IN THE HON'BLE NATIONAL GREEN TRIBUNAL
EASTERN ZONE AT KOLKATA

ORIGINAL APPLICATION NO. 93 OF 2024

IN THE MATTER OF:
ASHISH KOTHARI **…Applicant**

Vs.

MINISTRY OF ENVIRONMENT,
FOREST AND CLIMATE CHANGE **…Respondent**

WITH
ORIGINAL APPLICATION NO. 95 OF 2024

IN THE MATTER OF:
ASHISH KOTHARI **…Applicant**

Vs.

MINISTRY OF ENVIRONMENT,
FOREST AND CLIMATE CHANGE **…Respondent**

WITH
MISCELLANEOUS APPLICATION NO. 23 OF 2024

IN THE MATTER OF:
ASHISH KOTHARI **…Applicant**

Vs.

MINISTRY OF ENVIRONMENT,
FOREST AND CLIMATE CHANGE **…Respondent**

N.D.O.H. – 05.12.2024

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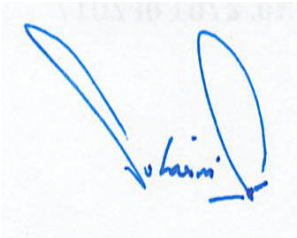

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Date: 21.10.2024

IN THE HON'BLE NATIONAL GREEN TRIBUNAL
EASTERN ZONE AT KOLKATA

ORIGINAL APPLICATION NO. 93 OF 2024

IN THE MATTER OF:

ASHISH KOTHARI **…Applicant**

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FOREST AND CLIMATE CHANGE **…Respondent**

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Counter Affidavit On Behalf of Ministry of Environment, Forest and Climate Change (Respondent No.1)

IT IS MOST RESPECTFULLY SHOWETH

I, E. Arockia Lenin S/o Emanuvel.J , aged about 37 Years working as 'Scientist-D' do hereby solemnly affirm and state as under :-

1. That I am working as 'Scientist-D'
2. That I am fully conversant with the facts and circumstances of the case from records maintained in the office. I have read and understood the contents of the Applications thereof and as such authorized and competent to swear the present affidavit.
3. That vide Order dated 14.05.2024 in OA No. 95/2024, the Hon'ble Tribunal has directed that the Application be connected with OA No. 93/2024 as both the matters are arising out of a common judgement and order passed by this Tribunal dated 03.04.2023 in Appeal No.32/2022/EZ.
4. Further, vide Order dated 14.05.2024 in another MA No. 23/2024 filed in Appeal No. 32/2022, this Hon'ble Tribunal stated, "*Since the issue involved in this case arises out of a common judgment and order passed by the Tribunal dated 03.04.2023 in Appeal No.32/2022/EZ, we direct this case to be connected with O.A. No.93/2024/EZ.*"
5. Therefore, for the sake of brevity, a combined Counter Affidavit is being filed by the answering Respondent for OA No. 93/2024 and 95/2024 and MA No. 23/2024, which have been clubbed together as stated in para 3 and 4 above.

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6. I submit that I deny all the averments mentioned in the Applications filed by the Applicant except those that are specifically admitted in the Counter Affidavit filed.

7. That by way of the Original Application No. 93/2024, the Applicant has alleged violation of the ICRZ Notification, 2019 by the Respondents for establishment of:

   a. International Container Transhipment Terminal (ICTT)-14.2 Million TEU

   b. Township & Area development

   c. 450 MVA Gas and Solar based power plant

   d. Airport (civilian and defence use)

   over an extent of 16610 hectares in the Great Nicobar Islands.

8. That the Applicant in the aforesaid Application has also prayed that 1st Respondent be directed to exclude and delete the admitted extents of ICRZ-IA areas from the projects of the 2nd Respondent and restrain the 2nd Respondent from carrying out any activity in areas classified as ICRZ-IA.

9. That the Applicant through OA No. 95/2024 and M.A. No. 23/2024 has alleged that the answering Respondent has failed to comply with the judgment of this Hon'ble Tribunal dated 03.04.2023 in Appeal No. 32/2022. The Applicant has also prayed in the Miscellaneous Application that the answering Respondent be punished for wilful and wanton violation of the judgement dated 03.04.2023 passed in Appeal No. 32/2022.

10. It is humbly submitted that the Environmental and Coastal Regulation Zone (CRZ) Clearance dated 11.11.2022 was granted to the integrated projects at the Great Nicobar Island by the answering Respondent after due appraisal of the project by

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the Expert Appraisal Committee (EAC) in its 293rd, 297th and 306th meeting and in accordance with the provisions of the EIA Notification, 2006 and ICRZ Notification, 2019. It is further submitted that the answering Respondent accorded the In-principle approval/Stage-I Clearance for diversion of 130.75 Sq. Km of forest land in favour of Andaman and Nicobar Islands Integrated Development Corporation Limited (hereinafter referred to as "ANIIDCO") vide letter dated 27.10.2022 under the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 [formerly known as the Forest (Conservation) Act, 1980]. True copy of the Environmental and CRZ Clearance dated 11.11.2022 issued by the answering Respondent is herewith annexed and marked as **Annexure- I.**

11. That the answering Respondent, while granting the CRZ Clearance, thoroughly ensured that the proposed construction project is permissible under the Island Coastal Regulation Zone Notification, 2019 (hereinafter referred to as the "ICRZ Notification, 2019) and no part of the project was falling under the prohibited area of ICRZ-IA. The Environmental and CRZ Clearance has been granted after due diligence and consideration of possible potential impacts on the ecology of the area.

12. It is pertinent to note that the Ministry of Home Affairs, vide letter dated 15.09.2022, communicated to the answering Respondent that the Project is of significant economic and strategic importance as it will accelerate the holistic and strategic development of the Great Nicobar Island. Therefore, keeping in mind the nature of this Project, the Environmental and CRZ Clearance for the airport

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component as well as the Stage- I Clearance have not been disclosed in accordance with Clause 8(1)(a) of the Right to Information Act, 2005, vide which the answering Respondent is exempted from disclosure of information.

13. That later on, the said Environmental and CRZ Clearance and Stage-I Clearance/In-principle approval was challenged by the Applicant along with other Appellant by filing an Appeal No. 29-32/2022 before this Hon'ble Tribunal on the ground that the EC, CRZ Clearance and Stage-I Clearance were granted without application of mind by the Expert Appraisal Committee (EAC) and the Forest Advisory Committee (FAC) and without taking into account the overall impact of the integrated project on biodiversity, wildlife and forest of the Great Nicobar Island.

14. That a comprehensive Counter Affidavit dated 22.02.2023 was filed by the answering Respondent stating that the Central Government has accorded Environmental, CRZ Clearance and Stage-I Clearance for the Project, having strategic and national importance, after taking into account all related aspects of conservation and sustainable development of the Great Nicobar Island; and after due diligence by way of designated EAC and FAC meetings held as part of the deliberations for ensuring adequate environmental safeguards. Copy of the Counter Affidavit 22.02.2023 is herewith annexed and marked as **Annexure-II**.

15. That after assessing the matter in detail and based on the facts of the case and the submissions presented by the respective Parties, this Hon'ble Tribunal, vide its Final Order dated 03.04.2023 in Appeal No. 29-32 of 2022, upheld the grant of

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Environmental and CRZ Clearance as well as Stage-I Clearance granted by the answering Respondent. Hon'ble NGT at para 32 of its aforesaid order stated that, "*...Thus, by and large the project is compliant and EC does not call for interference*". Similarly, the Hon'ble Tribunal at para 29 of the aforesaid Order stated that, "*Considering the above, we do not find any ground to interfere with the FC*".

The copy of the Order dated 03.04.2023 in Appeal No. 29-32 of 2022 is enclosed and marked as **Annexure- III.**

16. In addition to this, The Tribunal at para 33 of the Order recorded further, as follows:-

"33. However, there are some unanswered deficiencies pointed out by the appellants which need to be addressed. By way of instance, it is pointed out that out of 20668 coral colonies, 16150 are proposed to be translocated without any mention of threat to remaining 4518 coral colonies. It is pointed out that ICRZ Regulations prohibit destruction of corals. Further, data collected for impact assessment is only of one season as against requirement of three seasons. It is also shown that part of the project is in CRZ IA area where Port is prohibited. These aspects may call for revisiting the EC by a High-Powered Committee (HPC) which we propose to constitute. The same will be headed by Secretary, MoEF&CC, GoI. Other members will be Chief Secretary, Andaman & Nicobar, Zoological Survey of India, Botanical Survey of India, Central Pollution Control Board, nominee of Vice Chairman of NitiAayog, nominee of Secretary, Ministry of Shipping and Director, Wildlife Institute of India. Secretary, MoEF&CC may appoint a nodal officer, not below the rank of Joint Secretary, for facilitating functioning of the Committee. The Committee may meet within two weeks from today and finalise its proceedings within two months. It will be open to the Committee to associate any other

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institution/expert. In the light of report of the Committee, the EC or its conditions may be re-looked into by the competent authority. Till then, further work in pursuance of impugned EC may not proceed except for the work which may not be of irreversible nature."

