MINUTES OF THE 343<sup>rd</sup> MEETING OF EXPERT APPRAISAL COMMITTEE FOR PROJECTS RELATED TO COASTAL REGULATION ZONE HELD ON 31/10/2023.

The  $343^{\rm rd}$  meeting of the Expert Appraisal Committee (EAC) for projects related to Coastal Regulation Zone was held on 31/10/2023 through Video Conferencing. 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 expressed his happiness as a Chairman and given thanks to the Ministry as now given more responsibility and intimated that this is the first meeting of the re-constituted Committee and feels that Committee will emphasize and focus to consider the projects towards effective environmental management, conservation, protection and its safeguards in the coastal area. 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 Member including new Members i.e. Prof. Jaya Kumar Seelam, Dr. P.K. Dinesh Kumar, Col. Prakash Tewari and Shri Sharandeep Singh. He also informed about CRZ procedure for taking projects and also informed EAC that Dr. P.K. Dinesh Kumar is presently an Expert Member of NCZMA Committee Chaired by Secretary MoEFCC. Afterwords, with permission of the Chair Dr. 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 342<sup>nd</sup> meeting held on 06/10/2023 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 RE-CONSIDERATION PROPOSALS:

The EAC (CRZ) considered proposals as per the agenda adopted for the 343<sup>rd</sup> meeting. The details of deliberations held and decisions taken in the meeting are as follows:

# AGENDA 3.1

Proposal for Laying of RO Reject Disposal pipeline from proposed 60 MLD common effluent treatment plant (CETM), Dholera Special investment region (SIR) in to Sukhbadar Creek, Gulf of Khambhat, Gujarat by M/s Dholera Special Investment Region Development Authority (DSIRDA) – Reconsideration for CRZ Clearance

(IA/GJ/CRZ/414087/2023; F. NO.11/15/2023-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."

- **1.** Earlier, the proposal was considered by EAC it is  $323^{\rm rd}$  meeting held on 23/03/2023,  $329^{\rm th}$  meeting held on 29/05/2023 and  $335^{\rm th}$  meeting held on 07/08/2023.
- 2. After detailed deliberation, EAC has recommended the proposal for CRZ Clearance subject to specific conditions as stipulated by EAC in its 329<sup>th</sup> meeting other than standard conditions. Details presented during the above meetings by the project proponent (M/s Dholera Special Investment Region Development Authority) and their consultant (M/s AECOM India Private Limited) is as follows:
  - (i) The proposal is for seeking CRZ clearance for "Laying of RO Reject Disposal pipeline from proposed 60 MLD common effluent treatment plant (CETM), Dholera Special investment region (SIR) in to Sukhbadar Creek, Gulf of Khambhat, Gujarat" by M/s Dholera Special Investment Region Development Authority (DSIRDA).
- (ii) The development of DSIR encompasses an integrated industrial effluent management system, one of the components of which is a Central Effluent Treatment Plant (CETP) of capacity 60 MLD including Reverse Osmosis (RO).
- (iii) The proposed project involves a 13.5 km long outfall pipeline connecting 60 MLD CETP to Sukhbhadar Creek at Gulf of Khambhat in order to discharge 12 MLD of RO Reject from the CETP.

(iv) The Site location of the project as:

Description	Name	Latitude	Longitude
Proposed	A.	22°12'48.030"N	72°12'38.080"E
CETP	В.	22°12'50.300"N	72°12'44.007"E
	C.	22°12'48.710"N	72°12'48.096"E
	D.	22°12'41.250"N	72°12'51.320"E
	Ε.	22°12'37.930"N	72°12'42.430"E
Proposed RO	F.	22°12'44.410"N	72°12'42.776"E
reject pipeline	G.	22°9'12.960"N	72°12'19.421"E

(v) The total length of pipeline is 13527.7 meter and CRZ demarcation along the pipeline alignment is as follows:

Description	CRZ - Classification	Length (m)
Proposed RO	CRZ - IA	1128.65
Reject Pipeline	CRZ - IA (50 m Mangrove Buffer Zone)	112.38
i ipcime	CRZ - IB	2642.14

