

**MINUTES OF THE 280th MEETING OF THE EXPERT APPRAISAL COMMITTEE
FOR PROJECTS RELATED TO COASTAL REGULATION ZONE HELD ON
16th NOVEMBER, 2021**

The 280th meeting of the Expert Appraisal Committee for projects related to Coastal Regulation Zone was held on 16/10/2021 held through Video Conferencing due to prevalent pandemic situation. The list of members presents in EAC given at **Annexure-I**.

The deliberations held and the decisions taken are as under:

2.0 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

The Committee having noted that the Minutes of the 277th meeting 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:

3.1 Proposal for Development of 3400 MW (Phase-II) Solar Park / Solar activities in CRZ areas of Dholera Special Investment Region, Dholera, District Ahmedabad, Gujarat by M/s Dholera Special Investment Regional Development Authority - CRZ Clearance [IA/GJ/CRZ/77192/2018] [F.No. 11-7/2019-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 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 of M/s Dholera Special Investment Regional Development Authority (DSIRDA), is for Development of 3400 MW (Phase-II) Solar Park / Solar activities in CRZ areas of Dholera Special Investment Region, Dholera, District Ahmedabad, Gujarat, was earlier placed in the 267th EAC(CRZ) meeting held on 13/07/2021. Wherein, the project proponent made a presentation and submitted the following information as under:

- (i) Solar power generation in India by the end of March, 2018 stood at 21.65 GW. In order to realise the Government of India’s endeavour of 100 GW solar power generation by year 2022, the Government of Gujarat has come out with a proposal of putting up the World’s largest solar power park of 4400 MW capacity at Dholera.
- (ii) A Special Purpose Vehicle viz. M/s Dholera Industrial City Development Limited (DICDL) has been created by Central Government by Trust Delhi Mumbai Industrial Corridor Development Corporation (DMICDC) and the State Government of Gujarat by DSIRDA to implement the project.
- (iii) Gujarat Power Corporation Limited (GPCL) would be the major stakeholder in developing the proposed Solar Power Park and the land would be leased out to the GPCL for development of the proposed project. DSIRDA would facilitate GPCL to develop this Solar Power Park by putting up the minimum support infrastructure required and obtaining the land and necessary CRZ clearance for the project.
- (iv) Site for setting up Photovoltaic (PV) solar park would be dependent on the factors comprising of: i) high annual solar radiation to obtain maximum solar electricity output,

- ii) flat land to ensure savings on earthwork, iii) should have minimum vegetation at site, iv) should also be close to the grid and a substation to avoid the need to build expensive electricity lines for evacuating the power, v) should have adequate water availability to full fill the requirements during construction and for O&M activities and vi) easy accessibility from main thorough fares i.e. good connectivity.
- (v) The present site within DSIRDA earmarked boundary provides all the above identified advantages of siting of the solar park with all required basic infrastructure already under fast mode of implementation. Any other site nearby might not have provided all these advantages.
- (vi) Total land area of DSIR is about 920 Sq.km of which 520 Sq. km has been allocated for town planning and approximately 400 Sq. km falls under Coastal Regulation Zone (CRZ) of Gulf of Khambhat.
- (vii) The proposed 4400 MW solar park Geo-coordinates are 21°59'15.677"N to 22°18'53.311"N and 72°9'56.471"E to 72°19'57.257"E.
- (viii) The site touches the Gulf of Khambhat on the Eastern side and River Sukhbhadar passes through the northern side of the SIR area. In addition, River Lika passes through the middle of the SIR area before meeting the Gulf of Khambhat.
- (ix) The site does not have any human settlements or alternate legal status of land use and largely lying vacant. The site is absolutely flat with very gentle slope from north-west to south-east.
- (x) The proposed Solar Power Park of total capacity 4400 MW would be built in a land of about 8594.95 hectares.
- (xi) The total land area is about 8594.95 ha. which is falling under CRZ zones, CRZ IB (7949.17 ha.), CRZ III (204.34 ha.) and CRZ IVB (5.03 ha.) and about 436.41 ha. come under non-CRZ category.
- (xii) There will be 11 no. of plots in this 8594.95 hectares of land, ranging from 847 to 1,232 ha. area of each plot. These 11 plots have been further sub-divided into 27 sub-plots.
- (xiii) The total area available for the development of solar park after carving out the 'No-go' areas of salt marshes, mud-flats, mangroves and interspersed areas within these land features would be in the tune of 8594.95 hectares of which the solar plant proposed would occupy an area of about 8252 ha.
- (xiv) No R&R would be involved.
- (xv) There are no eco-sensitive areas within 2-3 kms of the site. The nearest eco-sensitive site of Velvadar Black Buck sanctuary and is about 4 km South-West from the nearest solar plot planned.
- (xvi) The CRZ map of 1:4000 scale was prepared by Institute of Remote Sensing, Anna University, Chennai.
- (xvii) An estimated amount of 11.25 MLD of water will be required for the proposed project during the operational stage. For on-site storage of water, 4 no's ground storage reservoir of capacity of 1.25 MLD, 4 MLD, 3.5 MLD and 2.5 MLD respectively will be constructed at site. An overhead tank will also be constructed, if required.
- (xviii) About 300 labourers (at the peak) comprising of semi-skilled and unskilled is estimated to be employed during the construction phase. First preference will be given to the people residing in the nearby villages depending on their working skills and capabilities. Thereafter, about 100 employees will be required during operation phase including operation and maintenance officers and site engineers.
- (xix) It is estimated that about 354 cum of earth excavation, 165 cum of concrete laying, 21 tons of reinforcement rods and 82 tons of galvanized structural steel would be required per MW of construction.
- (xx) Construction related materials viz. stone aggregates, sand, bricks etc. for the project are likely to be sourced locally from the established sources of DSIR with the region.
- (xxi) During the construction phase, the waste water or sewage from site office toilets will be disposed in package type Sewage Treatment Plant (STP) of 0.05 MLD at each sub-station

