) The status of various project activities are as:

Sl. No.	Project Details	CRZ- Classification	Length (m)	Total (m)
1.	Proposed Desalination Outfall Pipeline	CRZ-IB	405.72	3222.48
		No Development Zone (CRZ-III)	172.74	
		CRZ - IVA	704.84	
		CRZ - IVB	1939.18	
2.	Proposed Infiltration Gallery Pipeline	No Development Zone (CRZ-III)	215.62	400.6
		CRZ - IVB	184.99	

- (v) The sea water intake: 12.5 MLD and after desalination process, 5 MLD is product water and 7.5 MLD is brine reject.

- (vi) The total cost of the project ₹30.0 Crore.

- (vii) The Odisha Coastal Zone Management Authority has recommended the proposal for CRZ clearance vide its Letter No. OCZMA/33/2022/5/OCZMA, dated 19/01/2023 and activities are permissible / regulated under Para 5.1.2 (ii), 5.1.2 (xiv), 5.1.2 (xv), 5.1.2 (xviii), 5.3 (i), 5.4 (iii), 5.4 (xiii) of CRZ Notification 2019.

2. After detailed deliberation, the Committee in its 323rd meeting held on 23/03/2023 has noted that the area is major nesting ground for Olive Ridley Sea Turtles. The intake location is in Rushikulya River while outfall is about 500 m in the open sea. PP has not submitted PFR. The details about pipeline through HDD method are not available as well as desalination technology and recovery and brine quality etc are missing. The Committee suggested submitting all the aforesaid documents/clarification. Comprehensive marine biodiversity conservation plan with special focus on sea turtles needs to be prepared. This should include the details on the sea turtle congregation along the offshore areas of Rushikulya river mouth extending about 2 km in the sea and 2 km on either side of river mouth along the shore on both north and south of the river mouth needs to be examined. The details should include the impact of discharge of brine on sea turtles as well as impact of HDD on sea turtle nesting areas. An alternate alignment avoiding all sea turtle nesting areas should also be explored. The detailed study indicating the layout of intake, outfall with diffuser and depth of burial, discharge quantity/quality with environmentally friendly technology should be submitted along with above observations. The proposal was accordingly deferred.

3. Accordingly, proponent has submitted the followings through PARIVESH Portal and the same has been deliberated by EAC in the present meeting.

(i) Modified locations of the Outfall LFP & diffuser are as follows:

Particulars	UTM Coordinate (Zone 45)		Geographical Coordinates (WGS - 84)		Shifting
	X (m)	Y (m)	Latitude, N	Longitude, E	
<u>LFP 1 – River side</u> (Intake and outfall)	294996	2143819	19°22'40.98"	85°02'53.02"	Same
<u>Intake Channel</u> Distance from LFP 1 into River = 10 m Depth = 0.2 m CD Volume = 12.5 MLD	294991	2143811	19°22'40.72"	85°02'52.84"	Same
<u>LFP 2 (Shifted) – Open seaside (Outfall)</u> Distance of outfall pipeline across the river, i.e., LFP 1 to LFP 2 = 2142 m	296201	2142253	19°21'50.55"	85°03'34.91"	550 m South
<u>Outfall (Shifted)</u> Distance from LFP 2 to diffuser at open sea = 1000 m; Depth = 10.6 m CD Volume = 8 MLD	296639	2141354	19°21'21.47"	85°03'50.26"	635 m South

(ii) Modified locations of the Outfall LFP & diffuser are as follows:

Pipeline Crossing	Chainage	Pipeline laying method
River crossing at LFP 1	Ch: 0 m to Ch: 412 m (412 m)	Lay on the bed
Pipeline bordering Island 1	Ch 412 m to Ch: 1857 m (1445 m)	Open Trenching
North of Riverbank to HTL (covering LFP 2)	Ch: 1857 m to Ch: 2142 m (285 m)	HDD
LFP 2 to Outfall	Ch: 2142 m to Ch: 3142 m (1000 m)	Open Trenching

(iii) Pre-Feasibility Report and details of Desalination Technology and Brine have been submitted

(iv) Comprehensive Marine Biodiversity Conservation Plan with special focus on sea turtles, its congregation along the offshore areas covering 2 km inside sea and 2 km either side of Rushikulya river, impact of brine discharge & HDD on Turtle nesting areas is also submitted as suggested by EAC.

