

## **MINUTES OF THE 346<sup>th</sup> MEETING OF EXPERT APPRAISAL COMMITTEE FOR PROJECTS RELATED TO COASTAL REGULATION ZONE HELD ON 08/11/2023.**

The 346<sup>th</sup> meeting of the Expert Appraisal Committee (EAC) for projects related to Coastal Regulation Zone was held on 08/11/2023 in **Conference Hall (NARMADA), JAL wing, Ground Floor**, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003. 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, Shri M.S. Negi, Chairman, EAC (CRZ) welcomed the Members of the newly constituted Expert Appraisal Committee. He given thanks to the Ministry has now given more responsibility as a Chairman of the Committee and intimated that this is the third meeting of the re-constituted Committee, however all Members meets physically first time. He then requested Dr. H. Kharkwal, Member Secretary, EAC, to initiate the proceedings of the meeting with a brief account of the activities undertaken by the Ministry under CRZ Division.

Dr. H. Kharkwal, Member Secretary welcomed all Committee Members including new Members i.e. Prof. Jaya Kumar Seelam, Dr. P.K. Dinesh Kumar, Col. Prakash Tewari and Shri Sharandeep Singh. Afterword with permission of the Chair, Dr. H. Kharkwal initiated the proceedings of the meeting.

### **2.0 CONFIRMATION OF THE MINUTES OF THE LAST MEETING**

The Committee having noted that the Minutes of the 344<sup>th</sup> meeting held on 03/11/2023 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 OF PROPOSALS:**

#### **RECONSIDERATION-**

The EAC (CRZ) considered proposals as per the agenda adopted for the 346<sup>th</sup> meeting. The details of deliberations held and decisions taken in the meeting are as follows:

#### **AGENDA 3.1**

**Proposal for extending the disposal pipeline by 2.2 Km in Savitri River/Bankot Creek from Owale Village, Tal. Mahad, District Raigad by MIDC, Mahdad- Reconsideration for CRZ Clearance [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.”***

1. The Committee noted that the instant matter pertains to proposal submitted for CRZ clearance for extending the disposal pipeline in Savitri River / Bankot Creek from Owale Village, Taluka Mahad, District Raigad, Maharashtra by M/s Maharashtra Industrial Development Corporation (MIDC).

2. Earlier the proposal was considered by EAC in its 224<sup>th</sup> meeting held on 24/09/2019 and 263<sup>rd</sup> meeting held on 28/05/2021. After deliberation in aforesaid meetings, the Committee recommended the proposal only for the construction of 2.2 km long pipeline up to the proposed point of discharge but no discharge / release of effluents allowed in the pipeline until and unless the proposal for extension of pipeline up to deep sea point as per the recommendations of NIO is submitted and approved by the Committee.

3. Accordingly, file was processed in PARIVESH on 08/06/2021 and forwarded for approval from Competent Authority. However, Secretary, EF&CC had directed to discuss the matter *vide* note dated 17/06/2021.

4. Subsequently, the matter was discussed with Secretary, EFCC by JS (SKB) and found that the project is not in line of NIO recommendation and decided to seek compliance status of existing CETP of MIDC, Mahad from CPCB.

5. Accordingly, the matter has been taken up in e-office (File No. IA3-11/15/2021-IA.III; E- 157415) and letter dated 02/08/2021 and 12/05/2023 (p-187/C) has been issued to CPCB for compliance status of the operation of CETP of MIDC with approval of the Competent Authority. In addition, letter dated 02/08/2021 has also been sent to M/s MIDC for submission of revised proposal for extension of pipeline into deep water as per NIO recommendation.

6. In response, CPCB *vide* letter dated 05/07/2023 has submitted the Compliance report based on the site inspection carried out by Regional Directorate, CPCB, Pune on 20/05/2023. Key conclusion of the compliance report is as follows:

- *The design capacity of CETP is 7.5 MLD which was operational with primary, Secondary and tertiary treatment.*
- *The treated effluent was being discharged to estuarine portion of river Savitri at Owale village with the help of 24.2 km closed pipeline by MIDC which is not suggested by NIO*

- NIO, based on the studies (Report 2016 & report 2022) on request of MIDC recommended new location near Village Gomendi (180 03' 47.62" N; 730 18' 51.50" E) at a distance of 2.2 km downstream from the existing discharge location.
- The CETP is not Complying with the discharge standards prescribed by MPCB for monitored parameters-BOD, COD, Ammonia Nitrogen and TKN. The other monitored parameters are within the discharge standards. CETP needs to improve the operation of CETP to meet the prescribe standards i.e., BOD, COD. NH3-N & TKN.

