

**Minutes of the 306<sup>th</sup> meeting of Expert Appraisal Committee held on 22<sup>nd</sup> - 23<sup>rd</sup> August, 2022 Video Conference for the projects related to Infrastructure Development, all Ship breaking yards including ship breaking units 7(b); Industrial Estate/Parks/Complexes/Areas, Export Processing Zones, Special Economic Zones, Biotech Parks, Leather Complexes7(c); Ports, harbors, breakwaters, dredging7(e) and National Highways 7(f).**

The 306<sup>th</sup> Meeting of Expert Appraisal Committee (EAC) of Infra-1 (IA-III) was held through Video Conference during 22<sup>nd</sup> – 23<sup>rd</sup> August, 2022 under the Chairmanship of Dr. Deepak ArunApte. A list of participants is annexed as **Annexure-A**.

**1. OPENING REMARKS OF THE CHAIRMAN**

At the outset, Dr. Deepak ArunApte, Chairman, EAC welcomed the Members of the EAC and requested Shri Amardeep Raju, the Member Secretary of the EAC to initiate the proceedings of the meeting with a brief account of the activities undertaken by the Ministry under Infra-1 Division.

**2. CONFIRMATION OF THE MINUTES OF THE LAST MEETING**

The Committee confirmed the Minutes of 304<sup>th</sup> EAC Meeting held on 21st – 22nd July, 2022. In agenda item no.3.4 at specific condition no. ii an inadvertent typographical error occurred it was mentioned as “ii. EIA/EMP study shall be conducted for the cumulative capacity of 23.50 MTPA” the same may be read as “ii.EIA/EMP study shall be conducted for the cumulative capacity of 25.0 MTPA”

**AGENDA WISE CONSIDERATION OF PROPOSALS:**

Agenda wise details of proposals discussed and decided in the meeting are as following:

**Agenda No. 3.1**

**3.1 Development of 4 lane inter corridor (Greenfield alignment) from Balbhodarpur(Ch. 47+000) to Bela Nawada (Ch. 89+210) of section NH119D (Package-4, Length - 42.210 km) under BharatmalaPariyojana (Lot-5, Package-7) in state of Bihar by M/s National Highways Authority of India – Environmental Clearance regarding.**

**Proposal No. IA/BR/NCP/205963/2021 and File No. 10/21/2021-IA.III**

*“The EAC noted that the Project Proponent and the consultant have given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in 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 ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.”*

3.1.1 The project proponent along with the EIA consultant M/s P and M Solution and M/s SA Infrastructure Consultant Pvt. Ltd, Noida has made a presentation through Video Conferencing and provided the following information:-

3.1.2 The proposed project is for Development of 4 lane inter corridor (Greenfield alignment) from Balbhodarpur (Ch. 47+000) to Bela Nawada (Ch. 89+210) of section NH119D (Package-4, Length - 42.210 km) under BharatmalaPariyojana (Lot-5, Package-7) in state of Bihar. The proposed road passes through 2 districts viz. Samastipur and Darbhanga district in the state of Bihar and passes through approx. 60 villages. The major settlements along the alignment are Kalyanpur, Hayaghat, Bahadurpur and Darbhanga. The total length of the proposed alignment is approx. 42.210km.

3.1.3 The proposed project falls under 7(f), Category-A, Highway as per EIA notification 2006. Total investment/cost of the project is Rs 1133.34 Crores.ToR was considered during 260th meeting held on 5th – 6th April, 2021 and it was granted by MoEFCC vide its letter F.No. 10/21/2021-IA.III dated: 21<sup>st</sup> May, 2021.

3.1.4 The Geo-coordinates of project starts from latitudes 25°53’18.15”N - 26°11’9.33”N to longitudes 85°45’1.50”E - 85°56’13.40”E.

3.1.5 Land use Land cover of the project:

S.No.	Land use/Landover	Area (ha)	Percentage %	Remarks if any
1	Private land	236.83	89.19	Agriculture/Barren Land
2	Government land	24.61	9.27	Agriculture/Barren Land
3	Forest land	3.89	1.46	-
4	<b>Total</b>	<b>265.33</b>	<b>100</b>	-

3.1.6 ROW details: The Proposed alignment will have 60 meters Right of Way (RoW)for fully access controlled Highway with 4-lane dual carriage way configuration

3.1.7 Terrain: The terrain of the alignment area is mainly flat to undulating in nature. The maximum and minimum elevation recorded is 40-42 metres above mean sea level.

3.1.8 Water Bodies: There are 05 nos. of rivers, 7 Nos. of Canals, 81 Nos. of Nalahs, falling along the alignment. There shall be no major impact on the drainage system as 121 numbers of structures (such as 08 Major Bridge, 11 Minor Bridge, 08 VUP, 18 LVUP, 11 SVUP, 06 flyover, 02 ROB, 89 culverts) will be constructed.

3.1.9 Water requirement: The total water requirement during construction is estimated to 11673 KLD. Water will be extracted from surface sources. The ground water will be abstracted for camp site after obtaining permission from the competent authority.

3.1.10 Public Hearing: PH was conducted in Darbhanga, and SamastipurDistrict of Bihar.

S.no	Date	District	Chaired by	Issues Raised
1	16 <sup>th</sup> Mar 2022	Darbhanga	Additional Collector	1. Connection of Rural village road to National Highway 2. Felling of trees and plantation in the affected area. 3. Pollution control and their prevention in the proposed road construction project.
2	10 <sup>th</sup> Mar 2022	Samastipur	Additional District Magistrate	1. Benefit of the highway 2. procedure of evaluation of trees and orchard to be compensated 3. Employment 4. Monitoring of Air quality 5. Socio Economic development 6. Land compensation

3.1.11 Diversion of forest land: The project involves diversion of forest land (3.89Ha Forest). The forest proposal was submitted on line at the MoEF&CC, dated 09.05.2022. The reference forest Proposal no is FP/BR/ROAD/155194/2022. The proposal is under examination by the concerned Forest Divisions.

3.1.12 The proposed alignment does not pass through any National Parks, Wildlife Sanctuary, and Tiger Reserve or any other Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC within 10 Km radius of the project site.

3.1.13 Waste Management: Disposal of Sewage and other wastes in the construction yard and labor camps will be done as per directions of the Environmental Specialist / Environmental Engineer of the Engineer.

3.1.14 Details of Tree Cutting & Green Belt Development: approximately 1448 non-forest trees and 705 forest trees are present along the alignment. However, bare minimum no. of trees shall be felled for construction of four lane road. For each tree fell, 2 nos. of trees shall be planted for every tree to be cut and Compensatory afforestation would be carried out as per the state Forest Guidelines. Avenue plantation shall be carried out as per IRC SP: 21:2009 on available ROW apart from statutory requirements.

3.1.15 Rain Water Harvesting: the total 188 nos of rain water harvesting structures along the project road will be constructed. Each rainwater will be constructed with the budget of Rs.40,000. Total cost of Rain Water Harvesting Structure = Rs. 75,20,000/-. Provision of

rainwater recharge pits at every 500m interval is made according to the requirement of IRC SP: 42-2014 and IRC SP: 50-2013.

3.1.16 Land Acquisition/ R&R Issues: The project alignment involves acquisition of 265.33 ha of land which includes 236.83 ha of private land, 24.61 ha Government land and 3.89 ha forest land. The land will be acquired as per NH Act 1956 and compensation will be given as per RFCT LARR Act, 2013. As the proposed project falls in notified protected forest areas at some locations (crossings point of roads/railway/canals), declared for management purposes, the forest proposal shall be prepared after consultation with concerned forest officer if it attracts FC under section 2, 1980.

3.1.17 A total number of 75 structures will be affected due to proposed Road alignment. The NHAI shall compensate the entire affected title holder as per NHAI Act, 1956 and Right to fair compensation and transparency in land acquisition, rehabilitation and Resettlement Act, 2013.

3.1.18 All safety measures will be provided as per NHAI Safety Manual and IRC: SP 88 and Expressway Manual IRC: SP 99). Safety Measures, as provided in NHAI Safety Manual i.e. Unit-3 (pertaining to Traffic Safety , such as traffic control zone, advance warning zones, traffic control devices, regulatory & warning signs cylindrical cones, drums, flagman, Barricades, Pedestrian Safety , speed control etc.) and other safety guidelines & measures suggested in Unit-4 (Construction Zone Safety), Unit 5 (Temporary Structures Safety), Unit-6 (Workers & Work Zone Safety), Unit-7 (Electrical & Mechanical Safety) will be strictly implemented. All required illustrative plans for safety at construction sites keeping in view all situations highlighted IRC: SP: 55 and in NHAI Safety Manual will be prepared and strictly implemented.

3.1.19 Employment potential: The total manpower required for the project is 1050. About 1000 persons will be employed temporarily during the construction phase for a period of 3 years. During operation phase about 50 persons will be employed on permanent basis.

3.1.20 Benefits of the Project: The proposed access controlled project with new alignment has been envisaged through an area which shall have the advantage of simultaneous development as well as shall result in a shorter distance to travel. The proposed road would act as the prime artery for the economic flow to this region. It will enhance economic development, provide employment opportunities to locals, strengthen tourist development, ensure road safety, and provide better transportation facilities and other facilities such as way side amenities. Vehicle operating cost will also be reduced due to improved road quality. The compensatory plantation and road side plantation shall further improve the air quality of the region.

3.1.21 Details of Court cases: No court case is pending against the proposed project.

3.1.22 During the deliberation, the EAC noted the following:

- i. The alignment at chainage 64+200 is passing through hillock which may cause damage of hilly area by cutting hill.
- ii. The village name has been changed at start point and NH number of the project

3.1.23 The observation made by the EAC,PP vide letter dated 22.08.2022 submitted the following.

- i. PP clarified that there is no hill at proposed design chainage KM 64+200 and the line appeared in the kml file erroneously from consultant. Actually it is plantation on private land in plain area in village Kharsand circle Kalyanpur in Samastipur district.
- ii. Change of village name at start point and NH number of the project has been changed by the NHA vide office order no.nhai/piu-muz/nh-1190d/dpr/eia/387 dated 27.06.2022 and there is no change in the length.
- iii. At the time of obtaining the TOR it was mentioned that the alignment starts from the Tal Dasraha (Ch-47+000) to Bela Nawada (NH57) (CH89+100) (package-5, Length-42.100) under Bharatmala Pariyojana (Lot-5, Package-7) in state of Bihar.
- iv. As submitted by the PP, as per the NHA office order dated 27.06.2022 the alignment start from 'Balbhadarpur (CH-47+000) to Bela Nawada (CH89+210) of section NH119D (Package-4, length-42.210km) under Bharatmala Pariyojana (Lot-5, Package-7) in state of Bihar'.

3.1.24 The EAC based on the information submitted and clarifications provided by the project proponent and detailed discussions held on all the issues during its 306<sup>th</sup> meeting on 22<sup>nd</sup>-23<sup>rd</sup> August, 2022, **recommended** the project for environmental Clearance with stipulated specific conditions along with other Standard EC Conditions.

- i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concern Authority. Old, large and heritage value trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Where the trees need to be cut/transplanted with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut/ nonsurvival of any transplanted tree) shall be done and maintained. Plantations to be ensured species (cut) to species (planted).
- ii. Trees with heronry (breeding ground for herons), pelicanary or community nesting of birds like Painted Storks, Ibis, Egrets, Pelican, etc will not be allowed to fell. In case of presence of such, alignment will be required to be changed to save such trees.
- iii. Green belt development (tree plantation) in lieu of the trees being felled in non forest land should be carried out by the State forest department as deposit work and not by the private contractor. Green belt must be developed using exclusively native species. No exotic species to be used for the same. No Ground water shall be extracted and used. Approval/permission of concerned authority shall be obtained before drawing surface water from canal or any other sources.
- iv. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.