4. The Committee deliberated on the proposal and noted that responses project proponent is satisfactory. Further, the committee opined the in place of open trenching method of laying across Island within Rushikulya River, HDD may be considered in view expected exposure due to morphological changes of river. In response PP also agreed to implement the same. Accordingly, the committee recommended the proposal for CRZ Clearance subject to following specific conditions in addition to standard conditions:

- (i) All construction shall be strictly in accordance with the provisions of the CRZ Notification, 2019, as amended from time to time.
- (ii) The pipeline across Island within Rushikulya River should be laid through Horizontal Directional Drilling (HDD) method.
- (iii) There will be no construction activity during the turtle nesting season, if any from 1st January to 30th April of every year.
- (iv) In order to preserve the adjacent turtle nesting ground, de-weeding and beach cleaning activities should be carried out throughout two months prior to the nesting season in consultation with state forest department. 2.0 Crore has been allocated as a part of EMP for the same and to be used exclusively for beach cleaning, sea turtle nest and hatchling monitoring activities by the state forest department.
- (v) As a part of EMP, Zoological Survey of India or any such nationally reputed government or academic institute will be provided with state of art

laboratory equipment that can be used for high quality academic and research purpose for marine and coastal biodiversity.

- (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) The project proponents certify that there is no legal restriction on the proposed project activities at the proposed site. However, Project Proponent shall comply order/direction, if any, issued by Hon'ble Court/tribunal on the project.
- (xi) All the conditions stipulated by the Odisha Coastal Zone Management Authority for CRZ clearance under CRZ Notification, 2019 *vide* letter no. OCZMA/33/2022/5/OCZMA, dated 19/01/2023 and commitments made by the PP before the OCMA and EAC shall be followed in letter and spirit.
- (xii) All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

Agenda 3.4

Proposal for extension of Mumbai Trans Harbour Link (MTHL) project by MMRDA

[IA/MH/CRZ/411891/2022; F. NO.11-65/2012-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.”

Earlier the proposal was examined by EAC in its 325th meeting held on 17/04/2023; wherein the Project Proponent along with his EIA consultant made a presentation on above said proposal. The EAC took note of following key parameters and salient features of the project as presented during the meeting as well as the details provided in the brief and application for this project:

- (i) The proposal is 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).

- (ii) 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.
- (iii) 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.
- (iv) The EAC made detailed deliberation on the proposal and decided to make a site visit to understand the current status of the project and proposal was accordingly deferred.
- (v) Subsequently, the EAC (CRZ) Sub-Committee visited site on 23/05/2023 of Construction Mumbai Trans-Harbour Link project by M/s MTHL along with Environmental consultants, Safety Officers and Project Engineers.
- (vi) The Sub-Group Committee site visit report along with suggested observations on the project was placed before the EAC (CRZ) for its consideration and further action.

2. The committee deliberated on the site visit done by the Sub-Committee and concur the observations of site visit report and recommended by MCZMA and the Committee recommended the proposal for Extension of validity in CRZ Clearance CRZ Clearance by another 3 years i.e. till 24/01/2026 (total 10 years) subject to following **additional conditions:**