17. It may be noted from the aforesaid directions of the NGT that while upholding the grant of EC, CRZ and Stage- I Clearance, the Hon'ble NGT has merely pointed out that there is a need to address the unanswered deficiencies raised by the Appellants in Appeal No. 29-32 of 2022 in respect of three aspects, namely, translocation of coral colonies, collection of data for EIA studies and whether part of the project area fell in CRZ-IA. For this purpose, the Tribunal directed the answering Respondent to examine the aforesaid issues by revisiting the EC and also constituted a High Powered Committee to be headed by the Secretary (MoEF&CC) and comprising other members as mentioned in its Order dated 03.04.2023.

18. It is humbly submitted that in compliance of the directions issued by the Tribunal vide Order dated 03.04.2023, the answering Respondent constituted the High Powered Committee (hereinafter referred to as "HPC") headed by Secretary (MoEF&CC), including other members as Chief Secretary, Andaman & Nicobar, Zoological Survey of India, Botanical Survey of India, Central Pollution Control Board, nominee of Vice Chairman of NitiAayog, nominee of Secretary, Ministry of Shipping and Director, Wildlife Institute of India, vide Office Memorandum dated 13.04.2023. Copy of the OM dated 13.04.2023 regarding constitution of the High Powered Committee is herewith enclosed and marked as **Annexure-IV**.

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19. That the terms of reference of the Committee to address the issues raised by this Tribunal at para 33 of the judgment were laid down as under:-

   a. *To review the proposal related to coral translocation submitted by the project proponent and regulatory provisions under ICRZ Notification, 2019 with respect to corals.*

   b. *To review the data collection requirement for the project as per the EIA Notification, 2006.*

   c. *To review CRZ boundaries of the port project with respect to ICRZ Notification, 2019.*

20. It is humbly submitted that the HPC, under the Chairpersonship of the Secretary, EF&CC convened three meetings on 18.04.2023, 02.05.2023 and 04.07.2023, respectively where the above terms of reference were deliberated upon. During the designated meetings, the Committee conducted thorough re-examination of the issues raised by the Applicant in Appeal No. 32/2022 to ensure that all the concerns raised therein were adequately addressed and considered. The course of action adopted by the HPC in respect of the aforementioned Terms of Reference and findings of the Committee are as follows:-

   a. In respect of the 1st issue regarding the translocation of the 16150 out of 20668 coral colonies and threat to the remaining 4518 coral colonies, a study was conducted by the Zoological Survey of India (ZSI) and in its Report filed before the HPC, the ZSI has stated that no corals have been found in the proposed site for the construction of port and other amenities at Galathea Bay. However,

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16150 coral colonies found within 15 metres depth of water column and in proximity of the Project and may get impacted because of the Project, need to be translocate to suitable recipient sites based on sediment trap results. The remaining 4518 coral colonies at 15-30 metres of depth need to be duly studied and observed to analyse the sedimentation load and rate of sedimentation before any decision on translocation or otherwise is taken regarding them.

The HPC agreed with the recommendations of ZSI and concluded that necessary logistics support shall be provided by ANIIDCO in this regard including provision of building for camp office, office building, manpower, equipment, Running-Operation-Maintenance cost of any research facility that may be required as well as mobility support including travel as has been mentioned in the specific and general conditions of EC for carrying out suitable studies.

b. Regarding the 2nd issue of collection of the baseline data, the HPC observed that the answering Respondent has issued Guidelines for conducting EIA/EMP studies in 2010 for various sectors. The Environmental Impact Assessment Guidance Manual for Ports and Harbours mentions "*One season data should be monitored other than monsoon as per Central Pollution Control Board norms*". The abstract of the EIA Guidance Manual for Ports and Harbours dated 05.05.2010 is herewith annexed and marked as **Annexure- V**.

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The HPC further observed that only one season data is collected for other Port Projects also, which are appraised for consideration of Environmental Clearance. Accordingly, the HPC concluded that one season data should be monitored other than monsoon as per CPCB norms.

c. In order to address the 3rd issue, i.e., whether part of the Project is in CRZ- IA area where Port is prohibited, the HPC directed ANIIDCO to submit the layout plans and the National Centre for Sustainable Costal Management (hereinafter referred to as "NCSCM") was required to authenticate the maps to ensure that no part of the Port falls in ICRZ-IA. Therefore, in order to evaluate whether a part of the project is falling inside the CRZ-IA area, the NCSCM visited the project site and its nearby areas on 17th- 18th June, 2023 and also interacted with the ANIIDCO Project team as well as with the Forest Officials of UT of Andaman & Nicobar for conducting the ground truthing exercise to determine status of High Tide Line, Low Tide Line and Ecologically Sensitive Areas. Thereafter, taking into consideration the factual position, layout of the project received from ANIIDCO, observations made during the ground truthing exercise and in terms of the clarification received from the Forest Department of UT Administration and Project Proponent, the NCSCM concluded that no part of the project area fell under CRZ-IA area. Moreover, it was also clarified by ANIIDCO that in conformity with Specific and General conditions of the EC dated 11.11.2022, no activity is proposed within ICRZ-IA area.

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Based on the Report of the NCSCM, the HPC concluded that no part of the project area is falling under CRZ-IA area.

21. That so far as the contention of the Applicant in OA No. 93/2024 regarding violation of the ICRZ Notification, 2019 is concerned, it is relevant to mention that the Counter Affidavit filed by the answering Respondent earlier in Appeal No. 29-32 of 2022 brings out unambiguously that no part of the project is falling under the prohibited areas of CRZ-IA. However, the answering Respondent hereby reiterates that out of all the specific and general conditions imposed on the Project Proponent, the other specific condition No. IX stated, *"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."*

Further, the Project Proponent is bound by the aforesaid Specific Condition and has further stated that it is not carrying on any construction in the prohibited CRZ-IA area.

22. It is humbly submitted that contrary to the allegations raised by the Applicant in OA No. 95/2024 and MA No. 23/2024 regarding non-compliance of the directions of the NGT in Order dated 03.04.2023, it is stated that the answering Respondent has fully complied with the Order of this Hon'ble Tribunal dated 03.04.2023 by constituting the HPC and carrying out an in-depth examination of the various aspects of the EC, as raised by the NGT in its Order dated 03.04.2023 and it is only after detailed

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deliberations and consideration of the Reports filed by the concerned agencies as well as taking into account the EC and CRZ Clearance issued on 11.11.2022 that the HPC concluded that no violation of the EIA Notification, 2006 and ICRZ Notification, 2019 had taken place while granting Environmental and CRZ Clearance.

23. It is humbly submitted that the answering Respondent has revisited the EC and complied with the directions of NGT as is evident from the detailed submissions made in paras 20 to 22 above and the HPC has concluded that the EC and CRZ Clearance adhere to the instant statutory provisions in this regard.

24. Additionally, it is humbly submitted that the Report of the HPC is of strategic, defence and national importance and has confidential and privileged information and has therefore, been categorized accordingly by the competent authority. Further, it is respectfully submitted that in accordance with the Clause 8(1)(a) of the Right to Information Act, 2005, relating to the defence, strategic and national security, the details and Report of the HPC have cannot be placed in public domain or made available to public. The provision mentioned above is detailed as follows:-

"8. Exemption from disclosure of information-

(1) Notwithstanding anything contained in this Act, there shall be no obligation to give any citizen,—

(a) information, disclosure of which would prejudicially affect the sovereignty and integrity of India, the security, strategic, scientific or economic interests of the State, relation with foreign State or lead to incitement of an offence;"

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25. The aforesaid stand of the answering Respondent is also consistent with the observations of the Hon'ble NGT in its Final Order dated 03.04.2023, in which the Tribunal noted at para 26 that—

> *"26. From above resume, it is patent that the project has great significance not only for economic development of the island and surrounding areas of strategic location but also for defense and national security. Even the appellants have not joined issue on these aspects."*

26. In light of the foregoing submissions made by the Respondent, it is submitted that there has been no violation of the provisions of ICRZ Notification, 2019 as alleged in OA No. 93/2024. Furthermore, based on the findings and recommendations made by the HPC, the answering Respondent respectfully asserts that the Order of the NGT has also been complied with, both in letter and spirit. The allegations raised in the Applications, including the prayer seeking punishment of the answering Respondent, are devoid of merits and the Applications are therefore, liable to be dismissed forthwith solely on this ground.

27. In view of the above, it is prayed that this Hon'ble Tribunal may take on record and consider above submissions and dismiss the present Applications or pass any other appropriate order, which the answering Respondent shall duly comply with and thus render justice.