	CRZ - III (NDZ)	4830.67
	CRZ - IVB	267.75
	Outside CRZ	4546.12
Proposed CETP	Outside CRZ	88296.4 (Area Sq. m)

- (vi) The pipeline is proposed to be of 400 mm diameter and buried 2 m below the ground, to be laid in a 1 m wide trench using the cut-and-cover method and would have an online water quality monitoring equipment which would continuously monitor the water quality of the RO Reject.
- (vii) The portion 112.38m of the proposed RO Reject pipeline is passing through mangrove buffer areas.
- (viii) About 4.5 km of the pipeline towards the CETP side is located outside CRZ.
- (ix) The outfall would be located underwater and equipped with diffusers to ensure instant dilution and dispersion of the discharged material into the surrounding seawater.
- (x) Based on the modelling output, it is deduced that the order of dilution shows 150 times in 25 m distance and 1500 times in 100 m distance from discharge point.
- (xi) Total 100 permanent employment is likely to be generated by the project.
- (xii) The total cost of the project ₹9.0 Crore. An amount of ₹6.0 Lakh is proposed for environmental monitoring during the operation phase of the project
- (xiii) The Gujarat Pollution Control Board has issued provisional Consent Order (CTE) *vide* Consent No. CTE-95494 and valid upto 05/07/2025.
- (xiv) The Gujarat Coastal Zone Management Authority (GCZMA) has recommended the proposal for CRZ clearance *vide* its Letter No. ENV-10-2017-70-T, dated 27/09/2022.
- **3.** However, while processing the file for CRZ Clearance, the project proponent has requested amendment in specific condition no. (viii) viz., "Industries such as bulk drugs, pesticides, chemicals, petro-chemicals, pharmaceuticals and their effluent should not be allowed to dispose of effluent in this project." Accordingly, the proposal was examined by MoEF&CC and request of PP placed before the EAC in its 335th meeting held on 07/08/2023.
- **4.** During the deliberation, the project proponent (M/s Dholera Special Investment Region Development Authority) and their consultant (M/s AECOM India Private Limited) have submitted that chemicals are essential to process chain for establishing semiconductor. So the said specific condition implies restriction not only on effluent but also to industries itself and create barrier for industries which are even ready to comply with CETP inlet norms. Imposing such condition will lead to ambiguity to investors which may result in post clearance issues and amendments.

- **5.** Committee observed that chemicals of concern generated as effluents from semiconductor industries are:
  - a) Heavy Metals such as Cadmium, Lead, Mercury and Chromium. These metals can be toxic to aquatic life and can accumulate in the environment.
  - b) Acids and Bases such as Hydrochloric Acid (HCl) and Sulfuric Acid (H2SO4), and strong bases like Sodium Hydroxide (NaOH).
  - c) Organic Solvents like Acetone, Iso-Propyl Alcohol (IPA), and various hydrocarbons are commonly used in semiconductor cleaning processes. These solvents can contribute to air pollution and can be hazardous to human health.
  - d) Waste Photolithography Chemicals: Fluoride: Fluoride-containing chemicals are used in etching and cleaning processes. Nitric Acid and Nitrogen containing compounds: These chemicals are used in various processes, including cleaning and etching and if not, treated properly can contribute to pollution in water bodies.
- **6.** After detailed deliberation, the Committee in its 335<sup>th</sup> meeting asked PP to submit comprehensive effluent characteristics, quantity and treatment plan specific to the semiconductor industries need to present before the EAC, however, PP intimated that all detailed plan analysis on types of industrial wastes, chemicals discharge from Industries will be submitted before the next meeting. The EAC also suggested, the details of HDD in CRZ-I areas. On request of PP that they need time to provide, this information, Committee deferred the project on request of PP and request for submission of details as stated at Para 3 above.
- **7.** Accordingly, proponent has submitted the desired information though PARIVESH portal and the same has deliberated by EAC in the meeting held on 31/10/2023.
- **8.** The PP made a presentation of point wise information submitted / uploaded by them in response to the questions raised by the EAC in its 335<sup>th</sup> meeting. During deliberation, the Committee invited the attention of the PP (Dholera Special Investment Region) towards Joint Secretary (Industries), Government of Gujarat letter no.MIS102023-UOR-225-I-1, dated 22/09/2023 addressed to the Ministry of Environment, Forest and Climate Change *vide* which, based on the opinion sought from the various departments, especially from CEO DSIR, it was intimated that proximity of the Chemical Industrial park to the DSIR, which is designated for Sunrise Sector such as Semiconductors and display Fab manufacturing, is of great concern and, therefore a thorough assessment of the potential adverse impact on Sunrise Sector Industries is required for establishing chemical industries in the region.

