MINUTES OF THE 207th MEETING OF THE EXPERT APPRAISAL COMMITTEE FOR PROJECTS RELATED TO COASTAL REGULATION ZONE HELD ON 25th JANUARY, 2019 AT INDIRA PARYAVARAN BHAWAN, MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE, NEW DELHI.

The 207thMeeting of the Expert Appraisal Committee for projects related to Coastal Regulation Zone was held on 25.01.2019 at Brahmaputra Conference Hall, Vayu Wing, 1st Floor, Indira Paryavaran Bhawan, New Delhi. The members present were:

1.	Dr. Deepak Arun Apte	-	Chairman
2.	Dr. V.K Jain	-	Member
3.	Shri Anil Kumar Singh	-	Member
4.	Dr. N.K Verma	-	Member
5.	Shri. N.K. Gupta	-	Member
6.	Dr. Anuradha Shukla	-	Member
7.	Shri Arvind Nautiyal	-	Member Secretary

Dr. M.V Ramana Murthy, Shri T. P. Sing, Dr. Manoranjan Hota, Shri Prabhakar Singh, Shri Narendra Surana, Dr. Mohan Singh Panwar, Shri N.K. Gupta, and Shri Sanjay Singh were absent.

In attendance: Shri W. Bharat Singh, Director, MoEFCC. 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 205th meeting are in order, confirmed the same with suggestions that in case any typographical/grammatical errors are noticed the same may be corrected suitably.

3.0 FRESH PROPOSALS:

3.1 Proposed Mumbai- Ahmedabad High Speed Railway Project at Narmada River, in Baruch District, Gujarat by National High Speed Rail Corporation Ltd. [F.No. 11-1/2019-IA.III]– CRZ Clearance reg.

The proposal of National High Speed Rail Corporation Ltd. (a Joint venture company of the Government of India and state Government of Gujarat) is for construction of Mumbai-Ahmedabad High Speed Railway system from Mumbai to Ahmedabad. The project proponent made a presentation and provided the following information:

i) As part of the Ministry of Railways, Government of India, "Indian Railway Vision 2020". This vision aims to modernize existing conventional lines and enhance capacity as well as develop high speed railway lines.
ii) Seven routes were selected as candidates for the high speed railway system. Among them, the Mumbai-Ahmedabad route was given top priority by the Experts Committee on modernization of India's national railway.
iii) Japan International Cooperation Agency (JICA) and the Ministry of Railways, Government of India, signed a Memorandum of Understanding for joint feasibility

study in October, 2013 and the Joint Feasibility Study (Joint F/S) for Mumbai-Ahmedabad High Speed Railway (MAHSR) project was conducted from December 2013 to July 2015.

iv) The Government of India created a Special Purpose Vehicle (SPV) viz. National High-Speed Rail Corporation Limited (NHSRCL) for implementing the MAHSR project from planning to execution, construction, operation and maintenance.

v) The Prime Minister of Japan and the Indian Prime Minister issued a joint statement in December 2015, agreeing to introduce the Shinkansen High Speed Railway System on the Mumbai-Ahmedabad route.

vi) Prime Minister Shri Narendra Modi and his Japanese counterpart HE Shinzo Abe laid the foundation for a high-speed train network. Both heads of state announced the launch of Mumbai-Ahmedabad High Speed Railway (MAHSR) Project in Sabarmati on 14th September, 2017.

vii) Of the total cost of the project, 81% of the cost will be provided by Japanese soft loan at 0.1% per annum with repayment period over 50 years – including grace period of 15 years.

viii) This is first time in India that an infrastructure project is being funded under such favourable terms.

ix) Total length of the alignment will be 508.17 km, and it will start at Bandra Kurla Complex, Mumbai and terminating at Sabarmati, in Gujarat.

x) The length across the State of Maharashtra will be 155.642 Km and across Dadra & Nagar Haveli it will be 4.302 Km. The total length across the state of Gujarat will be 348.226 Km

xi) It will pass through the districts of Ahmedabad, Kheda, Anand, Vadodara, Bharuch, Surat

xii) Navsari, and Valsad in Gujarat.