28. The answering Respondent craves liberty to file additional information, if any, till *pendent lite*.

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Before me

18/10/24

P. DHANASEKARAN
ADVOCATE / NOTARY
No. 23, GEE GEE MINAR,
COLLEGE ROAD, NUNGAMBAKKAM,
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DEPONENT

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VERIFICATION

I, the aforementioned Deponent do hereby declare on this 19th day of September at Chennai that the contents of the affidavit are true to my knowledge and belief and nothing material has been concealed therefrom.

DEPONENT

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P. DHANASEKARAN
NOTARY PUBLIC
CHENNAI-06
G.O.MS. 596/22
GOVT. OF TAMIL NADU

Before me

18/10/24

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No. 23, GEE GEE MINAR,
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ENVIRONMENTAL CLEARANCE

PARIVESH

(Pro-Active and Responsive Facilitation by Interactive, and Virtuous Environment Single-Window Hub)

Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The GeneralManager

ANDAMAN AND NICOBAR ISLANDS INTEGRATED DEVELOPMENT CORPOARTION

ANIIDCO Ltd Vikash Bahwan,PO 180 Port Blair,Andamans,Andaman and Nicobar-744101

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/AN/NCP/260108/2021 dated 07 Mar 2022. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	**EC22A033AN125767**
2.	**File No.**	10/17/2021-IA-III
3.	**Project Type**	New
4.	**Category**	A
5.	**Project/Activity including Schedule No.**	7(e) Ports, Harbours
6.	**Name of Project**	Environmental and CRZ Clearance Integrated development of International Container Transhipment Terminal (ICTT)-14.2 Million TEU along with Greenfield International Airport (4000 Peak Hour Passengers-P
7.	**Name of Company/Organization**	ANDAMAN AND NICOBAR ISLANDS INTEGRATED DEVELOPMENT CORPOARTION
8.	**Location of Project**	Andaman and Nicobar
9.	**TOR Date**	25 May 2021

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 11/11/2022

(e-signed)
Amardeep Raju
Scientist E
IA - (INFRA-1 sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

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Subject: Integrated development of International Container Transhipment Terminal (ICTT)-14.2 Million TEU, 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 –reg.

2. The abovementioned proposal was considered in the 293rd meeting of EAC held on 24th – 25th March, 2022 and again in the 297th meeting of EAC held on 24th – 25th May, 2022. Based on the reply submitted to the queries raised by the EAC, the proposal is again placed in the 306th meeting of EAC held on 22nd – 23rd August, 2022. ToR was granted vide letter No. 10/17/2021-IA.III dated 25th May 2021.

3. The project proponent along with the EIA Consultant M/s Vimta Labs and M/s AECOM India Pvt Ltd made a presentation and provided the following information:-

4. Andaman and Nicobar Islands Integrated Development Corporation Limited (ANIIDCO) propose Holistic Development of Great Nicobar Island in Andaman and Nicobar Islands. Integrated development of International Container Transhipment Terminal (ICTT)-14.2 Million TEU, Township & Area development and 450 MVA Gas and Solar based power plant in Great Nicobar Islands, Nicobar District by M/s Andaman and Nicobar Islands Integrated Development Corporation Ltd.

5. As a part of Holistic Development of Great Nicobar Islands, Deep Berth Port (with ancillary areas for International Trans-shipment terminal) as primary component is planned along with power generation and distribution network; and township are planned which are interlinked projects to ICTT.

6. The proposed project fall under 7(e) Ports, harbours; 1 (d) Power Plant; and 8 (b) Township & Area Development project, Category A, Scheduled to the EIA Notification, 2006.

7. The total area required for the proposed project is 16610 ha. The proposed Project site is in not connected through any road. Currently, the access is through sea and air route only. Approach roads shall be developed within the Islands.

8. 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. Suggestion/opinion from MoD will be sought to finalise the buffer zones around Defence parcels. 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.

9. A separate land use category "Special Use" has been included in the land use plan. The subcategories under "Special Use" are:

   a. National Memorial (Western tip of Galathea Bay),
   b. Defence Purpose (Western tip of Galathea Bay),
   c. Pemayya Buffer Area (Buffer area of 500m from HTL for safe nesting of Leatherback turtles),

10. Golf courses are now not proposed as any specific landuse in the master plan.

11. 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.

12. 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 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).

13. Water Bodies & impact on Drainage: Magar Nala is near Govind Nagar and Matai Nala Near Gandhi Nagar. No major drainage channels/ water bodies are being blocked/ impacted by proposed development. All major water channels/ nalas/ drains are being conserved and are part of green land use within the proposed land use plan.

14. Water bodies & impact on drainage: Adjacent to Andaman Sea some water bodies exist such as Matait Anla Near Gandhi Nagar, South Bay (Galathea), Mata Taruwa Bay, Pemayya Bay near Pulobaha, Nanjappa Bay near Pulo Bekka, Galathea River or Dak Kea, Dak Aleh, Dak Ubho, Dak Tolai Near Pulabaha, Dak Air, and Dak Thena.

15. Total Water Demand during Operational Phase shall be 160 MLD. 90 MLD shall be Potable/Fresh Water Demand. Source of Fresh/Potable Water will be River Water/Sea Water. No ground water extraction/usage proposed.

16. In order to have minimal dependency on surface water from Galathea River, it is being proposed to create rainwater harvesting reservoirs within the project area. Approximate 2.5 Sq.km of area is being identified for creation of water reservoirs which will store rainwater from surface runoff. Detail watershed studies and mathematical modelling will be carried out at the detail design stage.

17. 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.

18. Diversion of forest land: In-principle Approval/Stage-I Forest clearance over an area of 130.75 Sq. Km (121.87 Sq. Km of forest land and 8.88 Sq. Km of deemed forest land) in three phases has been accorded in favour of Andaman and Nicobar Islands Integrated Development Corporation(ANIIDCO) by the MoEF&CC vide letter no.8-22/2020-FC dated 27th October, 2022.

19. Waste Management: The Solid Waste Management System and hazardous wastes treatment system in the Centralized Solid Waste Management Facility(CSWMF) Waste management including collection, segregation, transportation and disposal will be done as per the provisions contained in Solid Waste Management Rules, 2016, Hazardous and Other Waste (Management & Transboundary, Movement) Rules, 2016, Construction and Demolition Waste Management Rule, 2016, Biomedical Waste (Management & Handing) Rule, 2016 and Battery Waste Management Rules, 2016 and as per guidelines issued by Govt. of India and the UT Administration from time to time.

20. Rainwater harvesting: A total area of about 2.57 sq km is en-marked for reservoirs for the full development for all phases. As a fall-back option, in the case of contingency against the commissioning of gas based power plant, the water reservoirs can be developed, over which about 90-100 MVA of Solar plant systems can be erected and commissioned to meet power demand.

21. Three (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.

22. Great Nicobar has a wider habitat for saltwater crocodiles. 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 (*Crocodylusporosus*) in Great Nicobar Island'. The Conservation & Management Plan is divided into two components as Monitoring and Management.

23. 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. Phase1 involves 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. Phase 2 of the conservation plan will develop effective site-specific actions for conservation of sea turtles.

24. 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.

25. For 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.

26. 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.

27. Shoreline change: The observed trend of the shoreline at the proposed project location reveals that the shoreline remains with not noticeable change over a period of 5 years from 2015 to 2020. The shoreline analysis shows that the project site at port is surrounded with elevated hill promontories and rocky shores.

28. Dredging and Reclamation: The total quantity of capital dredging for the development of port is about 17.7 million cu.m. MIKE 21-PA (Particle Analysis) module was used to identify a suitable location for dumping the dredge spoil and to understand the dispersion pattern of disposed material after dumping. The maximum increase in seabed level over the disposal area is about 0.03 m at the proposed dumping location. Due to availability of deeper water depth of 600m the change in bed level at the proposed disposal location due to dumping is insignificant. The plume of suspended sediment after dumping tends to spread towards northeast to an extent of 1 km with an increase in seabed level of <0.008 m. Therefore, the proposed disposal location is found to be more ideal and it will not cause any adverse impact on the proposed port development facilities and the marine environment.

29. Reclamation: About 298 Ha area to be reclaimed. It is estimated that around 33.35 million m^3 material will be required for reclamation. Suitable dredged material shall be used for reclamation, remaining of reclamation shall be achieved by borrowed fill.

30. Cargo handling with dust control measures: Since the proposed port is International Container Transshipment Terminal (ICTT), there will be no dusty cargo, dry bulk cargo such as coal, iron ore or hazardous cargo, etc. will be handled at port. All the vehicles engaged for

construction should have valid pollution check certificate as per the motor vehicle act. Further, any regulations related to vehicle emission issued by local government should also be adhered to. Generators and machineries are to be serviced and maintained regularly to avoid generation of dust and other air pollutants. Oil Spill Contingent Management Plan includes Boom containment, Spray of dispersant and Skimmers. No hazardous industries are envisaged at GNI however the containers may contain hazardous cargo, Hazardous cargo shall be handled in accordance with 'The Manufacture, Storage and Import of Hazardous Chemicals Rules, ACT 1989'. Containers carrying hazardous cargo are labelled as Hazardous Cargos and stored at separate locations in the yard designated for the storage of hazardous cargo and a dedicated Nodal Officer will be appointed who will be responsible to check the compliance of the regulations from time to time. Hazardous waste like used oil, insecticide/ herbicides, paints, solvents, lubricants etc. would be generated from the project, the same hazardous substances will be securely stored at site before transportation, Double chamber Incinerator has been proposed to treat the possible hazardous waste generated from Port, Power plant and the Township.