The Committee also drawn the attention of PP on CEO, DSIRDA letter dated 11/10/2023 directly addressed to the MoEFCC on the same subject and requesting the Ministry to discourage the chemical, petroleum and petrochemical sector within 100 km of DSIR. The Committee requested PP to clarify whether the concerns raised in these letters have been addressed by the PP while proposing chemicals, Petro-chemicals and pharmaceuticals industries in DSIR and

requesting the EAC to amend the specific condition no. (viii) viz., "Industries such as bulk drugs, pesticides, chemicals, petro-chemicals, pharmaceuticals and their effluent should not be allowed to dispose of effluent in this project." which was considered to be stipulated in CRZ clearance recommended in EAC 229<sup>th</sup> meeting.

In response, project proponent requested the Committee for additional time to provide clarification in this regard. The Committee, on request of the PP, deferred the proposal and sought detailed impact analysis, including parameters at disposal point in the gulf.

# **AGENDA 3.2: CONSIDERATION OF NEW PROPOSALS:**

Proposal for Construction of bridge behind Bhagat Singh Nagar across Goregaon Creek along 36.6 m wide DP road at Boundary of K/W and P/S ward, Mumbai by M/s Brihanmumbai Municipal Corporation-CRZ Clearance [IA/MH/CRZ/441071/2023; 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 Brihanmumbai Municipal Corporation) along with his EIA consultant (M/s Centre for Envotech and Management Consultancy Pvt. Ltd. (CEMC) and M/s Tandon Urban Solutions Pvt. Ltd) 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 as per CRZ Notification, 2019 for Construction of Vehicular Bridge behind Bhagat Singh Nagar across Goregaon Creek by M/s Brihanmumbai Municipal Corporation.
- (ii) Total length of bridge is 512 m with overall width of 26.95m (3+3 lane) and carriage way of 11 m both side, median 0.45m, having utility corridor of 1.5 m both side. There is a provision of footpaths inclusive of utility corridor. The bridge is designed for all loads evaluated as per IRC6-2017. The alignment is as per the Development Plan of Brihanmumbai Municipal Corporation.
- (iii) The proposed bridge cross creeklet and mangroves. In order to cause least damage to the mangrove a long span bridge has been preferred. Among the various choices of long span types, Cable stayed bridge was selected, keeping in mind the marine ecosystem, ease of construction and cost.