xiii) More than 90% of the alignment has been changed to Viaduct structures although the feasibility report had proposed more than 60% on embankment. This reduces requirement of land (17.5 m width against 36 m) and ensures no obstruction to humans, wildlife and natural flow of waters. It will also provide seamless crossing at all places and provide sufficient clearance of 5.5m (highest for roads) over existing road network, thus, greatly improves safety and security perception against external interference.

xiv) As per CZMP for Bharuch District prepared based on CRZ Notification, 2011, the proposed project for High speed Railway does not fall within CRZ area. However, the application was made in accordance with earlier approved CZMP of 1996, where MAHSR project falls within the CRZ, at Bharuch, where a bridge is to be constructed across Narmada river (nearby Sarfuddin and Kukarwada villages). The bridge will have 5.5 m pier diameter and 60.0 m span length.

xv) Demarcation of HTL/LTL has been carried out by National Institute of Oceanography, Vishakhapatnam.

xvi) The MAHSR alignment traversing through CRZ-IVB affected area is 1.893ha. and under CRZ-III is 0.314 ha.

xvii) There are no ecologically sensitive areas in the proposed project in CRZ area of Bharuch District.

xviii) The nearest bridge is located at 5.75 Kms (aerial distance) downstream of the project side in Narmada river.

xix) Cost of the project is estimated at Rs. 1,08,000 Crores.

xx) GCZMA has recommended the project for CRZ clearance vide its letter no. ENV-10-2018-69-E, dated 02.11.2018.

2. The Committee deliberated and observed that though the project in itself may not entail any serious CRZ consequences on the Gujarat side of the alignment, the project proponent need to ensure that the flow regime of Narmada river is not affected or altered due to the civil construction associated with the proposed project. The Committee also noted that a representation from an NGO was received. The contents of the representation were perused and deliberated and it was decided that the project proponent shall submit a written response for records.

3. Based on the deliberations held and submissions made, the Committee decided that in larger public interest the instant proposal can be recommended for CRZ clearance for project areas falling in CRZ areas of Gujarat State subject to the following conditions:

i) The project activity shall not create any alteration to the flow regime of Narmada river and construction material including debris shall be disposed safely in the designated areas.
ii) No groundwater shall be extracted to meet with the water requirements during the construction and/or operation phases.
iii) Construction camps (if any) shall be located outside the CRZ areas.
iv) A third party (external agency of repute) shall be appointed for supervision/monitoring of proposed activities in CRZ areas.
v) 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 contemplated shall be submitted to the concerned agencies within six months of receipt of clearance letter.

3.2 Proposed development of 4400 MW Solar Power Park at Dholera Special Investment Region, near Gulf of Khambat, in Ahmedabad District by DSIRDA [F. No. 11-7/2019-IA.III]- **CRZ Clearance reg.**

The proposal of Dholera Special Investment Regional Development Authority (Government of Gujarat) is for development of a 4400 MW Solar Power Park at Dholera Special Investment Region, near Gulf of Khambat, in Ahmedabad District. The project proponent made a presentation and provided the following information:

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 endeavor 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. Dholera Industrial City Development Limited (DICDL) has been thus created between the Central Government (DMICDC Trust) and the State Government of Gujarat (DSIRDA) to implement the project.
iii) 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.
iv) The proposed Solar Power Park will cover land of about 8594.95 hectares, of which 7949.17 ha falls under CRZ-1B, 204.34 ha in CRZ-III, 5.03 ha in CRZ-IVB and 436.40 ha in non-CRZ zone.
v) 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.

vi) There will be 11 no. of Plots in this 8594.95 hectares of land, ranging from 847 to 1,232 hectares area of each Plot. These 11 plots have been further sub-divided into 27 sub-plots.

vii) 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.

viii) No R&R would be involved.

ix) 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.

x) The first phase will be initially for 1000 MW.

xi) 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 Nos. 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.

xii) 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.

xiii) 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.