31. No marine disposal is involved in the proposed project.

32. Energy conservation: List of materials to be used for construction will be decided at the details design stage. However, the design will follow Energy Conservation Building Code (ECBC 2017), Indian Green Building Council (IGBC) guidelines and Code of green buildings by Council of Architecture (COA).

33. Land acquisition and R&R issues: Total land acquisition required for project is approximately 421.57 ha. Total families affected is 379 and total affected population is 1761.

34. 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.

35. 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.

36. Mangroves: 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.

37. 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.

38. Details of Court cases:

(i) Name of the Court (Supreme Court, High Court, NGT) One (1) case at Civil Judge Junior Division, Campbell Bay, Two(2) cases at Addl. District Judge, Port Blair and one (1) case at Hon'ble Court of Calcutta circuit bench at Port Blair.

(ii) Case No. Suit No.1 of 2021(Bose Barla Vs Admn.), Suit No.02 of 2018 (Anburoja vs Admn,), Suit No.11of 2018 (Kamble vs Admn) and W>P No.313 of 2019 (Shri M. Muthualagu vs A&N Admn.)

(iii)Case Details:

Case 1: Regularization/allotment of plaintiff's encroachment over a portion of Government land bearing Survey No129/P measuring an Area of 0.0200 hectres Campbell bay.

Case 2: Allotment of Tsunami Permanent Shelter at Campbell Bay.

Case 3: Regularization/allotment of plaintiff's encroachment over a portion of government land bearing Survey No 47/P at Laxmi Nagar.

Case 4: Allotment of Tsunami Permanent Shelter at Campbell Bay Tehsil.

39. Employment Potential: The project around 6,939 persons directly and 10,408 persons would be employed by 2025, around 24,734 persons directly, 37,101 persons indirectly would be employed by 2040 and 51,423 persons directly and 77,135 persons indirectly would be employed by 2052. Generally, locals are employed by the contractor.

40. Public Hearing: Public Hearing was conducted on 27.01.2022 at Community Hall, Gram Panchayat, Campbell Bay, Great Nicobar.

41. Benefits of the Project: ***Strategic benefits***:- Strong presence in Indian Ocean Region to counter the pressure being built by foreign powers growing presence. Capturing the Strategic location to develop a new Economic hub in India Ocean region. Improving connectivity with Indian mainland and other global cities. ***Socio-economic benefits***: Promoting sustainable tourism. The proposed ICTT will allow India to participate in the regional and global maritime economy by becoming a major player in cargo transshipment. A Mixed-use urban development in the vicinity of these major infrastructure works will also be necessary to support quality of life for the residents that will generate and enable growth in the various economic sectors over time. This will require the development of simultaneous primary and secondary urban infrastructure networks such as roads, public transport, energy and electrical power, as well as water, wastewater, and storm water facilities and services, which will form the skeleton of the proposed township master plan. It is estimated that after the project is fully implemented, it has the potential to generate around 1,28,558 jobs opportunity. Socio-economic growth of local population. Development of social infrastructure supporting existing population and proposed population.

42. 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.

43. 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 306th meeting during 22nd – 23rd 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:

44. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other Miscellaneous projects and other co-opted members of Infra-2 EAC, members of Thermal EAC and NDS Committee) and hereby decided to grant Environmental Clearance and CRZ Clearance for the "Integrated development of International Container Transhipment Terminal (ICTT)-14.2 Million TEU, 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" under the EIA Notification, 2006 and ICRZ Notification, 2019 as amended, subject to strict compliance of the following specific conditions, 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 (*Tridacna*sp) 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 geo-fencing 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 10 years 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 Committee shall not exceed three years, and accordingly committees should be reconstituted every three years. The budget allocation of 10 Crore 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 Niti Aayog, 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 Niti Aayog, 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 Niti Aayog, 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 8th 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 IUCN experts 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 on boarded 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 6th 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 mount 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.

XLII. The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.

STANDARD CONDITIONS:

A. International Container Transhipment Terminal (ICTT)

I. Statutory compliance:

(i) Construction activity shall be carried out strictly according to the provisions of ICRZ Notification, 2019 and the Coastal Zone Management Plan as drawn up by the State/UT Government. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.

(ii) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

(i) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the project area at least at four locations, covering upwind and downwind directions.

(ii) Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed emission standards.

(iii) Shrouding shall be carried out in the work site enclosing the dock/proposed facility

area. This will act as dust curtain as well achieving zero dust discharge from the site. These curtain or shroud will be immensely effective in restricting disturbance from wind in affecting the dry dock operations, preventing waste dispersion, improving working conditions through provision of shade for the workers.

(iv) Dust collectors shall be deployed in all areas where blasting (surface cleaning) and painting operations are to be carried out, supplemented by stacks for effective dispersion.

(v) The Vessels shall comply the emission norms prescribed from time to time.

(vi) Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

III. Water quality monitoring and preservation:

(i) 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.

(ii) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality. Silt curtains shall be used to contain the spreading of suspended sediment during dredging within the dredging area.

(iii) No ships docking at the proposed project site will discharge its on-board waste water untreated in to the estuary/ channel. All such wastewater load will be diverted to the proposed Effluent Treatment Plant of the project site.

(iv) Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.

(v) Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.

(vi) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

(vii) No diversion of the natural course of the river shall be made without prior permission from the Ministry of Water resources.

(viii) All the erosion control measures shall be taken at water front facilities. Earth protection work shall be carried out to avoid erosion of soil from the shoreline/boundary line from the land area into the marine water body.

IV. Noise monitoring and prevention:

(i) Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

(ii) Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.

(iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

(iv) The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures:

(i) Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;

(ii) Provide LED lights in offices and project areas.

VI. Waste management:

(i) Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring reports.

(ii) Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.

(iii) The solid wastes shall be managed and disposed as per the norms of the Solid Waste Management Rules, 2016.

(iv) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

(v) A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.

(vi) Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

(vii) Oil spill contingency plan shall be prepared and part of DMP to tackle emergencies. The equipment and recovery of oil from a spill would be assessed. Guidelines given in MARPOL and Shipping Acts for oil spill management would be followed. Mechanism for integration of terminals oil contingency plan with the overall area contingency plan under the co-ordination of Coast should be covered.

VII. Green Belt:

(i) Green belt shall be developed in area as provided in project details with a native tree species in accordance with CPCB guidelines.

(ii) Top soil shall be separately stored and used in the development of green belt.

VIII. Marine Ecology:

(i) Dredging shall not be carried out during the fish breeding and spawning seasons.

(ii) Dredging, etc shall be carried out in the confined manner to reduce the impacts on

marine environment.

(iii) The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.

(iv) A detailed marine biodiversity management plan shall be prepared through the NIO or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity and submitted to and implemented to the satisfaction of the State Biodiversity Board and the CRZ authority. The report shall be based on a study of the impact of the project activities on the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, sub-tidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standards survey methods and include underwater photography.

(v) Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components including all micro, macro and mega floral and faunal components of marine biodiversity.

(vi) The project proponent shall ensure that water traffic does not impact the aquatic wildlife sanctuaries that fall along the stretch of the river.

B. Township & Area development

I. Statutory compliance:

i. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

ii. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.

iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.

iv. The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.

v. The project proponent shall obtain the necessary permission for drawl of ground water/surface water required for the project from the competent authority.

vi. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.

vii. The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.

viii. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

II. Air quality monitoring and preservation:

i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.

ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.

iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$) covering upwind and downwind directions during the construction period.

iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

vi. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.

vii. Wet jet shall be provided for grinding and stone cutting.

viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.

x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

xii. For indoor air quality the ventilation provisions as per National Building Code of India.

III. Water quality monitoring and preservation:

i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.

ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.

iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

viii. Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

xi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.

xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

xiii. All recharge should be limited to shallow aquifer.

xiv. No ground water shall be used during construction phase of the project.

xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.

xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.

xviii. No sewage or untreated effluent water would be discharged through storm water drains.

xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent

expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

IV. Noise monitoring and prevention:

i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures:

i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.

ii. Outdoor and common area lighting shall be LED.

iii. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

iv. Energy conservation measures like installation of CFLs/LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.

v. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.

vi. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

VI. Waste Management:

i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.

ii. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.

iv. Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.

v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.

vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.

viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Cover:

i. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. 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.

ii. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

VIII. Transport

i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
b. Traffic calming measures.
c. Proper design of entry and exit points.
d. Parking norms as per local regulation.

ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

C. 450 MVA Gas and Solar based power plant.

I. Statutory Compliance

i. Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.

ii. The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.

iii. No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.

iv. Groundwater shall not be drawn during construction of the project. In case, groundwater is drawn during construction, necessary permission be obtained from CGWA.

II. Air quality monitoring and Management:

i. Stacks of prescribed height shall be provided with continuous online monitoring instruments for SO_X, NOx and Particulate Matter as per extant rules.

ii. Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.

iii. Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM_{10}, $PM_{2.5}$, SO_2, NO_Xwithin the plant area at least at one location. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.

iv. Appropriate Air Pollution Control measures (DEs/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.

III. Noise pollution and its control measures:

i. The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
ii. Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
iii. Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.

IV Human Health Environment:

i. Bi-annual Health check-up of all the workers is to be conducted. The study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
ii. Baseline health status within study area shall be assessed and report be prepared. Mitigation measures should be taken to address the endemic diseases.
iii. Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.
iv. Sewage Treatment Plant shall be provided for domestic wastewater.

V. Risk Mitigation and Disaster Management:

i. Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.
ii. Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
iii. Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
iv. Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.

D Public hearing and human health issues:

(i) The work space shall be maintained as per international standards for occupational health and safety with provision of fresh air respirators, blowers, and fans to prevent any accumulation and inhalation of undesirable levels of pollutants including VOCs.

(ii) Workers shall be strictly enforced to wear personal protective equipments like dust mask, ear muffs or ear plugs, whenever and wherever necessary/ required. Special visco-elastic gloves will be used by labour exposed to hazards from vibration.

(iii) In case of repair of any old vessels, excessive care shall be taken while handling Asbestos & Freon gas. Besides, fully enclosed covering should be provided for the temporary storage of asbestos materials at site before disposal to CTSDF.

(iv) Safety training shall be given to all workers specific to their work area and every worker and employee will be engaged in fire hazard awareness training and mock drills which will be conducted regularly. All standard safety and occupational hazard measures shall be implemented and monitored by the concerned officials to prevent the

occurrence of untoward incidents/ accidents.

(v) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

(vi) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

(vii) Occupational health surveillance of the workers shall be done on a regular basis.

E. Environment Responsibility:

(i) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

(ii) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

(iii) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

F. Miscellaneous:

(i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

(ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

(iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

(iv) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

(v) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the

Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

(vi) The criteria pollutant levels namely; $PM_{2.5}$, PM_{10}, SO_2, NOx (ambient levels) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

(vii) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

(viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

(ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

(x) No further expansion or modifications in the project shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

(xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

(xii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

(xiii) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

(xiv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

(xv) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

(xvi) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

This issue with the approval of the Competent Authority

(Amardeep Raju)
Scientist-E

Copy to:

1. The Principal Secretary (Environment), Department of Environment and Forests Van Sadan, Haddo, Port Blair Andaman & Nicobar Islands.
2. Addl. Principal Chief Conservator of Forests (C), Andaman and Nicobar Coastal Zone Management Authority, Van Sadan, Haddo, Port Blair, Andaman & Nicobar Islands.
3. Member secretary, Andaman & Nicobar Islands Pollution Control Committee (ANIPCC), Department of Science and Technology, Dollygunj, Port Blair - 744103, South Andaman, A & N Islands.
4. Addl. Principal Chief Conservator of Forests (C), Ministry of Env., Forest and Climate Change, Regional Office (SEZ), Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai – 34.
5. The Member Secretary, Andaman and Nicobar Coastal Zone Management Authority, Van Sadan, Haddo, Port Blair, Andaman & Nicobar Islands.
6. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
7. Guard File/Record File
8. Notice Board.

(Amardeep Raju)
Scientist-E

IN THE HON'BLE NATIONAL GREEN TRIBUNAL, EASTERN ZONE, KOLKATA BENCH

IN

APPEAL NO. 29-32 OF 2022

IN THE MATTER OF:

Ashish Kothari ...Appellant

Vs.

Ministry of Environment, Forest and Climate Change & Ors. ...Respondents

WITH

Conservation Action Trust & Anr. ...Appellant

Vs.

Ministry of Environment, Forest and Climate Change & Ors. ...Respondents

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Kolkata
Dated: 22nd February, 2023

Through

SUDIP CHAUDHURI

22 FEB 2023

Respondent No. 1

Apurba Ghosh
Advocate

IN THE HON'BLE NATIONAL GREEN TRIBUNAL, EASTERN ZONE, KOLKATA BENCH

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BEFORE THE NOTARY PUBLIC
AT BIDHANNAGAR
DIST.-NORTH 24 PARGANAS

Counter Affidavit On Behalf of Ministry of Environment, Forest and Climate Change (Respondent No.1)

NOTARY 6584/2008

I, Dr. Soma Das, daughter of Shri Sukumar Das, aged about 49 years, currently working as Regional Director, Integrated Regional Office, Kolkata in the Ministry of Environment, Forest and Climate Change (MoEFCC),Integrated Regional Office, Kolkata, do hereby solemnly affirm and state as under: -

1. That I am working as Regional Director in Integrated Regional Office, Kolkata under the Ministry of Environment, Forest and Climate Change.
2. That I am fully conversant with the facts and circumstances of the case from records maintained in the office. I have read and understood the contents of the petition thereof and as such authorized and competent to swear the present affidavit.

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3. I submit that I deny all the allegations/averments mentioned in the Appeal filed by the Applicant except those that are specially admitted in the counter affidavit filed.

4. That by way of Appeal No. 32 of 2022, Shri. Ashish Kothari and by Appeal No. 30 and 31, Conservation Action Trust has challenged the Environment Clearance dated 11.11.2022 issued by the answering Respondent in favour of Andaman and Nicobar Islands Integrated Development Corporation Limited (ANIIDCO) under EIA Notification, 2006 and ICRZ Notification,2019 for establishment of:

   a. International Container Transhipment Terminal (ICTT)-14.2 Million TEU
   b. Greenfield International Airport (4000 Peak Hour Passengers-PHP)
   c. Township & Area development
   d. 450 MVA Gas and Solar based power plant

   over an area of 16610 hectares in the Great Nicobar Islands (GNI).

5. That, apart from the above appeals filed, another Appeal has been preferred by the Conservation Action Trust against the answering Respondent (Appeal no. 29/2022) challenging the Stage – I Clearance dated 27.10.2022 issued under Section 2 of the Forest (Conservation) Act, 1980 for the diversion of 130.75 Sq Km of forest land in favour of ANIIDCO. It is respectfully submitted that this integrated project forms a part of the 'Holistic Development of Greater Nicobar Island' undertaken by Niti Aayog and also serves key defence and strategic needs of the Nation.

   The Appellants, through the aforementioned appeals, have alleged that the Environmental Clearances accorded by the answering Respondent under the EIA Notification, 2006, CRZ Notification, 2019 and Forest (Conservation) Act, 1980 without application of mind by the Expert Appraisal Committee (EAC) and Forest Advisory Committee (FAC) and without taking into account the overall impact

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of the integrated project on biodiversity, wildlife and forest at Great Nicobar Islands.

The Applicant, therefore, has prayed before the Hon'ble Tribunal to set aside the Environment Clearance (EC) dated 11.11.2022 issued to the 2nd Respondent (Andaman and Nicobar Islands Integrated Development Corporation Limited).

6. That in this regard, the answering Respondent respectfully submits that under clause (v) of sub-section (2) of Section 3 of the Environment (Protection) Act, 1986, the Central Government has the power to make rules for carrying out the purposes of the said Act. While exercising the powers conferred by the Environment (Protection) Act, 1986, the Ministry had issued the Environment Impact Assessment (EIA) Notification vide S.O.60 (E) dated 27th January, 1994 mandating 32 categories of projects listed in Schedule- I for obtaining prior environmental clearance based on the investment criteria (originally it was Rs 50 crores, which was enhanced to Rs 100 crores). It is further submitted that the Environmental Impact Assessment (EIA) was made a statutory requirement for certain category of construction and development activities through amendment dated 07.07.2004 in the EIA Notification, 1994.

7. It is humbly submitted that under the Environment (Protection) Act, 1986 read with Environment (Protection) Rules, 1986, the Ministry has issued a notification number S.O. 1533(E) dated 14.09.2006 (hereinafter referred to as the "EIA Notification, 2006"), in suppression of the notification number S.O.60(E) dated 27th January, 1994.

8. It is further submitted that under the provisions of the EIA Notification, 2006, all new projects or activities listed in the Schedule to the EIA Notification, 2006 or the expansion or modernization of existing projects or activities listed in the said

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Schedule with addition of capacity beyond the limits specified for the concerned sector, that is, projects or activities which cross the threshold limits given in the Schedule, after expansion or modernization or any change in product –mix in an existing manufacturing unit included in Schedule beyond the specified range, shall be undertaken in any part of India, as applicable, only after receipt of the prior environment clearance from the Central Government or by the State Level Environment Impact Assessment Authority ("SEIAA"), as the case may be. It is submitted that the Central Government under sub-section (3) of Section 3 of the Environment Protection Act, 1986 and in accordance with the procedure specified in the EIA Notification, 2006, duly constitutes SEIAA in the States.