- v. The proponent shall obtain permission from the competent authorities for tree felling along the proposed alignment.
- vi. Rain water harvesting pit shall be at least 3 - 5 m above the highest ground water table.
- vii. No Ground water shall be extracted and used. Approval/permission of concerned authority shall be obtained before drawing surface water from canal or any other sources.
- viii. In borrow pits, the depth of the pit shall be regulated such that the sides of the excavation will have a slope not steeper than 1:2, from the edge of the final section of bank. Soil erosion checking measures shall be carried out. Details for Borrow area operation and rehabilitation given in EIA report shall be followed.
- ix. Quarry areas shall be barricaded during mining operations. The abandoned quarry shall be developed as water reservoirs with proper fencing around quarry area. Details for Quarry area operation and rehabilitation given the EIA report shall be followed.
- x. In all the construction sites within 150 m of the nearest habitation, noisy construction work such as crushing, concrete mixing will be stopped during the night time between 10.00 pm to 6.00 am. No noisy construction activities will be permitted around educational institutions/health centres (silence zones) up to a distance of 100 m from the sensitive receptors. All plants and equipment used in construction shall strictly conform to the CPCB/SPCB noise standards.
- xi. Traffic Control Devices/Road Safety Devices/ Roadside Furniture including various types of cautionary, informatory, regulatory as mandatory signboards, road markers, studs, etc. shall be provided at appropriate locations all along the project stretch in accordance with the specifications laid down in Manual of Specifications and Standards for Expressways (IRC: SP:99-2013) and IRC:8, IRC:25, IRC:26, IRC:35, IRC:67, IRC:79, IRC:103 and Section 800 of MORTH Specifications.
- xii. All the major, minor bridges and culverts should not affect the drainage systems. Flood plains of the rivers/ drainage systems are not to be disturbed.
- xiii. Afforestation using compensatory plantation in the ratio of 1:10 shall be carried out by the State forest department as deposit work and not by the private contractor. Native tree species shall be provided as per the IRC Guidelines on Landscaping and Tree Plantation (IRC:SP:21-2009). Effort should be made to plant native trees and large number of Ficus species on both sides of the alignment. Special attention shall be given for protecting giant trees, and locally important trees (having cultural importance).
- xiv. Project alignment should be managed in such a way to save the Heritage/old trees supposed to be affected by the proposed alignment.
- xv. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and

submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV, Compensatory afforestation etc., either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also become part of EMP and shall be implemented.

- xvi. Proponent shall keep the finish road level sufficiently elevated from ground level with provision of railing on both sides to restrict animal crossing in order to avoid the possibility of wildlife injury/death. Animal underpasses, watch tower, water holes and other mitigation measures proposed shall be constructed in supervision of forest department.
- xvii. While constructing the over bridges as proposed over major water bodies efforts should be made to avoid construction of pillars in beds of water bodies.

### **Agenda No. 3.2**

**Development of 6 Lane Kanpur Ring Road starting from NH-19 (Existing Ch. 506+820) near Sachendi village and ends at same point i.e. NH-19 (Existing Ch. 506+820) near Sachendi village in Kanpur Nagar district under NHDP Phase-VII in the state of Uttar Pradesh(Total length 93.209km) by M/s National Highways Authority of India-Proposal No. IA/UP/NCP/284612/2022 and File No. 10/34/2022-IA.III Terms of Reference reg.**

*“The EAC noted that the Project Proponent and the consultant have given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in PFR/DPR/Form-1/Annexure-III. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.”*

3.2.1 The above mentioned proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure, CRZ and other miscellaneous projects in its 306<sup>th</sup> EAC meeting held during 22<sup>nd</sup> -23<sup>rd</sup> August, 2022, in the Ministry of Environment, Forest and Climate Change, New Delhi.

3.2.2 The project proponent M/s National Highways Authority of India made a presentation through Video Conferencing and submitted the following information.

3.2.3 The proposed project is for development of 6 Lane Kanpur Ring Road starting from NH-19 (Existing Ch. 506+820) near Sachendi village and ends at same point i.e. NH-19 (Existing Ch. 506+820) near Sachendi village in Kanpur Nagar district under NHDP Phase-VII in the state of Uttar Pradesh(Total length 93.209km).

3.2.4 The proposed project falls under 7(f), Category-A, Highway as per EIA notification 2006. Total investment/cost of the project is Rs9482.79 Crores.

3.2.5 Land use/Land cover of project site: The total land acquisition for the proposed alignment is approx. 721.0 ha including 4.11 ha protected forest land. The land use pattern on 10 km either side of the project road is predominantly agriculture land followed by habitation and Waterbodies.

3.2.6 The proposed alignment mostly follows 'plain' terrain. The elevation varies from ~105m to ~132m aboveMSL at different locations. The Proposed Right of Way (RoW) is 60 m.

3.2.7 Water Bodies: The proposed alignment is passing through 02 Rivers (Pandu & Ganga), 49 Drains, 26 Canal and some minor nalas and the proposed alignment will have 04 Major Bridge, 21 Minor Bridges, 01 Viaduct, 09 ROB, 21 LVUPs, 13 VUPs, 06 Flyovers and 62 Culverts for free passage of local people & domestic animals and to avoid impact on water bodies.

3.2.8 Water requirements: Approx. Total requirement of water for the construction is estimated to be 5600 KLD water will be extracted from suitable surface sources (rivers/canals) after obtaining necessary permissions from the competent authority.

3.2.9 Tree cutting: about 2450 trees are falling within PROW. The tree enumeration for affected trees shall be undertaken during detailed EIA Study. The inventory will include tree species, girth and height.

3.2.10 Diversion of forest land: The proposed alignment passes through 4.11 ha protected forest land for which the forest clearance is not yet submitted.

3.2.11 The proposed project does not fall within 10 km of Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves etc and also not located within the Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC. The proposed project does not fall within CRZ area.

3.2.12 Land acquisition and R&R issues: Approx. 721.0 ha land shall be required for the proposed project. The land acquisition shall be done as per NH Act, 1956 and LARR Act, 2013. The R&R issues shall be resolved as per LARR Act, 2013. The detailed report will be provided along with EIA report.

3.2.13 A total number of 247 structures (Pucca Building, temporary sheds, huts etc.) and 09 religious structures will be affected due to proposed highway. Compensation shall be paid as per NH Act, 1956 and RFLARR Act, 2013.

3.2.14 Employment potential: During the construction of the road, around 2744 persons would be employed temporarily for a period of 2.5 years. During operation of Highway about 686 persons will be employed for highway patrolling, highway management & maintenance activities, etc. The total manpower requirement for the project is 3430. Preference will be given to local people for employment.

3.2.15 Benefits of the project: The proposed project shall provide multi-fold benefits such as travel time and cost savings, direct and indirect employment, easy movement of industrial



traffic, tourism in the area will be benefited from improved access and connectivity, Improved road safety as a result of access-control Expressway and reduced crossings.

3.2.16 Details of Court cases: No Court Case is pending against the proposed project.

3.2.17 The EAC based on the information submitted and clarifications provided by the project proponent and detailed discussions held on all the issues during its 306<sup>th</sup> meeting held on 22<sup>nd</sup> -23<sup>rd</sup> August, 2022, **recommended** the project for grant of Terms of Reference (ToR) with stipulated specific conditions along with other Standard ToR Conditions.

- i. Provide details regarding the number and type of trees to be felled and planted for the proposed project.
- ii. Cumulative impact assessment study should be carried out along the entire stretch including the other packages and the current stretch under consideration.
- iii. The proponent shall carry out a detailed traffic flow study to assess inflow of traffic from adjoining areas like airport/urban cities. The detailed traffic planning studies shall include complete design, drawings and traffic circulation plans (taking into consideration integration with proposed alignment and other state roads etc.). Wherever required adequate connectivity in terms of VUP (vehicle underpass)/ PUP (Pedestrian underpass) needs to be included.
- iv. Provide compilation of road kill data on the wildlife on the existing roads (national and state highways) in the vicinity of the proposed project. Provide measures to avoid road kills of wildlife by the way of road kill management plan.
- v. The alignment of road should be such that the cutting of trees is kept at bare minimum. Alignment also should be such that it will avoid cutting old and large and heritage trees if any. All such trees should be geo-tagged, photographed and details be submitted in the EIA –EMP report.
- vi. All trees with heronry (breeding ground for herons), pelicanary or community nesting of birds like Painted Storks, Ibis, Egrets, Pelican, etc will not be allowed to fell. In case of presence of such, alignment will be required to be changed to save such trees. Presence of such trees should be marked chainagewise and present as a separate table in EIA-EMP.
- vii. The proponent shall carry out a comprehensive socio-economic assessment and also impact on biodiversity with emphasis on impact of ongoing land acquisition on the local people living around the proposed alignment. The Social Impact Assessment should have social indicators which can reflect on impact of acquisition on fertile land. The Social Impact Assessment shall take into consideration of key parameters like people's dependency on fertile agricultural land, socio-economic spectrum, impact of the project at local and regional levels.
- viii. As per the Ministry's Office Memorandum F.No.22-65/2017-IA.III dated 30<sup>th</sup> September, 2020, the project proponent, based on the commitments made during the public hearing, shall include all the activities required to be taken to fulfil these

commitments in the Environment Management Plan along with cost estimates of these activities, in addition to the activities proposed as per recommendations of EIA Studies and the same shall be submitted to the Ministry as part of the EIA Report. The EMP shall be implemented at the project cost or any other funding source available with the project proponent. In pursuance of this OM the project proponent shall add one annexure in the EIA Report indicating all the commitments made by the PP to the public during public hearing and submit it to the Ministry and the EAC.

- ix. The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25<sup>th</sup> October, 2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.
- x. Passage for animal movement has to be detailed in the EIA/EMP report.
- xi. A comprehensive plan for plantation of three rows of native species, as per IRC guidelines, shall be provided. Such plantation alongside of forest stretch will be over and above the compensatory afforestation. Tree species should be same as per the forest type.
- xii. Detailed Biodiversity assessment and conservation/mitigation plan be developed by a reputed institute or by a team of expert of national repute.
- xiii. Rain water harvesting structures be constructed at both sides of the road with special precaution of oil filters and de-silting chambers.

### **Agenda No. 3.3**

#### **Setting up of Integrated Manufacturing Cluster (IMC) at Pudussery for Palakkad Node in Kerala under Kochi-Bengaluru Industrial Corridor (KBIC) [Area 580.69 ha] by M/s Kerala Industrial Corridor Development Corporation Limited – Terms of Reference Proposal No. IA/KL/NCP/284458/2022 and File No. 10/35/2022-IA.III.**

*“The EAC noted that the Project Proponent and the consultant have given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in PFR/DPR/Form-1/Annexure-III. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.”*

3.3.1 The above mentioned proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure, CRZ and other miscellaneous projects in its 306<sup>th</sup> EAC meeting held during 22<sup>nd</sup> -23<sup>rd</sup> August, 2022, in the Ministry of Environment, Forest and Climate Change, New Delhi.

3.3.2 The project proponent M/s Kerala Industrial Corridor Development Corporation limited made a presentation through Video Conferencing and submitted the following information.

3.3.3 The proposed project is for Setting up of Integrated Manufacturing Cluster (IMC) at Pudukkottai for Palakkad Node in Kerala under Kochi-Bengaluru Industrial Corridor (KBIC) [Area 580.69 ha] by M/s Kerala Industrial Corridor Development Corporation Limited.

3.3.4 The proposed proposal fall under 7(c) Industrial estates/ parks/ complexes/areas, export processing Zones, Category A as per EIC notification 2006. The overall cost of the project is Rs. 1,075 Crores.

3.3.5 Land use/Landcover of the project site is as shown in below Table:

S.No.	Landuse/Landcover	Indicative Area (ha)	Indicative %	Remarks, if an
1	Agriculture Land	145.37	25.0	-
2	Built-up Area	2.04	0.4	-
3	Open Scrub	376.43	64.8	-
4	River/Waterbody	19.45	3.4	-
5	Vegetation	22.14	3.8	-
6	Others	15.24	2.6	-

3.3.6 During the deliberation, EAC observed the following:

- i. *The present site falls/adjacent to the ESA category as per Kerala State Biodiversity Report, and the PP also submitted the two land parcels for the one industrial estate.*
- ii. *Considering extremely sensitive nature of the forests near the sitethere is a scope to change the site so that a distance from the ESA can be increased substantially and avoid any construction within and nearby sensitive nature of the forests areas of the ESA. Accordingly, alternate sites in such specific segments avoiding the nearest ESA and Forest areas can be explored.*
- iii. *PP submitted multiple parcels as one industrial area, in that scenario, duplication of efforts in providing infrastructure like CETP, STP, etc may arise, therefore, it is suggested that either M/s Kerala Industrial Corridor Development Corporation Limited shall submit the individual application for individual sites, or submit application for contiguous site.*

3.3.7 The EAC, taking into account the submission made by the project proponent, had a detailed deliberation in its 306<sup>th</sup> EAC meeting during 22<sup>nd</sup> – 23<sup>rd</sup> August, 2022 and **return** the proposal in the present form and requested the PP to apply with the following documents/information:

- i. PP shall submit the alternate sites avoiding and keeping the safe distance from the ESAand forest shall be prepared along with the location maps showing in KML.
- ii. Either M/s Kerala Industrial Corridor Development Corporation Limited shall submit the individual application for individual sites, or submit application for contiguous site.

#### Agenda No. 3.4

**3.4 Change in Product Mix of Kattupalli Port at Kattupalli, Ponneri Taluka, Tiruvallur District, Tamil Nadu by M/s Marine Infrastructure Developer Pvt. Ltd. – Environmental and CRZ Clearance under Clause 7(ii) of EIA Notification, 2006 Proposal No. IA/TN/NCP/284080/2022 and File No. 10-130/2007-IA.III.**

*“The EAC noted that the Project Proponent and the consultant have given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in PFR/DPR/Form-1/Annexure-III. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.”*

3.4.1. The above mentioned proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure, CRZ and other miscellaneous projects in its 306<sup>th</sup> EAC meeting held during 22<sup>nd</sup> -23<sup>rd</sup> August, 2022, in the Ministry of Environment, Forest and Climate Change, New Delhi.