xiv) 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.

xv) 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.

xvi) The proposed project site is situated within 5 km of Velavadar National Park, and within 4 km of the ESZ of this protected area.

xvii) The site dies 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.

xviii) Site for setting up 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 thoroughfares i.e. good connectivity.

xix) 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.

xx) 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.
xxi) An amount of Rs 3 Crores will be earmarked for environment mitigation measures.
xxii) The total cost of the proposed solar Park will be Rs 22,000/- crores.
xxiii) CRZ maps has been prepared by IRS, Chennai.
xxi) GCZMA has recommended CRZ Clearance vide its letter No. ENV-10-2018-39-E, dated 10.08.2018.

2. The 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 noted that perhaps the project proponent had identified the land availability only from R&R encumbrances and the viability of the site to withstand impact of erosion and sea level rise, has been either negated or not given due diligence. 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.

3. 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. The Committee during the course of the deliberation agreed that to begin with the project can be considered for 1000 MW in the intertidal areas close of HTL that are lightly inundated. The Committee also decided that a site visit shall be undertaken by a Sub-Committee comprising of: (i) Dr. Deepak Apte, Chairman of the Committee; (ii) Dr. V.K. Jain, Member of the Committee; (iii) representative of the Ministry of Environment, Forest and Climate Change; and (iv) representative of Gujarat Ecology Commission. The Committee further decided once the report of the studies viz (i) erosion modelling and study for the next 30 years' period, specific model in respect of sea level rise and risks and viability of the entire project capacity in this context; and (ii) impact on migratory birds, are received and based on the findings of the site visit of the Sub-Committee, further consideration for addition of remaining capacity of Solar Power parks will be examined.

5. Based on the deliberations held and submissions made, the Committee therefore decided that to begin with 1000 MW Solar Power project can be recommended in the inter tidal areas close to the HTL that are lightly inundated subject to the following conditions:

i) Clearance from the Standing Committee of Wildlife as may be applicable shall be obtained.
ii) In order to combat likely rise in ambient temperature due to installations of solar PV panels, the project proponent shall implement massive afforestation programme in the region, (in addition to mangrove plantation committed by the project proponent) to be executed simultaneously during the course of implementation of the project itself. However, no afforestation should be done on non-vegetated mudflats.

iii) No mudflats and connecting inter-tidal streams shall be touched during the implementation of the project.
iv) No groundwater shall be extracted to meet with the water requirements during the construction and/or operation phases.
v) Construction camps (if any) shall be located outside the CRZ areas.
vi) A third party (external agency of repute) shall be appointed for supervision/monitoring of proposed activities.
vii) 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 contemplated shall be submitted to the concerned agencies within six months of receipt of clearance letter.

3.3 Proposed 70 MLD Desalination Plant at Taneerbavi village, in Mangalore by Mangalore Refinery and Petrochemicals Ltd. [F. No. 11-3/2019-IA.III]- **CRZ Clearance reg.**

The proposal of Mangalore Refinery and Petrochemicals Ltd. (MRPL) is for setting up of 70 MLD Desalination Plant including laying of conveying pipelines at village Taneerbavi, in Mangalore. The project proponent made a presentation and provided the following information:

i) MRPL implemented the diesel quality improvement project along with enhancement of refinery capacity to 13.6 MMTPA crude oil processing to meet BS III & BS IV specification of auto-fuels (MS & HSD).
ii) The overall water requirement in the existing plant is 4386 m^3/h, which includes treated sewage of 908 m^3/h, and recycled treated effluent of 820 m^3/h.
iii) MRPL has consent for withdrawal of freshwater from Irrigation Department, Govt. of Karnataka from Sarapady pumping station, which is about 45 km from MRPL refinery, on Netravati River and 1242 m^3/h quantum of water is abstracted from the said source. Another source of fresh water is taken from MSEZL with quantity of 1416 m^3/h. MSEZL also provides treated sewage of 908 m^3/h for the refinery. The source of water to the refinery is Netravati River.
iv) The capacity of the said plant for the Ultimate Phase will be 15 MGD to cater to the water demand for Refinery Operations, of which 6 MGD shall be the water demand for present Refinery Operations and balance for upcoming expansions. If the total water supply to Mangalore City Corporation (MCC) is not enhanced, the city shall have a deficit in supply to meet the city's water demand. Hence a minimum capacity of 6 MGD (30 MLD) is required to meet the current phase demand to have production in line with the designed refinery capacity. Therefore, a Sea Water Desalination Plant of 15 MGD (70 MLD), Ultimate Capacity is planned.
v) The proposed Land Fall Points (LFPs) along the shoreline for seawater intake and marine outfall have been planned at 1.7 km south of the southern breakwaters of the New Mangalore Port at Panambur, in Mangalore. Gurpur river runs on the eastern side the proposed LFPs.
vi) Seawater will be drawn from the adjacent Arabian Sea and will be carried to the desalination plant located within the project premises on the western side of the plant. The brine reject coming out from the desalination plant will be routed through pipeline back to the sea. Desalination Plant will have a pretreatment plant, filtration plant, reverse osmosis including high pressure pump, energy recovery system and outfall.

vii) The seawater requirement for the RO (Reverse Osmosis) plant will be 187 MLD~7792 m^3/hour ~ 2.165 m^3/s.
viii) The seawater intake head will be located at the selected distance of 950 m from the shore at 7.7 m CD (Chart Datum) water depth. The intake pipeline will be made of HDPE material and it will be laid on the seabed. The entire pipeline will be buried in such a way that the top of pipeline will remain at minimum 2 m below the sea floor.
ix) The salinity of the brine reject released into the sea will be 65 ppt, which will have the salinity difference of 30 ppt higher than the seawater ambient salinity of 35 ppt.
x) The brine discharge into the sea from the desalination plant will be 117 MLD ~ 4875 m^3/hour ~ 1.35 m^3/s.
xi) The outfall diffuser will be located at 1050 m distance from the shoreline at a water depth of 8 m CD. The outfall pipeline will be laid on the seabed where the top of pipeline will be buried 2.0 m below the seafloor.
xii) The Seawater intake pipeline will have a length of 950m and the outfall pipeline length will be1050 m.
xiii) The desalination plant will be in CRZ-II areas but the pipelines will traverse through CRZ-IV, CRZ-II and CRZ-I.
xiv) Cost of the project will be Rs 595 crores.
xv) KCZMA has recommended CRZ clearance vide its letter no. FEE 194 CRZ 2018, dated 22.12.2018.

2. The Committee observed that the proposed desalination plant is a necessity and the likely CRZ ramification may be minimal and confined during the construction period. Based on deliberations held and clarifications made, the Committee therefore recommended the project for CRZ Clearance subject to the following conditions:

i) 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.
ii) Solid waste shall be collected, treated and disposed of in accordance with the Solid Waste Management Rules, 2016.
iii) 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 contemplated shall be submitted to the concerned agencies within six months of receipt of clearance letter.

3.4 Proposed Shamuka Beach Project in Puri by Department of Tourism, Government of Odisha [F. No. 11-22/2015-IA.III]**- CRZ Clearance reg.**

The proposal of Department of Tourism, Government of Odisha is for development of Shamuka Beach Project at South of Puri town alongside the Bay of Bengal. The project proponent made a presentation and provided the following information:

i) The proposed development at Shamuka Beach include 5/4 Star Hotels/Resorts, Convention Centre, Golf Course, Exhibition Complex, Eco Parks etc. Proposed project site is located on the sea coast of Puri.
ii) The project will be implemented in 3 phases. Phase-I will include convention centre, hotels based on various national and international standards, heritage town with main street, golf course, water sports etc. Phase-II includes Health and Wellness tourism focus and Phase-III includes high end villas and second homes.