catering to the people working under the respective command area. The total capacity envisaged for the project is 0.2 MLD for 4 (four) sub-stations.

- (xxii) An amount of ₹3.0 crore will be earmarked for environment mitigation measures.
- (xxiii) The total estimated cost of the project is approximately ₹22,000 crore with additional cost of ₹1700 crores for infrastructure.
- (xxiv) The Gujarat Coastal Zone Management Authority has recommended the proposal for clearance vide its letter No. ENV-10-2018-39-E(T CELL) dated 10/08/2018.

2. The Committee was informed that M/s Dholera Special Investment Regional Development Authority was earlier accorded CRZ Clearance for Phase-I (1000 MW) Solar Power Park at Dholera Special Investment Region near Gulf of Khambhat, in Ahmedabad District Gujarat *vide* this Ministry's letter dated 26th February, 2019.

3. The present Committee was appraised that in the earlier EAC CRZ meeting held on 25th January, 2019, the then Committee observed that about 7949.17 ha. (say 8000 ha.) falls under CRZ-1B i.e inter-tidal zone and the area is a highly eroding area, in particular the mud flats areas. It was also observed that mudflats are ecologically very sensitive and its characteristics should not be altered. The Committee observed that prior modelling study for a 30-year period should necessarily have been carried out considering that a large part of the project falls in a highly eroding stretch acknowledged by most agencies concerned. The Committee therefore decided that the project proponent shall make a study and develop for the next 30 years' period, a modeling specific to sea level rise and associated risks and examine viability of the entire project capacity in this context. The Committee also observed that the region falls under Central Asia flyway of migratory birds and therefore need to refer the study carried out either by BNHS or carry its own study to assess, in depth, the potential impact on migratory birds.

4. On submission of the above documents, the proposal was placed for consideration before the EAC for the Phase II (3400 MW). The Committee noted that the area is in inter-tidal zone however, the activity is a permissible one as per para under 3(i) (c) and 4 (ii) (h) of the CRZ Notification, 2011. The Committee found the documents *viz.* (i) Three Season Migratory Avifauna study at proposed Solar Power project site in Dholera Special Investment Region and (ii) Study on Sea level rise and coastal erosion in Dholera Special Investment Region (DSIR), Dholera, Gulf of Khambhat, Gujarat are satisfactory. The Committee took a special note of excellent study reports prepared by GUIDE for bird migration and by Indomer Coastal Hydraulics (P) Ltd for sea level rise and coastal erosion. Such good quality reports helped EAC significantly in understanding the aspects well.

5. The Committee also noted that project proponent agreed to notify 628.63 ha. area out of 6365.52 ha. plot area as no development areas (buffer area) as recommended in the study by Indomer Coastal Hydraulics (P) Ltd.

6. The Committee desired that the final recommended will be considered after the site visit undertaken by a Sub-Committee in the month of August-September 2021 comprising of: i) Dr. Deepak Apte, Chairman of the EAC (CRZ); and members of the committee ii) Dr. V.K. Jain; iii) Dr. Mukesh Khare; iv) Mr. S. Jeyakrishnan; v) Mr. M.S. Negi; vi) Dr. Ramana Murthy vii) Representative of the Ministry of Environment, Forest and Climate Change; and viii) Representative of Gujarat Ecology Commission; Representatives of GUIDE and Indomer Coastal Hydraulics (P) Ltd. for better understanding of the CRZ area proposed for the project. The Committee also stated that the project is first of its kind in India and has to be implemented without any significant damage to the coastal ecosystem.