7. Based on submission of above mentioned details on PARIVESH portal, the proposal has been relisted and examined by the EAC in its 325<sup>th</sup> meeting held on 17/04/2023.

8. After deliberation, the Committee recommended the proposal for CRZ Clearance and also noted that 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.

9. Based on the recommendation of EAC, the file has been processed in PARIVESH on 28/06/2023 and forwarded for approval from Competent Authority.

12. However, HMEFCC *vide* note dated 29/08/2023 has noted the followings:

***“Refer the matter to EAC for re-examination and MSPCB and MIDC may be asked to make a presentation on the performance of CETP and the steps taken over the past 2 years for improvements in the functioning of CETP.”***

13. In view of above, *vide* letter dated 25/10/2023 the Ministry has directed MSPCB and MIDC to make a presentation on the performance of CETP and the steps taken over the past 2 years for improvements in the functioning of CETP in the forthcoming meeting. Accordingly, representative from MSPCB and MIDC has made presentation in the present meeting and presented the followings:

- Treatability study of incoming effluents by Tesla Innovations and IIT Mumbai in context to identify toxic contents and to control the same for improving CETP performance.
- Installed 50 KLD Pilot Plant by Tesla Innovations with Advanced Technologies for R&D purpose.
- Installed SCADA based online monitoring system as per MPCB directions by CETP as well as by majority of Member Industries and following up with SSI units also for the same.
- Purchase the new equipment for the analysis of Total Kjeldahl Nitrogen- With the help of TKN instrument MMA CETP identified the High TKN discharging Industries & instructed to that industries to treat TKN in their own ETP & after confirming the result discharge to MMA CETP.

- Purchase the new equipment for the analysis of Colour-With the help of Colour analyser MMA CETP identified the colour discharging Industries & instructed to that industries to remove colour in their own ETP & after confirming the result discharge to MMA CETP.
- Improved performance from year 2016-2023:

Effluent color	Almost colorless
Avg. Inlet COD	700 to 1000 ppm
Avg. Inlet BOD	250 to 400 ppm
Avg. Outlet COD	150 to 250 ppm
Avg. Outlet BOD	20 to 50 ppm

- Past Five years MPCB vigilance Sampling:

Average Inlet Parameter (mg/l except pH)					Average Outlet Parameter (mg/l except pH)			
Parameters	pH	BOD	COD	SS	pH	BOD	COD	SS
<b>Limit</b>	5.5 to 9.0	1000	2000	--	6.0 to 9.0	100	250	100
<b>Year Jan-2018 to Dec-2018</b>	7.27	266.47	914.51	135.12	7.22	37.75	165.77	49.76
<b>Year Jan-2019 to Dec-2019</b>	7.16	239.52	816.44	119.35	7.25	38.66	158.62	40.69
<b>Year Jan-2020 to Dec-2020</b>	7.33	236.03	662.26	109.91	7.35	50.22	165.47	52.64
<b>Year Jan-2021 to Dec-2021</b>	7.47	267.63	754.06	83.21	7.34	60.07	178.25	38.56
<b>Year Jan-2022 to Dec-2022</b>	7.33	312.02	820.76	88.08	7.42	40.33	139.68	35.41
<b>Year Jan-2023 to June-2023</b>	<b>8.01</b>	<b>223.33</b>	<b>688.1</b>	<b>85.35</b>	<b>7.55</b>	<b>52.35</b>	<b>173.09</b>	<b>42.79</b>

- Planted More than 1734 Trees in the CETP premises itself to develop green belt and adding more every year.
- Planted more than 34000 Trees in surrounding area under the initiative of “1 Koti Vruksh Lagwad” by Government of Maharashtra.
- Provided 25000 Fruits Trees of 4-5 years age to National Park Boriwali to take step closer to Nature.
- Creating Green Belts with The help of Large Member Industries at Different Locations in Mahad MIDC.
- Beautification of Roadside premises in MIDC for pleasant Environment Friendly Experience

