

MINUTES OF THE 228th MEETING OF THE EXPERT APPRAISAL COMMITTEE FOR PROJECTS RELATED TO COASTAL REGULATION ZONE HELD ON 29th NOVEMBER, 2019 AT INDIRA PARYAVARAN BHAWAN, MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE, NEW DELHI.

The 228th Meeting of the Expert Appraisal Committee for projects related to Coastal Regulation Zone was held on 29.11.2019 at Brahmaputra Conference Hall, Vayu Block, 1st Floor, Indira Paryavaran Bhawan, New Delhi. The members present are:

1.	Dr. Deepak Arun Apte	-	Chairman
2.	Dr. M.V Ramana Murthy	-	Member
3.	Dr. Anil Kumar Singh	-	Member
4.	Dr. V. K. Jain	-	Member
5.	Dr. Anuradha Shukla	-	Member
6.	Dr. Manoranjan Hota	-	Member
7.	Dr. Rajesh Shah	-	Member
8.	Ms. Bindhu Manghat	-	Member

Shri Prabhakar Singh, Shri Narendra Surana, Shri N.K. Gupta, Shri. N.K. Verma and Shri Sanjay Singh were absent. Shri. W. Bharat Singh, Member Secretary was unable to attend as he had to attend to an inter-ministerial assignment on off shore wind energy programme of the Government of India. The meeting was therefore officiated by Dr. P. Saranya as Member Secretary.

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 226th meeting are in order, 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 FRESH PROPOSALS:

3.1 Proposal for Construction of doubling of Railway Line between Existing Holding Yard No.1 at Ch.00 m (Near Bridge No.5) to Entry of Container Rail Terminal Yard of M/s Kamarajar Port Ltd. at Athipattu, Puzhuthivakkam and Ennore Village of Ponneri Taluk, Tiruvallur District, Tamil Nadu [IA/TN/CRZ/120935/2019] [F.No. 11-41/2019-IA III] - CRZ Clearance reg.

The proposal of M/s Kamarajar Port Ltd. (KPL) is for construction of doubling of railway line between existing holding Yard No.1 at Ch.00 m (near bridge No.5) to the entry of Container Rail Terminal Yard at Athipattu, Puzhuthivakkam and Ennore village of Ponneri Taluk, Tiruvallur District, in Tamil Nadu. The project proponent made a presentation and provided the following information:

- (i) Kamarajar Port is 12th major Port under Ministry of Shipping, Government of India (GoI) and is located at about 24 km North of Chennai. Presently, it is handling thermal

coal of Tamil Nadu Electricity Board and other cargo like liquid POL containers, automobiles, LNG etc.

- (ii) KPL is connected to Indian Railway network system through a single line from Attipattu Pudu Nagar Station, and Attipattu Station. Present line capacity is 20 trains per day and needs to be increased to meet the growing needs of KPL for cargo evacuation.
- (iii) The proposed construction of doubling of Railway Line between Existing Holding Yard No.1 at Ch.00m (Near Bridge No.5) to Entry of Container Rail Terminal Yard of M/s Kamarajar Port Ltd, at Athipattu, Puzhuthivakkam and Ennore Village of Tiruvallur District, Tamil Nadu.
- (iv) Doubling of Railway Line starts from 13°15'35.4" N, 80°18'32.0" E and ends at 13°15'52.4" N, 80°19'45.5" E.
- (v) The project work was awarded to IPRCL (A JV Company of Major Ports and RVNL, under Ministry of Shipping / Government of India,) by KPL for execution of doubling of the railway line.
- (vi) This is a brown field project and involves construction of another railway line by the side of existing one by extending embankment, providing culverts, and bridges **in alignment with the existing ones**, for free flow of water.
- (vii) Three major bridges and 7 box culverts need to be constructed. Out of which 2 box culverts and 2 major bridges fall under the CRZ area and rest on the Non – CRZ area.
- (viii) No land acquisition is involved in the proposed project.
- (ix) Total length of the proposed doubling is 2650 m, out of which 1446 m falls in CRZ area and 1204 m in non- CRZ area.