7. Committee also desired GUIDE to prepare a comprehensive migratory bird conservation and habitat restoration plan including most critical areas for migratory birds as stated in their

report along with financial provisions based on the three-season study undertaken by them. Committee during the site inspection will examine it in detail.

8. Committee also desired project proponent to provide in detail the project layout based on the study conducted and recommendation made by Indomer Coastal Hydraulics (P) Ltd including no development areas clearly demarcated. Committee will examine the locations and recommendations during the site visit.

9. Committee will also examine the status of the 1000 MW (out of 4400 MW) units that were already granted CRZ clearance.

10. The site visit was conducted from 17-18 August, 2021 by the Sub-Committee of EAC (CRZ) and Members of Committee were as: (i) Dr. Deepak A. Apte, (ii) Prof. Mukesh Khare, (iii) Prof. V. K. Jain, (iv) Mr. S. Jeyakrishnan, (v) Mr. M. S. Negi, (vi) Dr. Raman Murthy and (vii) Dr. H. Kharkwal. The Sub-Committee site visit report alongwith suggested observations on the project was placed before the EAC(CRZ) in its 277th EAC meeting held on 26/10/2021 and EAC accepted and was of the view that the suggestions made in the Sub-Committee Report may be forwarded to PP for further compliance and to submit the required clarification / information for further consideration of the EAC.

11. On submission of the information sought by EAC in its meeting held on 13/07/2021 and compliance of site visit observation / discussion submitted by PP were placed before the EAC in its 280th EAC(CRZ). Therefore, based on the deliberations held and submissions made, the Committee recommended the proposal for CRZ Clearance subject to following conditions:

- i) All construction shall be strictly in accordance with the provisions of CRZ Notification, 2011 and as amended from time to time.
- ii) This clearance is subject to obtaining clearance from the Standing Committee of Wildlife, as applicable.
- iii) No mudflats and connecting inter-tidal streams shall be touched during the construction and implementation of the project.
- iv) All no-go areas identified for migratory bird conservation by GUIDE will be clearly marked and no installation/infrastructure be allowed on the same.
- v) Non-vegetated mudflats as identified and marked by Indomer shall be protected as non-vegetated mudflats. These shall never be used for any development or mangrove afforestation.
- vi) Bird diverters of international standard should be installed at all sites as identified by GUIDE in consultation with GUIDE.
- vii) GUIDE will continue to monitor these sites (11 iv and 11 v) during future development atleast for five years after completion of the installation of solar units and document the impact on birds systematically for future mitigation if any. Adequate financial provision be made for the same.
- viii) The highest flood water level estimated using highest tide and sea level due to climate change by M/s Indomer should be provided to each unit holder for compliance so as to design the solar panels desired height from the ground to avoid flooding.
- ix) Power evacuation from individual solar parks to the grid should be through underground cables with sufficient burial depth till the main collection points that connects the grid. PP has agreed to reduce the collection points from four to three at high bird congregation areas
- x) No groundwater shall be extracted within CRZ area to meet the water requirements during construction and implementation of the project.
- xi) No excavated material during the construction shall be dumped in water bodies or adjacent areas. The site shall be restored to its near original condition after completion of construction work.

- xii) No permanent labour camp, machinery and material storage shall be allowed in CRZ area.
- xiii) Any temporary physical infrastructure setup during construction period shall be removed simultaneously with completion of laying of each segment of the project.
- xiv) A third party (external agency of repute) shall be appointed for supervision, implementation and monitoring of proposed activities regularly.
- xv) The recommendation made by the GCZMA vide its letter No. ENV-10-2018-39-E, dated 10/08/2018, shall be implemented 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.

3.2 Proposal for laying pipeline for transportation of edible oil from Adani Hazira Port Pvt. Ltd. to Adani Wilmar Refinery at Shivarampur Village, District Surat by M/s Adani Wilmar Limited –CRZ Clearance

[IA/GJ/CRZ/130737/2019] [F.No.11-2/2020-IA.III]

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

The proposal of M/s Adani Wilmar Limited for laying pipeline for transportation of edible oil from Adani Hazira Port Pvt. Ltd. to Adani Wilmar Refinery at Shivarampur Village, District Surat, Gujarat, was earlier considered in the 229th EAC(CRZ) meeting of EAC (CRZ) held on 27/01/2020. Wherein, the project proponent made a presentation and submitted the following information as under:

- (i) The proposed edible oil (crude palm oil and crude soya bean oil) pipeline from Adani Hazira Port to M/s Adani Wilmar Refinery at Shivarampur Village will be for a length of about 12.53 km and diameter of the pipeline will be 14". The pipelines will be laid below ground and above ground depending on the need and situation. The length above ground pipeline will 11.6 km and in the it will be about is 0.9 km.
- (ii) The pipeline will pass through CRZ-IB (2423.001 m), CRZ-II (2212.293 m), NDZ of CRZ-III (1038.470 m), CRZ-III (299.061 m), CRZ-IVA (301.274 m) and Non CRZ area (6254.967m). No mangroves will be affected due to the laying of the pipeline.
- (iii) Total 3500 nos. foundation with piling and steel structure on RCC pedestal will made to support the proposed pipeline. However, no piles will be in CRZ areas.
- (iv) Approximately 12,500 trees will be cut down. Stage-I Forest clearance has been obtained vide their letter No. 6JB038/2018-BHO, dated 2nd August, 2018.
- (v) Water of about 1400 m³ will be required one time and shall be sourced from tankers. Excavated materials of about 2700 m³ shall be used in pipeline siding.
- (vi) The total cost of the project is about ₹45 crores of the proposed pipeline.
- (vii) Consent to Establish has been obtained from GPCB vide Letter No. GPCB/CTE-SRT-3477/ID-53020.
- (viii) The Gujarat Coastal Zone Management Authority has recommended the proposal for clearance *vide* their letter No. ENV-10-2018-212-E (T Cell), dated 30th November, 2019.

2. The Committee in the said meeting had noted that the proposed pipeline project involves cutting of 12500 trees and there is no remuneration plan for the trees to be cut nor any afforestation plan. The Committee also noted that the Stage-I FC states that no tress shall be cut, whereas, it is proposed to cut 1200 number of trees. The Committee also noted that 5 m ROW is highly

unjustified for a 14” pipe diameter and reducing the ROW will eventually lead to large reduction on unavoidable tree cutting too. The Committee also observed that the pipelines are proposed to be laid taking the easiest route through inter-tidal areas, a large length of which is avoidable if alignment of pipeline is taken along the side of the existing road as far as possible. The Committee further observed that the number of piers proposed to be constructed is too high and must be reduced drastically, especially in CRZ areas.

3. Based on the deliberations EAC meeting held on 27/01/2020, the Committee had agreed that the project was premature for consideration in its present form and decided that the proponent shall first submit the following information / documents for reconsideration from CRZ perspective:

- (i) Revised layout CRZ map (1:4000 scale) from an authorized agency, indicating the revised pipeline alignment (alongside the existing road) as far as possible) and position of piers etc. due to the change in alignment of the pipeline shall be submitted.
- (ii) The revised proposal due to the change in alignment shall be got duly endorsed by the State Coastal Zone Management Authority thereafter.
- (iii) Reduced ROW shall be specifically stated and number of tree cuttings involved shall be calculated. While doing so, the type of tree and its number likely to be affected shall be provided.
- (iv) Number trestles shall be recalculated pursuant to change in alignment and an undertaking that no trestles shall be made in the inter-tidal area shall be submitted.
- (v) Afforestation plan for remuneration of trees to be cut due to the proposed project in consultation with the State Forest Department shall be submitted.
- (vi) Appropriate financial allocation as per the Office Memorandum issued by the Ministry, dated 01/05/2018, on CER, for activities to be undertaken under CER shall be earmarked and detailed plan of action shall be submitted.
- (vii) Accordingly, the proposal was deferred for reconsideration at a later stage.

4. On submission of the above pointwise reply / information, the proposal was again placed before the EAC. The Committee noted that there is no forest land available for the change in alignment alongside the existing road as informed by PP and submitted Forest Department Letter No. K/17/Survey/635/20-21, dated 10/11/2020. As per the Stage I in-principle approval received from Forest Department vide letter No. 6-GJB038/2018-BHO/308, dated 02/08/2018. No felling of Trees shall be involved. Further, as far as ROW of 5 meter considered and approved by State Forest Department and temporary access of 2.5 meter at both sides for laying of pipeline as well as future maintenance of pipeline clearances subject to requirements. Further, regular ground patrolling of ROW is being carried out alongside the Pipeline. The instant project was recommended by GCZMA *vide* letter dated 30th November, 2020.

5. The proponent also informed that as per the Stage-I Forest Clearance dated 02/08/2018, Compensatory Afforestation (CA) shall be taken up by the Forest Department over 3.50 ha non forest land at Survey No. 85, 86P, Village – Anantarness, Teshil-Santalpur, Distt-Patan, Gujarat at the cost of User Agency. The Compensatory Afforestation will be maintained for 10 years.

6. In response of number trestles, the Committee suggested that HDD technology be adopted in the inter tidal areas and an undertaking in this regard be submitted by PP. The proponent has accepted the same e-mail dated 22/11/2021 to all EAC Members and MoEF&CC.