- (i) Monitoring of adjacent mudflats area and water quality needs to be done by Fergusson College's Advance Research Center for Ecology for next 5 years and suggest mitigation measures, if required and PP should comply the same and submit report to IRO. Accordingly, 5 Crore as a onetime grant to be provided as a part of EMP to Fergusson College's Advance Research Center for Ecology within 3 months from the grant of extension of CRZ clearance for developing state of art laboratory and undertake the studies as desired and for other academic and research purposes. Any additional funds that may be necessary to be provided during the course of the studies additionally.
- (ii) IISER-Pune to be engaged in the mangrove related research for next 5 years and suggest conservation measures, if required and PP should comply the same and submit report to IRO. Accordingly, 5 Crore as a onetime grant to be provided as a part of EMP to IISER-Pune within 3 months from the grant of extension of CRZ clearance for developing state of art laboratory

- and undertake the studies as desired and for other academic and research purposes. Any additional funds that may be necessary to be provided during the course of the studies additionally.
- (iii) 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.
 - (iv) All the condition stipulated by Maharashtra Coastal Zone Management Authority (MCZMA) *vide* their letter No. CRZ 2022/CR 185/TC 4, dated 09/12/2022 and commitments made by the PP before the MCZMA and EAC shall be followed in letter and spirit.
 - (v) All the terms and conditions as mentioned in the earlier CRZ Clearance dated 25th January, 2016 and commitments made by the PP before the MCZMA and EAC shall be followed in letter and spirit.
 - (vi) All necessary clearance from the concerned authority, as may be applicable should be obtained.

Agenda 3.5

Proposal for Construction of Versova-Bandra Sea Link Project by M/s Maharashtra State Road Development Corporation Ltd.- CRZ Clearance

[IA/MH/CRZ/421589/2023; F.NO.11/27/2023-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.”

Earlier the proposal was examined by EAC in its 327th meeting held on 15/05/2023; wherein the Project Proponent along with his EIA consultant made a presentation on above said proposal. The EAC took note of following key parameters and salient features of the project as presented during the meeting as well as the details provided in the brief and application for this project:

- (i) The proposal [Versova Bandra Sea Link (VBSL) project] is for construction of Sea Link from Versova to Bandra in the suburbs along the west coast of Mumbai. It is an extension of the ‘Rajeev Gandhi Sea Link’ between Bandra and Worli. The Bandra-Worli Sea Link is already built and operational. The Worli – Nariman Point coastal road project is under construction.
- (ii) The length of the sea link is approximately 9.800 km with intermediate dispersal points at Juhu Koliwada and Carter Road (near Otters Club) and end connectors at Versova and Bandra. The sea link passes through the Arabian sea, approximately 900 m away from the coast.

- (iii) The sea link will have 4+ 4 lanes on both the sides and overall length of roads including connectors and dispersal points will be 20.843 km (Bandra connector 2.248 km; Juhu connector 3.538 km; Otters club connector 2.567 km & Versova connector 2.719 km + Sea link of 9.8km).
- (iv) Earlier, CRZ clearance was obtained for this project from MoEF&CC vide letter no. 11-84/2011-IAIII dated 09/01/2013 as per CRZ Notification, 2011. Moreover, wrt Order of Hon'ble NGT, project proponent had also obtained Environmental Clearance for the project under category 8 (b) (projects having built up area > 150, 000 sq. m) from SEIAA, Maharashtra vide letter SEAC-I/C.R24/TC-2 dated 02/02/2017.
- (v) Thereafter, the validity of the CRZ clearance was extended by the Ministry till 07/01/2023 vide letter no. 11-84/2011- IA-III dated 07/02/2019.
- (vi) The chronology of approvals for this project is as follows:

Sl. No.	Approval	Date	Remark
1.	MMB approval	13/04/2012	Indicating no objection to construction of VBSL with specified vertical and horizontal clearance
2.	CRZ clearance granted by MoEFCC	09/01/2013	
3.	Environmental clearance granted by SEIAA	02/02/2017	As per Order of Hon'ble NGT
4.	Consent to establish granted by MPCB	29/11/2018	Valid up to commissioning of project or 30/10/2023 whichever is earlier
5.	Stage-I Forest Clearance diversion of 2.9907 Ha of Forest land	20/12/2018	Mangrove area of 2.9907 ha is Reserved Forest land as per Order of Hon'ble HC of Mumbai
6.	CRZ validity extension by MoEFCC	07/02/2019	
7.	High Court permission for mangrove cutting	26/04/2019	
8.	Stage-II Forest Clearance for mangrove cutting	30/11/ 2021	
9.	Amendment in CRZ clearance	28/01/2020	Para no. 8, specific condition no. (i) in CRZ clearance dated 09 Jan. 2013 is amended to: a. Include number of mangrove trees to be cut. b. Revise mangrove area. c. Location of regeneration/ replantation of mangroves
10.	Working permission from forest department	21/12/2020	For cutting of mangroves

- (vii) The Present application and EIA report had been submitted to Maharashtra Coastal Zone Management Authority (MCZMA) on 27/12/2022 for grant of CRZ clearance. The proposal was considered in 165th meeting of MCZMA and recommendations has been forwarded to the Ministry vide letter no. CRZ 2022/CR 299/TC4 dated 09/03/2023.
- (viii) The project activity falls in CRZ IA (Mangrove & Mangrove buffer zone), IB (intertidal area), II (Mumbai suburban area) and CRZ IVA (the Arabian sea) and the proposed activity is permissible under clause 5.1.1 (ii and iii); 5.1.2 (i a and c); 5.2 (i); 5.2 (ii); 5.3 (ii)(c) & 5.4 (ii)(a) of CRZ Notification, 2019.
- (ix) Total project area is 13,32,359.62 sq.m; Of which, CRZ area is 13,27,440.60 sq.m and Non CRZ area is 4,919.02 sq. m. Land use break of the project activity in CRZ are as follows:

Description	CRZ-Classification	Length (m)	Total Length (m)	Area (sq. m)	Total Area (sq. m)
Proposed VBSL Main Alignment	CRZ-IVA	9770.34	9770.34	637852.96	637852.96
Proposed Bandra Connector	CRZ - IB	42.52	2248.33	1245.86	140019.32
	CRZ - II	565.06		4081.69	
	CRZ - IVA	1184.16		125755.29	
	NDZ-within CRZ-II-Greater Mumbai	62.34		4017.46	
	Outside CRZ	394.25		4919.02	
Proposed Juhu Connector	CRZ - IA (50m Mangroves Buffer Zone)	64.4	3538.27	298.57	198106.86
	CRZ - IB	417.52		20524.19	
	CRZ - II	705.6		29519.09	
	CRZ - IVA	2366.81		145046.28	
	NDZ - within CRZ-II-Greater Mumbai	48.34		2718.73	
Proposed Otters Connector	CRZ - IA (50m Mangroves Buffer Zone)	74.41	2567.13	3945.19	169227.46
	CRZ - IA (Mangroves)	34.61		902.18	
	CRZ - IB	369.61		41316.83	
	CRZ - IVA	2088.51		123063.26	
Proposed Versova Connector	CRZ - IA (50m Mangroves Buffer Zone)	104.58	2718.85	3790.65	198106.86
	CRZ - IA (Mangroves)	361.16		15371.36	
	CRZ - IB	236.2		10414.58	
	CRZ - IVA	2016.9		157576.43	

CRZ IVA	CRZ IA (50m Mangrove s Buffer Zone)	CRZ IA (Mangroves)	CRZ IB	CRZ II	NDZ within CRZ II greater Mumbai	Outside CRZ
1189294. 2	8638.02	15371.4	73501.46	33600.78	6736.19	4919.02