Description	Length (m)
Non CRZ Area	1204
CRZ Area	1446
Total Length of the Proposed Railway Track	2650

S.No	Description	Length (m)
1	CRZ IA	276
2	CRZ II	978
3	CRZ IB	64
4	CRZ IVB	128
5	Non CRZ Area	1204
Total length		2650

- (x) The chainage-wise details of various project components are given hereunder:

S.No	Chainage Starting Point (m)	Chainage Ending Point(m)	Length in (m)	CRZ Zone	Project components	Permissibility as per CRZ Notification 2011
1	0	664	664	Non CRZ	-	-
2	664	1305	641	CRZ II	Rail Road & Box Culvert - 2 Nos	Para 3 (iv) (a)

3	1305	1369	64	CRZ IB	Rail Road	Para 8 I.CRZ-I (ii) (b)
4	1369	1468	99	CRZ IVB	Major Bridge	Para 3 (iv) (a)
5	1468	1744	276	CRZ IA	Rail Road & Major Bridge	Para 8 I.CRZ-I (ii) (b)
6	1744	2048	304	CRZ II	Rail Road & Signal Building	Para 3 (iv) (a) & Para 8 II.CRZ-II (i)
7	2048	2077	29	CRZ IV B	Major Bridge	Para 3 (iv) (a)
8	2077	2110	33	CRZ II	Rail Road & Major Bridge	Para 3 (iv) (a)
9	2110	2650	540	Non CRZ	-	-

(xi) Proposed Bridges and Culverts in CRZ area

Chainage Starting Point (m)	Chainage Ending Point (m)	Bridge No	Structure	Vent Proposed (LxWxHt) in m	CRZ Status
821.9	833.9	13	Box Culvert	12x1.5x2	CRZ II
1172.5	1184.5	14	Box Culvert	12x1.5x2	CRZ II
1369	1589	15	Major Bridge	220x12x4.5	CRZ IA & IVB
2048	2088	16	Major Bridge	40x12x6	CRZ II & IVB

- (xii) The existing bridge No.13 (skew) box culvert at Ch.821.9m is proposed to be extended on the right side of the existing track for accommodating the doubling line. The existing Box culvert skew Bridge No.14 at Ch.1172.5m need to be extended to accommodate the proposed double line.
- (xiv) A major bridge No. 15 with PSCU girders (11 spans x20m each) is located at Ch.1369 m across Kosasthalaiyar River on the existing single line to KPL. As a part of doubling, it is proposed to construct a parallel bridge with the same span configuration viz., 11 nos' of 20 m span, at a distance of 12m from the existing bridge to its left hand side, so that the piers of the existing and proposed bridges will be in the same line, for free flow of water.
- (xv) The existing Bridge No.16 is located on Buckingham Canal at Ch.2048m and consists of 2 spans of 12 m as end spans and one span of 20m at center. It is proposed to construct a bridge parallel to the existing one at a distance of 6m to its left, with an overall span of 44.70 m, to suit to the navigational standards of Inland Water Authority of India (IWAI) on Buckingham canal.
- (xvi) The mangrove areas which get affected during the construction activity will be around 23 mangrove trees over 20 sq.m area. The proposed project involves only piling construction activity near water bodies and hence there will be very little impact on any fauna living under water bodies. In compensation to that, three times of mangrove plantation (69 trees) will be done at the nearby mangrove areas.
- (xvii) Temporary approach road is proposed to be constructed for conveying the construction materials to project site. The length and width of the temporary approach road No.1

will be about 2.5km and 8m and for temporary approach road No.2 is 1km and 8m wide respectively. Temporary roads will be made by laying and filling with sand and gravel to a thickness of 0.30m, providing soling stone to a depth of 0.15m. Coarse Aggregates will be used to fill up the voids of soling stone and water bound macadam road layer to a thickness of 0.30m will be provided. The temporary road will be removed after construction of the railway lines.