**14.** After deliberation, the Committee has noted that though the last two year performance is satisfactory, as per CPCB report CETP is not complying with the

discharge standards for monitored parameters i.e., SS (138 mg/l as against standard of 100 mg/l) BOD (125 mg/l as against standard of 100 mg/l), COD (344 mg/l as against standard of 250 mg/l), Ammonia Nitrogen (74.25 mg/l as against standard of 50 mg/l) and TKN (184.80 mg/l as against the standard of 50 mg/l). The Committee deliberated on aspects related to variation between monitored parameters from the samples taken at instance against the prescribed discharge standards of CPCB and felt that there is need to collect multiple samples at CETP to assess the reason for such variation and prepare report.

The Committee suggested PP to undertake monitoring with multiple samples and reanalyse the parameters against the prescribed effluent standards. Thereafter, PP should forward report to CPCB for their comments / vetting and then place before the committee. Hence, the proposal is deferred.

## **FRESH PROPOSALS-**

### **AGENDA 3.2**

#### **Proposed Construction of 3 Nos. light Houses (Light beacons) at Uttan, Mira Bhayandar District, Thane, Maharashtra by M/s Mumbai Maritime Board - CRZ Clearance**

**[IA/MH/CRZ/450146/2023; F.NO.11/43/2023-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 (**M/s Mumbai Maritime Board**) along with his EIA consultant (**M/s. Eco Foot Forward**) 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 instant proposal is for seeking CRZ Clearance under CRZ Notification, 2011 for construction of 3 No of lighthouses (Light beacons) at Uttan, Mira Bhayandar District, Thane, Maharashtra.
- (ii) These light houses (which were actually light beacons as per the design and specifications explained by the PP during presentation) will be constructed on existing rock patch at Saryachi Vat, Katlyachi Vat and Vashi Khadak.

- (iii) Newly constructed light beacons will assist in safe navigation of fishing boats in Uttan region. This structure will be constructed on rock patches present around navigation route of Uttan and nearby jetty.
- (iv) Light beacons will act as indicator for fishing boats to stay away from these rocks during rough weather and night time and avoiding potential damage to boats and humans.
- (v) Proposed light house (Light beacons) will be constructed on 4 No. of typical 500mm pile reinforcement. Deck of dimension 3.5 × 2.5 m will be constructed on piles. Bottom of deck will be 1.5m above highest toe level. Solar indicator light will be fitted on cylindrical mount constructed on the deck.
- (vi) CRZ report has been prepared by IRS, Anna University, Chennai. The project site falls in CRZ IVA as per approved Coastal Zone Management Plan (CZMP) 2011 (Map No. MH 82).
- (vii) In the construction phase, water required shall be arranged through water tankers by contractor. All the constructional activity will be carried out during daytime only. As workers shall be travelling to site on daily basis no domestic water requirement shall be required for labour camps. Water requirement for worker toilets shall be fulfilled from the same water tanker supply.
- (viii) Diesel generators will be primarily used for construction purpose. Post construction solar lamp will be fitted on light house.
- (ix) During construction phase domestic waste generated from the labours force involved. This solid waste will be collected and segregated in the form of Biodegradable and non-biodegradable waste and will be handed over to local authorities for disposal. During construction mobile toilets will be used on the site by work force.
- (x) Coast of proposed project is estimated to be ₹3.58 Cr. Proposed EMP cost during construction and operation phase is ₹10,66,400/year and ₹1,98,000/year respectively.
- (xi) There is no National Parks, Sanctuaries and Tiger Reserves notified by the MoEF&CC within 10 km of proposed project site. There is no Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC within 10 km of proposed project site.
- (xii) The project activity does not attract prior environmental Clearance under EIA Notification, 2006 as amended.
- (xiii) No tree cutting is involved.
- (xiv) Labour camp will not be established. Workers shall travel to site on daily basis and shall go back to their origin in the evening. Local community will be given preference for employment as per requires skill and qualification.
- (xv) Proposed project would provide safe navigation of fishing boats from Uttan region to and fro from sea, safety for fishermen, Improvement in fishing occupation of Uttan fishermen community. Therefore, proposed project will be benefited to fishermen community and uplifting socio-economic condition of Uttan town.
- (xvi) The project activity is permissible as per para 3 (i) (a) of CRZ notification 2011. Accordingly, MCZMA has recommended the project for CRZ Clearance vide letter No. CRZ 2022/CR 160/ TC 4 dated 19/01/2023 and

noted that as per para 4(ii) (c) of CRZ Notification 2011, construction, operation of lighthouses requires clearance from MoEF&CC.