*Area in sq. m

- (x) Project activity affecting a total of 1585 mangroves on 2.9907 ha of area. Connectors at Versova (1547 trees on 2.2663 ha), Juhu (2 trees on 0.6173 Ha.) and at Bandra (36 trees on 0.1071 Ha.). Accordingly, project proponent has obtained relevant stage I Forest clearance (dated 20th Dec 2018) and stage II (dated 30th Nov 2021) clearance and Hon'ble Bombay High Court Order (dated 26th Apr 2019) for cutting of mangroves for the project. Subsequently, the mangroves have been cut after obtaining work permit from Forest Department.
- (xi) Compensatory land area includes 2.9907 ha land as compensation for Mangrove land affected & 2.61 ha for planting ten times the trees cut due to project. MSRDC has paid costs of Rs 72,97,208/= (Rupees Seventy Two lakhs Ninety Seven Thousand Two Hundred and Eight) on 04/01/2019 to the Forest Department for raising and maintaining Compensatory plantation for seven years period.
- (xii) The project area comprises terrestrial and marine flora and fauna, including species of mangroves that act as important buffers for the coastline. There will be some impact of the construction activities on the marine flora and fauna, avifauna, and mangroves. However, mitigation plans have been suggested to reduce this impact. Additionally, no major impact on flora and fauna is envisaged during the operation phase.
- (xiii) The estimated cost of the project is ₹11,332.82 Crores. During construction phase, capital cost of EMP is ₹680.00 Lakhs & recurring cost is ₹123.5 Lakhs per annum; during operation phase, capital cost of EMP is ₹253.00 Lakhs & recurring cost is ₹145.00 Lakhs per annum).
- (xiv) The project is not located in Critically Polluted area.
- (xv) The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
- (xvi) Several litigations are pending against the project.
- (xvii) Benefits of the project: Benefits of the project include generation of employment opportunities, development of infrastructural facilities, improvement in quality of life etc. which is essential for sustainable development.

2. The EAC has deliberated on the proposal in its 327th meeting and noted that the project activity is permissible under CRZ Notification, 2019 and recommended by MCZMA *vide* letter dated 09/03/2023. Further, Committee has noted that the instant proposal is for renewal of CRZ Clearance, as the Clearance granted by the Ministry *vide* letter dated 09/01/2013 has already been expired. So far, about 8% of project works has been completed as informed by the project

proponent. After detailed deliberation, Committee deferred the proposal and asked the project proponent to submit the followings information for further consideration in forthcoming meeting.

- Detailed road safety audit report and its Management Plan.
- Pre-feasibility report of project.
- Potential of the project for decongestion rather than diverting the congestion from one place another place.
- Impact on adjacent fishing community and movement of fishing boats and measures needs to adopt, if any adverse impact is anticipated.
- Undertaking for the non-existence of casting yard in CRZ area.
- Timeline and budget for the proposed EMP to be revised to include monitoring of marine biodiversity and conservation of mangroves during the construction period and at least for 5 years post construction period through IISER (Pune) and Zoological Survey of India (Western Zone) for monitoring cetaceans found within 500 m of the either side of the alignment and benthic fauna of the region.
- Revised air monitoring plan need to be submitted as CO monitoring time period not mentioned as per laid down standard norms.
- Muck disposal plan and details of adjacent/offshore muck disposal area.
- Details of litigation against the project and its status.
- Status of compensatory mangrove afforestation at Charkop, Andheri.
- The Committee also decided to make a site visit to understand the current status of the project.

3. Accordingly, proponent has submitted the replies through PARIVESH Portal and the same is deliberated by EAC in the present meeting.

4. The committee made detailed deliberation on the proposal. The Committee noted that the MCZMA has recommended the project as per CRZ Notification 2019. However, Committee suggested based on the site visit done by Sub-Committee, the Grade separator should be provided at all junctions in order to facilitate the decongestion of traffic, all livelihoods related activities should be carried out by Mangrove Foundation and the Committee also satisfied the reply submitted by PP. Accordingly, the Committee recommended the proposal for CRZ Clearance as per CRZ Notification 2019 subject to following conditions:

- (i) All construction shall be strictly in accordance with the provisions of the CRZ Notification, 2019, as amended from time to time.
- (ii) The project proponent shall ensure the flow of natural tidal water to mangroves should remain un-affected and thus adequate measures to be provided to maintain un-interrupted tidal water to mangroves.
- (iii) Grade separator should be provided at all junctions in order to facilitate the decongestion of traffic.
- (iv) All livelihoods related activities should be done by Mangrove Foundation. Accordingly, financial assistance should be provided to Mangrove Foundation and report should be submitted to IRO.