(xviii) The total cost of the project in CRZ Zone will be Rs.40 Crores.

(xix) The Tamil Nadu Coastal Zone Management Authority has recommended the above proposal for clearance vide their letter No. 17097/EC.3/2019-1, dated 16.10.2019.

2. The Committee deliberated the proposal and noted that Chennai Port, Kamarajar Port and Kattupalli Port, together form a Coastal Economic Zone covering Thiruvallur, Chennai and Kancheepuram districts in Tamil Nadu. The Committee also noted that the existing rail lines that provide access to the Kamarajar Port was constructed by TANGEDCO in the year 1998 and the existing track is electrified.

3. The Committee further noted the two box culverts and two major bridges were proposed in the CRZ areas. It was stated that the two major bridges are being proposed to be constructed adjacent to the existing bridges in the same alignment across Kosasthalaiyar River and Buckingham Canal. The Committee suggested that the bridges should not impinge on tidal flow in the water bodies. The Committee also noted that 276 m of the proposed alignment in the CRZ-IA area affecting 20 sq.m of mangrove area and the proposed project involves only piling construction activity near water bodies and hence less impact will be there for any fauna living under water bodies. The Committee desired that the plantation of native mangroves and management plan for immediate implementation in consultation with the concerned agency in the state shall be prepared and implemented during the course of execution of the project.

4. Based on the deliberations held the Committee recommended the project for CRZ clearance subject to the following conditions:

- i) No groundwater shall be extracted to meet with the water requirements during the construction and/or operation phase of the project.
- ii) 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 bridge.
- iii) Plantation of native mangroves over an area of five times the mangroves areas i.e over 100 sq.m will be undertaken in consultation with the concerned State department for plantation and management of mangrove. The implementation plan shall be duly approved by the concerned department in the State.
- iv) Any physical infrastructure setup during construction period shall be removed simultaneously with completion of laying of each segment of the erection project.
- v) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May, 2018, and proposed by the project proponent, an amount of Rs. 40 lakhs i.e @1% of project Cost shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as support to local government, schools, sanitation and health including construction of public toilets in the surrounding villages, as per need based assessment carried out. The activities proposed under CER shall be restricted to the affected area around the project. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

3.2 Proposal for establishment of 10 MLD Desalination Plant at Paradip Port by M/s Paradip Port Trust [IA/OR/CRZ/125897] [F.No.11-42/2019-IA.III] - CRZ Clearance reg.

The proposal of M/s Paradip Port Trust is for establishment of 10 MLD Desalination Plant at Paradip Port. The project proponent made a presentation and provided the following information:

- (i) Paradip does not have a natural water source nearby and the raw water is being drawn 100 km from Mahanadi River through Taladanda Canal. The Paradip is located at tail end of Taladanda canal and the water is being used by public for domestic purposes all along the canal, degrading the quality of water at Paradip.
- (ii) At present Paradip Port Trust has an operational 27MLD water treatment plant which is in service for the last 60 years and facing a difficulty in maintaining the quality of water consistently. Hence, to meet the quality of water for human consumption and to cater the water demand, Paradip Port Trust proposes to establish a 10 MLD RO desalination plant in the port premises.
- (iii) About 23,870 sq.m of area is available within the port premises for the proposed desalination plant out of which the total built up area will be 5333 sq.m and green belt plantation will be raised over 6193 sq.m.
- (iv) The proposed desalination process will make use of Reverse Osmosis (RO) technology to remove salt from sea water, thereby producing fresh product water. The three major components of RO Desalination plant are seawater Intake, Desalination plant, intake pipeline and outfall pipeline for brine disposal. The sea water intake structure is proposed at water depth of 8m and the intake pipeline of around 200m connects the sea water intake to the plant. The plant is designed with recovery efficiency of 40% and the total water requirement of the desalination plant is about 1075 m³/hr, out of which 427 m³/hr of fresh water will be produced and 644 m³/hr of brine will be disposed into the sea through buried pipe line of diameter 400mm HDPE pipe.
- (v) The brine dispersion model indicated that the salinity concentration reduced from 60 ppt to 36.75 ppt that can be achieved within 10 m from outfall point in 80 seconds. Hence, the water quality in the environment is not disturbed.
- (vi) The proposed plant and associated facilities are located in CRZ IB, CRZ II, CRZ IVB.
- (vii) The geographical location of the desalination plant is (20°15'35.7" N, 86°40'23.5" E), intake structure (20°15'43.98"N, 86°40'23.98"E), outfall (20°15'35.76"N, 86°40'38.71"E).
- (viii) Both Intake and Outfall is inside the Harbour area. It is far away from nesting ground, and fishing activities. No Mangroves in the project location. So there is practically no adverse impact.
- (ix) The cost for establishment of 10 MLD, RO desalination plant is around Rs. 116 crores.
- (x) The Odisha Coastal Zone Management Authority has recommended the above proposal for clearance vide their letter No. 294/OCZMA, dated 16.11.2019.