3.4.2 The project proponent along with EIA consultant M/s L & T Infrastructure Engineering Ltd. made a presentation through Video Conferencing and submitted the following information.

3.4.3 The proposed project falls under 7(e), Category-A, Ports & harbors as per EIA notification 2006. The project cost is about Rs. 1546.45 Crores.

3.4.4 Initially, L&T Ship Building Limited (LTSB) has obtained EC & CRZ clearance for Shipyard cum Port Complex at Kattupalli, Thiruvallur District, Tamil Nadu vide Letter No. 10- 130/2007-IA.III, dated July 03, 2009. Tamil Nadu Pollution Control Board (TNPCB) has accorded Consent to Establish (CTE) vide letter dated August 18, 2009. LTSB obtained amendment for dredging and dumping from MoEF&CC vide Letter No. 10- 130/2007-IA.III, dated May 12, 2010. LTSB commenced the construction in October, 2009. Consent to Operate (CTO) was also obtained from TNPCB vide letter dated November 16, 2012 and the same is being renewed regularly. LTSB has commissioned its operations on January 30, 2013. LTSB obtained amendment to handle revised cargo traffic at the Kattupalli Port in EC & CRZ clearance along with extension of validity from MoEF&CC vide Letter No. 10- 130/2007-IA.III, dated December 17, 2014. Thereafter Environmental and CRZ Clearance bifurcation completed on mutually acceptable division of responsibilities between LTSB & MIDPL and bifurcated EC was granted to MIDPL vide letter no. F. No.10-130/2007-IA.III dated February 9, 2018.

3.4.5 Now MIDPL applied for modification in environmental clearance under clause 7(ii) of EIA Notification, 2006 for change in configuration by modification within the approved cargo handling capacity of 24.65 MTPA and cargo profile. Stating that Considering the future business/market potential and keen interest shown by the major suppliers and major importers, MIDPL is proposing to strengthen their traffic by Changing the Product Mix to cater the needs of port users under the approved cargo category/profile without change in the overall handling capacity of 24.65 MTPA as approved in the Environment and CRZ

clearance by MoEF&CC. The details of existing approved handling capacity and proposed changes requested is given below:

<b>Name of the cargo</b>	<b>Existing Cargo Mix</b>	<b>Existing Cargo (MTPA) (Consented Quantity)</b>	<b>Final handling Capacity after amendment (MTPA)</b>	<b>Final Cargo Mix after amendment</b>
Containers	Containers	21.60	16.64	Containers
Ro-Ro–Automobiles	Ro-Ro–Automobiles	0.07	0.07	Ro-Ro –Automobiles
Project Cargo	Project Cargo	0.44	0.44	Project Cargo
Break Bulk/General cargo	Barytes/Gypsum/Limestone/Granite/Steel Cargo/Rock Phosphate/Dolomite/Bauxite	1.82	5.00	Barytes/Gypsum/Limestone/Granite/Steel Cargo/Rock Phosphate/Dolomite/Bauxite and additional handling of Agricultural Products, Fertilizers, Scrap, Soda Ash, Pig Iron, Sponge Iron, Iron products, Bentonite, Silica Sand, Clinker, Feldspar Cargos, Aluminium Ingots, Salt, Laterite, Magnesite, Cobble Stones, Cement, Piperine, Food grains including pulses, Sugar and other clean cargo under Break Bulk / General Cargo,
Non–Hazardous Liquid Cargo	Edible oil, CBFS, Base Oil, Lube Oil	0.72	2.50	Edible oil, CBFS, Base Oil, Lube Oil and additional handling of cargos Glycerine, Crude Glycerine, Fatty Acid, Mineral Oil-Light, Heavy White Oil, Tall Oil Fatty Acids, 2- Propyl Heptanol (2-PH), Di Octyl Phthalate, Bio

				Diesel, Castor Oil, Molasses, Oleic Acid (Composition: Oleic Acid- 70-100% By Weight Or Fatty Acids: C16-18 And C18- Unsaturated), Palm Kernel Fatty Acid, RBD Hard Palm Stearin and other Non-Hazardous Cargo.
Total Handling Capacity at Port.		24.65	24.65	

3.4.6. The certified compliance report submitted by the Ministry's regional office at Chennai vide letter dated 30/31.05.2022. The committee noted that the instant proposal has submitted under provision of para 7(ii) of the EIA notification, 2006, therefore the committee deliberated the compliance status of the earlier EC submitted by PP and found in order.

3.4.7. The total land area for the project is 336.75 Acres (321.75 Acres of Revenue Land and 15.0 Acres of Coastal land). The proposed activities will be within the existing capacity. No additional marine infrastructure such as berths, capital dredging, breakwater, reclamation is proposed as existing infrastructure is adequate to meet the requirements of proposed change in product mix. No additional land is proposed as sufficient land is available within already approved port boundary. Proposal is for the change in product mix within the approved cargo handling capacity of 24.65 MTPA and cargo profile (Containers, Ro-Ro – Automobiles, Project Cargo, Break Bulk/ General cargo and Non – Hazardous Liquid Cargo). No increase in total Cargo Handling Capacity and no change cargo profile. Extension of storage areas are in the non-CRZ area within the approved existing land. As such, no revision in the port layout is envisaged due to handling of the proposed cargo.

3.4.8. The EAC, taking into account the submissions made by the project proponent, had a detailed deliberation in its 306<sup>th</sup> EAC meeting during 22<sup>nd</sup> – 23<sup>rd</sup> August, 2022 and **recommended** the following modification in environmental clearance under clause 7(ii) of EIA Notification, 2006 for change in configuration by modification within the approved cargo handling capacity of 24.65 MTPA and cargo profile as under.:

Name of the cargo	Existing Cargo (MTPA) (Consented Quantity)	Final handling Capacity after amendment (MTPA)	Final Cargo Mix after amendment
Containers	21.60	16.64	Containers
Ro-Ro– Automobiles	0.07	0.07	Ro-Ro –Automobiles
Project Cargo	0.44	0.44	Project Cargo
Break Bulk/	1.82	5.00	Barytes/Gypsum/

General cargo			Limestone/Granite/ Steel Cargo/Rock Phosphate/Dolomite/ Bauxite and additional handling of Agricultural Products, Fertilizers, Scrap, Soda Ash, Pig Iron, Sponge Iron , Iron products, Bentonite, Silica Sand, Clinker, Feldspar Cargos, Aluminium Ingots, Salt, Laterite, Magnesite, Cobble Stones, Cement, Piperine, Food grains including pulses, Sugar and other clean cargo under Break Bulk / General Cargo,
Non-Hazardous Liquid Cargo	0.72	2.50	Edible oil, CBFS, Base Oil, Lube Oil and additional handling of cargos Glycerine, Crude Glycerine, Fatty Acid, Mineral Oil-Light, Heavy White Oil, Tall Oil Fatty Acids, 2- Propyl Heptanol (2-PH), Di Octyl Phthalate, Bio Diesel, Castor Oil, Molasses, Oleic Acid (Composition: Oleic Acid- 70-100% By Weight Or Fatty Acids: C16-18 And C18-Unsaturated), Palm Kernel Fatty Acid, RBD Hard Palm Stearin and other Non-Hazardous Cargo.
Total Handling Capacity at Port.	24.65	24.65	

Following additional condition has been recommended:

- i. The greenbelt at least 5to 10 m width shall be developed in nearly 33 % of the total project area, mainly along the periphery of the project. Selection of plant species will be purely native in nature and shall be as per the CPCB guidelines in consultation with the state Forest Department.

- ii. PP shall make additional arrangement if required for protection of possible fire hazards during material handling. Fire fighting system shall be as per the norms.
- iii. All other terms and conditions prescribed in the environmental clearance vide letter no. F. No.10-130/2007-IA.III dated February 9, 2018 remains unchanged.

### **Agenda No. 3.5**

#### **Expansion of JSW Jaigarh Port at Jaigarh, Ratnagiri by M/s JSW Jaigarh Port Ltd.– Amendment in Environmental and CRZ Clearance Proposal No. IA/MH/NCP/285464/2022 and File No. 10-17/2006-IA.III.**

*“The EAC noted that the Project Proponent and the consultant have given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in 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 ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.”*

3.5.1. The project proponent attended the meeting via video Conferencing and requested for withdrawal of application.

### **Agenda No. 3.6**

#### **Setting up of New Industrial Estate – GIDC Bulk Drug Park (Area 745.22 Ha) near Villages Kanasagar, Tankaribandar, Madafar, BakarporTimbi, ThakorTalavadi and Asandvad, Taluka Jambusar, District Bharuch, Gujarat by M/s Gujrat Industrial Development Corporation –Terms of Reference Proposal No. IA/GJ/NCP/284497/2022 and File No. 10/36/2022-IA.III.**

*“The EAC noted that the Project Proponent and the consultant have given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in 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 ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.”*

3.6.1 The project proponent along with the EIA consultant M/s Eco Chem Sales & Services has made a presentation through Video Conferencing and provided the following information:-

3.6.2 The proposed project is for Setting up of New Industrial Estate – GIDC Bulk Drug Park (Area 745.22 Ha) near Villages Kanasagar, Tankaribandar, Madafar, BakarporTimbi, ThakorTalavadi and Asandvad, Taluka Jambusar, District Bharuch, Gujarat by M/s Gujrat Industrial Development Corporation.

3.6.3 The proposed project falls under 7(C) – Industrial Estates /Parks /SEZ etc, Category A. The project appraisal will be done at Expert Appraisal Committee (EAC), MoEF&CC as



treated as category A project. Total investment/cost of the project is Rs. 350000 Lakhs (Rs. 3500 Crores).

3.6.4 The above mentioned proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure, CRZ and other miscellaneous projects in its 306<sup>th</sup> EAC meeting held during 22<sup>nd</sup> -23<sup>rd</sup> August, 2022, in the Ministry of Environment, Forest and Climate Change, New Delhi.

3.6.5 The Geo-coordinates of project site is as following-latitude 22°1'12.79"N to 21°42'3.60"N and Longitude- 72°38'10.98"E to 72°48'58.41"E.

3.6.6 Land use/ Land cover of project site in tabular form:

S. No.	Landuse/Landcover	Area (ha)	%
1.	Grass Land	103	7.54
2.	Scrub Land	300	22.00
3.	Vegetation	123	9.04
4.	Crop Land	534	39.16
5.	Fallow Land	153	11.23
6.	Salt Pan	24	1.79
7.	Water body	10	0.77
8.	Barren Land	99	7.26
9.	Settlement	17	1.22
<b>Total</b>		<b>1363</b>	<b>100</b>

3.6.7 List of industries to be housed with: Types of industries expected to be established in proposed Industrial Park are as following:

Sr. No.	Types of Industries/Sectors	Categorization of Industry as per EIA Notification, 2006	Categorization as per CPCB	Zoning as per ATLAS
1.	Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates)	5 (f)	A & B	A1,W1
2.	Common Effluent Treatment Plant.	7 (h)	A & B	A1,W1
3.	Treatment Storage Disposal Facility.	7 (d)	A & B	A1,W1

4.	Sewage Treatment Plant.	-	-	-
5.	Solvent Management Facility.			
6.	Common Steam Facility.	-	-	-
7.	Residential Facility.	-	-	-
8.	Industries which do not attract any provisions of EIA Notification 2006, but covered under CTE/CTO.	-	-	-

3.6.8 Terrain and topographical features: Terrain of the project site is undulating terrain and Mean Sea level is ranging from 5 m to 8 m.

3.6.9 Details of water bodies: Vishwamitri River is at a distance of 3 km from proposed project site. Storm water drainage system shall be designed to collect and convey run-off generated within the catchment of the Bulk Drug Park during and after rainfall events, for safe discharge of the collected storm water into the natural storm drain passing through the Bulk Drug Park area, finally draining in to the river Vishwamitri. Sections of the drains have been considered based on the magnitude of peak flows of the micro-catchment of the Park.

3.6.10 Water requirements: The estimated water demand for manufacturing and non-manufacturing area, services, and green belt will be 64 MLD which will be tapped from 60 MGD water supply pipeline from Narmada Main Canal to Dahej PCPIR. NOC letter for water supply is obtained vide letter no: GIDC/ENG/PH/609 on dated 08<sup>th</sup> July 2022 from GIDC Gandhinagar. No Ground water will be used.

3.6.11 Tree cutting: No major tree cutting will be carried out within proposed site. No Forest land is involved in proposed project.

3.6.12 Protected area/ESZ: Project site is not located within 10 km radius of any protected area, Eco sensitive zones, National Park, Wild life sanctuary and Tiger Reserves etc.

3.6.13 CRZ area: The project site falls under CRZ-IB, CRZ-III and CRZ-IV as per CRZ Notification 2011 & 2019. Preparation of CRZ Map is under process.