- (v) The MSRDC should assist the following academic and research institutes of national repute during the construction and minimum 5 years of post-construction for the bridge as:
1. Research related to the mangroves to be undertaken by IISER (Pune).
 2. Monitoring cetaceans by Zoological Survey of India – Western regional Office and
 3. Marine biodiversity studies and monitoring through Fergusson College's Advance Research Center for Ecology.
- Accordingly, 5 crore as a onetime grant is to be provided to each of the above three institute as a part of EMP within 3 months from the grant of extension of CRZ clearance for developing state of art laboratory and undertake the studies as desired and for other academic and research purposes. Any additional funds that may be necessary to be provided during the course of the studies additionally. The report of the same should be submitted to IRO.
- (vi) Detailed muck disposal plan including monitoring compliance report should be submitted to IRO.
- (vii) Impact of bridge on adjacent fishing community and the movement of fishing boats need to be addressed in detail and mitigation measures along with Financial and Physical target to be drawn and compliance report should be submitted to IRO.
- (viii) No groundwater shall be extracted to meet with the water requirements during the construction and/or operation phases.
- (ix) Topsoil excavated during construction activities shall be stored for use in horticulture/landscape development etc. within the project site.
- (x) 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.
- (xi) All the condition stipulated by Maharashtra Coastal Zone Management Authority (MCZMA) vide their letter No. CRZ 2022/CR 299/TC4 dated 09/03/2023 and commitments made by the PP before the MCZMA and EAC shall be followed in letter and spirit.
- (xii) All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

Agenda 3.6

Proposal for the construction of Integrated Storm Water Drains (ISWD) in Kovalam Basin-MM2 by the Superintending Engineer, Storm Water Drain Department, Greater Chennai Corporation, Chennai-Clearance under CRZ Notification, 2011

[IA/TN/CRZ/428811/2023; F.NO.11/33/2023-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.”

- (i) The proposal is for seeking CRZ Clearance for Construction of Integrated Storm Water Drain (ISWD) in “Kovalam Basin-M2” within Extended Greater Chennai Corporation (GCC) Areas.
- (ii) The proposed project will prevent water stagnation and inundation problems in the Chennai Corporation area during the monsoon/cyclones. The proposed project will improve storm water drainage facilities, mitigate flood from low lying and flood prone areas of Greater Chennai Corporation area.
- (iii) The Integrated Storm Water Drain Project covers a total length of 121.94 km (6.32 km in CRZ Area including 53 Nos. out of 56 Nos. outfalls in CRZ area. & 115.62 km in Non CRZ Area). The catchment area of the project is spreading over 20.64 Sq.km.
- (iv) CRZ Classification of the area is as follows:

Sl. No.	Project Component (in CRZ)	CRZ Classification	Length (m)
1.	Proposed Storm Water Drain	CRZ – IB	215.9
2.		CRZ – II	5,295.71
3.	Reconstruction of existing Storm Water Drain	CRZ – IVB	54.31
4.		CRZ – II	760.34
Total length in CRZ			6,326.26

- (v) Outfall details are as follows:

Sl. No.	Project Component (in CRZ)	CRZ Classification	No. of Outfalls
1.	Out falls	CRZ-IVB	53
Total Number of Outfalls			53

- (vi) Total cost of the project is ₹659.82 Crores (CRZ Area Project Cost ₹24.32 Crores & Non CRZ Area Project Cost ₹635.50 Crores)
- (vii) Total water requirement of project during construction phase is about 6-8KLD
- (viii) Total power requirement is 50 kVA and same will be sourced through Temporary DG set of 62.5 kVA
- (ix) The project activity is permissible as per CRZ Notification 2011 *vide* para 3(v) (b), However as per Para 4 (ii) (d), the proposed activities require clearance from the Ministry of Environment, Forests and Climate Change, Govt. of India.