7. Based on the deliberations held and submissions made, the Committee recommended the proposal for CRZ Clearance subject to following conditions:

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

- (ii) The pipeline shall be laid exclusively by Horizontal Directional Drilling (HDD) method at crossing of water body/river/creek, mangrove and CRZ areas
- (iii) Forest Clearance under Forest (Conservation) Act, 1980 shall be obtained for diversion of reserve forest area.
- (iv) The Compensatory Afforestation (CA) shall be taken up by the Forest Department over 3.50 ha. non forest land as committed in Stage-I Forest Clearance at the cost of User Agency and should be maintained for 10 years.
- (v) The project proponent shall ensure natural flow of the Creek water in the project site.
- (vi) No groundwater shall be extracted within CRZ area to meet the water requirements during the construction and / or operation phase of the project.
- (vii) No excavated material during the construction shall be dumped in water bodies or adjacent areas. The site shall be restored to its near original condition after completion of construction of work.
- (viii) No permanent labour camp, machinery and material storage shall be allowed in CRZ area.
- (ix) Any temporary physical infrastructure setup during construction period shall be removed simultaneously with completion of laying of each segment of the project.
- (x) The recommendation made by the GCZMA *vide* its letter No. ENV-10-2018-39-E, (T Cell), dated 30th November, 2019, shall be implemented in letter and spirit.
- (xi) All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

3.3 Proposal for construction of 3 Nos. all weather helipad at Sagar Island in the District of south 24 Parganas, under PWD, Government of West Bengal by M/s Diamond Harbour Highway Division - CRZ Clearance.

[IA/WB/CRZ/143367/2020] [F.No.11-18/2020-IA.III]

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

The proposal of M/s Diamond Harbour Highway Division proposed for construction of 3 Nos. all weather helipad at Sagar Island in the District of south 24 Parganas, under PWD, Government of West Bengal was earlier placed in 233rd EAC(CRZ) meeting held on 28/04/2020. Wherein, the project proponent made a presentation and submitted the following information as under:

- (i) The proposed project site is located at Sagar Island in South 24 Parganas district in West Bengal. Sagar Island is still not connected with the mainland through road ways. Only the waterways and limited helicopter service during fair weather connect this island with the main land.
- (ii) Presently at Sagar Island, there are 3 existing helipads with double layer brick soling. The helipads are located at low lying areas with an average embankment height of 1.35 m above the helipad level. Hence these can only provide service in fair weather conditions.
- (iii) The present proposal involves the following:
 - a) Construction/renovation of 03 nos of helipads at an elevated level to promote all weather service.
 - b) Elevating the entire area to level (FRL) of Road no. 05.
 - c) Construction of office-cum- Crew rest room adjacent to the Helipads
 - d) Developing all weather road connectivity between Helipads and Road no 5

- e) Addition of Green Zone and beautification for enhancement of Biodiversity of the surroundings

Particular	Location Point	Latitude (N)	Longitude (E)
Sagar Island Helipad Area	Sl. No.	Latitude	Longitude
	1.	21°38'33.33"N	88°04'14.83"E
	2.	21°38'30.69"N	88°04'13.13"E
	3.	21°38'29.25"N	88°04'14.49"E
	4.	21°38'28.89"N	88°04'14.75"E
	5.	21°38'28.52"N	88°04'14.97"E
	6.	21°38'27.71"N	88°04'15.28"E
	7.	21°38'27.10"N	88°04'15.21"E
	8.	21°38'26.22"N	88°04'14.99"E
	9.	21°38'25.76"N	88°04'16.46"E
	10.	21°38'25.66"N	88°04'17.25"E
	11.	21°38'27.08"N	88°04'18.50"E
	12.	21°38'28.38"N	88°04'19.99"E
	13.	21°38'29.48"N	88°04'19.09"E
	14.	21°38'30.01"N	88°04'19.38"E
	15.	21°38'30.94"N	88°04'18.34"E
	16.	21°38'30.36"N	88°04'17.78"E
	H1	21°38'27.10"N	88°04'16.19"E
	H2	21°38'29.94"N	88°04'15.06"E
H3	21°38'31.58"N	88°04'15.21"E	
G	21°38'29.03"N	88°04'17.81"E	
H	21°38'29.29"N	88°04'18.32"E	

- (iv) Total land area is 23282.936 Sq.m. Area of each helipad (paved area) will be 706.8 Sq.m. and thus total Helipad area paved will be 2120.40 Sq.m. Paver Block road area will be 436.5 x 3.75 i.e 1636.87 Sq.m. Office cum crew rest room area will be 103 Sq.m. Green area and others (soft area): 19422.69 Sq.m.
- (v) The project site falls within CRZ II area as mentioned in the CRZ map provided by IESWM. The rest portion of the project site lies beyond the CRZ area. In between the creek and the project site there is an earthen bund constructed by Gangasagar Bakkhali Development Authority.
- (vi) The water requirement for the proposed project is as under:

S.No	Description	Water Consumption in m ³ /day	Waste water generation and its management
1	Domestic	0.5	0.3 KLD domestic wastewater generated is being/will be disposed through septic tank followed by soak pit.
2	Water Sprinkling and Gardening	1.5	-
	Total	2	

- (vii) Solid Waste Management:
- a) During construction, waste like debris, concrete etc. will be generated.