3.6.14 Waste management: CETP: API manufacturing involves extensive usage of water in process and in utilities. After optimization of use and possible recycling by member industries estimated that 45.5 MLD of wastewater will be generated as low COD & low TDS steam. Industrial units shall discharge pre-treated/primary treated low COD & TDS effluent into CETP through underground closed pipeline network of GIDC after conforming CETP inlet norms. A CETP of 54 MLD capacity has been proposed inside the Bulk Drug Park. STP: Sewage generated from API manufacturing units will be treated by individual industrial units and shall be reused within their own plant premises. Sewage of 5.2 MLD will

be generated from commercial and residential units. Accordingly, two STPs based on conventional technology (derivative of Activated Sludge Process comprising secondary and tertiary treatment) shall be implemented. At Cluster 01 – 03 MLD and Cluster 02 – 2.2 MLD, treated Sewage will be used for gardening purpose, ash quenching and washing purpose. Dried sludge from the STP will be used as manure for greenbelt development in the Bulk Drug Park and in the industrial units.

3.6.14 Land acquisition and R&R issues involved: GIDC has already acquired total 742.36 ha of land for proposed development. From total 742.36 ha land, 336.83 ha is from private land and 405.53 ha is from government land. No R&R issues involved.

3.6.15 Employment potential: Around 3500 nos. of workers will be employed during construction phase. The proposed employment is projected for the industries, with a worker density of 113 employees/Ha. Around 496 ha area is allotted for industrial Plots. Thus, approx. 56000 no. of workers will be employed.

3.6.16 Details of Court cases: No Court Case is pending against the proposed project.

3.6.17 Benefits of the project: significantly bring down the manufacturing cost of bulk drugs and thereby increase the competitiveness of the domestic bulk drug industry by providing easy access to standard testing and infrastructure facilities, Department of Pharmaceuticals Government of India has notified a guidelines of the scheme for "Promotion of Bulk Drug Parks" on 27<sup>th</sup> July 2020. The proposed Bulk Drug Park would strengthen the position of the pharma industry within the state, which will further improve the position of the state, both in terms of business and the industry. The employment of local people in primary and secondary sectors of project shall upgrade the prosperity of the region. This in-turn will improve the socio-economic conditions of the area.

3.6.18 During the deliberation, the EAC observed the following:

- Based on submission of the PP the site located near by the proposed Kalpasar project that is currently being heard by EAC. It is vital drinking and other Water Supply project. Site is also close to the Vishwamitri River which is at a distance of 3 km.
- PP submitted that the GIDC Industrial units will discharge pre-treated/primary treated low COD & TDS effluent into CETP through underground closed pipeline network of GIDC after conforming CETP inlet norms. However, Committee is deeply concerned about huge quantity of discharge water.

3.6.19 The EAC based on the information submitted and clarifications provided by the project proponent and detailed discussions held on all the issues during 306th meeting during 22<sup>nd</sup> – 23<sup>rd</sup> August, 2022 **deferred** the proposal and requested the PP to submit the following.

- i. Details of Alternative sites explored/analyzed to be submitted.  
and

- ii. Proponent to submit an undertaking for ZLD if the PP wants continue in the current location.

### Agenda No. 3.7

#### **Development of Harohalli 4th Phase Industrial Area in an area of 142.595 Ha at Cheeluru and Rampura Villages, Kanakapura Taluk, Ramanagara District, Karnataka by M/s Karnataka Industrial Areas Development Board – Terms of Reference. Proposal No. IA/KA/NCP/285350/2022 and File No. 10/30/2022-IA.III.**

*“The EAC noted that the Project Proponent and the consultant have given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in 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 ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.”*

3.7.1 The project proponent along with the EIA consultant M/s Hubert Enviro Care System(p) Ltd, Chennai has made a presentation through Video Conferencing and provided the following information:-

3.7.2 The proposed project is for development of Harohalli 4th Phase Industrial Area in an area of 142.595 Ha at Cheeluru and Rampura Villages, Kanakapura Taluk, Ramanagara District, Karnataka by M/s Karnataka Industrial Areas Development Board.

3.7.3 The proposed project falls under 7(C) – Industrial Estates /Parks /SEZ etc, Category A, as the project location is at a distance of Bannerghatta National Park ESZ is ~8.66 Km (SE) Since, the applicability of General Condition of MoEFCC notification, the project appraisal will be done at Expert Appraisal Committee (EAC), MoEF&CC as treated as category A project. Total investment/cost of the project is Rs 36128.98 Lakhs.

3.7.4 The proposal is considered under violation category as construction activities have already started. Roads, storm water drains and overhead tank are already constructed at site. The project was considered in 302<sup>nd</sup> EAC meeting held on 7th-8th July, 2022, Agenda No.3.4. The proposal was return the proposal in present form stating that the instant proposal is a violation proposal as the PP has already started construction work before grant of TOR. Now PP applied as a case of violation. The above mentioned proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure, CRZ and other miscellaneous projects in its 306<sup>th</sup> EAC meeting held during 22<sup>nd</sup> -23<sup>rd</sup> August, 2022, in the Ministry of Environment, Forest and Climate Change, New Delhi.

3.7.5 Proposed Area break up for the Industrial Park is given below

S.No	Type of Area	Area in Acres (KIADB)	Area in %
1	Industrial	166.19	50.45
2	Commercial	4.66	1.41

S.No	Type of Area	Area in Acres (KIADB)	Area in %
3	Amenity	7.24	2.20
4	Road	41.85	12.71
5	Residential	4.74	1.44
6	Park / Nala/ HT line	49.85	15.13
7	Parking	16.89	5.13
8	Utility	13.44	4.08
9	Buffer	24.54	7.45
	Total	329.40	100
10	NH-Roads Area	22.96	-
	<b>Total</b>	<b>352.36</b>	-

3.7.6 List to industries to be housed with the proposed project site:

S. No	Focus Sector	Anticipated Types of Industries	Activities	Categorization of industry as per EIA notification	Categorization as per CPCB	Pollution Potential
1	Engineering	Fabricated Metal products	Manufacturing of pressure vessels	Not Applicable	Orange	W13, A1D
2		Automobiles	Manufacture of motor vehicles (Two wheelers, Cars etc)	Not Applicable	Red	A1C; W11; HW3 & HW4
3		Automobile components	Manufacture of parts and accessories for motor vehicles such as Engine, Gear box parts, Drive axle, steering and suspension, breaks, Seats, Tyres, rubber products etc	Not Applicable	Orange, green, white	W11, A1C,E,F,G

S. No	FocusSector	Anticipated Types of Industries	Activities	Categorization of industry as per EIA notification	Categorization as per CPCB	Pollution Potential
4		Fibre glass manufacturing	Manufacturing of fibre glass and processing	Not applicable	Red	A2F1, HW1, HW4
5		Batteries Manufacturing	Lead acid batteries manufacturing	Nil	Red	A1G, HW1, HW4, W12
6	Food and beverages	Instant tea/coffee, Coffee processing, Non-alcoholic beverages, processing industries, dairy and dairy products.	-	Not Applicable	Orange	W13, A1D
7		Manufacturing of vegetable oils	-	Nil	Orange	W12, Group A1G
8	Other Industries	Coated electrode manufacturing	-	Nil	Orange	W12, Group A1F
9		Tile manufacturing	-	Nil	Orange	Group A2F2,
10		Paint	Blending and mixing	Nil	Orange	Group A1G, W12, HW1, HW4
11	Fish and poultry feed	Fish, poultry and cattle feed manufacturing	-	Nil	Orange	Group A1G

S. No	Focus Sector	Anticipated Types of Industries	Activities	Categorization of industry as per EIA notification	Categorization as per CPCB	Pollution Potential
12	Printing	Printing ink manufacturing	-	Nil	Orange	W12, Group A1G, HW1, HW4
13		Printing press	-	Nil	Orange	W12, Group A1G, HW1, HW4
14		Silk screen printing	-	Nil	Orange	W12, Group A1G, HW1, HW4
15	Other Non EC category industries (as per the re-categorization of Industries by CPCB February 29, 2016 – Red, Orange, Green Category) which are not listed in the abovetable, but envisaged in the future will be accommodated with stringent pollution control norms, following siting guidelines, without affecting the surrounding environment and local natural resources including flora-fauna					

3.7.7 Terrain and Topographical Features: Site elevation of the proposed project is an average of ~1,207m above sea level. The terrain is rugged and broken and is composed of a succession of hills and valleys intersected by rocks and rapid streams with sandy beds.

3.7.8 Water Bodies: There is pond near the site. Other water bodies near the site are Lake near Hanumanthanager  $\approx$  0.06 km (E), Canal near Bannikuppe  $\approx$  0.12 km (W), Suvarnamukhi R  $\approx$  0.53 km (W), Arkavati R  $\approx$  2.08 km (SW), Vrishabhavati R  $\approx$  3.73 km (N), Lake near Kagalhaddoddi  $\approx$  3.79 km(NNE), Bairamangala Left Bank Canal  $\approx$  3.81 km (N), MavathurKere  $\approx$  5.98 km (SSE),GattalKereHalla $\approx$  6.13 km (E), Kutle Hole  $\approx$  7.43 km (SE), Suvarnamukhi Reservoir  $\approx$  8.81 km (NNE), SubedaranakerekodihalliHalla  $\approx$  9 km(ENE), Bairamangala Right BankCanal  $\approx$  9.82 km (N), Rayatmala Hole  $\approx$  10.19 km (E), Antaragange Hole  $\approx$  12.21 km (E), RayatmalaKere  $\approx$  12.78 km (E), Byramangala Reservoir  $\approx$  13.39 km (N), Kebre Hole  $\approx$  14.45 km (ESE). For securing the water bodies 15 m green belt is proposed along the periphery of the site and along the nala.

3.7.9 Total water requirement for the project is 2129 KLD. Fresh water requirement is 610KLD. Water requirement for greenbelt (349 KLD) and utilities for industrial purpose (300 KLD), process which do not need fresh water (470) and flushing for residential units (400 KLD), will be met from recycling of treated sewage and treated effluent. Domestic sewage generation will be 749 KLD. It will be treated in 900 KLD CSTP and treated sewage will be recycled for green belt development and toilet flushing.

3.7.10 Tree Cutting: No trees will be uprooted. Detailed number and its mitigate plan with species will be given in EIA.

3.7.11 Forest land/Protected area: There is no forest land and protected area in the project site. However, Bannerghatta National Park ESZ~8.66Km (SE) and GangadharanGudda RF located at the distance of ~2.48 Km (ESE), Handigundi RF is located at the distance of ~3.16 (W), Bananthimari RF is located at the distance of ~4.77 (SW), Tenginkal RF is located at the distance of ~8.49 Km (W), Bannerghatta National Park ESZ is located at the distance of ~8.66Km (SE), Bilikal RF is located at the distance of ~9.45 (SE), Bannerghatta National Park Core is located at the distance of ~9.6 Km (SE), RF near Kungallu is located at the distance of ~11.45 Km (NW), Bantanal RF is located at the distance of ~12.35 Km (E), Karadikkala RF is located at the distance of ~13.28 Km (NE) from the project site.

3.7.12 Water requirement – 2039KLD. Effluent generated –780KLD. Sewage generated - 749KLD. Sewage will be treated in proposed CSTP of 900 KLD and treated sewage will be recycled for green belt development and flushing for residential units.

3.7.13 Waste Management: Individual industries will have their own area for segregation and storage of Hazardous waste materials. The same will be disposed as per the Hazardous and Other Wastes (Management and Transboundary Movement) Amendment Rules, 2016.

3.7.14 Land acquisition and R&R issues: The entire land has been handed over to KIADB for development of Industrial Area. Hence R & R is not applicable for this project.

3.7.15 Employment potential: During construction phase 100 no of employers and during operation phase 7500 employment are expected to be generated.

3.7.16 Benefits of the project: Socio-economic benefit to the locals as it would provide both indirect employment and direct employment during construction and operation of the Industrial Area. There will be positive impact on social conditions in and around the site due to the proposed project.

3.7.17 Details of Court cases: No Court Case is pending against the proposed project.

3.7.18 The EAC based on the information submitted and clarifications provided by the project proponent and detailed discussions held on all the issues during 306<sup>th</sup> meeting during 22<sup>nd</sup>-23<sup>rd</sup> August, 2022, **recommended** the project for grant of Terms of Reference (ToR) under violation category with stipulated specific conditions along with other Standard ToR Conditions.

- i. The State Government/SPCB to take action against the project proponent under the provisions of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC.
- ii. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR).