iii) All structures will be within the prescribed limit not exceeding 9 m in height and no residential quarters will be developed.
iv) About 920.04 acres of land is earmarked for the project. Land was acquired by Industrial Development Corporation Orissa Ltd. and the lease deed was transferred in favour of the Department of Tourism for 90 years' period.
v) The total construction/built up area will be 916046 sq.m.
vi) HTL, LTL, ESAs and CRZ categories have been drawn by NCSCM, Chennai. The HTL and LTL are demarcated from aerial photographs/satellite images by taking into consideration different signatures such as boundaries of embankments, vegetation and bunds as existed at the aerial photo/satellite image.
vii) There are no mangroves (CRZ-IA present near the site).
viii) The proposed project site falls outside of Municipal/Corporation boundary and categorized as CRZ-III.
ix) No construction is proposed within 200m of HTL.
x) Balukhand Sanctuary is located at about 9.5 kms from the project site.
xi) An STP of 4.5 MLD will be set up.
xii) Water requirement will be 14 KLD and will be met from water supplied by Public Health Division, Puri vide its letter No. 4352, date: 19.07.2017.
xiii) Energy requirement will be approximately 45 MW and will be sourced from Odisha Electricity Power Supply Board.
xiv) The total cost of the project is Rs. 166.64 Crores.
xv) Environmental clearance has been issued by SEIAA Odisha vide its letter no.6212/SEIAA, dated 09.11.2018.
xvi) Odisha SCZMA has recommended CRZ clearance vide its letter No. 46/OCZMA, dated 24.06.2017.

2. The Committee noted that the project of such a dimension should necessarily have a robust water harvesting system installed in addition to solar power generation. The Committee observed that the CRZ ramification may be minimal and confined during the construction period. The Committee however noted that the project attracts EIA Notification, 2006 as well as CRZ Notification, 2011 and therefore a composite EC and CRZ clearance is to be issued by the concerned authority, as per the CRZ regulations.

3. Based on deliberations held and clarifications made, the Committee therefore recommended the project for CRZ Clearance subject to the following conditions:

i) No construction activity shall be undertaken in NDZ areas.
ii) A robust water harvesting system shall be installed and the project implemented as a role model of a tourism project.
iii) Solar power generation shall be adopted.
iv) Solid waste shall be collected, treated and disposed of in accordance with the Solid Waste Management Rules, 2016.
v) 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 contemplated shall be submitted to the concerned agencies within six months of receipt of clearance letter.

3.5 Proposed development of premium Island Resort at Survey Nos.1/1, 1/1/1 and 1/1 at Lalaji Bay, Long Island, District North and Middle Andaman, Andaman & Nicobar by M/s

Andaman and Nicobar Islands Integrated Development Corporation Ltd. [F.NO.11-4/2019-IA.III**]- IPZ Clearance reg.**

The proposal of Andaman and Nicobar Islands Integrated Development Corporation Ltd. is for development of premium Island Resort at Lalaji Bay, Long Island, in North and Middle Andaman district, Andaman & Nicobar. The project proponent made a presentation and provided the following information:

i) The proposed premium Island resort is proposed at Suvey Nos. 1/1, 1/1/1 and 1/1 at Lalaji Bay, Long Island and will comprise of 220 Keys / Rooms).
ii) Built up area will be 39600 sq.m
iii) Desalination plant of 180 KLD is also proposed.
iv) An STP of 255 KLD is proposed to be set up.
v) CRZ maps has been prepared by NCSCM, Chennai.
vi) The proposed project falls in ICRZ- III (beyond 50 m of HTL) as per IPZ Notification, 2011.
vii) No forest land is involved.
viii) About 17 MT/month of solid waste will be generated during operation phase., out of which 10.2 MT will be biodegradable and 6.8 MT non-biodegradable.
ix) Water requirement will be 240 KLD, out of which 96 KLD will be met from rain water harvesting system and 144 KLD from desalination plant.
x) Energy requirement will be 785 kVA and will be met from 2.4 MW Solar Power Plant and 0.6 MW DG set.
xi) A floating jetty is also proposed.
xii) Construction will be based on eco-friendly material and pre-fabricated concrete with minimal use of RCC.
xiii) Cost of the project will be Rs 379 Crores.
xiv) ANCZMA has recommended CRZ Clearance vide its Letter No. APCCF/EPA/1/Vol.XIII/361, dated 30.11.2018.