- b) Municipal solid waste generated from labour camp of 24 kg/day shall be disposed of at MSW disposal sites in the vicinity.
 - c) Solid waste generated during operation phase will be collected and disposed off to MSW site.
- (viii) Total power requirement during construction phase as well as operational phase will be sourced from WBSEDCL.
 - (ix) The employment potential during the construction phase will be average 50 workers per day. Approximate 10 numbers of persons shall be employed during operational phase.
 - (x) Total cost of proposed project is ₹5.07 crores.
 - (xi) West Bengal Coastal Zone Management Authority has recommended the above proposal for clearance vide their letter No. 306-EN/T-II-4/07/2019 dated 11th February, 2020.

2. The Committee in 233rd EAC(CRZ) meeting had noted that submission of the State Government about the project has high importance considering that it has to cater to the needs of the local people for essential supplies and emergency services including disaster management and evacuation, as there is no road network between the Sagar Island and the mainland. The Committee however noted that the proposed site seems close to large mangrove patches and a low lying area and a bird sanctuary viz. Chintamani Kar Bird Sanctuary (formerly named as Narendrapur Wildlife Sanctuary) exists at about 8 kms or so from the area, which is home to several migratory birds. That this bird sanctuary is locally known as 'Kayaler Bagan' and was originally notified as a sanctuary in 1982. The Committee observed that the proposal primarily warrants a bird hazard risk assessment study, which the project proponent need to have been mindful of. The Committee therefore decided that the project proponent shall carry out the same through reputed institutes like SACON, WII, etc. and submit the views of the Committee. The Committee further observed that there are large secondary data on avian fauna of the region already available. The project proponent may collate and make an assessment of risk to the helicopter sorties due to birds based on the secondary data but be supplemented by one season (three months) data during migratory period.

3. The Committee also had noted that CRZ map (1:4000 scale) made available does not seem to appropriately demarcate the CRZ features as per the extant norms of the CRZ regulations. The Committee therefore desired that a revised CRZ map (1: 4000) scale clearly indicating the HTL, LTL, ESAs, Sand Dunes, the road proposed to be constructed (its origin from the Helipads and the CRZ delineation) etc. shall be redrawn and submitted to the Ministry.

4. The Committee had desired that a marine section of the EIA studies require additional information on the likely impact of the proposed project on flora and fauna and also a mangrove conservation study be done. It was also desired that appropriate budget allocation be made for activities specific to marine and coastal biodiversity conservation and detailed plan of action be submitted.

5. The Committee was also informed in the 233rd EAC (CRZ) meeting that some naval facilities are located along the coast of Sagar island and therefore it was decided that the project proponent shall submit necessary clearance from the Competent Authority as may be applicable. Based on the deliberations held, the Committee observed that the proposal is premature for recommendation for CRZ clearance in its present form and desired documents/information on the following:

- (i) Revised CRZ map (1: 4000) scale clearly indicating the HTL, LTL, ESAs, Sand Dunes, the road proposed to be constructed (its origin from the Helipads and the CRZ delineation) along with existing constructions etc. shall be redrawn and submitted.

- (ii) A detailed bird hazard study to helicopter sorties shall be carried out by any nationally reputed institutes like SACON, WII, etc. based on secondary data available at these institutes and supplemented by one season (three months) data during migratory period.
- (iii) A report on safety/mitigation measures to be adopted during natural disaster such as floods/storm surge/ sea erosion shall be submitted.
- (iv) Supplementary marine EIA studies indicating likely impact of the proposed project on the flora and fauna including mangrove conservation study.
- (v) Information on need for obtaining prior permission from Ministry of Defence or concerned competent authority for the proposed project in Sagar Island.
- (vi) Appropriate financial allocation as per the Office Memorandum issued by the Ministry, dated 01/05/2018, on CER, for activities to be undertaken specific to marine and coastal biodiversity conservation under CER shall be earmarked and detailed plan of action contemplated shall be submitted to the Ministry.
- (vii) Accordingly, the proposal was deferred for reconsideration once the above information/documents/actions are received by the Ministry.

6. On submission of the above information / documents, it was again placed before the EAC. The Committee noted that the proposed project in CRZ-II area and the revised CRZ map (1: 4000) scale has been prepared by IESWM, West Bengal. M/s Diamond Harbour Highway Division informed that the proposed all weather helipad at Sagar Island will be used only for emergency purpose not for regular purpose.

7. Committee noted the report from SACON on bird hazard and noted that SACON has observed no bird hazard risk for the proposed project.