- iii. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
- iv. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter (13) in the EIA report by the accredited consultants.
- v. Budget of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared accordingly.
- vi. The project proponent shall require to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.
- vii. The planning of Industrial Estate should be based on the criteria mentioned in this Ministry's Technical EIA Guidance Manual for Industrial Estate (2009) prepared by IL&FS as well as CPCB's Zoning Atlas Guidelines for siting industries.
- viii. Water balance chart be prepared and submitted along with EIA/EMP report.
- ix. Proponent shall ensure the conservation and development of nearby water bodies in the surrounding areas.
  - x. Trees with heronry (breeding ground for herons), pelicanary or community nesting of birds like Painted Storks, Ibis, Egrets, Pelican, etc will not be allowed to fell.
  - xi. Detailed land use breakup of proposed Industrial area with green belt to be submitted.
  - xii. The terrain of the project area has to be detailed with hydrological study and its impact need to be carried out on the catchment and drainage system in core and buffer zones.
- xiii. The PP shall not use groundwater without obtaining approval from CGWA/SGWA as the case may be. The project proponent shall obtain necessary permission from Competent Authority to use water from Tungabadhra channel.
- xiv. Proponent shall establish captive treatment, storage, and disposal facility (TSDf) to ensure the effective Solid Waste Management.
- xv. Submit a certificate from local DFO that no forest land is involved in the proposed Industrial Park.
- xvi. The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA. I (M) dated 25th October, 2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.

### **Agenda No. 3.8**

**3.8 Development of Industrial Park in area of 1050.45 Ha (2595.74 acres) at Kopparthi, YSR Kadapa District, Andhra Pradesh under VCIC project by M/s Andhra Pradesh Industrial Infrastructure Corporation Limited – Terms of Reference Proposal No. IA/AP/NCP/280803/2022 and File No. 10/37/2022-IA.III**

Project Proponent did not attend the meeting, the Committee deferred the proposal.

### Agenda No. 3.9

#### **3.9 Development of Port facilities at Haldia Dock-II at Mouza– Shalukkhali&Rupnarayanchak, P.S. Sutahta, District East Midnapore, West Bengal by M/s Syama Prasad Mookherjee Port – Extension of validity of Environmental and CRZ Clearance Proposal No. IA/WB/NCP/283522/2022 and File No. 11-140/2010-IA.III.**

*“The EAC noted that the Project Proponent and the consultant have given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in 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 ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.”*

3.9.1 The project proponent along with the EIA consultant M/s Envirotech East Private Limited has made a presentation through Video Conferencing and provided the following information:-

3.9.2 The project of "Development of Port Facilities at Haldia Dock-II at Mouza Shalukkhali & Rupnarayanchak, P.S. Sutahta, District East Mednipore in West Bengal by M/s Kolkata Port Trust" was granted Environmental & CRZ Clearance on 30.07.2015 with 04 numbers dry bulk cargo handling jetty. The project was not implemented due to lack of response from the bidders. Subsequently Amendment in the EC&CRZ Clearance was accorded vide letter F.No.11-140/2010-IA-III dated 28<sup>th</sup> February, 2020 for converting fourth jetty to liquid bulk cargo jetty. As per the amendment in EC letter dated 28.02.2020 the following is amended in the existing EC dated 30.07.2015.

<b>Attributes</b>	<b>Details as per EC &amp; CRZ Clearance dated 30.07.2015</b>	<b>Amendment granted</b>
Capacity	23.4 MMTPA	21.48 MMTPA
Cargo Profile	Dry Bulk 23.4 MMTPA	Dry Bulk 19.05 MMTPA Liquid Bulk 2.43 MMTPA
Type of Cargo	Coking coal, thermal coal & other bulk cargo	LPG and LNG /Paraxylene, Edible Oil & Chemicals/ POL Products (Class-A, B & C)
No. Of Jetty	4 (all for dry bulk cargo)	4 (3 for dry bulk cargo & 1 for liquid bulk cargo)
Project Cost	Rs. 1707.5 Crores	Rs. 1474.0 Crores

3.9.2 PP requested for extension of validity of EC vide letter dated 30.07.2015 mentioning that the project could not take off after obtaining Environmental & CRZ clearance during July, 2015 due to change in market demand for dry bulk cargo. The issue was compounded with the change of Govt. Policy regarding ban on iron ore export. Hence after necessary market survey

it was decided to change the fourth jetty to liquid bulk cargo jetty. The liquid bulk cargo jetty went revision in ToR due to amendment in liquid cargo profile. Ultimately, the amendment in EC&CRZ clearance was obtained in February 2020 by converting fourth jetty to liquid bulk cargo jetty. Concessioner agreement has duly been signed for Liquid bulk cargo jetty. However, due to covid pandemic the starting of work has delayed further which is expected to start shortly.

3.9.3 The EAC based on the information submitted and clarifications provided by the project proponent and detailed discussions held on all the issues during its 206<sup>th</sup> meeting held on 22<sup>nd</sup> -23<sup>rd</sup> August, 2022, clarified that as per amendment notification dated 12<sup>th</sup> April, 2022, the EC is valid for 10 years and 1 year may be extended in respect of valid Environmental Clearance, by the regulatory authority concerned if an application is made in the laid down proforma to the regulatory authority by the applicant within the validity period of the existing Environment Clearance.

M/s Kolkata Port Trust has obtained Environmental Clearance vide letter dated 30.07.2015, therefore as per the existing regulatory provisions, the EC is valid till 29.07.2025. However, as per the Notification dated 18<sup>th</sup> January, 2021 period from the 1<sup>st</sup> April, 2020 to the 31<sup>st</sup> March, 2021 shall not be considered for the purpose of calculation of the period of validity of Prior Environmental Clearances. Therefore, the Validity of EC has been automatically extended upto 29.07.2026.

- i. The extension of validity is being granted for the original proposals for which Environmental and CRZ Clearance was granted earlier.
- ii. The project proponents will not make any changes in the project nature, structure or configuration and limit themselves to activities for which the Environmental and CRZ Clearance has been given earlier.

### **Agenda No. 3.10**

**Integrated development of International Container Transshipment Terminal (ICTT)-14.2 Million TEU along with Greenfield International Airport (4000 Peak Hour Passengers-PHP), Township & Area development and 450 MVA Gas and Solar based power plant in 16610 ha. Great Nicobar Islands, Nicobar District by M/s Andaman and Nicobar Islands Integrated Development Corporation Ltd – Environmental and CRZ Clearance**

**[Proposal No. IA/AN/NCP/260108/2021 and File No. 10/17/2021-IA.III].**

*“The EAC noted that the Project Proponent and the consultant have given undertaking that the data and information given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in EIA/EM P 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.”*

3.10.1 The abovementioned proposal was earlier considered in the 293<sup>rd</sup> meeting of EAC held on 24<sup>th</sup> – 25<sup>th</sup> March, 2022 and again in the 297<sup>th</sup> meeting of EAC held on 24<sup>th</sup> – 25<sup>th</sup> May, 2022. The reply to the queries raised by the EAC in the earlier meetings were prepared by the PP who submitted the information vide letter no. F. No. 1-1601/ANIIDCO/Projects/2021-22/Vol. XII/1 922 dated 19<sup>th</sup> August, 2022 on PARIVESH portal for further consideration of the proposal. Accordingly, the proposal is again placed in the instant 306<sup>th</sup> meeting of EAC held on 22<sup>nd</sup> – 23<sup>rd</sup> August, 2022. The project proponent along with the EIA Consultant M/s Vimta Labsand M/s AECOM India Pvt Ltd made a presentation in virtual mode and provided the following information: -

- (i) Regarding exclusion of some of the areas other than the defense related areas in the western coast of the GNI especially the areas of Pemayya Bay, Casuarina Bay and Alexandria Bay, it has been explained that the western coast of Galathea Bay excluding the defence installation and power plant is excluded from Phase I development. Buffer area of 500 mts from high tide line around Pemayya to be declared as Costal Protection Area with stringent controls on any development within

the area. Further, Alexandria Bay and Casuarina Bay are located far away and fall outside the project area on the western coast. All these areas including Pemayya Bay have been made part of the leatherback conservation plan. Adequate measures have been proposed for protection of nesting beaches and turtles.

- (ii) Regarding RoW not to be more than 30 meters it has been explained that the North South road of 55m ROW is the main arterial road connecting different pockets of development across the master plan area. It also serves as the key connector between the development on the eastern and western side of the master plan area and serves the overall function of distributing traffic and enabling access. The 55m RoW has been envisaged as an urban arterial road and the proposed design for this road is in compliance with guidelines for Urban Roads. The 55 m arterial road serves multiple functions enabling movements through different modes of transport including non-motorised transport i.e. cycles as well as pedestrians. Development within CRZ area will be in compliance with ICRZ Notification 2019.

It was further explained that the arterial road will be developed in a phased matter. In the first phase, 30 m ROW will be utilized and developed and the balance 25 m ROW will be reserved for future expansion for BRT or LRT.

- (iii) Total Power Demand and Supply through various proposed sources is as below. As per discussion with Central Electricity Authority (CEA), it was suggested that majority of demand to be meet through Gas.

Phase	Year	Power Demand	DG Capacity Installed (MVA)	Gas Capacity Installed (MVA)	Solar Capacity Installed (MVA)	Total Installed Capacity (MVA)
Phase - I	1	2	5	0	0	5
	5	35	40	50	0	90
Phase - II	10	106	40	1000	20	160
	15	181	0	150	70	220
Phase - III	20	253	0	250	100	350
	25	293	0	300	100	400
	30	350	0	300	100	400

**Phase I:** For first 5 year of the project, power demand is proposed to be met through Diesel Generators (DG). It is proposed to have 40 MVA capacity DG power plant installed to meet the power demand which is projected as 35 MVA.

Phase I of project will also include construction and commissioning of 50MVA gas based power plant which will take the total installed capacity to 90 MVA.

**Phase II:** total projected demand for the Phase II by the end of 15 year is 181 MVA. The power generation will be augmented to 220 MVA by increasing the installed capacity of Gas based power plant to 150 MVA and increasing the Solar power generation by additional 50 MVA taking total Solar power generation to 70 MVA.

**Phase III:** total projected power demand for end of Phase III will be 350 MVA against proposed installed capacity to be augmented to 400 MVA. The Gas based power plant capacity is proposed to be increased to 300 MVA and Solar power plant will be augmented to 100 MVA.

- (iv) Regarding parts of proposed master plan for Ports which are falling within CRZ IA and IB areas, it has been explained that the same shall be excluded from the revised layout of master plan.
- (v) Regarding township clusters abutted defence installations, PP mentioned that suggestion/ opinion from MoD will be sought to finalise the buffer zones around Defence parcels.
- (vi) Golf courses are now not proposed as any specific landuse in the master plan.
- (vii) Regarding possibility of extending the western isolated breakwater up to base of the GalatheaBay parallel to the eastern flank for the possible unhindered movement of the turtles to and fro nesting grounds in western flank, it has been explained that the modelling study carried out using MIKE 21 HD for the extended breakwater condition shows that the circulation will be limited between the western shore and the western breakwater. This region would form as a sheltered region with 730 m width and 2500 m length. The modelling result shows that flow velocity will reduce, and it will go less than 0.1 m/s. There will not be a free flow and it would lead to a formation of a quasi-stagnant water. There will be a possibility that if any debris washed to shore from open ocean, they would get accumulated over the period, due to low flushing. This will lead to contamination of the water. Such fall in water quality will hamper the turtles to choose and reach this region. On the other hand, the arrangement as proposed earlier, i.e., only a detached breakwater of short length will maintain the present current circulation and help the water to be clean for every tidal cycle. This will help the turtle nesting to continue without any fall in water quality. It is suggested that the port may place series of Ecological Marker Buoys for every 200 m along the proposed extended breakwater line. Also, Marker Booms may be connected in between the buoys. Such arrangement will clearly mark the 'AREA TO BE AVOIDED TO AID TURTLES', warn restriction of the navigational route, thereby neither ships nor boats can enter the 'TURTLE NESTING AREA'. It would protect the turtles from the port operation.
- (viii) Regarding facilitating movement of wildlife between forest and the sea shore and for crossing the arboreal animals as well as for passage of snakes, crabs, crocodiles etc, safe wildlife corridors at 8 locations along the eastern side of the island connecting forest and seashore through via-ducts in the north south arterial road have been proposed and incorporated in the master plan. The locations of the proposed wildlife corridors i.e. via ducts have been selected based on the ground situation and inputs provided by ZSI and Department of Environment & Forest. The width of the corridor ranges from 250 meters to 1100 meters and the eastern side of the corridors via ducts towards the seashore would be maintained as green area and no development is

proposed in the said areas.