2. The Committee noted that the Paradip does not have a natural water source nearby and the raw water is being drawn 100 km from Mahanadi River through Taladanda Canal. The project proponent also informed that the Taladanda canal water is being shared by other big industries and the Paradip Port Trust (PPT) being at the tail end, the residual water left after consumption by the industries is highly inadequate. The proposed 10 MLD RO desalination plant will meet the domestic households and water demand of PPT.

3. The Committee was also informed that the water intake will be at a depth of 8 m w.r.t CD with a flow rate of 1075 m³/hr. The Committee also noted that the ambient salinity of 1.75 ppt will be met at a distance ranging from 9 m from the outfall point.

4. Based on the deliberations held the Committee recommended the project for CRZ clearance subject to the following conditions:

- i) No storage reservoir for sea water shall be permitted and only pipelines conveyance system shall be installed.
- ii) No groundwater shall be extracted to meet with the water requirements during the construction and/or operation phase of the project.
- iii) No excavated material during the construction shall be dumped in water bodies or adjacent areas.
- iv) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May, 2018, and proposed by the project proponent, an amount of Rs. 1.74 crores i.e @1.5% of project Cost shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as support to local government, schools, sanitation and health including construction of public toilets in the surrounding villages, as per need based assessment carried out. The activities proposed under CER shall be restricted to the affected area around the project. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

3.3 Proposal for Construction of 30 inch (outer dia) Underground Natural Gas Pipeline from Ennore LNG Terminal situated inside Kamarajar Port Limited, Ennore, Tiruvallur District to Salavakkam Village, Uthiramerur Taluk, Kancheepuram District by M/s Indian Oil Corporation Limited [IA/TN/CRZ/123194/2019] [F.No. 11-42/2019-IA III] - CRZ Clearance

The proposal of M/s Indian Oil Corporation Limited is for laying of 30 inch (outer dia.) underground natural gas pipeline from Ennore LNG Terminal situated inside Kamarajar Port Limited, Ennore, in Tiruvallur District to Salavakkam Village, Uthiramerur Taluk, in Kancheepuram District, Tamil Nadu. The project proponent made a presentation and provided the following information:

- (i) Indian Oil Corporation has been authorized by Petroleum and Natural Gas Regulatory Board (PNGRB) to lay, build and operate 1423 km long pipeline including spurlines for evacuation of natural gas from its 5 MMTPA liquefied natural gas import terminal at Kamarajar Port (Ennore Port) near Chennai and its transportation to demand centres in various hinterlands of Tamil Nadu, Andhra Pradesh, Karnataka and Puducherry.
- (ii) In order to cater to immediate requirement of gas to anchor customers in Chennai viz. Madras Fertilizers Limited, Chennai Petroleum Corporation Limited, Tamil Nadu Petroproducts Limited and Manali Petrochemicals Limited a 16" OD Pipeline along with spurline has been laid from Ennore to Manali and commissioned on 08.03.2019. As a part of this project, 30" OD Pipeline is being laid from Ennore to Salavakkam Village in Uthiramerur Taluk, Kancheepuram District.
- (iii) The pipeline originates from the Ennore LNG Import Terminal and traverses in Tiruvallur and Kancheepuram Districts.