**2.** The Committee deliberated the proposal based on the information provided/presented by the proponent. After deliberation, the Committee has opined that project involves construction of 3 Nos. Light beacons, not a light house, for safe navigation of fishing boats and uplifting socio-economic condition of fishermen community at Uttan town area. Further, the Committee has noted that the project activity is permissible as per CRZ Notification, 2011 and MCZMA has recommended the proposal *vide* letter no. CRZ 2022/CR 160/ TC 4 dated 19/01/2023. Accordingly, the Committee recommended proposal for CRZ Clearance with following Specific conditions other than General conditions:

- (i) All construction shall be strictly in accordance with the provisions of the CRZ Notification, 2011, as amended from time to time.
- (ii) No groundwater shall be extracted within the CRZ area to meet the water requirements during the construction and/or operation phase of the project.
- (iii) Construction material and structures/scaffoldings erected for construction at site shall be cleared immediately after finishing construction disposed off onshore through pontoons used for construction and it shall be ensured that no construction waste, garbage and machinery or equipment are disposed off in sea.
- (iv) Disaster Management Plan (DMP) should be implemented as commitments made by the PP before the MCZMA and EAC and submitted Plan.
- (v) All the conditions stipulated by the Maharashtra Coastal Zone Management Authority for CRZ clearance under CRZ Notification, 2011 *vide* its letter no CRZ 2022/CR 160/ TC 4 dated 19/01/2023 and commitments made by the PP before the MCZMA and EAC shall be followed in letter and spirit.
- (vi) The Project Proponent shall comply order/direction, if any, issued by Hon'ble Court/tribunal on the project.
- (vii) The location of these navigation beacons should be marked in navigation chart.
- (viii) All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

### **AGENDA 3.3**

**Proposed Construction of Bridge at Dharivali Village at Marve Road in P/N ward by M/s Municipal Corporation of Greater Mumbai, Bridges Department-CRZ Clearance**

**[IA/MH/CRZ/450080/2023; F.NO.11/44/2023-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 (**M/s Municipal Corporation of Greater Mumbai, Bridges Department**) along with his EIA consultant (**M/s Centre for Envotech & Management Consultancy Private Limited**) 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 seeking CRZ Clearance under CRZ Notification, 2019 for construction of bridge at Dharivali Village at Marve Road in P/N ward by MCGM.
- (ii) The existing bridge is located on Madh-Marve Road at Dharivali village. Currently, the width of the bridge is 6.5 m; which is not enough for playing of two buses/trucks at the same time is not possible. Hence, existing bridge needs widening from 6.5 meter to 27.5 meter i.e. as per RL. The proposed bridge is designed as per the Development Plan of MCGM and the right of way matches the Madh-Marve DP road. Widening of the bridge will help in free vehicular movement and help local people.
- (iii) The existing bridge is of load bearing type and made of rubble masonry. During tides, water passes through the small pipes. The proposed bridge will be on stilts hence there will be ample of space for tidal water flow.
- (iv) The proposed bridge at Dharivali village at Marve road falling entirely in the jurisdictional area of MMB and traverse a total distance of 706 m.
- (v) There are four piers proposed and are designed outside the creeklet so as to ensure the free flow of water.
- (vi) The project activity involves the Diversion of 0.1702 ha. i.e. (1702 Sq.m) Forest (Mangroves) land in village Aksa in Survey no 16 /CTS no. 99 pt. which is Reserved Mangrove Forest and 97 Mangroves Tree of Species *Avicennia marina* is proposed to be felled. The compensatory Mangroves Plantation in lieu of the project shall be carried at Manjurli Village Survey No. 71, Palghar.
- (vii) CRZ report has been prepared by IRS, Anna University, Chennai and noted that the proposed bridge is passing through CRZ-IA, CRZ-IA (mangrove and 50 m buffer zone area) and with the remaining portion inside CRZ-II as per approved CZMP 2019. CRZ Categorization is as follows:

<b>CRZ Classification</b>	<b>Area (Sq. m)</b>
CRZ IA	573.53
CRZ IA (50 M Mangrove Buffer Zone)	5898.25
CRZ II	12264.50
Total	18736.29

- (viii) The Project Cost Estimates will be ₹101 Crores.