2. The Committee observed the area of concern is in respect of management of solid waste collection, treatment and disposal. The Committee in particular was concerned of the mechanism of control of solid waste management in such a fragile area, once the project is commissioned and handed over. The Committee therefore desired that a sound and sustainable proposal for management of solid waste including its disposal method shall be formulated in accordance with the provisions prescribed in the Solid Waste Management Rules, 2016.

3. The Committee noted that the project also attracts EIA Notification, 2006 in addition to IPZ Notification, 2011 and therefore a composite EC and CRZ clearance is to be issued by the concerned authority, as per the CRZ regulations. The Committee observed that the proposal also consists of a desalination plant, the details of which including the route of intake and outfall pipelines superimposed on CRZ map, impact on marine environment and mitigation measures proposed, etc. are not available. The Committee observed that the project proponent may approach an institute of repute such as NIOT for marine impact assessment. The Committee further observed that turtle nesting site may be present not far from the site and therefore the project proponent need to come up with data on turtle nesting and breeding in the area.

4. The Committee observed that as the area were the premium resort is proposed seem to be in an ecologically very fragile and biodiversity rich, and therefore a sub-committee comprising of: (i) Chairman, EAC (CRZ); (ii) Dr. M.V Ramanamurthy, Member, EAC (CRZ); (iii) representative of the Ministry; and (iv) representative of ANCZMA, shall undertake a site visit to assess the likely impact of tourism activities on the eco-system of the area.

5. In view of the above, the Committee decided that the proposal in its present form is pre-mature for its consideration for appraisal from CRZ perspective. Accordingly, the proposal was deferred for consideration at a later stage.

3.6 Proposed development of Premium Tents and Tree Houses at Smith island, in North and Middle Andaman by M/s Andaman and Nicobar Islands Integrated Development Corporation [F. NO.11-5/2019-IA.III] **- IPZ Clearance reg.**

The proposal of Andaman and Nicobar Islands Integrated Development Corporation Ltd. is for development of premium Tents and Tree Houses at Smith Island, in North and Middle Andaman district, Andaman & Nicobar. The project proponent made a presentation and provided the following information:

i) The proposed premium tents and tree houses are proposed at Suvey Nos. 96 and 98 at Smith Island and will comprise of 70 Keys / Rooms).
ii) Built up area will be 9100 sq.m
iii) Desalination plant of 41 KLD is also proposed.
iv) An STP of 67 KLD is proposed to be set up.
v) CRZ maps has been prepared by NCSCM, Chennai.
vi) The proposed project falls in ICRZ- III (beyond 50 m of HTL) as per IPZ Notification, 2011.
vii) No forest land is involved.
viii) Turtle nesting sites are present at 1.5 to 2 kms from the site.
ix) About 5.4 MT/month of solid waste will be generated during operation phase., out of which 3.2 MT will be biodegradable and 2.2 MT non-biodegradable.
x) Water requirement will be 69 KLD, out of which 28 KLD will be met from rain water harvesting system and 41 KLD from desalination plant.
xi) Energy requirement will be 250 kVA and will be met from 1.2 MW Solar Power Plant and 0.3 MW DG set.
xii) Construction will be based on eco-friendly material and pre-fabricated concrete with minimal use of RCC.
xiii) Cost of the project will be Rs 65 Crores.
xiv) ANCZMA has recommended CRZ Clearance vide its Letter No. APCCF/EPA/1/Vol.XIII/361, dated 30.11.2018.

2. The Committee observed that management of solid waste collection, treatment and disposal are an area of concern as highlighted in the previous proposal. The Committee in particular was concerned of the mechanism of control of solid waste management in such a fragile area, once the project is commissioned and handed over. The Committee therefore desired that a sound and sustainable proposal for management of solid waste including its disposal method shall be formulated in accordance with the provisions prescribed in the Solid Waste Management Rules, 2016.