- (x) The project proposal has been recommended by Tamil Nadu Coastal Zone Management Authority vide letter dated 13/04/2023.
- (xi) Benefits of the project: Direct economic benefits such as the cost for the restoration of damaged roads, engaging earth work excavator, cost of pumping and associated fuel cost, cost of material such as sand bags, restoration cross drainages, small bridges etc. can be prevented. Indirect benefits such as improvement in health status of population due to reduced risk of exposure to water borne diseases such as malaria, dengue and resultant health impacts. Further, the cost on flood relief measures, loss of livestock and other structures will be reduced after implementation of this Storm Water Drain Project

2. The committee deliberated on the proposal. After deliberation, the committee has noted that the project activity is permissible as per the CRZ Notification, 2011 and TNCZMA has recommended the proposal for CRZ Clearance *vide* letter dated 13/04/2023. Further, the committee has opined that periodic cleaning of Buckingham Canal, opening of mouth at Northern and southern end, placement of pumps in uplifted position/area wherever the elevation is below the water level and periodic third party monitoring should be considered for effective utilization of proposed project. Accordingly, the committee recommended the proposal for CRZ Clearance subject to 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) The project proponent shall ensure the flow of natural tidal water to mangroves should remain un-affected and thus adequate measures to be provided to maintain un-interrupted tidal water to mangroves.
- (iii) Periodic cleaning of Buckingham Canal, monitoring of water quality by national institute should be submitted to IRO.
- (iv) The last mile connectivity to sea at suitable locations to drain flood water from Buckingham Canal should be ensured.
- (v) The PP conducts the periodic third party monitoring through a nationally reputed institute like IIT or IISER to ensure the effectiveness of the project and submit the report to IRO.
- (vi) 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.
- (vii) No groundwater shall be extracted to meet with the water requirements during the construction and/or operation phases.
- (viii) Topsoil excavated during construction activities shall be stored for use in horticulture/landscape development etc. within the project site.
- (ix) All the condition stipulated by Tamil Nadu Coastal Zone Management Authority (TNCZMA) *vide* letter dated 13/04/2023 and commitments made by the PP before the TNCZMA and EAC shall be followed in letter and spirit.

- (x) All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.
- (xi) Rupees 2 crore as a onetime grant is to be provided to the nationally reputed institute or university from the State as a part of EMP within 3 months from the grant of extension of CRZ clearance for developing state of art laboratory for academic and research purposes.

Agenda 3.7

Eco-Restoration of Adyar River (2000-4800 m) Chainage from Thiru, Vi.Ka.Bridge to 400 m upstream of Kottupuram Bridge Chennai-Amendment in CRZ Clearance

[IA/TN/CRZ/300821/2023; F.NO.11-26/2019-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 is for seeking amendment in CRZ clearance granted by the Ministry *vide* F.No.11-26/2019-IA-III dated 22/10/2019 for Eco-Restoration of Adyar River (2000-4800m) chainage from Thiru. Vi. Ka. Bridge to 400 m, upstream of Kotturpuram Bridge, Chennai” to the Project Director, Chennai Rivers Restoration Trust, Chennai, Tamil Nadu. Project details submitted by the project proponent are as under:

- (i) Originally, the project has proposed 13 activities grouped under following 5 categories:

Category	Description of the Project	Chainage (in m) (L - Left & R - Ri ht
Sewage Management	Two interception mains in Adyar and Kottwlmram diverting the raw sewage to a new in- situ treatment facility located dis of the MRTS Brid e	R 2000 - 4000
	Laying of a new network to collect the sewage in the houses and connect to the existing network in Greenways Road	L 3500
River Channel Improvement	Lowering the river bed from Thiru. Vi. Ka Bridge to Kotturpuram MR TS Bridge	2000 - 3200
	Lowering the river bed from Kotturpuram MRTS Bridge to Kotturpuram Bridge	3200 - 4350
	Lowering the river bed from Kotturpuram Bridge to 400m upstream	4350 - 4800