- (ix) There are no National Parks, Sanctuaries and Tiger Reserves notified by the MoEF&CC within 10 km of proposed project site. There is no Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC within 10 km of proposed project site.
- (x) The project activity does not attract prior environmental Clearance under EIA Notification, 2006 as amended.
- (xi) Employment potential –skilled, semi-skilled and others will be benefited.
- (xii) Benefits of the project: As the project is a widening of existing bridge. It will be beneficial for locals. The existing bridge is a masonry type bridge which does not allow water to flow freely during the high tide and low tide. However, the new stilt bridge will ensure free flow of water as the distance between the piers is relatively more.
- (xiii) As per para 5.1.1 of the CRZ Notification, 2019, construction of roads and road on stilts in CRZ I area as a public utility shall be permitted. As per para 7(iii) of the original CRZ Notification, 2019: "For all other permissible and regulated activities as per this notification, which fall purely in CRZ-II and CRZ-III areas, the CRZ clearance shall be considered by the concerned Coastal Zone Management Authority and such projects in CRZ - II and III, which also happen to be traversing through CRZ-I or CRZ-IV areas or both, CRZ clearance shall, however be considered only by the Ministry of Environment, Forest and Climate Change, based on recommendations of the concerned Coastal Zone Management Authority".
- (xiv) Accordingly, MCZMA has recommended the project to Ministry *vide* letter no. CRZ 2023/CR 38/TC4 dated 12/05/2023.

**2.** The Committee deliberated the proposal based on the information provided/presented by the proponent. After deliberation, the Committee has noted that the project activity is permissible as per CRZ Notification, 2019 and MCZMA has recommended the project *vide* no. CRZ 2023/CR 38/TC4 dated 12/05/2023. Further, the Committee has opined that instead of four piers, two piers shall be considered to minimize the mangrove cutting. The PP was of the opinion that there is possibility of amending the design of bridge. In addition, the Committee suggested that the project activity is anticipated to facilitate the tidal flooding in adjacent areas after the construction of bridge, so utmost care should be taken by the proponent to safeguard the ecological health of the adjacent mangrove areas in addition to the proposed afforestation plan. In response, proponent has agreed the same. Accordingly, the Committee recommended the project for CRZ Clearance with following Specific conditions other than General conditions:

- (i) All construction shall be strictly in accordance with the provisions of the CRZ Notification, 2019, as amended from time to time.
- (ii) Effort shall be made to amend the design of the bridge to ensure that instead of 4 only 3 piers are constructed to reduce the damage to mangrove.
- (iii) The PP shall carry out the study by renowned institute to assess the impact of the tidal ways or ingress of sea water in areas upstream of the bridge which is likely to be there after replacements of old load bearing type rubble masonry bridge by bridge on stilts. The report shall be submitted to the

MCZMA and mitigate measures for maintaining the ecological health of mangroves and to avoid possible flooding of upstream areas shall be taken as per the recommendations of the MCZMA.