3. The Committee further observed that the proposal also consists of a desalination plant, the details of which including the route of intake and outfall pipelines superimposed on CRZ map, impact on marine environment and mitigation measures proposed, etc. are not available. The Committee observed that the project proponent may approach an institute of repute such as NIOT for marine impact assessment. The Committee further observed that turtle nesting site may be present not far from the site and therefore the project proponent need to come up with data on turtle nesting and breeding in the area.

4. The Committee observed that as the area were the premium tents and tree houses are proposed seem to be in an ecologically very fragile and biodiversity rich, and therefore a sub-committee comprising of: (i) Chairman, EAC (CRZ); (ii) Dr. M.V Ramanamurthy, Member, EAC (CRZ); (iii) representative of the Ministry; and (iv) representative of ANCZMA, shall undertake a site visit to assess the likely impact of tourism activities on the eco-system of the area.

5. In view of the above, the Committee decided that the proposal in its present form is pre-mature for its consideration for appraisal from CRZ perspective. Accordingly, the proposal was deferred for consideration at a later stage.

3.7 Proposed development of Luxury Tents at Aves Island, Andaman and Nicobar by M/s Andaman and Nicobar Islands Integrated Development Corporation Ltd. [F.NO.11-6/2019-IA.III] **- IPZ Clearance reg.**

The proposal of Andaman and Nicobar Islands Integrated Development Corporation Ltd. is for development of Luxury Tents at Aves Island, in North and Middle Andaman district, Andaman & Nicobar. The project proponent made a presentation and provided the following information:

i) The proposed premium Luxury Tents is proposed at Suvey Nos. 2/1 and 2/2 at Aves Island and will comprise of 50 Keys / Rooms).
ii) Built up area will be 5000 sq.m
iii) Desalination plant of 27 KLD is also proposed.
iv) An STP of 38 KLD is proposed to be set up.
v) CRZ maps has been prepared by NCSCM, Chennai.
vi) The proposed project falls in ICRZ- III (beyond 50 m of HTL) as per IPZ Notification, 2011.
vii) No forest land is involved.
viii) About 3.9 MT/month of solid waste will be generated during operation phase., out of which 2.3 MT will be biodegradable and 1.6 MT non-biodegradable.
ix) Water requirement will be 37 KLD, out of which 15 KLD will be met from rain water harvesting system and 22 KLD from desalination plant.
x) Energy requirement will be 178 kVA and will be met from 0.43 MW Solar Power Plant and 0.1 MW DG set.
xi) A floating jetty is also proposed.
xii) Construction will be based on eco-friendly material and pre-fabricated concrete with minimal use of RCC.
xiii) Cost of the project will be Rs 38 Crores.
xiv) ANCZMA has recommended CRZ Clearance vide its Letter No. APCCF/EPA/1/Vol.XIII/361, dated 30.11.2018.

2. The Committee observed that management of solid waste collection, treatment and disposal are an area of concern as highlighted in the previous two proposals. The Committee in particular was concerned of the mechanism of control of solid waste management in such a fragile area, once the project is commissioned and handed over. The Committee therefore desired that a sound and sustainable proposal for management of solid waste including its disposal method shall be formulated in accordance with the provisions prescribed in the Solid Waste Management Rules, 2016.

3. The Committee further observed that the proposal also consists of a desalination plant, the details of which including the route of intake and outfall pipelines superimposed on CRZ map, impact on marine environment and mitigation measures proposed, etc. are not available. The Committee observed that the project proponent may approach an institute of repute such as NIOT for marine impact assessment. The Committee further observed that turtle nesting site may be present not far from the site and therefore the project proponent need to come up with data on turtle nesting and breeding in the area.

4. The Committee observed that as the area were the luxury tents are proposed seem to be in an ecologically very fragile and biodiversity rich, and therefore a sub-committee comprising of: (i) Chairman, EAC (CRZ); (ii) Dr. M.V Ramanamurthy, Member, EAC (CRZ); (iii) representative of the Ministry; and (iv) representative of ANCZMA, shall undertake a site visit to assess the likely impact of tourism activities on the eco-system of the area.