- (iv) As per the approved CZMP under CRZ Notification, 2019 (Map N. MH 78), the project activity fall in CRZ-IB (5260.44 Sq.m), CRZ-II (2411.48 Sq.m) and CRZ-III (NDZ-within CRZ-II-Greater Mumbai; 2123.18 Sq.m) and outside CRZ (14026.30 Sq.m). So, the project requires prior CRZ Clearance from the Ministry.
- (v) EIA report has been prepared by M/s Centre for Envotech and Management Consultancy Pvt. Ltd. (CEMC) and M/s Tandon Urban Solutions Pvt. Ltd
- (vi) CRZ report of the project has been prepared by IRS, Anna University, Chennai.
- (vii) The project involves diversion of 0.2708 ha. forest (Mangrove) land at village Pahadi Goregaon, Tal Borivali, Mumbai Suburban District. Forest Diversion proposal no. FP/MH/ROAD/423309/2023 has been submitted and Compensatory afforestation shall be done on 1 ha. degraded forest land in Palghar District.
- (viii) Total cost of the project is ₹500 crore. The proposed cost of EMP is ₹ 26.87 Lakhs.
  - (ix) Employment: Generates Employment opportunities for skilled, semi-skilled and others around the vicinity of project.
  - (x) Benefits of the project: There is no existing connectivity between Millat Nagar and Shahid Bhagat Singh Road, Goregaon Creek. Also, the proposed Coastal Road is passing by the Creek Road hence this bridge will be useful for dispersal of traffic from Millat Nagar to Bhagat Singh Nagar in western suburbs i.e. Goregaon. Currently, this connectivity requires about 30-45 minutes during peak traffic time which shall be reduced to about 2-3 minutes. It shall also serve the purpose of a major traffic dispersal mode for the proposed Coastal Road (North).
  - (xi) The project activity is permissible as per para 5.1 CRZ-I 5.1.1. ii (construction of road on stilts) of CRZ Notification, 2019. Accordingly, the project has been recommended by MCZMA vide letter No. CRZ 2023/CR103/TC 4 dated 09/06/2023.
- 2. The Committee deliberated the proposal based on the information provided the proponent. After deliberation, the Committee has noted that the project activity is permissible and MCZMA has recommended the project *vide* letter No. CRZ 2023/CR103/TC4 dated 09/06/2023. Accordingly, the Committee recommended the proposal for CRZ Clearance on receipt of revised EIA report and 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) Any temporary physical infrastructure setup and excavated material during construction shall not be disposed in water bodies or adjacent areas and the site shall be restored to its original condition after completion of construction of work.
- (iii) No groundwater shall be extracted within the CRZ area to meet the water requirements during the construction and/or operation phase of the project. Provisions for suitable rainwater harvesting should be made and implemented.

- (iv) Prior approval of the High Court of Mumbai shall be obtained in view of the direction issued in connection with the felling of Mangrove and its conservation before execution of the project.
- (v) Prior Forest Clearance under Forest (Conservation) Act, 1980 should be obtained before commissioning of the project.
- (vi) 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.
- (vii) 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 of pressure reducing devices or sensor based control.
- (viii) Topsoil excavated during construction activities shall be stored for use in horticulture/landscape development etc. within the project site.
  - (ix) 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..
- (x) 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 conditions stipulated by the Maharashtra Coastal Zone Management Authority for CRZ clearance under CRZ Notification, 2019 *vide* its letter no CRZ 2023/CR103/TC 4 dated 09/06/2023 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 3.3

Proposal for Construction of storm Water Pumping Station (SWPS) with Gatepumps technology at T-Junction, Dharavi, Bandra, Mumbai by M/s Brihanmumbai Municipal Corporation.