- (ix) Regarding stretches of the road falling in CRZ IA and IB area, all development within CRZ area shall be in compliance with ICRZ Notification 2019.
- (x) No development is proposed on the western side of Galathea Bay in Phase I development apart from Defence area development, power plant and basic infrastructure to sustain defence and power plant site. A separate land use category “Special Use” has been included in the land use plan. The subcategories under “Special Use” are:
- National Memorial (Western tip of Galathea Bay),
  - Defence Purpose (Western tip of Galathea Bay),
  - Pemayya Buffer Area (Buffer area of 500m from HTL for safe nesting of Leatherback turtles),
- (xi) The revised land-use breakup is as follows:

<b>LANDUSE</b>	<b>Phase I (Area in Sq.km.)</b>	<b>Phase II (Area in Sq.km.)</b>	<b>Phase III (Area in Sq.km.)</b>	<b>Total (Area in Sq.km.)</b>
Airport	8.45	0.00	0.00	8.45
ICTT	4.50	2.42	0.00	6.92
Power Plant	0.39	0.00	0.00	0.39
Residential	6.78	6.45	3.39	16.62
Commercial- Mixed Use	1.59	1.08	1.85	4.51
Commercial- Office	0.18	0.00	0.00	0.18
Commercial- Tourism & Hospitality	2.53	2.48	0.01	5.01
Commercial- Coastal Tourism	1.31	2.16	4.72	8.19
Institutional	1.26	4.52	0.00	5.77
Industrial & Logistic	0.13	4.68	0.07	4.88
Eco-Tourism	16.51	10.62	13.42	40.55
Green and Recreational	9.56	10.92	3.39	23.87
Utilities-Others	0.13	0.21	0.08	0.42
Utilities-Water Reservoir	1.27	1.30	0.00	2.57
Jetty	0.10	0.00	0.00	0.10
Defence land	12.61	0.00	0.00	12.61
Special Use (Defence Purpose)	0.43	0.00	0.00	0.43
Special Use (National Memorial)	0.08	0.00	0.00	0.08
Special Use (Pemayya Buffer Area)	0.00	0.69	3.83	4.52

Coastal Regulatory Zone (CRZ)	4.39	6.82	8.81	20.02
<b>Grand Total</b>	<b>72.20</b>	<b>54.34</b>	<b>39.56</b>	<b>166.10</b>

- (xii) Regarding legal protection to the areas by way of declaring them as Wild Life Sanctuaries (WLS) or Conservation Reserves as per provisions of Wildlife Protection Act it has been clarified that already 3 new wildlife sanctuaries have been identified at Little Nicobar, Menchal and Meroe Islands for conservation and protection of Leatherback turtles, Megapode and Corals respectively and Ministry of Home Affairs (MHA) accorded approval on 21.03.2022 for new wildlife sanctuaries to be created. The details are: 1. Leatherback turtle sanctuary of 13.75 sq.km at Little Nicobar Island, 2. The entire Menchal Island of 1.29 sq.km as a Megapode Sanctuary, 3. The entire Meroe Island of 2.73 sq.km as a Coral Sanctuary.
- (xiii) The Mangrove Conservation and Management Plan for Great Nicobar Island has been prepared by the Department of Environment and Forests, A&N Administration. The mangrove conservation plan is aimed at restoration and restocking of the tsunami impacted mangrove areas besides enhancement/enrichment through plantations. The plan also aims at improving the diversity of mangroves, its richness and stand density through proper assessment of distribution and status of mangrove species found in Great Nicobar Island along with the locations. The conservation plan addresses the strategies to restore and revive the mangrove areas through ecological restoration and enrichment planting. Also an amount of Rs.7.5 crores is kept for mangrove conservation and management as part of EMP.
- (xiv) The Coral Conservation Plan prepared by ZSI addresses both, the conservation strategies for coral colonies around GNI as well as translocation strategies for ten (10) hectares of impacted corals. A total of 245 species of scleractinian corals under 53 genera and 15 families are recorded from seven sites including the Great Nicobar Island. No major coral reef exists within the work area of the project. However, scattered coral reefs are available at the peninsular part of the Galathea Bay. As part of the assessment for conservation and management of Coral reefs, the Coral cover required to be translocated from the proposed site is around 10 ha which includes around 20668 Coral colonies out of which approximately 16150 colonies will be translocated. The plan addresses the probable sites for translocation, the methodology, the coral colonies for transplantation, conservation and management of coral reefs both at the translocated sites, donor sites and other sites in Great Nicobar Islands. The approximately INR 53.57 Crores is estimated for coral conservation plan.
- (xv) Regarding Crocodile Conservation and Management Plan, the crocodiles have been sighted in Magar nallah, Dillon nallah, Vijay Nagar, Laxminagar, Galathea bay and Navy Dera in the project area in the past and also in Casuarina Bay and Alexandria Bay in the west coast falling outside the project area. The potential habitats include Gandhi Nagar, and Shastri Nagar, etc. WII has prepared a 'Conservation & Management Plan of Salt Water Crocodile (*Crocodylus porosus*) in Great Nicobar



Island’. The Conservation & Management Plan is divided into two components as Monitoring and Management. The budget requirement for the Monitoring is INR 9.7 Crores and for Management is INR 32.2 Crores. The implementation of the plan will be done in two phases of 5 years each post approval of the plan.

- (xvi) WII has prepared the plan for conservation and long term monitoring of sea turtles of the Nicobar Islands along with the leatherback sea turtles for a period of 10 years primarily. The conservation plan will be implemented in two phases. In Phase1 involves to monitoring and nesting the population tracking the movements, identification of high use areas in the breeding sites and non-breeding regions, determining foraging areas using stable isotopes, population genetic structure of leatherback turtles, assessing vulnerability of turtle nesting beaches and adoption of appropriate management strategies and multi stakeholders’ involvement in the long-term conservation of sea turtles. Phase2 of the conservation plan will develop effective site-specific actions for conservation of sea turtles.
- (xvii) WII has been identified as a scientific agency to prepare and implement conservation plans for leatherback turtles and saltwater crocodiles. In the case of Nicobar Megapod, coordinated and collaborative research will have better outcome and in the larger interest of the endemic species of Nicobar megapode.
- (xviii) Revised ICRZ recommendations have been received via letter ‘No.PCCF/EPA/1/Vol-XVI/154, Andaman & Nicobar administration, Department of Environment and Forests, PCCF (CRZ&FC) / nodal officer, FCA&MS, A&NCZMA/ Van Sadan, Haddo, Port Blair, Dated 8th July, 2022’ addressed to Additional Director and Member Secretary (CRZ), Ministry of Environment, Forests and Climate Change, Government of India. The project proponent submitted the revised area falling under various categories of ICRZ and the details are as following.

S.no	Activity	Area in Sq.km	ICRZ I		ICRZ II		ICRZ IV	
			CRZ IA	CRZ IB	NDZ	50-100M	IVB	IVA
1	Port(ICTT)	7.39	0.57	0.25	0	0	0.18	0.62
2	Airport	8.45	0.60	0.82	0.38	0.1	0.14	0.56
3	Power Plant	0.39	0.00	0.00	0	0	0	0
4	Township(Defence)	12.6	0.81	1.43	0.02	0	0.07	0.2
5	Township(other landuses)	137.27	5.03	6.05	1.69	0.45	2.5	3.55
Total		166.1	7.01	8.55	2.09	0.55	2.89	4.93
A	Port(reclamation area)	2.27	0.06	0.11	0	0	0	2.1
B	Airport(reclamation area)	0.71	0.00	0.33	0.04	0	0.32	0.02

Total(including reclaimed area)	169.08	7.07	8.74	2.13	0.55	3.21	7.05
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3.10.2 After detailed deliberations, the EAC also noted that three premier institutes of India namely Zoological Survey of India (ZSI), Wildlife Institute of India (WII) and Salim Ali Centre for Ornithology and Natural History (SACON) provided scientific inputs. While ZSI categorically stated in its recommendation that the proposed project will not have impact on the flora and fauna of GNI and can be mitigated through stringent mitigation measures. WII provided cautious inputs very specific to Leatherback Sea Turtles only suggesting that it has less site fidelity and it can move to other suitable nesting areas in GNI. WII suggested that the project can be undertaken however more intensive assessment/research is required on Leatherback Sea turtle and its movements to craft site-specific mitigation strategy and suggested 10-year road map to systematically implement mitigation measures. SACON and WII has provided 10-year plan to mitigate impacts on Nicobar Megapod.

3.10.3 EAC also noted that there are several other endemic flora and fauna and impact of the project on these species is mostly unknown. The EAC noted the scale of impacts the proposed project may have both on flora and fauna of GNI and native populations, however, considering the strategic nature of the integrated project as presented by the PP and taking into account the submission made by the project proponent had a detailed deliberation in its 306<sup>th</sup> meeting during 22<sup>nd</sup> – 23<sup>rd</sup> August, 2022 and **recommended** the proposal for grant of Environmental and CRZ clearance with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

### Specific Conditions

- I. All the recommendations mentioned in the wildlife conservation plans and Tribal welfare plans below shall be implemented in time bound manner. The compliance to the recommendations as per schedule shall be submitted along with 6 monthly compliance reports to the regional office of MoEF&CC.
  - A. **Leatherback Sea Turtle:** Proposal submitted by Wildlife Institute of India (WII) was considered by the EAC and following recommendations are provided to ensure conservation of Leatherback along with other species of sea turtles such as Hawksbill, Green, Loggerhead and Olive Ridley in Andaman and Nicobar Islands with focus of Nicobar group of Islands. EAC has following specific recommendations-
    - i. WII will establish its long-term field research unit in Andaman and Nicobar Islands with one base in Great Nicobar, one based in Little Andaman and one in south Andaman to undertake and monitor sea turtle related research in A&N islands.
      - a. The budget estimated by WII needs to be revised as the project life-cycle is for 30 years till year 2052, however, the proposal of WII is only for 10 years. Therefore, WII need to revise proposal for 30 years along with budgetary provisions and implementation timeline and submitted to PP within 15 days of the grant of EC. Based on the revised proposal sent by WII corresponding amount for first 10 years

will be released by PP within 3 months of submission of proposal which would enable WII to undertake uninterrupted research and conservation interventions on Leatherback and other species of sea turtles such as Hawksbill, Green, Loggerhead and Olive Ridley. Accordingly, the Committee informed PP to revise the EMP provisions. The provision for WII would be over and above the cost required by forest department. The costing should include costs of additional resources such as human resource, vehicles, mechanized boats, 200 additional satellite tags and monitoring costs over entire lifecycle of the proposed project etc as stated below. Project tenure of WII should be consistent with the holistic development plan for GNI and thus will be till the completion of the final phase of the same in the year 2052 and not limited to 10 years. The financial allocation in the proposal of WII should be such that the satellite tagging studies can be started immediately and have adequate and uninterrupted financial resources to continue the conservation work on Leatherback Sea Turtles. If any additional funds are required at a later stage or for post project development monitoring work, those will be made available by PP to WII. Project monitoring committee as stated in 3.10.3(VI) will review the project progress through biannual meetings and additional financial requirements in due course.

- b. 20% of nesting population of Leatherback Sea Turtle or minimum 150 satellite tags (Argos-linked FastGPS Platform Terminal Transmitter with DIVE sensors), whichever is higher, to be deployed to Leatherback Sea Turtle in GNI and Nicobar Islands and Little Andaman in the first 5 years phase by WII. Of these 150 tags, minimum 50 tags to be deployed in the first year so that the sea turtle movement data will be available for the PP to monitor construction activity. For rest of the nesting individuals, flipper tags to be deployed.
- c. 20 satellite tags each for Green Sea Turtle, Hawksbill Sea Turtle and Olive Ridley Sea Turtle to be deployed in the first 5 years phase.
- d. Provision for 10 satellite tags for Loggerhead Sea Turtle should be made in case if nesting females are noticed in A&N
- e. Considering the vast research area, additional manpower especially research associate and field assistants needs to be incorporated in the proposal of WII including dedicated units for Great Nicobar, Little Nicobar and Little Andaman
- f. One additional mechanized engine Dingy for the inter-island movement including boatman, boat running and maintenance cost be included in the WII proposal. All three mechanized dingy (2 for forest dept and one for WII) to be exclusively dedicated to sea turtle research and monitoring
- g. Holistic development will include data and recommendation from WII, ZSI, SACON and BSI studies in the deliberations and directions of the monitoring committee as stated in 3.10.3(VI) and plans maybe

modified accordingly if found necessary in the interest of all species of sea turtles with focus of Leatherback Sea Turtle and other flora and fauna of GNI. Additional measures may be considered by the Committee if found essential.

- h. Zero nest predation approach must be ensured by the state forest department to achieve highest possible survival of Leatherback, Hawksbill, Olive Ridley and Green Sea Turtle. Community based nest monitoring and protection programme should be initiated from year 2022 nesting season. The budget for the same will be submitted by state forest department to PP. This will be over and above the budget for WII proposal.
- i. Domestic dog population control through sterilization to be explored with priority.
- j. Accordingly, WII is advised to revise the proposal and implementation plan within 15 days and send the same to EAC and MoEFCC for record and to PP for release of first 10 years installment within three months.
- k. A&NFD will ensure implementation of conservation measures as recommended by WII.