- (iv) The length of the pipeline is 120 Km and it traverses through 18 metre RoW acquired as per Petroleum & Minerals Pipeline Act (P & MP Act) 1962.
- (v) The initial 36Km of Pipeline RoW from Ennore Port to Poochi Athipattu Village (Uthukottai Taluk) has been acquired as per P&MP Act 1962. The pipeline from 36Km to 120 Km is being laid in the 18m RoW already acquired for laying of CTMPL Product pipeline.
- (vi) The project does not involve diversion of any forest land.
- (vii) The brief description of Pipeline RoW is provided below.

S.No	Pipeline Chainage (Km)		Pipeline Length (Km)	RoW Type	Remarks
	From	To			
1	0	36.4	36.4	New RoW	Land acquisition completed
2	36.1	114.47	78.07	Existing IOCL RoW	Already acquired land
3	0	3.61(Spurline)	3.61	Existing IOCL RoW	Already acquired land
4	0	2.51(Spurline)	2.51	New RoW	SIPCOT Land

- (viii) The proposed is traversing through the CRZ near Ennore creek. The details are provided below:

S.No	Length of Pipeline(Km)	CRZ Classification
1	1037.41	CRZ - III
2	655.98	CRZ - IVB
Total Length of Pipeline in CRZ :1.69 Km		

S.No	Chainage Starting Point (km)	Chainage Ending Point(km)	Length in (km)	CRZ Zone	Permissibility as per CRZ Notification 2011
1.	0	1.396	1.396	Non CRZ	CRZ notification clause 4 (ii) d
2.	1.396	1.466	0.070	CRZ-III	
3.	1.466	1.506	0.040	CRZ-IVB	
4.	1.506	1.52	0.014	CRZ-III	
5.	1.52	1.766	0.246	CRZ-IVB	
6.	1.766	1.798	0.032	CRZ-III	
7.	1.798	1.971	0.173	CRZ-IVB	
8.	1.971	2.549	0.578	CRZ-III	
9.	2.549	3.078	0.529	Non CRZ	-
10.	3.078	3.36	0.282	CRZ-III	CRZ notification clause 4 (ii) d
11.	3.36	3.556	0.196	CRZ-IVB	
12.	3.556	3.624	0.068	CRZ-III	

- (ix) The total cost of the project is Rs.849 Crores including the cost of project in CRZ area of about Rs 9.4 crores.
- (x) The Tamil Nadu Coastal Zone Management Authority has recommended the above proposal for clearance vide their letter No. 17099/EC.3/2019-1, dated 15.10.2019.

2. The matter was deliberated in detail and the Committee noted that the pipeline will be laid underground in the entire stretch with a minimum clear cover of 1.2 m above the pipe and in crossing locations, 2m to 10 m depending on type of crossing. The Committee also noted

that the total length of pipeline is approximately 120 km and it will traverse through 18 m RoW acquired as per the Petroleum & Minerals Pipeline Act, 1962. The Committee also took note that after 36.4 km, the pipeline will be laid in the existing RoW of Chennai-Trichy-Madurai product pipeline acquired in the year 2004 upto Kilakadi village.

3. The project proponent also informed the Committee that the pipeline crosses Kosasthalaiar River and will be laid by Horizontal Directional Drilling method which is trenchless technology. The project proponent also informed that the maximum depth of laying of pipeline in CRZ area is 10-15 m below the scour depth the water body. The Committee desired that laying of pipeline shall not alter/affect the flow of water at any point of time.