9. It is most respectfully submitted that proposal for setting up the aforementioned project received from the Project Proponent (Respondent No. 2) by the answering Respondent is in accordance with the provisions of the EIA Notification, 2006 for seeking prior Environment Clearance under the following entries in the Schedule:-

SUDIP CHAUDHURI NOTARY 6584/2003 GHAZIABAD COURT

	Project or Activity	Category with threshold limit		Conditions if any
		A	B	
(1)	(2)	(3)	(4)	(5)
7(e)	**Ports**, harbors, break waters, dredging	≥ 5 million TPA of cargo handling capacity (excluding fishing harbours)	< 5 million TPA of cargo handling capacity and/or ports/ harbours≥10,000 TPA of fish handling capacity	General Condition shall apply Note: 1.Capital dredging inside and outside the ports or harbors and channels are included; 2.Maintenance dredging is exempt provided it formed part of the original proposal for which Environment

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				Management Plan (EMP) was prepared and environmental clearance obtained.
7(a)	**Air ports**	All projects including airstrips, which are for commercial use		Note: Air strips which do not involve bunkering / refueling facility and or Air Traffic Control, are exempted.
8(b)	**Townships and Area Development Projects**		Covering an area of > 50 ha and or built up area > 1,50,000 sq. mtrs	A project of Township and Area Development Projects covered under this item shall require an Environment Assessment report and be appraised as Category 'B1' Project. Note- "General Conditions" shall not apply.
1(d)	Thermal Power Plants	≥ 500 MW (coal/lignite/naphtha[1] &**gas based);** ≥ 50 MW (all other fuels except biomass). >20 MW (using municipal solid non-hazardous waste, as fuel).	>5 MW < 500 MW (coal/lignite/ naphtha1 and gas based); <50 MW ≥ 5MW (all other fuels except biomass and municipal solid non-hazardous waste); <20 MW >15 MW (using municipal solid non-hazardous waste, as fuel). >15 MW plants based on biomass fuel.	General Condition shall apply. Note: (i)Thermal Power Plants up to 15 MW based on biomass or non-hazardous municipal solid waste using auxiliary fuel such as coal, lignite / petroleum products up to 15% are exempt. (ii)Thermal Power plants using waste heat boilers without any auxiliary fuel are exempt.

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[1] Word Amended vide S.O. 1949 dated 13th November, 2006

10. It is pertinent to note that the Ministry of Home Affairs vide letter dated 30.03.2022, communicated to the answering Respondent that the Greenfield International Airport proposed at Gandhi Nagar-Shastri Nagar area of Great Nicobar Island as part of the Integrated development of the Island, will be developed as a joint military-civil, dual-use airport, under the operational control of Indian Navy. This project will be for Defence, Strategic, National Security, and Public Purpose and therefore, the portion of deliberation made for Airport component may be dealt with accordingly as a project of strategic nature.

11. That at the outset, it is respectfully submitted that as will be set out in greater detail in the subsequent paragraphs of this affidavit, both the Environmental Clearance dated 11.11.2022 as well as the Stage-1 Forest Clearance have been accorded to the present integrated project after an extremely detailed and rigorous scrutiny process at the highest level, and with scrupulous adherence to the provisions of the Environmental Impact Assessment Notification, 2006, the Coastal Regulation Zone Notification, 2011 and the various other applicable extant notifications and statutory provisions. It is further submitted that this entire exercise has been carried out keeping in view the rich biodiversity of the region and the need to ensure balanced and sustainable development with maximum protection to the environment.

SUDIP CHAUDHURI NOTARY 6584/2008

I. PRELIMINARY SUBMISSIONS:

12. That it is respectfully submitted that the present integrated project has been accorded the highest level of scrutiny at all levels, having been deliberated upon in five meetings of the Expert Appraisal Committee i.e. the 258th, 260th, 293rd, 297th and 306th meetings. In this regard it is further submitted:

(i) It is submitted that in terms of Office Memorandum dated 24.12.2010, the project was appraised comprehensively by the

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EAC comprising not only members of the Infra-I sector but also Member Secretaries of the Infra- II sector, Thermal sector and Nuclear, Defence and Strategic (NDS) sector, Coastal Regulation Zone (CRZ) sector were co-opted for comprehensive appraisal of the various components of the Project both before grant of the ToR and thereafter at the time of appraisal for grant of the EC/CRZ Clearance.

(ii) That a perusal of the minutes of each of these meetings would show that every aspect of each one of the components of the present project was examined in the minutest detail.

(iii) After two rounds of deliberations i.e. after the 260th EAC meeting, the project proponent was awarded detailed Terms of Reference with 18 specific ToRs for the ICTT, 23 specific ToRs for the Airport, 12 specific ToRs for the Township and Area Development Project and 52 specific ToRs for the Gas and Solar Based Power Plant, in addition to Special Conditions and all standard ToR conditions as applicable to such projects.

(iv) Following the grant of ToRs, a public hearing was held involving 138 participants on 27.01.2022, and the EIA Report was also received on 7.03.2022. Thereafter, the project was again deliberated upon at the 293rd, 297th and 306th meetings of the EAC, before the Environmental Clearance was finally accorded on 11.11.2022.

(v) The Environmental Clearance accorded contains as many as 42 specific conditions dealing with each component of the project, in addition to all standard conditions applicable to each component dealing with statutory compliances, air quality monitoring and preservation, water quality monitoring and preservation, noise monitoring and preservation, energy conservation measures, waste management, green belt, marine ecology, transport, human health environment and risk

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mitigation and disaster management. Out of these specific conditions, the first condition itself comprises of 9 further sub-conditions dealing with (i) Leatherback Turtles (ii) Nicobar Megapode (iii) Saltwater Crocodile (iv) Impact of invasive species on native flora (v) Impact on inter-tidal flora and fauna (vi) Nicobar Macaque, Robber Crab and other endemic bird species of Greater Nicobar (vii) Mangrove Restoration (viii) Coral translocation and (ix) Welfare of local tribal population of Shompen and Nicobarese.

(vi) That it goes without saying that the Environmental Conditions will be strictly monitored by the answering Respondent in accordance with the prevailing law, and failure to adhere to the conditions of the EC would have the necessary legal consequences. The project proponent is required in terms of the Environmental Clearance to submit six-monthly compliance reports to the concerned Regional Office of the Answering Respondent.

13. That it is further respectfully submitted that in terms of the EIA Notification 2006, the CRZ Notification 2011 and the other extant Notifications, the project proponent has been asked to study the environmental impacts of each component of the project both prior to the issuance of the ToRs and even after the submission of the EIA Report. In terms of the directions of the EAC and the Environmental Clearance, these studies and their consequent mitigation measures are to be undertaken at the highest level by the top statutory and non-statutory bodies whose credentials and competence cannot conceivable be doubted. By way of example, the following are some, though not all, of the studies that were or are to be submitted by the Project Proponent at the pre-ToR, ToR and in terms of the EC are as follows:

SUDIP CHAUDHURI NOTARY 6584/2008 PORT BLAIR (A&N) GOVT. OF INDIA

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(i) Independent evaluation of impact of proposed port site at Galathea Bay by engaging a nationally recognized institute such as Zoological Survey of India ("ZSI") or Salim Ali Centre for Ornithology and Natural History ("SACON") or the Wildlife Institute of India ("WII") or a consortium of these institutes.

(ii) Independent study for the assessment of biodiversity and Wildlife value of all alternative port sites by engaging nationally reputed institutes like WII, ZSI, SACON or the Indian Institute for Science ("IISc").

(iii) Comprehensive study of the impact of dredging and reclamation and port operations by ZSI, SACON or WII or a consortium of these institutes

(iv) A specific study on the impact of the proposed development on migratory birds by ZSI, SACON or WII covering both inward and return migration period.

(v) Involvement of an independent organization with specialized skill such as IIT, NIOT, NCCR, NIO, etc. for technical aspects of site selection of the port as well reputed research institutes such as WII, ZSI, SACON for ecological assessment.

SUDIP CHAUDHURI NOTARY 6584/2008 BARASAT COURT 24 PGS. (N) GOVT. OF INDIA

(vi) In addition to the above, the Project Proponent also undertook multiple studies through reputed agencies during the preparation of an environmentally sound Environmental Management Plan ("EMP") such as: Marine Ecological Conservation of Island Fauna Diversity and Marine Ecological Studies, Comprehensive conservation plan for Nicobar Megapode, an assessment of the Environmental sensitiveness of sea turtle nesting beaches of the Great Nicobar Island, Environmental Baseline Data Monitoring, Socio-Economic Survey, Environmental Impact Assessment Study, Topographic survey through helicopter mounted LIDAR and OLS Survey, Mathematical Modelling Study, Oceanographic

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Study, Hydrographic Survey and Bathymetric & Geophysical Survey, Soil Investigation Study, Traffic & Market Analysis for Port.