**B. Nicobar Megapod:** The endemic Nicobar Megapod is a keystone species of Nicobar group of islands. From the enclosure no 17 provided by PP it is clear that about 51 active nests of Nicobar Megapod are present within the proposed project areas of which appx 30 will be permanently destroyed. In this context, the PP has submitted two proposals towards understanding of habitat utilization and microhabitat and conservation of remaining population of this endemic species in the Nicobar region. The approach and methodology for both is similar in nature. However, WII alongside the population monitoring also suggested disease prevalence study. After careful consideration, EAC suggested SACON and WII in close collaboration will undertake comprehensive studies and conservation measures for endemic Nicobar Megapod. Project tenure should be consistent with the holistic development plan for GNI and thus will be till the completion of the final phase of the same in the year 2052 and not limited to 10 years. Accordingly, SACON and WII shall submit two full proposals to PP with a copy to MoEFCC and EAC within 15 days of grant of EC and CRZ clearance. The SACON will undertake studies for population ecology, meta populations, disease surveillance and translocation of endemic Nicobar Megapod and WII will study population genetics and Satellite tagging studies. SACON and WII is advised to develop full proposals with sufficient budgetary provisions and timeline. Based on the revised proposal sent by SACON and WII corresponding amount for first 5 years will be released by PP within 3 months of submission of proposal which would enable SACON and WII to undertake uninterrupted research and conservation interventions on endemic Nicobar Megapod. A&NFD will ensure implementation of conservation measures as recommended by SACON and WII. This cost is over and above the cost required by A&NFD. If any additional funds are required at a later stage or for post project development monitoring work, those will be made available by PP to SACON. Accordingly, the Committee informed PP to revise the EMP provisions.

- C. Saltwater Crocodile:** PP submitted the proposal by WII and A&N State Forest Department towards addressing issue of saltwater water crocodile conservation and conflict mitigation. Project tenure should be consistent with the holistic development plan for GNI and thus will be till the completion of the final phase of the same in the year 2052. Accordingly, WII and A&N Forest Department should revise the proposal with budget allocation and timeline and submit it to the PP with a copy to MoEFCC and EAC within 15 days from the grant of EC and CRZ clearance. The Committee direct PP for the release the first five years budget payment to WII and A&N Forest Department for the study and conservation measures for Saltwater Crocodiles within 3 months from the grant of EC & CRZ Clearance. If any additional funds are required at a later stage or for post project development monitoring work, those will be made available by PP to WII. Accordingly, the Committee informed PP to revise the EMP provisions
- D. Impact of invasive species on native flora:** To understand the impact and to develop prevention of invasives in to the wild, a specific action plan is required. Accordingly, the Committee suggested that a detailed proposal consistent with the holistic development plan for GNI and thus will be till the completion of the final phase of the same in the year 2052 along with budgetary provisions shall be developed by Botanical Survey of India (BSI) and submitted to the PP with a copy to MoEFCC and EAC within three months of grant of EC and CRZ clearance. The Committee direct PP for the release the first five years budget payment to BSI within three months from the grant of EC and CRZ clearance to undertake immediate work on this very important subject, develop robust guidelines in the first year and monitor the impact of invasives on native endemic and endangered flora as the project development progress. If any additional funds are required at a later stage or for post project development monitoring work, those will be made available by PP to BSI. Accordingly, the Committee informed PP to revise the EMP provisions. A&NFD will ensure implementation of conservation measures as recommended by BSI.
- E. Impact on inter-tidal flora and fauna:** The ZSI report emphasize rich biodiversity of the inter-tidal region of GNI. Several parts of this region will be either directly reclaimed or used for other infrastructure such as road on stilts, and other permissible activities within CRZ. Accordingly, the Committee suggested that a detailed proposal consistent with the holistic development plan for GNI and thus will be till the completion of the final phase of the same in the year 2052 along with budgetary provisions shall be developed by Zoological Survey of India (ZSI) and submitted to the PP with a copy to MoEFCC and EAC within 15 days of grant of EC and CRZ clearance. The Committee direct PP for the release the first five years budget payment to ZSI within three months from the grant of EC and CRZ clearance to undertake immediate work to undertake the detailed baseline documentation and further monitoring of the same during entire implementation phase of the holistic development plan. ZSI should also document shift in the inter-tidal community with each phase of the project is being implemented so as to understand the impact and develop mitigation strategies. Accordingly, the Committee informed PP to revise the EMP provisions. A&NFD will ensure implementation of conservation measures as recommended by ZSI.

- F. Nicobar Macaque, Robber Crab and other endemic bird species of Great Nicobar:**For conservation of Nicobar Macaque, Robber Crab and other endemic bird species of Great Nicobar the Committee suggested that a detailed proposal consistent with the holistic development plan for GNI i.e. till the completion of the final phase of the same in the year 2052 along with budgetary provisions shall be developed by SACON and submitted to the PP with a copy to MoEFCC and EAC within 15 days of grant of EC and CRZ clearance. The Committee direct PP for the release the first five years budget payment to SACON within three months from the grant of EC and CRZ clearance to undertake detailed baseline documentation, conservation intervention and further monitoring of the same during entire implementation phase of the holistic development plan. Accordingly, the Committee informed PP to revise the EMP provisions. A&NFD will ensure implementation of conservation measures as recommended by SACON.
- G. Mangrove Restoration:**PP provided the Committee a proposal submitted by A&N forest department for the conservation and restoration of mangroves. EAC agreed to the proposal and directed PP to release the amount mentioned in the proposal to A&N state forest department within 3 months of grant of EC and CRZ.
- H. Coral translocation:**Zoological Survey of India provided detailed plan for coral translocation with a budget of 55 Crore. EAC noted that the budget is only for 10 years while the project lifecycle is for 30 years. It also does not include several components that will be necessary for this complex work. Accordingly, the Committee advised ZSI to submit revised proposal with budget provisions to PP with copy to Ministry and EAC. Committee also direct ZSI to include translocation of endangered Giant Clams (*Tridacnasp*) in the same proposal with necessary budget provisions. Project tenure should be consistent with the holistic development plan for GNI and thus will be till the completion of the final phase of the same in the year 2052 and not for 10 years. The Committee direct PP for the release the first five years budget payment to ZSI within three months from the grant of EC and CRZ clearance to undertake the uninterrupted work of preparation of new translocation sites and actual translocation of coral heads and giant clams (*Tridacnasp*) from 10 ha project impact areas as stated in the proposal before project work begins on ground. ZSI will maintain systematic data on translocated coral colonies with GPS tags to each colony to monitor its survival. The proposal may be finalized based on the EMP and consultation with PP. A&NFD will ensure implementation of conservation measures as recommended by ZSI.
- I. Welfare of local tribal population of Shompen and Nicobaris:** The project activities shall not disturb Shompen tribe and their habitations. Clear demarcation of the land shall be done for specific purpose of land use in the vicinity of project area such that habitations of the tribal shall not be intervene. Budgetary provisions for the same shall be made in the EMP report and expenditure in this regard shall be maintained on records. For the protection and safety purpose of community, security & surveillance mechanism shall be in place with geofencing cum surveillance towers nearby Tribal settlements.

All the considerations will be undertaken by Department of Tribal Welfare (DTW) as per the Andaman and Nicobar Islands (Protection of aboriginal Tribes) Regulation, 1956. (Commonly known as PAT Regulation), Policy on Shompen Tribes. Accordingly, the Committee suggested that a detailed proposal for 50 years along with budgetary provisions shall be developed by Department of Tribal Welfare (DTW) and submitted to the PP. The Committee direct PP for the release the first 10years budget payment to DTW within three months from the grant of EC and CRZ clearance to undertake immediate work and to undertake the detailed baseline documentation and further monitoring of the same during entire implementation phase of the holistic development plan. Accordingly, the Committee informed PP to revise the EMP provisions.

### **Other Specific Conditions**

- II. PP should construct all weather good quality two research stations within one year from the grant of EC and CRZ clearance (one each in Campbell Bay and Kamorta) with office space and accommodation facilities. Campbell station should have accommodation facility for 40 research team members (ten double occupancy rooms, and four dormitories) while Kamorta accommodation facility will be for 10 research team members (two double occupancy rooms, and two dormitories). PP will maintain at its own cost both the research stations for the entire project duration. The research station will be exclusively used and shared by WII, BSI, SACON and ZSI teams and other invited scientists. In the meantime, PP will make arrangements of accommodation of researchers at their own cost through the provisions provided in the respective budgets.
- III. WII will be overall in-charge of the station and will appoint a focal person (through the funds allocated to them under various components) to oversee the smooth running of the above centers. WII should make adequate financial provision for the same in their proposals under overall administrative costs.
- IV. After the completion of the project i.e. after 2052, the research station will be handed over to the A&N Forest Department and maintained by them and will be provided exclusively to the researchers involved with the biodiversity studies of the region and forest department staff for on ground conservation work.
- V. PP will also separately provide funds to A&N forest department for complete oversee of the conservation and mitigation work, infrastructure and operation costs towards implementation of Leatherback Sea Turtle, Nicobar Megapod, Saltwater Crocodile management and other endemic flora and fauna conservation. Proposal for the same will be developed by A&N Forest Department. This amount will be over and above the cost recommended for WII (Leatherback Sea Turtle, Salt-water Crocodile related work and Nicobar Megapod); SACON ( Nicobar Megapod, Nicobar Macaque, Robber Crab and other endemic bird species of Great Nicobar); Zoological Survey of India (for coral and Giant Clam translocation and restoration work, inter-tidal flora and fauna work); Botanical Survey of India (for invasive species related work); A&N Forest department (for mangrove restoration and supervision of work of WII, SACON, BSI and ZSI); and A&N Tribal Welfare Department (for welfare, protection and other measure for Shompen and Nicobarese). All these funds will be provided by the PP as stated in the specific conditions and within stated time stipulated from sr. no A to I upon receiving the EC and CRZ so that respective agencies can initiate uninterrupted conservation

action, research and monitoring while the project is being implemented.

### **Monitoring Committee**

VI. PP will establish three independent Monitoring Committees to oversee the implementation of Environmental Management Plan. Each committee must meet twice a year and undertake one site visit each year. The committees will take review of progress of work of respective areas and implementation of mitigation measures and advise further on its implementation. Minutes of the meetings, site visit reports by these committees and recommendation of the same will be included in the implementation plans of each institute and PP. Proceedings of each Committee will be uploaded on the A&N state forest department website under a specific link provide to the project at GNI. One committee will be to oversee the pollution related matters and measures and its implementation. Second committee is to oversee the implementation of biodiversity related conditions. Third committee will oversee welfare and issues related to Shompen and Nicobarese. Following specific composition of the committees are stipulated. The tenure of the committee will be till the completion of final phase of Holistic Development Plan. However, tenure of every individual expert in each of the Committees shall not exceed three years, and accordingly committees should be reconstituted every three years. The budget allocation of 10 Core is provided to meet the expanses of the committee meetings. For the first three years following constitution is recommended

- i. **Committee to oversee pollution related matters** – The Committee will be chaired by Member Secretary of State Pollution Control Board. The other members of the committee should include representative from CPCB, one national reputed expert each in the field of air, noise, water, solid waste and soil pollution. The committee will also include representative of Chief Wildlife Warden not below the rank of CF, representative of PP, representative of NitiAayog, representative of collector, representative of disaster management unit, representative from Central/State-UT Ground Water Authority and one member of EAC-CRZ and Infra 1 Committee.
- ii. **Committee to oversee biodiversity related matters** – The Committee will be chaired by PCCF (WL) A & N Forest Department. The other members of the committee must include directors of WII, SACON, ZSI, and Botanical Survey of India, representative of PP, representative of NitiAayog, representative of collector, Director, CSIR-National Botanical Research Institute, two independent and nationally recognized scientists in the field of terrestrial and marine biodiversity, Director-Deep Sea Mission of GoI and one member of EAC-CRZ and Infra 1 Committee with biodiversity expertise
- iii. **Committee to oversee welfare and issues related to Shompen and Nicobarese**- The Committee will be chaired by the Collector. The other members of the committee should include Director - A & N Tribal Welfare Department, PCCF and HoFF-A&N, Director of department of health, two independent and nationally reputed individual experts on Shompen and Nicobarese, representative of PP, representative of NitiAayog, representative of A&N Administration and one member of EAC-CRZ and Infra 1 Committee.

VII. **Western Flank of the Galathea Bay:** Along the western flank of Galathea Bay no



development will be allowed in Phase 1 and 2 of the projects except defence related infrastructure (pocket 10 in the master plan) or any activity that is strategic and national defence point of view important in nature. A buffer of 500 meters from HTL on both the sides of the flank shall be maintained in any case. Infrastructure related to Gas-based power plant as shown in the development plan (pocket 9) will be allowed. Institutional areas marked in pocket 9 and 10 will not be allowed at this location. It needs to be shifted within pocket 1 to 7. Tourism will not be permitted along the western flank of Galathea Bay in any phases. Pemayya Bay and all other Leatherback nesting sites on the western parts of GNI must remain no development zones as these sites are likely to be used by Leatherback Sea Turtles as alternate sites due to impact of ICTT at Galathea Bay. All major nesting beaches in Great Nicobar Islands including Alexandria Bay, Casuarina Bay, Pemayya Bay, Dogmar will be protected by establishing protection camp, sea turtle hatcheries and kept under 24X7 surveillance and monitoring from nesting till hatching season each year. No development and tourism will be allowed on these shores. Besides, in GNI nesting of Leatherback turtles also have been reported in East of Indira point, West of Indira Point, Koshindon, Laxmi Nagar, North of Alexandria, South of Alexandria, North of Dogmar, South of Dogmar, Pulo Bed, PuloKunji, re Pinsuot, Renhong, Safed Balu, Patatiyo and South of Galathea. These sites will be kept disturbance free with no tourism activity or infrastructure development. WII studies will provide further insight in to it and can be further incorporated in the management plan of Leatherback and other sea turtles at GNI.