8. The Committee have also agreed that since as a matter of policy, the CER condition has now been dispensed with and the condition may be dropped.

9. Based on the deliberations held and submissions made, the Committee recommended the proposal for CRZ Clearance subject to following conditions:

- i) All construction shall be strictly in accordance with the provisions of CRZ Notification, 2011 and as amended from time to time.
- ii) The project proponent shall ensure natural flow of the Creek water all the time in the project site.
- iii) Recommendation provided by SACON be implemented in totality
- iv) No groundwater shall be extracted within CRZ area to meet the water requirements during the construction and / or operation phase of the project.
- v) No excavated material during the construction shall be dumped in water bodies or adjacent areas. The site shall be restored to its near original condition after completion of construction of work.
- vi) Any temporary physical infrastructure setup during construction period shall be removed simultaneously with completion of laying of each segment of the project.
- vii) No permanent labour camp, machinery and material storage shall be allowed in CRZ area.
- viii) All recommendation made by the WBCZMA *vide* its letter No. 360 – EN/T-II-4/07/2019 dated 11/02/2020, shall be implemented in letter and spirit.
- ix) All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

FRESH PRAPOSAL:

3.4 Proposal for laying of 36” dia, pipeline passing through CRZ areas (4.484 km) out of total pipeline length @36 km along with associated facilities for transportation of Natural Gas from Dahej (District Bharuch) to Bhadbhut, District Bharuch by M/s Gujarat State Petronet Ltd.-CRZ Clearance

[IA/GJ/CRZ/124873/2019] [F.NO. 11/34/2021-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 data / information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.”

The proposal of M/s Gujarat State Petronet Ltd. is for laying of 36” dia, pipeline passing through CRZ areas (4.484 km) out of total pipeline length @36 km along with associated facilities for transportation of Natural Gas from Dahej (District Bharuch) to Bhadbhut, District Bharuch, Gujarat. The project proponent made the presentation and provided the following information:

- (i) Proposed pipeline passes through only Bhukhi River (Non-perennial) for width 51.24m which comes under tidal influence. However, pipeline will cross the Tidal influence river body by HDD method & there will be no disturbance to the present situation of water body.
- (ii) The total length of pipeline is 36Km, with 36” Diameter.
- (iii) The pipeline will be passes through 3 stations.
- (iv) The design pressure is 98 bar and operating pressure is 95 bar (maximum).
- (v) The Inlet Range (88 to 89 bar) and the outlet Pressure 83.5 bar at Bhadbhut.
- (vi) The capacity will be 17.7 MMSCMD.
- (vii) Proposed pipeline will be a buried underground with a cover of approx. 1.2mtr. and will be laid as per PNGRB Technical Standard & Specifications including safety guidelines and other applicable statutory standards like OISD and best available technology.
- (viii) As per the CRZ map, the pipeline passing through CRZ-IB, CRZ-III (NDZ), CRZ III and CRZ IV areas.
- (ix) Thus the total length passing through CRZ area is about 1301 meter.
- (x) The proposed project layout was superimposed on the approved CZMP of the 1:4000 scale map, which was prepared by National Centre for Sustainable Coastal Management, Chennai.
- (xi) CRZ Classification as per CRZ Notification 2011 is as furnished below:

CRZ Classification		Length of Gas pipeline passing through difference CRZ Categories (in meter)
CRZ IB(Intertidal Zone)		25
CRZ III	NDZ	937
	200-500m from HTL	309
CRZ IVB(River/Creek)		30
Total pipeline length in CRZ Area		1301 meter

- (xii) The water requirement will be 13.5 KLD. Waster water will be disposed with Soak Pit via septic tank. The water will be sourced from local body (nearby municipal source).

- (xiii) The energy requirement will be 40 KVA and one DG set will be required which will be kept standby at various SV & RT installations. (The Energy requirement will be 63 KWH and sourced from Dakshin Gujarat Vij Company Limited(DGVCL)
- (xiv) Green belt will be developed (33% as per MoEF&CC guideline) with locally available species along the periphery of SV station and control station locations keeping safety distance/hazard area classification zone as applicable. In addition, the proposed pipeline will be laid maximum to avoiding cutting of trees. However, in unavoidable situation forest authority will be informed and necessary tree plantation /compensation to forest authority will be given.
- (xv) Solid wastes generated from the temporary campsites and other wastes like plastics, paper, cardboard, etc. will be properly collected, segregated and reused / disposed off appropriately (recycle, reuse, and composting / landfill).
- (xvi) No hazardous wastes are envisaged from pipeline construction activities.
- (xvii) During the proposed project approximate 250-300 employment likely to be generated.
- (xviii) The total cost of project is ₹205 crores.
- (xix) The Gujarat Coastal Zone Management Authority has also recommended the proposal for clearance vide its letter No. ENV-10-2018-171-E(T Cell), dated 30/07/2019.