[IA/MH/CRZ/439645/2023; 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 Brihanmumbai Municipal Corporation) along with his EIA consultant (M/s Enkay Enviro Services Pvt Ltd) 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 as per CRZ Notification, 2019 for Construction of Storm Water Pumping Station (SWPS) with Gate pumps technology at T-Junction, Dharavi near yellow bungalow in G/North ward, Bandra, Mumbai by M/s Brihanmumbai Municipal Corporation.
- (ii) As per the approved CZMP under CRZ Notification, 2019 (Map N. MH 75), the project activity falls in CRZ-IA (Mangrove buffer area). As per Para 7.2 of CRZ Notification, 2019 all the developmental activities or projects in CRZ-I and CRZ-IV areas, which are regulated or permissible as per this Notification, shall be dealt by the Ministry based on the recommendation of SCZMA. So the project requires prior CRZ Clearance from the Ministry.
- (iii) CRZ report of the project has been prepared by IRS, Anna University.
- (iv) EIA report has been prepared by M/s Enkay Enviro Services Pvt. Ltd.
- (v) Monitoring surveys of the study area (project area) has been carried out in one season i.e. March 2022 to May 2022.
- (vi) Total cost of the project is ₹73.37 Crores.
- (vii) No mangrove will cut or disturb or relocate due to proposed project activities.
- (viii) Benefits of the project: Faster receding of storm water in Dharavi, Mukhtadhyapak Bhavan, Road no 6 Sion, Sion Station railway tracks
- (ix) As per para 5.1.1 (ii) of CRZ Notification 2019, in the mangrove buffer, only such activities shall be permitted like laying of pipelines, transmission lines, conveyance systems or mechanisms and construction of road on stilts, etc. that are required for public utilities.
- (x) Accordingly, the project has been recommended by MCZMA *vide* letter No. CRZ 2022/CR119/TC 4 dated 09/10/2023 considering that the storm water Pumping Station is an important public utility.
- 2. The Committee deliberated the proposal based on the information provided the proponent. After deliberation, the Committee has noted that the project activity is permissible considering that storm water Pumping Station is an important public utility and MCZMA has recommended the project *vide* letter No. CRZ 2022/CR119/TC4 dated 09/10/2023. In addition, considering the proximity of adjacent creek, the Committee has suggested that PP should ensure the water quality adjacent creek water and no construction debris dumped in the creek. In response PP has agreed the same. Accordingly, the Committee has recommended the proposal for CRZ Clearance as per CRZ Notification, 2019 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) Project Proponent has to obtain Prior High Court Bombay permission, if any Mangrove cutting is involved, since project activities are situated within 50 m mangrove buffer zone area.
- (iii) Any temporary physical infrastructure setup and excavated material during construction 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.
- (iv) Muck disposal plan should be submitted to IRO and implemented in supervision of the MCZMA.
- (v) No storage reservoir for sea water shall be permitted.
- (vi) No groundwater shall be extracted within the CRZ area to meet the water requirements during the construction and/or operation phase of the project.
- (vii) The Project Proponent shall comply order/direction, if any, issued by Hon'ble Court/tribunal on the project.
- (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) Topsoil excavated during construction activities shall be stored for use in horticulture/landscape development etc. within the project site.
- (x) 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.
- (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, 2019 vide its letter no CRZ 2022/CR119/TC 4 dated 09/10/2023 and commitments made by the PP before the MCZMA and EAC shall be followed in letter and spirit.
- (xiii) All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

# AGENDA 3.4

Development and Improvement of Tourism through Recreational Activities at Sea-face Area – Dumas, Surat located at Revenue Survey No 151/p, R-64 – Social Infrastructure, TP-80 Sultanabad Bhimpore, Village: Sultanabad, District: Surat, Gujarat by M/s Surat Municipal Corporation-CRZ Clearance.

IA/GJ/CRZ/446497/2023; F. No: 11/42/2023-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 Surat Municipal Corporation**) along with his EIA consultant (**M/s Envision Enviro Technologies Pvt. Ltd**) 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 as per CRZ Notification, 2011. for Development and Improvement of Tourism through Recreational Activities at Sea-face Area Dumas, Surat by M/s Surat Municipal Corporation.
- (ii) As per the approved CZMP under CRZ Notification, 2011 (Map N. GJ 44), the part of the project activity falls in CRZ-IB, CRZ-II and CRZ-III (NDZ) area. Total plot area of the project is 1,28,698 Sq.m and the built-up area is 17,700 Sq.m. So the project attracts only CRZ clearance.
- (iii) EIA report has been prepared by M/s Envision Enviro Technologies Pvt. Ltd.
- (iv) CRZ Report has been prepared by NCSCM Chennai.
- (v) Project area breakup is as follows:

Sr.	Particular	Area (m²)
No.		
1	Paved area	36,647.00
2	Green area	47,747.00
3	Sand area	6,270.00
4	Surface Parking	15,382.72
5	Road area	4,030.00
6	Multi-level car parking footprint area	4,889.00
7	Substation foot print area	440.00
8	Existing Erosion control work	13,292.28
Total	plot area	1,28,698.00