- VIII. No withdrawal of water from Galathea River is permitted. Galathea River must remain free of any recreational activity. No ground withdrawal of freshwater will be permitted. Drinking water will be exclusively augmented through two reservoirs proposed along with capacity augmentation of existing freshwater storage facilities at GNI.
- IX. Construction activity shall be carried out strictly according to the provisions of the ICRZ Notification, 2019. No construction works other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- X. All the recommendations and conditions specified by the Andaman Nicobar Coastal Zone Management Authority (ANCZMA) vide letter dated 8<sup>th</sup> July, 2022 shall be complied with.
- XI. Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974. The project proponent shall comply with the air pollution mitigation measures as submitted.
- XII. The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
- XIII. Necessary approvals to be taken during implementation and commissioning from statutory bodies concerned.
- XIV. Shoreline should not be disturbed due to dumping. Periodical study on shore line changes and coastal geomorphology shall be conducted and mitigation measures like living shoreline carried out in line with conservation plan. The details shall be submitted along with the six monthly monitoring report to the regional office of MoEFCC.
- XV. No trees will be cut at one go. These will be done in phased manner and depending on the progress of the work on an annual basis. Plan for cutting of trees should be developed by PP and got approved from state forest department. All trees which are

exceptionally tall and old in age shall be safeguarded, as far as possible. A&NFD will mark all such trees and submit the species wise list to the Ministry and EAC and the regional office of MoEFCC before the infrastructure activities take place.

- XVI. Trees with nesting holes of endemic owls to be identified and geo-tagged with the help from SACON. Such trees shall be safeguarded, as far as possible.
- XVII. Some of the township clusters seems to have several defence installations abutted by commercial and tourism infrastructure thus PP shall obtain the recommendations from the Ministry of Defence and as suggested by them buffer zone will be maintained in between the defence installation and township cluster, commercial and tourism infrastructure.
- XVIII. The arterial road shall be developed in a phased matter. In the first phase, 30 m ROW shall be utilized and developed and the balance 25 m ROW shall be reserved for future expansion for Bus Rapid Transit (BRT) or Light Rail Transit (LRT). Need for development of remaining 25 m RoW will be reviewed by the project monitoring committee on biodiversity before its construction and after full capacity utilization of 30m RoW and evaluation by CSIR-Central Road Research Institute (CRRI). During that period the 25 m RoW shall be maintained in "as it is" condition.
- XIX. In the western coast of Galathea Bay excluding the defence installation and power plant, a buffer area of 500 mts from high tide line around Pemayya may be declared as Coastal Protection Area with no development within the area.
- XX. Safe wildlife corridors at eight (8) locations along the eastern side of the island connecting forest and seashore through via-ducts (elevated crossings) on the north south arterial road shall be provided. In addition to wildlife corridors, culverts and canopy crossings will be provided at appropriate locations for movement of wildlife. The chainage wise locations of the wildlife corridors has been identified by ZSI and Department of Environment & Forest. The width of the corridor ranges from 250 m to 1100 m and the eastern side of the corridors towards the seashore would be maintained as green area. SACON and WII may further suggest additional corridors and canopy crossings based on the data available with them and proposed studies. Representative of A&FFD will physically monitor that the same are implemented as stipulated in the EIA-EMP.
- XXI. The Mangrove Conservation and Management Plan for Great Nicobar Island has been prepared by the Department of Environment and Forests, A&N Administration with the budget of Rs.7.5 crores for mangrove conservation and management as part of EMP. PP shall strictly implement the same. The conservation plan shall adhere the strategies to restore and revive the mangrove areas through ecological restoration and redensification.
- XXII. No dredging activity should be taken in Rocky areas to avoid any type of Disaster. Dredge management plan with automatic monitoring sensors in port area, reclamation area to contain the impact of dredge spoil on marine ecosystem to be developed and to be overseen by nationally reputed institution such as NIOT or NIO.
- XXIII. All illumination for ICTT, Gas-based power plant and other infrastructure adjacent to sea turtle nesting areas must be in conformity with international standards and sea turtle friendly. No other type of illumination would be permitted. WII will develop illumination policy for the entire infrastructure and PP will ensure its implementation.

- XXIV. Dredging, sea reclamation activity for ICTT should take into account nesting and hatching time of sea turtles. Also it should be strictly following Dredging protocol and operational protocol as prepared by IUCNexperts and Species Survival Commission's Marine Turtle Specialist Group and revision, scrutiny, and follow-up of the processing time to time as per the expert opinion.
- XXV. Movement of the ships within Galathea Bay once the ICTT is operational should take into account the movement of Leatherback Turtles. WII satellite data will aid ICTT operators to monitor movement and accordingly plan operations to avoid sea turtle collision risks. One scientist from WII and representative of A&NFD will be onboarded by ICTT operators for the environment monitoring cell as a part of their standard operating procedures. Adequate financial provisions be made by ICTT to meet the costs of both environmental cell and requirements of WII scientists including long-term satellite tagging of Leatherback Sea Turtles.
- XXVI. Installation of deflectors to be done to clear turtles from the path of the suctioning equipment. Underwater silt/sediment dispersal preventing curtains to be deployed to avoid deposition of silt on sandy shores.
- XXVII. PP must explore and use non-conventional sources of energy in the form of solar, wind or tidal energy to bridge the deficit, if needed.
- XXVIII. A & N administration should establish within six month a Special Medical Unit along with state of art infrastructure, medicines and qualified medical staff at GNI to monitor human induced diseases due to expected influx of large population both domestic and international. All mechanism must be in place to ensure that Shompen and Nicobarese are not exposed to the risks related to introduced diseases. SOP and Guidelines will be developed by the Special Medical Unit for the same within 6 months from the grant of EC&CRZ. A provision of 100 Crore is recommended and PP is advised to accordingly revise EMP and submit the same to the Ministry and EAC within 30 days from the grant of EC and CRZ. PP is also directed to make these funds available for A&N Administration within 3 months from grant of EC and CRZ. Any additional funds required will be provided through special provisions by A&N Administration.
- XXIX. Forest department will establish hatcheries to ensure minimum 90% survival of hatchlings with onset of coming nesting season for Leatherback and other sea turtles, as presented during the EAC. Systematic data will be maintained for the same and reported to the regional office of the Ministry on annual basis.
- XXX. The existing island human population should be protected and if needed, ensure to provide the compensation instead of their agricultural/ residential Lands. The census of local as well as population from mainland should be documented.
- XXXI. Optimum number (minimum 2) of road side monitors (CAAQMS) at appropriate distance from the kerb of the road shall be fixed following the CPCB criteria to monitor biogenic VOCs, NOx and PM2.5.
- XXXII. Disposal of hazardous waste material would not be allowed in GNI including batteries, pesticides, organochlorines etc.
- XXXIII. The waste generated during construction and operation period of the project shall be managed as per the prevailing regulations on management of solid waste, plastic waste, e-waste, bio-medical waste, C&D waste and hazardous wastes issued in 2016 by the Ministry. The waste shall be segregated and should be recycled/reused as per the regulatory provisions. No Municipal Landfills will be allowed in GNI. All rejects after

the recycle/reuse of waste must be transported to mainland for its safe disposal. A separate application for TSDF shall be made to the Ministry in case of establishment of TSDF at GNI.

- XXXIV. For the first 5 years (Phase-I) of the project, power demand shall be met through Diesel Generators (DG). Phase I of project shall include construction and commissioning of 50MVA gas based power plant and floating solar power plant in water reservoirs. The combined installed capacity to 90 MVA through diesel and gas based power will further augmented by 20 MVA through first phase of solar power from 6<sup>th</sup> year. During 10-15 years (Phase-II), the power generation shall be augmented to 220 MVA by increasing the installed capacity of Gas based power plant to 150 MVA and increasing the Solar power generation by additional 50 MVA taking total Solar power generation to 70 MVA. During 15 – 30 years (Phase III) the Gas based power plant capacity shall be increased to 300 MVA and Solar power plant shall be augmented to 100 MVA.
- XXXV. Additional storage facility for 7000 kl fuel, 4 ha of additional land at GNI has been provided considering the existing fuel storage capacity is inadequate to cater to increased fuel demand during construction. The area for the storage and hazard mitigation measures as stated in the revised EIA-EMP be followed strictly.
- XXXVI. All the facilities such as port, powerplant and township etc., to be designed to withstand seismic and Tsunami hazard and detailed plan should be submitted to monitoring committee
- XXXVII. As stated by PP, a total number of 102 active mounds of Nicobar Megapode and their locations in GNI have been mapped by ZSI. Out of the 102 mounds, only 19 mounds are falling in the project area. Further, it is seen that several mounds are falling in the green area of the development and the same will be protected. SACON will thoroughly map exact locations of all such mounds falling in the green areas of development and A&N forest department will ensure that these are not disturbed during project development and accordingly advised to define safe buffer areas as advised by SACON for each mound and to be designated as NDZs.
- XXXVIII. A&N Administration should develop tourism policy for GNI considering ecological sensitivities of the island. The tourism development will be guided by the GNI Tourism Policy. PP has to ensure that tourism development is consistent to this policy.
- XXXIX. PP will establish a modern nature and science information center at GNI in consultation with National Council of Science Museum, Kolkatta (NCSM) an autonomous society under the Ministry of Culture, Government of India. PP is advised to write to NCSM seeking further assistance and develop a full proposal within 3 months from grant of EC&CRZ. All costs necessary for developing the center will be made available by PP. The center can also act as capacity building for operators of various infrastructure components of GNI holistic development. Accordingly, the Committee informed PP to revise the EMP provisions.
- XL. Use of vehicles or any recreational means on Sea Turtle nesting beaches will be strictly prohibited. Such beaches will be clearly marked as no-use zones by A&NFD. These will also be included in the Tourism Policy of GNI.
- XLI. Three new sanctuaries are notified by A&N administration as follows towards mitigation measures. It will be ensured that these remains as sanctuaries with no further scope of denotification for any purposes.
- a. Leatherback turtle sanctuary of 13.75 sq.km at Little Nicobar Island*
- b. The entire Menchal Island of 1.29 sq.km as a Megapode Sanctuary.*

c. The entire Meroe Island of 2.73 sq.km as a Coral Sanctuary.

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**Annexure-A**

**Following members were present during the 306<sup>th</sup> EAC (Infra-1) meeting held on 22<sup>nd</sup> – 23<sup>rd</sup> August, 2022.**

S. No.	Name	Designation	Remarks	
			22 <sup>nd</sup> August 2022	23 <sup>rd</sup> August 2022
1.	Dr. Deepak Arun Apte	Chairman	Present	Present
2.	Sh. S. Jeyakrishnan	Member	Present	Present
3.	Sh. Manmohan Singh Negi	Member	Present	Present
4.	Sh. Sham Wagh	Member	Present	Present
5.	Dr. Mukesh Khare	Member	Present	Absent
6.	Dr. Ashok Kumar Pachauri	Member	Absent	Absent
7.	Dr. V. K Jain	Member	Present	Present
8.	Dr. Manoranjan Hota	Member	Present	Present
9.	Representative of CPCB	Member	Absent	Absent
10.	Representative of CGWA	Member	Absent	Absent
11.	Dr. M. V Ramana Murthy	Member	Present	Present
12.	Dr. Nirmalendu Kumar	Member	Absent	Absent
13.	Dr. Niraj Sharma	Member	Present	Present
14.	Sh. Amardeep Raju	Scientist 'E' & MS - EAC (Infra-1)	Present	Present
15.	Dr. Ramesh A	RO, MoEF&CC	Present	Present
<b>Co-opted members for Agenda Item No. 3.10.</b>				
16.	Harendra Kharkwal	Scientist 'E' & MS - EAC (CRZ division)		Present
17.	Shruti Rai Bhardwaj	Scientist 'E' & MS - EAC (NDS division)		Present
18.	Dr Ashish Kumar	Scientist 'E' & MS –EAC		Present

		(Infra-2)		
19.	Shri. Y.P Singh	Scientist 'E' & MS- EAC (Thermal)		Present
20.	Dr.Ajay Sood	EAC Member (NDS)		Present
21.	Shri Inderaj Singh	EAC Member (NDS)		Present
22.	Dr. Santosh Kumar Hampannavar	EAC Member (Thermal)		Present
23.	Dr.Nandini N	EAC Member (Thermal)		Present
24.	Dr.Satish C.Garkoti	EAC Member (Infra-2)		Present
25.	Shri Ashvini Kumar	EAC Member (Infra-2)		Present

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