2. As per discussion of EAC, the M/s Gujarat State Petronet Ltd informed *via* email dated 16/11/2021 to all EAC Members, that the proposed Dahej Bhadhut pipeline passes through CRZ area in which it crosses tidal influence water body / Bhukhi River for approx. width 30 meter. The river will be crossed using Horizontal Direction Drilling (HDD) method, 2.5 meter below scour depth of the river without disturbing the natural flow of river and vegetation, length of the HDD will be as per the HDD profile and length will be approximately 500 meter.”

3. The Committee noted that the proposed pipeline length, as per GCZMA recommendation letter was 4.48 Km while the final proposal it is reduced to 1.301 km only in CRZ area. The proponent informed that during the map preparation from NCSCM of 1:4000 scale, it is noted the original length of pipeline is only 1.301 km in CRZ area. The Committee noted and agreed with the proposed length as it is a less than originally proposed and approved and recommended by GCZMA.

4. Based on the deliberations held and submissions made, the Committee recommended the proposal for CRZ Clearance subject to following conditions:

- i) All construction shall be strictly in accordance with the provisions of CRZ Notification, 2011 and as amended from time to time.
- ii) The pipeline will be laid through Horizontal Directional Drilling (HDD) method at crossing of water body/river/creek and CRZ areas.
- iii) No storage reservoir for sea water shall be permitted in the NDZ and only pipelines conveyance system shall be installed and also shall ensure natural flow of the Creek water in the project site.
- iv) No groundwater shall be extracted within CRZ area to meet the water requirements during the construction and / or operation phase of the project.
- v) No excavated material during the construction shall be dumped in water bodies or adjacent areas. The site shall be restored to its near original condition after completion of construction of work.
- vi) Any temporary physical infrastructure setup during construction period shall be removed simultaneously with completion of laying of each segment of the project.
- vii) No permanent labour camp, machinery and material storage shall be allowed in CRZ area.
- viii) The recommendation made by the GCZMA *vide* its letter No. ENV-10-2018-171-E(T Cell), dated 30/07/2019, shall be implemented in letter and spirit.

- ix) All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

MISCELLANEOUS

3.5 Proposal for Construction of desalination plant for LNG Terminal at Anjanwel, District Ratnagiri by M/s Konkan LNG Private Limited - CRZ Clearance reg. [IA/MH/CRZ/227968/2021] [F.No.11/32/2021-IA.III]

The proposal of M/s Konkan LNG Private Limited for Construction of desalination plant for LNG Terminal at Anjanwel, District Ratnagiri, was earlier considered in the 277th EAC(CRZ) meeting held on 26/10/2021. Wherein, the Committee took note that the proposed desalination plant is to set up at existing LNG terminal site of KLPL, Ratnagiri is in NDZ area which is non-permissible activity and recommended alongwith suggestion that submit a revised plan outside NDZ area to the Ministry's record before processing the file for final CRZ Clearance.

2. Thereafter, the Ministry asked to PP submit a revised plan outside NDZ area and PP submitted on Parivesh Portal dated 11/11/2021 that the proposed desalination plant falls within the Port of Dabhol, which is a notified port as per Notification No. 01/2012, issued by Customs (NT) Pune, on 22nd February 2012 and also subsequent notifications. The port is owned and operated by Konkan LNG Private Limited for Import of LNG.

3. Based on the documents received and after discussed in detail by EAC the Committee desired that the Ministry may process the file for CRZ clearance as per recommendation in its earlier 277th EAC meeting held on 26/10/2021.

4.0 Any other item with the permission of the Chair.

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

List of the Expert Appraisal Committee (CRZ) Members participated during Video Conferencing (VC) Meeting

S. No.	Name of Members	Designation
1.	Dr. Deepak Arun Apte,	Chairman
2.	Dr. Manoranjan Hota	Member
3.	Shri Manmohan Singh Negi	Member
4.	Shri Sham Wagh	Member
5.	Prof. Ashok Kumar Pachauri	Member
6.	Shri S. Jeyakrishnan	Member
7.	Prof. V.K Jain	Member
8.	Dr. M.V. Ramana Murthy, Director, NCCR, Chennai	Member
9.	Shri. R.P.S Verma, Director, Ministry of Water Resources, Central Water Commission, New Delhi	Member
10.	Dr. H. Kharkwal Additional Director Ministry of Environment, Forest and Climate Change, New Delhi	Member Secretary
11.	Dr. Saranya P. Ministry of Environment, Forest and Climate Change, New Delhi	Joint Director
12.	Dr. Bhawana Kapkoti Negi Ministry of Environment, Forest and Climate Change, New Delhi	Technical Officer