- (iv) No groundwater shall be extracted within the CRZ area to meet the water requirements during the construction and/or operation phase of the project.
- (v) Prior High Court Bombay permission has to obtain, since project involves cutting of Mangroves and activities are situated within 50 m mangrove buffer zone area.
- (vi) Prior Forest Clearance under Forest (Conservation) Act, 1980 should be obtained before commissioning of the project.
- (vii) The compensatory mangrove plantation plan should be prepared and care should be taken to safeguard the ecological health of the adjacent mangrove areas in consultation of Maharashtra Mangrove Cell and submit plan to concern IRO for further implementation.
- (viii) 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.
- (ix) As agreed by PP, number of piles should be reduced to facilitate free flow tidal water and also to minimize number of mangroves cutting.
- (x) The flow conditions at Upstream and downstream of bridge should be monitored after construction of bridge through national institute.
- (xi) Topsoil excavated during construction activities shall be stored for use in horticulture / landscape development etc. within the project site.
- (xii) Water quality of the entire creek should be monitored regularly to see the impact of construction and reclamation activities and submit the report to IRO of the Ministry..
- (xiii) 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.
- (xiv) The Project Proponent should comply order/direction, if any, issued by Hon'ble Court/tribunal on the project.
- (xv) All the conditions stipulated by the Maharashtra Coastal Zone Management Authority for CRZ clearance under CRZ Notification, 2019 vide its letter no CRZ 2023/CR 38/TC4 dated 12/05/2023 and commitments made by the PP before the MCZMA and EAC shall be followed in letter and spirit.
- (xvi) All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

#### **AGENDA 3.4**

**Proposed Construction of new pipeline for disposal of treated wastewater into the Estuary Zone of River Par from Central ETP at Atul, District Valsad, Gujarat by M/s Atul Limited -CRZ Clearance [IA/GJ/CRZ/449958/2023; F.NO.11/48/2023-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 (**M/s Atul Limited**) along with his EIA consultant (**M/s Kadam Environmental Consultants**) 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 seeking CRZ Clearance under CRZ Notification, 2019 for ‘Construction of new pipeline for disposal of treated wastewater into the Estuary Zone of River Par from Central ETP’ at Atul, District Valsad, Gujarat by M/s Atul Limited.
- (ii) The proposed project consists of laying of treated wastewater disposal pipeline for 20.514 MLD of treated wastewater from existing pipeline outlet point of East Central ETP of Atul Limited to LFP (Land Fall Point) to the estuary zone of River Par.
- (iii) The existing pipeline (4 km 630 mm dia HDPE grade) was laid in 1998 and was granted CRZ *vide* letter dated 17/01/1998. The existing treated waste water pipeline has been in operations since last two decades and is currently working satisfactorily.
- (iv) Since the pipeline is quite old, chances of breakdown / leakages / chocking cannot be ruled out, thereby damaging the estuary environment and also would result in shutdown of production activities in the plant. To continue the environmentally safe operations of treated waste water disposal, the new proposed pipeline would be laid in parallel to the existing one of similar capacity with diffuser arrangements. There will be neither any change in the discharge treated effluent quality nor in the quantity. Also pipeline diameter and discharge point will also be same as of existing one only. Existing pipeline will be removed after successful commissioning of proposed pipeline
- (v) The total length of proposed pipeline is ~4.0 Km.
- (vi) The combined treated wastewater is commonly collected in guard pond of 12525 m<sup>3</sup> capacity as per existing situation. The same will be continued to be utilized in future. Thus, a total retention time for treated outlets of ETP will be ~12 hours per day.
- (vii) Outfall point selected based on Hydrodynamic Modelling studies with sufficient dilution and diffusion as per MOEF and CPCB Norms.
- (viii) EIA report has been prepared by M/s Kadam Environmental Consultants.
- (ix) CRZ report has been prepared by IRS, Anna University, Chennai and noted that the pipeline alignment falls in CRZ-IB, CRZ-III (NDZ) and CRZ-IVB as per approved CZMP (Map No. GJ 08). CRZ categorization is as follows:

Sl. No.	CRZ-Classification	Length (m)
1.	CRZ-IB	407.05
2.	CRZ-III(NDZ)	888.06
3.	CRZ-IVB	2704.89
Total		4000.00

- (x) The pipeline is designed, constructed and inspected in accordance with the following standards and codes:
- Central Public Health and Environmental Engineering Organisation (CPHEEO)
  - IS Codes for pipe material and laying work
  - Other IS Codes related to Civil Engineering Works
- (xi) Pumping main is designed based on economical diameter of rising main calculations for onshore and offshore pipeline (Based on CPHEEO Norms). Adequate velocity for pumping between 1-2 m/sec is taken in order to avoid any deposition in the total pipeline system and also have sufficient velocity at the tip of the diffuser system for effective dilution requirements. The onshore pipeline will be laid in trenches underground based on site conditions along the entire stretch up to landfall point.
- (xii) Even in the offshore section the pipeline will be buried in river bed from landfall point to outfall point in estuary zone of River Par. The pipeline design features/specifications are summarized in below table. The pipeline design features/specifications are summarized below:

Sl. No.	Description	Parameters
1	Flow rate	1000 m <sup>3</sup> /Hr
2	Number of pipelines	1
3	Size and MOC of Pipeline	630 mm OD HDPE PN8
4	Media	Treated effluent as per the GPCB norms
5	Temperature of media	Ambient
6	Length of pipeline	4000 mts
7	Mode of disposal	Estuary zone of River Par as suggested by NIO.
8	Onshore section of Outfall pipeline.	888.06 mts
9	Offshore section of Outfall pipeline	3111.94 mts

- (xiii) Employment: The estimated manpower requirement during construction phase will be ~15-20 workers. During operation phase, maintenance and monitoring of pipeline will be carried out by existing employees of Atul Ltd.
- (xiv) Power requirement: Construction Phase: power requirement will be fulfilled by 3 DG sets of 25 KVA. Operation Phase: No additional power is required as existing pump house will be used. Power required (150 kW) for 100 Hp

(2 pumps + 1 standby) is sourced mainly from Captive Power Plant of Atul Ltd. or Dakshin Gujarat Vij Company Limited (DGVCL).

- (xv) The project activity does not attract prior environmental Clearance under EIA Notification, 2006 as amended.
- (xvi) There is no National Parks, Sanctuaries and Tiger Reserves notified by the MoEF&CC within 10 km of proposed project site. There is no Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC within 10 km of proposed project site
- (xvii) The quality of treated wastewater compared with GPCB discharge norms for sea disposal based on the third party quality monitoring is presented below:

S. No.	Parameter	Average Quality of Final Outlet/ treated wastewater of ETP (based on third party monitoring results)	GPCB Consent Conditions for discharge
1	pH	7.58	5.5 to 9.0
2	COD	196	250 mg/l
3	BOD	42	100 mg/l
4	SS	42	100 mg/l
5	O & G	4.6	10 mg/l
6	Phenolic Compounds	0.65	5 mg/l
7	Cyanides	ND	0.2 mg/l
8	Fluorides	0.84	2.0 mg/l
9	Sulphides	0.98	2.0 mg/l
10	Ammonical Nitrogen NH <sub>3</sub> -N	5.9	50 mg/l
11	Total Chromium as Cr <sup>+3</sup>	ND	2.0 mg/l
12	Hexavalent Chromium as Cr <sup>+6</sup>	ND	1 mg/l
13	Arsenic as As	ND	0.2 mg/l
14	Copper as Cu	0.086	3.0 mg/l
15	Lead as Pb	ND	2.0 mg/l
16	Mercury as Hg	ND	0.01 mg/l
17	Nickel as Ni	ND	5.0 mg/l
18	Zinc as Zn	0.26	15 mg/l
19	Cadmium as Cd	ND	2 mg/l
20	Phosphates as PO <sub>4</sub>	1.84	5 mg/l
21	Sodium Absorption Ratio	6.39	26
22	Manganese as Mn	0.048	2.0 mg/l
23	Tin as Sn	ND	0.1 mg/l
24	Temperature	30	40°C
25	Colour	50 Co-Pt	-
26	Bio Assay test	100 % survival of fish after 96 hours in 100% effluent	90 % survival of fish after 96 hours in 100% effluent

- (xviii) Permissibility of proposed project in CRZ area is as follows:

<b>Project Activity</b>	<b>CRZ Category as per IRS CRZ Map</b>	<b>Clause permitting activity as per CRZ Notification, 2011</b>	<b>Pipeline length in (m)</b>
<b>Pipeline area</b>	<b>CRZ IB</b>	8 I (i) b	407.05
	CRZ III (NDZ)	3 (i) (a)	888.06
	CRZ IVB	4 (ii) (d), 4 (ii) (f)	2704.89

(xix) Accordingly, GCZMA has recommended the proposed project to Ministry *vide* its letter No. ENV-10-2021/215/T dated 29/08/2023.