4. The Committee observed that the necessary precaution shall be taken as the entire pipeline is underground and suggested that sectionalized valve stations at regular intervals as per population density in case of exigencies and adequate tests as per Petroleum Rules shall be adopted.

5. Based on the deliberations held the Committee recommended the project for CRZ clearance subject to the following conditions:

- i) No groundwater shall be extracted to meet with the water requirements during the construction and/or operation phase of the project.
- ii) No excavated material during the construction shall be dumped in water bodies or adjacent areas.
- iii) Any physical infrastructure setup during construction period shall be removed simultaneously with completion of laying of each segment of the erection project.
- iv) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May, 2018, and proposed by the project proponent, an amount of Rs. 8.49 crores i.e @1% of project Cost shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as support to local government, schools, sanitation and health including construction of public toilets in the surrounding villages, as per need based assessment carried out. The activities proposed under CER shall be restricted to the affected area around the project. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

3.4 Proposal for laying of 12" dia. pipeline along with associated facilities for transportation of Natural Gas from Umargam, District Valsad, Gujarat to Gholvad, Maharashtra by M/s Gujarat Gas Limited [IA/MH/CRZ/121306/2019] [F.No. 11-43/2019-IA III] - CRZ Clearance

Neither the project proponent nor any of its representatives attended the meeting. The Committee therefore decided that the proposal may be deferred and considered at a later stage when the project proponent submits its request for taking up. The Committee further decided that in case no request is received within three months, the proposal may be delisted from the pending list with proper intimation to the project to reapply afresh.

RECONSIDERATION

3.5 Proposal for laying Seawater Intake and Outfall System for Stage – II (1x 800 MW) at Village Nelatur, Mandal Muthukur, District SPSR Nellore by M/s Andhra

Pradesh Power Development Company Limited (A Subsidiary of Andhra Pradesh Power Generation Corporation Limited) [IA/AP/CRZ/105120/2019] [F.No. 11-20/2019-IA III] – CRZ Clearance

The proposal of M/s Andhra Pradesh Power Development Company Limited [APPDCL] (A Subsidiary of Andhra Pradesh Power Generation Corporation Limited) was earlier considered in the 218th meeting held on 28.06.2019, wherein, the project proponent had provided the following information to the Committee:

The project proponent made a presentation and provided the following information:

- (i) APPDCL proposes expansion of Sri Damodaram Sanjeevaiah Thermal Power Station (SDSTPS) by addition of 1x800 MW (Stage-II) in its existing 2x800 MW TPP.
- (ii) The seawater intake for stage-II is contemplated by adding one separate intake line (over ground) of 2.2m dia (M.S pipe) from the existing Seawater Pump House to the Power Plant, using the same existing open channel Sea Water Intake (which were already designed for the for the Stage-II requirements also). The reject water of Stage-II (1x800MW) can also be handled through the existing outfall line, as was designed accordingly.
- (iii) An additional RO Plant of 54 MLD capacity is being set up for handling Fly Ash, as per the PCB Guidelines. These works are being taken up along with Stage-II expansion works of 1x800 MW.
- (iv) The existing outfall line cannot cater to the rejects from this RO Plant. Hence, the reject water of approximately 5000 m³/hr is planned to be discharged into the Sea through a separate new outfall pipeline of approximately same dia of existing outfall pipeline of 1.8m (M.S pipe) at distance of 1.5 km from Shoreline (with a gap of 40m from the existing pipeline towards North).
- (v) The proposed outfall location is at 14 19'31.60" N, 80 9'28"E. A MS pipeline with inner diameter of 1800 mm and of thickness 14 mm is anchored by reinforced concrete sleeves/ Anchor Blocks and buried to the desirable depth.
- (vi) The entire route of the pipeline is passing through CRZ areas. As per approved CZMP of the area, the area is classified as CRZ-IB and CRZ IV A. The proposed pipeline is passing through 99 m in CRZ IB in inter tidal zone and 1501 m in CRZ IV(A). The alignment of proposed outfall pipeline is free from mangroves, tidal flats or other ESA. As per the report the site of the proposed ash pond extension falls in non CRZ area.
- (vii) CRZ clearance for the existing intake and outfall pipeline for the unit was issued by this Ministry vide letter No. 11-43/2012-IA III dated 29.05.2008 and amended on 03.09.2013.
- (viii) The total project cost is around Rs. 20 Crores.
- (ix) Andhra Pradesh CZMA has recommended the project for CRZ clearance vide letter No.130/APCZMA/CRZ/IND/2018-89 dated 03.04.2019