5. In view of the above, the Committee decided that the proposal in its present form is pre-mature for its consideration for appraisal from CRZ perspective. Accordingly, the proposal was deferred for consideration at a later stage.

3.8 Amendment of CRZ Clearance accorded to NIOT, Andhra Pradesh for establishment of Sea Front Facilities with sea water collection system, at Ramanji and Vagarau villages near Nellore, Andhra Pradesh [F.No.11-17/2017-IA.III]**– reg.**

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

National Institute of Ocean Technology (NIOT) is a strategic institution for ocean related research functioning as an autonomous society under the administrative control of the Ministry of Earth Sciences, Government of India. NIOT is functioning at Pallikaranai, Chennai and is accommodating various research facilities and administrative office. The activities of NIOT have expanded significantly ever since its inception and several number of large scale projects are in progress, many of which require testing of scientific equipment in sea conditions before the prototypes are taken to ocean. The present NIOT campus at Pallikaranai has limitations for further expansion due to recent guidelines issued by Tamil Nadu Government, lack of space and requirement of seawater for testing. To cater to the land requirements of NIOT, a Seafront Research Facility (SRF) is being established at Pamanji and Vagarru and a Facility for Administration, Computation and Training at Chittedu in SPSR Nellore District, Andhra Pradesh. It is proposed to establish Finfish hatchery, Raceway Ponds and Ballast Water Treatment System Test Facility at Seafront Research Facility in Pamanji.

CRZ clearance for the aforesaid a Seafront Research Facility (SRF) including submarine pipeline for drawing water from the sea was issued by Ministry of Environment,

Forest and Climate Change vide F.no.11-17/2017-IA-III dated 10-7-2017. The testing and validation of Ballast Water Treatment System (BWTS) in the test facility as recommended by International Maritime Organization (IMO) requires live micro-organisms which are available mostly at about 1.0m from high tide mark in the sea which is unlike drawing water for cooling purpose in any power plants by a submerged pipeline system. The ballast water test facility at The Royal Netherlands Institute for Sea Research (NIOZ), in Netherlands, has over ground pipeline system for seawater intake and the same is practiced worldwide. The proposed test facility in India is one of its kinds in the South East Asia. Therefore, an over ground pipeline system (trestle based pipeline system) for seawater intake instead of submarine pipeline system as practiced worldwide in ballast water test facilities is proposed for Ballast Water Treatment System Test Facility and the present request is for amendment of the CRZ clearance accorded vide F.no.11-17/2017-IA-III dated 10-7-2017 accordingly.

2. The matter was discussed and it was noted that the original proposal of NIOT was for over ground pipeline (trestle based) but due to the instances of the Committee submarine system of pipeline laying was agreed to be taken up and CRZ clearance was accorded. The Committee also observed that the recommendation for CRZ clearance by APCZMA was also for over ground pipeline with trestle based system.

3. In view of the information provided above, the Committee agreed that the request of NIOT for allowing over ground pipelines based on trestle may be permitted in lieu of subsurface pipeline. The Committee therefore recommended that the Ministry may carry out the necessary amendment.

4.0 Any other item with the permission of the Chair.

Site visit to M/s Saurashtra Chemicals Ltd. (Nirma Division)

The Committee was informed that a long pending site visit to M/s Saurashtra Chemicals Ltd. (Nirma Division) could not be materialised so far. Accordingly, the Committee in its 205th Meeting held on 17.12.2018 had decided that decided that the site visit shall be completed not later than 1st week of January, 2019 by a team comprising of Shri N.K. Verma, Member EAC and Shri N.K. Gupta, Member (EAC). The Committee was informed that this also could not materialise due to compelling reasons of the team. The Committee decided that under the circumstances, the site visit shall be undertaken by Shri N.K. Verma, Member, EAC; Dr. V.K. Jain, Member, EAC; and a representative of the Ministry and a report submitted early, preferably, before the next meeting.

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

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