14. Additionally, the Answering Respondent submits that keeping in mind the need to balance the defence and strategic requirements of the Nation along with the seminal importance that is owed to the biodiversity and natural habitat of the region, the EAC recommended certain very stringent conservation and mitigation measures, to be carried out by the project proponent either independently or in close collaboration with reputed national research institutes. These mitigation measures form part of the conditions of the Environmental Clearance and it is submitted that these measures would more than adequately address the impacts of the proposed project upon the ecology of the region. By way of example, a few of the conservation/mitigation measures that form a part of the Environmental Clearance are:

(i) WII would establish a long-term field research unit in the Andaman & Nicobar specifically for undertaking uninterrupted turtle research and carrying out necessary conservation interventions if required

(ii) WII and SACON would undertake comprehensive conservation measures for the endemic Nicobar Megapod, and two full proposal for the same are to be submitted to the Project Proponent with a copy to the Answering Respondent.

(iii) The Project Proponent would release funds within three months to the WII and A&N Forest Department for conservation measures for saltwater crocodiles

(iv) SACON would develop a detailed proposal for the conservation of the Nicobar Macaque, Robber Crab and other endemic bird species of Great Nicobar, which would then be implemented by the Project Proponent

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(v) Over and above all other conservation proposals, the Project Proponent is to separately provide funds to the A&N Forest Department for the 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 endemeic flora and fauna conservation.

(vi) Three independent monitoring committees are to be established by the Project Proponent for implementation of the Environment Management Plan, i.e. – one committee would oversee all pollution related matters, one committee would oversee the implementation of biodiversity related conditions and the third committee would oversee welfare and issues related to the Shompen and Nicobarese tribal populations.

(vii) Safe wildlife corridors at 8 locations along the eastern side of the island would be created.

(viii) The Mangrove Conservation and Management Plan for Greater Nicobar Island prepared by the A&N Administration would be adhered to.

(ix) The Coral Conservation Plan prepared by Zoological Survey of India (ZSI) addresses both the conservation strategies for coral colonies around Great Nicobar Island (GNI) as well as translocation strategies for ten hectares of impacted corals.

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(x) Various restrictions on dredging, construction activity, waste management, disease control etc. have all be provided for within the Environmental Clearance.

15. The answering Respondent further submits that it has ensured that the Project Proponent has kept the interest of the tribal population at the forefront while granting the present project prior Environmental Clearance. It is submitted that there are 6 tribes residing in Great Nicobar, which are various stages of development – with the majority

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of them preferring to remain away from modern society. In these circumstance, the tribals were duly represented at the public hearing through the Andaman AdimJanjatiVikasSamiti (hereinafter the "AAJVS") whose views were considered. It was also noted that the only habitation of Shompens or Nicobarese in the project area is at New Chingen, Rajiv Nagar and further, the Administration is not proposing displacement of any tribal habitations. Additionally, the Expert Appraisal Committee had taken note of the following submissions made by the project proponent - (i) that the project will not disturb or displace any Shompen/ Nicobari tribal or their habitation, (ii) that there will be a clear demarcation of land so that there is no scope of conflict arising in future, and (iii) the habitat rights of the tribal persons will be duly taken care of as per the provisions of Forest Rights Act in the unlikely event that any issue in this regard should arise. Further, the Environmental Clearance mandates that Project Proponent constitute a specific committee to oversee all issues related to welfare of the Tribal population.

16. It is further submitted that the project area does not fall within the boundary of any National Park or Wildlife Sanctuary or their Eco-Sensitive Zones and therefore, the project is not proposed to be established in any Eco Sensitive Zone of any Protected Area contrary to what has been claimed in the present appeal. The Project Proponent further submitted that the project site is outside the Ecologically Sensitivity Zone (ESZ) notified around the two National Parks. The EAC, therefore directed the Project Proponent that parts of the proposed master plan for Ports which are falling within CRZ IA and IB areas shall be excluded from the revised layout of master plan in order to safeguard the ecological sensitive areas of the coastal areas.

17. The answering Respondent further submits that the project has correctly been appraised in terms of the Integrated Coastal

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Regulation Zone Notification, 2019. Contrary to what has been claimed by the present Appellants, the said Notification has come into force, as the Inland Coastal Regulation Zone plans of Great Nicobar Island as per ICRZ Notification, 2019 has been approved by the answering Respondent vide letter dated 1st June, 2021 i.e. before the grant of EC/CRZ clearance.

18. It is respectfully submitted that the answering Respondent has taken note of the fact that notwithstanding the breadth of the proposed project, the impacts on the flora, fauna and local population have been sought to be kept to a minimum. The diversion of forest for the instant project is as per the provisions of the National Forest Policy, 1988, which says that in hills and in mountain regions, the aim should be to maintain two-third of the area under forest cover. Despite the diversion of proposed forest land for this project in Great Nicobar Island, the remaining forest cover still be more than two-third of the geographical area of island. Moreover, if the proposed area with respect to the entire forest area of the A&N island is considered, it amounts to only 1.82%. It is also respectfully submitted that the area proposed for development is approximately 18% of the total area in Great Nicobar island. Remaining area of 82% is covered under Protected Forests, National Parks, Eco Sensitive Zones and Biosphere Reserve and managed for conservation of biodiversity at ecosystem, species and genetic levels. Thus, 82% of Great Nicobar Island will be protected and conserved to take care of ecosystem structure, functions and services. The Answering Respondent is also monitoring the steps being taken towards Compensatory Afforestation in this regard.

19. Further, it is submitted that the Stage- 1 Clearance under the Forest Conservation Act, 1980 has been correctly accorded. In this regard, the answering Respondent respectfully submits that the proposal received from the UT administration was placed before the Forest

Advisory Committee (FAC) in its meeting held on 21.09.2022. Keeping in view the strategic nature of the project, the meeting of the FAC was held separately and the minutes of the said meeting are therefore not available in public domain. Without prejudice to the above, and in addition thereto, the answering Respondent wishes to make the following detailed submissions:

II. DETAILED SUBMISSIONS:

20. It is respectfully submitted that in accordance with the provisions of the EIA Notifications, as amended, the EIA process undertaken by the Project Proponent is summarized as follows:-

a. The Application from the Project Proponent for development of the International Container Transhipment Terminal (ICTT), Greenfield International Airport, Township & Area development and 450 MVA Gas and Solar based power plant at Great Nicobar Islands was received by the answering Respondent on 15.03.2021 for issuance of the Terms of Reference (ToR). It may be mentioned that solar based power projects are not mentioned in the schedule of EIA notification, 2006.

b. The project proponent engaged M/s. AECOM India Pvt Ltd for the preparation of the Master Plan for the holistic development of Great Nicobar Island. AECOM engaged QCINABET accredited consultant M/s. Vimta Labs Limited, Hyderabad, for undertaking the Environmental Impact Assessment (EIA) study and preparation of Environment Management Plan whose accreditation is valid up to 27th May, 2023.

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c. After the deliberations held during the 258th and 260th Expert Appraisal Committee (EAC)meetings, the ToR was granted to the Project Proponent vide letter dated 25.05.2021 for conducting the public hearing and preparing the EIA Report in accordance with

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the ToR which inter-alia includes ToR for all four identified components as specified in para (a) above.

d. Accordingly, the public hearing was conducted on 27.01.2022 at Community Hall, Gram Panchayat, Campbell Bay, Great Nicobar and the application for Environment Clearance (EC), along with the EIA Report was received by the answering Respondent on 07.03.2022.

e. The EC was granted by the answering Respondent on 11.11.2022 after taking into consideration the detailed deliberations held during the 293rd, 297th and 306th EAC meetings, wherein the project was ultimately recommended for grant of EC.

f. The Environmental Clearance letter was issued on 11.11.2022 in the correct format after removal of the typographical error in the auto-generated Environmental Clearance letter dated 4.11.2022.

21. It is respectfully submitted by the answering Respondent that the proposal was initially considered in the 258th Expert Appraisal Committee (EAC) meeting held on 17.03.2021-18.03.2021 but the same was deferred for want of requisite information from the Project Proponent. The proposal was again considered in the 260th EAC meeting held on 05.04.2021-06.04.2021 wherein the Committee recommended the proposal for grant of Terms of Reference (ToR), which was issued by the answering Respondent on 25.05.2021. The Committee, in its 260th meeting also opined that with regard to the impact on Leatherback Turtles, all emphasis shall be given to avoid any impact on the turtle nesting sites and detailed mitigation strategies shall be covered in the EIA report including but not limited to offshore break water provision for allowing unhindered turtle movement to nesting grounds. Copy of the Minutes of the 258th EAC meeting held on 17.03.2021-18.03.2021 and 260th meeting held on 05.04.2021-06.04.2021 are herewith attached and marked as **Annexure- I** and **Annexure- II,** respectively.