2. The Committee in the said 218th meeting had noted that the proposal also includes an additional intake pipeline of about 4 km in length (overground) from the existing pump house of seawater intake system to the power plant, which traverses to CRZ areas. In the said 218th meeting, during the course of the presentation made by the project proponent, the Committee had observed that the baseline data of salinity of the sea water appears very low and had desired that the IIT, Chennai study perhaps require re-validation. The Committee therefore had decided that the salinity baseline data shall be cross checked and the model exercise entailing additional discharge into the outfall point shall be reworked and submitted early for its perusal.

3. The Committee had further also noted in the 218th meeting that CRZ map in 1:4000 scale may be redrawn indicating the existing intake pipeline and proposed intake and outfall pipeline. It was also desired that appropriate financial allocation as per the Office Memorandum issued by the Ministry, dated 01.05.2018, on CER, for activities specific to marine and coastal biodiversity conservation to be undertaken under CER shall be earmarked and detailed plan of action contemplated shall be submitted to the Ministry within 3 months.

4. On submission of the above documents the matter was placed for reconsideration and M/s APPDCL made a presentation before the Committee on the changes made pursuant to the last deliberations. M/s APPDCL informed the Committee that there has been a strong freshening of coastal and near shore water along east coast of India during the post summer months which gets stronger during north east monsoon. It was also submitted that this could be attributed to discharges from Buckingham Canal and mixing of coastal waters and hence, in the modeling study of IIT Madras the lower values are considered to produce larger gradients in salinity during the dilution process. The Committee took note of the above submission and found them satisfactory.

3. The Committee was also presented the revised CRZ map indicating the existing intake pipeline and proposed intake & outfall pipeline was submitted. The details of areas as per updated CRZ demarcation are as under: -

CRZ Classification	Length of Intake Pipeline (m)	Length of Outfall Pipeline (m)	Length of Pipe carrying bridge (m)
CRZ -IB	31.60	157.14	-
CRZ III (between 200m & 500m from HTL)	195.75	579.55	-
CRZ III (NDZ)	473.57	662.90	41.78
CRZ-IV(A)	-	1478.56	-
CRZ-IV(B)	32.24	32.32	32.22
Non CRZ	3559.52	3626.03	
Total	4292.68	6536.50	74.00

4. Based on the deliberations held and the submissions made by the project proponent, the Committee recommended the project for CRZ clearance subject to the following conditions:

- i) For continuous online monitoring of intake and outfall pipeline, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying sea water/effluent within the premises.
- ii) No groundwater shall be extracted to meet with the water requirements during the construction and/or operation phases.
- iii) No storage reservoir for sea water shall be permitted and only pipelines conveyance system shall be installed.
- iv) No excavated material during the construction shall be dumped in water bodies or adjacent areas.
- v) The project proponent shall ensure that the temporary structures installed for laying of pipe lines are removed within one months of accomplishment of the work.

- vi) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May, 2018, and proposed by the project proponent, an amount of Rs. 40 lakhs i.e @2% of project Cost shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as support to local government, schools, sanitation and health including construction of public toilets in the surrounding villages, as per need based assessment carried out. The activities proposed under CER shall be restricted to the affected area around the project. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

4.0 Any other item with the permission of the Chair.

There being no agenda item left, the meeting ended with a vote of thanks to the Chair.