(vi) Built-up area break up is as follows:

Particular	Multi Level Car Parking area (m <sup>2</sup> )	Additional Building (m <sup>2</sup> )	Substati on (m <sup>2</sup> )	Total Area (m²)
Basement floor	3,744	4,108	-	7,852
Ground floor	4,889	669	80	5,638
First floor	3,871	-	-	3,871
Terrace floor	339	-	-	339
Roof	67	-	-	67
(Overhead				
Tank)				
Total	12,910	4,777	80	17,700

(vii) Project activity under CRZ categorization is as follows:

<b>Proposed Project Activities</b>	Area in m <sup>2</sup>		
	CRZ Landward of HTL - CRZ II	No Development Zone - CRZ III	

	80,	775.89
Total	71,072.58	9,703.31
Walking Area	1,917.64	925.72
Urban Beach	2,169.30	
Upgrading Existing Road	652.04	-
Surface Car Parking	8,517.93	
Statue Spot	9.03	
Sports Area	2,161.19	-
Seating	2,036.40	161.14
Road	3,759.35	318.23
Plaza	1,120.17	
Pathways	16,579.49	5,026.03
Parking	81.48	-
Landscape Area	25,290.56	895.48
Kids Park	2,834.88	1,707.73
Drop Off Parking	181.81	-
Cycle Track	1,714.88	384.76
Beach Volleyball	723.17	-
Beach Access	237.12	-
Arrival Plaza	703.85	155.33
Access to Dariya Ganesh Temple	382.29	128.89

- (viii) Total cost of the project is ₹206.73 Crore. Capital cost and recurring cost of EAM is ₹1,300 Lakhs and ₹14.1 Lakhs/year
- (ix) No forest land is involved for the proposed project. Total 32 Nos. of Gando Baval (*Prosopisjuliflora*) required to be cut & the permission for the same is obtained from Deputy Forest Conservator on 16/03/2023. Facility will develop 47,747 m<sup>2</sup> (i.e. 37.10%) greenbelt/green cover out of 1,28,698 m<sup>2</sup> project area. Total 1,931 trees will be planted in 1,28,698 m<sup>2</sup> area within a year considering three trees per 200 m<sup>2</sup>.
- (x) The proposed solid and hazardous waste management during construction and operation phase is as follow:

# A. Construction Phase:

Type of waste	Generation Quantity	Quantity to be Reused	Mode of Disposal/ Reuse
Solid Waste	110 kg/day (0.2 kg/ person/day)	1	Separate bin will be provided for collection of Solid Waste (Bio Degradable & Non - Bio degradable) at different places and the same will be collectively disposed off to solid waste site.

Other excavated earth	1,142m <sup>3</sup>	1,142m <sup>3</sup>	Will be used for back filling, plinth filling within premises and remaining will be used at other project sites.
Construction	$5,100m^3$	$5,100m^3$	Will be refilled at low lying areas
debris			within premises
Discarded	3,57,477m <sup>3</sup>		Sell to vendors
packing			
materials			

# B. Operation phase:

Waste	Basis	Generation Quantity (kg/day)	Mode of Disposal
Dry waste	0.09kg/person/day	1,080	Wet (biodegradable) waste to be generated will be processed
Wet waste	0.06 kg/person/ day	540	in Organic Waste Converter (OWC) within project premises. The compost thus obtained will be used for soil conditioning in greenbelt development or sold off and dry waste will be collected by the SMC for its ultimate disposal.  Recycled material shall be disposed as per practice of SMC.
STP Sludge	2.1 kg/KL	110	Reused in gardening as manure within premises.
Used Oil (Category 5.1 Sch-I)		0.5 MT/Annum	Collection, storage and sent to authorized recyclers

- (xi) The estimated water requirement during construction and operation phase is 18 KLD and 384 KLD respectively and the same will be sourced through Surat Municipal Corporation.
- (xii) The estimated power requirement is during construction and operation phase is 600 kVA and 1020 kVa respectively and the same will be sourced through Dakshin Gujarat Vij Company Ltd. In addition, 3 nos of DG sets (100 kVA) will be used during construction phase; whereas one DG sets of 50 kVA will be used during operation phase.
- (xiii) Domestic waste water will be treated in STP of 240 KLD capacity from which 144 KLD treated water will be reused for gardening and 76 KLD for flushing
- (xiv) Employment potential: Construction phase-500 individuals; operation phase-30 individual.