Riverfront Development	Maintenance way on the right bank from Thiru. R Vi. Ka Bridge to MRTS Bridge	R2000 - 3050
	Maintenance way on the right bank from MRTS Bridge to Kotturpuram Bridge	R3220 - 4380
	Maintenance way on the right bank from Kotturpuram Bridge to Suriya Nagar Slum	R 4380 - 5480
	Park near Kotturpuram downstream of MRTS Bridge on the right bank	R 2880 - 3200
	Installation of floating docks Ill 2 locations (Kotturpuram & Dr. Radbakrishna Puram)	-
	Parking lots in 2 locations (Thiru. Vi. Ka Bridge and Kotturpuram)	-
Plantation	Plantation of trees, shrubs, creepers, reeds and mangrove and grass all along the river bank	-
River Mouth Management	Continuous opening of the mouth for 2 years I Mouth Opening and Maintenance in the 4th & 5th Year	0 - 100

- (ii) However, 13th component of the proposal kept abeyance w.r.t following specific condition in CRZ Clearance letter dated 22/10/2019:

“Proposed opening of river mouth and sand bars removal shall not be carried out and proposal to this effect shall be submitted at a later date once a detail study spanning multi-season, with specific focus on riverine / estuarine ecology and biodiversity and Besant Nagar Turtle Nesting Site by an institute of repute like NIOT, Chennai, is carried out and its findings are positive.”

- (iii) Accordingly, Water Resources Department engaged NIOT for conducting scientific study for sustainable opening of the river mouth-field data collection for bathymetry, beach profiling and sediment samples, desk studies including analysis of satellite imageries using ARCGIS and numerical model study using DELFT 3D software package. Recommendations of the NIOT studies area as follows:

- Analysis showed that sand bar formed at the river mouth follows the sediment transport pattern of the area, blocking the northern movement of sediment resulting in net erosion along the shores of villages located in the north. It is well known that any river mouth training structure obstructing the alongshore sediment movement will cause erosion to the north.
- Desilting the river mouth and dumping of the desilted sand towards the north of the river mouth for sand nourishment is proposed as a solution for mouth opening and to prevent erosion and providing a sustainable solution.

- Results of the proposed solution show that dredging of river mouth and nourishment of the northern region during the **months of May-June every year** will help keep the mouth open, preventing erosion along the north. An estimated quantity of **200000 cubic meters** of sediment has to be removed and dumped in the north of the river.

2. The committee deliberated on the proposal. After deliberation, the committee has noted that the project activity is permissible as per the CRZ Notification, 2011 and the NIOT study's results also positive w.r.t ecology of the adjacent coastal habitats. Accordingly, EAC recommended the 13th component of the CRZ Clearance dated 22/10/2019 as the specific condition no. 1 may be read as:

PART A- SPECIFIC CONDITIONS:

- (i) **“The Proposed opening of river mouth and sand bars removal should be carried out in line of NIOT prepared report in October, 2022 as submitted and commitment made by PP. The water quality should be monitored before and after opening of mouth through NCCR, who is monitoring sea water quality along coastal areas”**
- (xvi) **All the terms and conditions as mentioned in the earlier CRZ Clearance dated 22nd October, 2019 remain unchanged.**

Annexure

List of the Expert Appraisal Committee (CRZ) Members participated during Hybrid Meeting held on 21st June 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.	Dr. Nirmalendu Kumar	Member
9.	Dr. Neraj Sharma	Member
10.	Dr. H. Kharkwal	Member Secretary
11.	Dr. Ragavan P, Scientist B	MoEF&CC