**2.** The Committee deliberated the proposal based on the information provided/presented by the proponent. After deliberation, the Committee has noted that the project activity is permissible as per CRZ Notification, 2011 and GCZMA has recommended the project *vide* no. No. ENV-10-2021/215/T dated 29/08/2023. Further, the Committee has suggested the PP to submit the latest six monthly compliance report submitted to IRO given earlier clearance by Ministry, treated effluents monitoring results, undertaking for laying pipeline parallel to the existing pipeline except across railway line, NOC from SPCB and details of show cause notice received during the last three years. In addition, the Committee has requested the proponent to remove existing pipeline immediately after the commissioning of proposed pipeline. In response proponent has submitted the details *vide* letter dated 08/11/2023 and same has been appraised by EAC while approving the minutes. Accordingly, the Committee recommended the proposal for CRZ Clearance with following Specific conditions other than General 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 proposed new pipeline shall be within Right of Way of existing pipeline except the stretch falling in railway land for which railway has raised objection.
- (iii) Old pipeline shall be removed within a period of 12 months from the date of commissioning of new Pipeline and material shall be disposed of beyond the CRZ area as per Solid Waste Management Rules, 2016 under the supervision of GCZMA.
- (iv) M/s Atul Limited should strictly ensure disposal of treated effluent discharge into Estuary/ Creek /Sea to the prescribed standards of CPCB / GPCB.
- (v) Water quality of the entire Estuary / Creek should be monitored regularly to see the impact of treated effluent discharge and submit six monthly reports to IRO of the Ministry.
- (vi) Topsoil excavated during construction activities shall be stored for use in horticulture/landscape development etc. within the project site.
- (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) No storage reservoir for sea water shall be permitted and only pipelines conveyance system shall be installed.

- (ix) Permanent labour camp, machinery and material storage shall not be set up in the CRZ area.
- (x) Temporary toilets will be provided for all construction labour. Suitable toilet fixtures for water conservation shall be provided. Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- (xi) 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.
- (xii) All the conditions stipulated by the Maharashtra Coastal Zone Management Authority for CRZ clearance under CRZ Notification, 2011 vide its letter no ENV-10-2021/215/T dated 29/08/2023 and commitments made by the PP before the GCZMA and EAC shall be followed in letter and spirit.
- (xiii) The Project Proponent shall comply order/direction, if any, issued by Hon'ble Court/tribunal on the project.
- (xiv) All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

### **AGENDA 3.5**

#### **Proposed Construction of Bridge at Madh-Versova Creek in K/W and P/N ward by M/s Brihanumbai Municipal Corporation, Maharashtra - CRZ Clearance**

**[IA/MH/CRZ/447177/2023; 11/50/2023-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 (**M/s Brihanumbai Municipal Corporation**) along with his EIA consultant (**M/s Centre for Envotech & Management Consultancy Private Ltd.**) attended the meeting. Before make a presentation on aforesaid proposal, the EAC took note that despite the project listed in the agenda of this meeting, the proponent has failed to circulate the necessary documents to Members of the EAC prior to the meeting. Hence, the Committee not in position to consider the proposal without the background / necessary documents in the present meeting and same was also accepted by PP/ consultant. The Committee also suggested the PP and Consultants that the project is very near to mangrove CRZ-I area. Therefore, future presentation needs to be made with detail plan of road connectivity with surrounding road etc. The Committee, further advised the proponent and consultants to submit the documents at the earliest in future to avoid the unnecessary delay in appraising the proposal.

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**Annexure**

**List of the Expert Appraisal Committee (CRZ) Members participated during Meeting held on 08<sup>th</sup> November, 2023.**

<b>S. No.</b>	<b>Name of Members</b>	<b>Designation</b>
1.	Shri M.S. Negi	Chairman
2.	Shri S. Jeyakrishnan	Member
3.	Prof. V.K.Jain	Member
4.	Dr. M.V. Ramana Murthy	Member
5.	Prof. Jaya Kumar Seelam	Member
6.	Col. Prakash Tewari	Member
7.	Dr. P. K. Dinesh Kumar	Member
8.	Shri Sharandeep Singh	Member
9.	Dr. H. Kharkwal	Member Secretary
10.	Dr. Ragavan P, Scientist B	MoEF&CC

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