- (xv) Benefits: Tourism Development, Employment Generation, Revenue Generation.
- (xvi) As per CRZ Notification 2011, proposed project activity is permissible under section 8(II)(i) and 8(III)(A)(iii)(a). Accordingly, Gujarat CZMA has recommended the project vide letter No. ENV-10-2021/41/T dated 27/09/2023.
- 2. The Committee has deliberated the proposal based on the information presented/provided the proponent. After deliberation, the Committee has noted that project activity is permissible as per CRZ Notification, 2011 and GCZMA has recommended the project No. ENV-10-2021/41/T dated 27/09/2023. The Committee has also noted that the Disaster management Plan submitted by the proponent is not specific to the proposed project and requested to the PP to submit the project specific Disaster management Plan to concern IRO at the earliest. In addition, the Committee has requested the proponent to provide adequate access road for maintenance of adjacent bund in seaward side and also requested that project activity within NDZ should be done with eco-friendly materials instead of concrete structures. In response, PP has agreed to execute the same. Accordingly, the Committee has recommended the proposal for CRZ Clearance as per CRZ Notification, 2011 with following specific conditions other than standard conditions:
  - (i) All construction shall be strictly in accordance with the provisions of the CRZ Notification, 2011, as amended from time to time.
- (ii) Any temporary physical infrastructure setup and excavated material during construction 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.
- (iii) Disposal of treated effluent into Sea/ creek shall strictly conform to the prescribed standards of CPCB / GSPCB.
- (iv) No storage reservoir for sea water shall be permitted.
- (v) Adequate solar power facilities shall be installed as energy conservation measures.
- (vi) Project specific Disaster Management Plan should be prepared and submitted to concern IRO at the earliest.
- (vii) Adequate access road should be provided for maintenance of adjacent shore protection bund on landward side.
- (viii) The morphology at shore protection bund and adjacent areas should be monitored and submitted to regional office of MoEF&CC.
  - (ix) All the project activity within NDZ should be done with eco-friendly materials instead of concrete structures as per the provisions of the CRZ Notification, 2011, as amended from time to time.
  - (x) No groundwater shall be extracted within the CRZ area to meet the water requirements during the construction and/or operation phase of the project.
  - (xi) Permanent labour camp, machinery and material storage shall not be set up in the CRZ area.
- (xii) The Project Proponent shall comply order/direction, if any, issued by Hon'ble Court/tribunal on the project.

- (xiii) 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.
- (xiv) The walkways proposed in the project should be distantly away from the sea protection wall, it will no hindrance is created in maintenance of the sea wall.
- (xv) Provisions for suitable rainwater harvesting should be made and implemented.
- (xvi) The PP should keep provisions of drainage facilities for avoid flooding of park during rains or possible ingress of sea water.
- (xvii) 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 of pressure reducing devices or sensor-based control.
- (xviii) Topsoil excavated during construction activities shall be stored for use in horticulture/landscape development etc. within the project site.
- (xix) Water quality of the entire creek should be monitored regularly to see the impact of construction and reclamation activities and submit report to concern IRO.
- (xx) 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.
- (xxi) All the conditions stipulated by the Gujarat Coastal Zone Management Authority for CRZ clearance under CRZ Notification, 2019 *vide* its letter no. ENV-10-2021/41/T dated 27/09/2023 and commitments made by the PP before the GCZMA and EAC shall be followed in letter and spirit.
- (xxii) All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

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List of the Expert Appraisal Committee (CRZ) Members participated during Video Conferencing (VC) Meeting held on 31st October, 2023.

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

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