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22. The Terms of Reference issued by the answering Respondent as against ICTT also directed the Project Proponent to conduct a detailed study as to whether the selected site could withstand the cyclone/storm surge and Tsunami. The copy of the Terms of Reference issued by MoEF&CC vide letter dated 25.05.2021 is attached herewith and marked as **Annexure III.**

23. In reply to the contention of the Appellant that alternative sites were not given consideration, the answering Respondent humbly submits that during the 260th meeting, a comparative analysis was also presented by the Project Proponent for consideration of alternate sites viz Galathea Bay, Casuarina Bay, Anderson Bay, Pemayya Bay, Campbell Bay for undertaking the project. Based on the detailed comparative analysis presented by the Project Proponent, before the EAC, it was decided that Galathea Bay would be the most appropriate technical and financially feasible site amongst all the other different locations. However, while recommending the ToRs, it is again prescribed by the EAC that the EIA study should again examine other alternate sites suggested in the ToR presentation such as Casuarina Bay, Anderson Bay, Pemayya Bay and Campbell Bay based on environmental, ecological and economic considerations, and choose one appropriate site having minimum impacts on ecology and environment with specific focus on Leatherback Turtle and other endangered species. Accordingly, comparative analysis of alternate sites were carried out by the project proponent and it was found out that Transshipment Port site at Galathea Bay appears to be the most feasible in terms of overall considerations for technical, environmental and financial parameters. Further, during the EIA study conducted by the Project Proponent, alternate site analysis for Port, Airport and Power Plant were undertaken and requirement for power, water and solid waste management were also worked out.

24. The answering Respondent respectfully submits that the project area does not fall within the boundary of any National Park or

Wildlife Sanctuary or their Eco-Sensitive Zones and therefore, the project is not proposed to be established in any Eco Sensitive Zone of any Protected Area contrary to what has been claimed in the present appeal. The Project Proponent further submitted that the project site is outside the Ecologically Sensitivity Zone (ESZ) notified around the two National Parks. The EAC, therefore directed the Project Proponent that parts of the proposed master plan for Ports which are falling within CRZ IA and IB areas shall be excluded from the revised layout of master plan in order to safeguard the ecological sensitive areas of the coastal areas.

25. The proposed project sites fall under CRZ area and the CRZ studies and mapping is being carried out by National Centre for Sustainable Coastal Management, MoEF&CC, Chennai which is one of the empanelled technical institutes to conduct such studies.

26. In reply to the contention made in the Appeals that the ICRZ Notification, 2019 has not come into force as CZMP have not been notified, it is humbly stated that the Inland Coastal Regulation Zone plans of Great Nicobar Island as per ICRZ Notification, 2019 has been approved by the answering Respondent vide letter dated 1st June, 2021 i.e. before the grant of Environment/CRZ Clearance.

27. It was further submitted that no project activities are envisaged in the areas where the aboriginal tribes reside and no impacts on this social and economic conditions are expected. It was further observed that the proposed development will generate significant number of jobs, create livelihood opportunities and catalyze the socio-economic growth of the local population in addition to improving connectivity and developing eco-tourism of the region.

28. The Project Proponent also submitted that the emissions from ships, vehicles during transportation and operational phase shall be controlled on the basis of "The International Convention for the Prevention of Pollution from Ships" (MARPOL) Convention protocol.

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Adequate pollution control measures will be undertaken during storage and handling of material and the details of the emissions and control measures have been provided in the EIA Report.

29. It is respectfully submitted that the public hearing was conducted by the Andaman and Nicobar Administration Pollution Control Committee on 27.01.2022 as per the provisions of the EIA Notifications, as amended, in a systematic and transparent manner ensuring widest possible public participation. Regarding representation of tribal groups during public consultation, it is clarified that the representation of tribal groups was made by "Andaman AdimJanjatiVikas Samiti (AAJVS). It is further clarified that the public consultation was conducted as per the provisions of the EIA Notification, 2006 and there was no restriction for any NGO/ agencies/ individual to participate. Moreover, most of the common queries pertained to the issue of adequate compensation to be provided to the people during acquisition of the land while implementing the said project. The public hearing concluded on the basis that the holistic development would be for the betterment of the locals, settlers, farmers and tribal community of the GNI and adequate compensation will be provided to the private land owners in accordance with the prevailing Acts and Rules. Apart from the public comments during the public hearing, comments from various organizations and individual experts were received on the EIA/EMP report by A&N PCB through mail.

30. That, taking into consideration, India's commitments under several conventions and to ascertain that harmony between development and environmental considerations are not compromised, it is respectfully submitted that, the following studies were undertaken as part of the EIA study by various technical organizations engaged by the Project Proponent, for preparing an environmentally sound

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Environmental Management Plan (EMP) for sustainable development: -

- Marine Ecological Conservation of Island Fauna Diversity and Marine Ecological Studies.
- Comprehensive conservation plan for Nicobar Megapode
- An assessment of the Environmental sensitiveness of sea turtle nesting beaches of the Great Nicobar Island.
- Environmental Baseline Data Monitoring, Socio-Economic Survey, Environmental Impact Assessment Study
- Topographic survey through helicopter mounted LIDAR and OLS Survey.
- Mathematical Modelling Study.
- Oceanographic Study, Hydrographic Survey and Bathymetric & Geophysical Survey.
- Soil Investigation Study.
- Traffic & Market Analysis for Port.

31. Further, as part of the EIA study, baseline environmental studies for air, water, noise & ecological attributes were also undertaken in accordance with the provisions of the EIA Notification, 2006, as amended and directions of the answering Respondent from time to time. Mathematical modelling were undertaken for the Port project for shoreline changes, transportation study were undertaken for working out details of road network, impact assessment & mitigation measures for land environment, reclamation, change in coastline/shoreline, air emissions, noise pollution, waste water, solid waste, social ecology, coral reef, etc. was worked out, risk assessment study was undertaken for Port, Airport, Power Plant considering earthquake, tsunami, cyclone as well as for combination of such disasters for preparation of management plan. Information and data obtained during the course of these studies were part of the comprehensive EIA report submitted to the answering Respondent.

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32. The Appellants have raised the contention that no plans, studies or modelling is available for the creation of the water reservoirs, as mentioned in the EC letter and the EC has been granted inspite of this. In reply to this, the answering Respondent is respectfully submitting that the water demand for phases 1, 2 and 3 has been estimated and accordingly, water balance has been established. For the phase wise development, water will be sourced from the proposed reservoir at two locations identified on the eastern side of GNI within the development area identified. Also, at present there is about 0.7 MLD water supply operational on the island against the similar demand. The existing resource will be augmented to a capacity of approximately 2.5 MLD to take care of construction and construction labour requirements till the time the reservoir supply is operationalised. In addition, rain water harvesting will be made mandatory for conserving and use of rain water on the buildings and other structures. Moreover, for phase-1, the water demand will be 16 MLD. For phase – 2, the water demand will be 34 MLD and for phase-3, the water demand will be 33 MLD and the detailed water balance chart for all the phases may be provided by the Project Proponent.

33. It is humbly submitted that with regard to the allegation made by the Appellant that fresh public hearing was not conducted after submission of the final EIA Report, the answering Respondent humbly states that the draft EIA/EMP report presented at the time of public hearing included all components of the project and discussed during the course of public hearing. All observations raised during the public hearing were responded by the Project Proponent and the commitments made by the Project Proponent were duly incorporated as a part of EMP in the EIA/EMP report. The additional queries raised by the EAC and the replies submitted by the Project Proponent are technical in nature and more of clarificatory in nature and do not

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involve addition of any new component to the project and therefore, there is no requirement of conducting fresh public hearing as per the provisions of EIA Notification, 2006, as amended for the additional clarification submitted by the Project Proponent.

34. Thereafter, the proposal for grant of prior Environment Clearance was considered in the 293rd EAC meeting held on 24.03.2022 and 25.03.2022 and was deferred for detailed examination of documents submitted by the Project Proponent.

35. It is respectfully submitted that on the specific issues raised by the EAC in its 297th EAC meeting held on 24.05.2022-25.05.2022, the Project Proponent submitted that a leatherback turtle conservation Plan will be prepared as part of the Biodiversity Management Plan for the Nicobar Group of Islands and implemented to conserve and protect the leatherback turtles. Additionally, it was submitted that since the Great Nicobar has a wider habitat for saltwater crocodiles, therefore, during construction phase, the same shall be handled as per provisions of Wildlife Act through Department of Forest of GNI in accordance with the action plan prepared by the Wildlife Institute of India (WII). Further, an action plan has also been prepared as "Action plan of mitigation of human-crocodile conflicts in the Andaman and Nicobar Islands". Copy of the Minutes of the 297th EAC meeting held on 24.05.2022-25.05.2022 is herewith attached and marked as **Annexure- IV.**

36. As far as the protection of Megapode species is concerned, the Conservation and Monitoring Plan submitted by the Wildlife Institute of India and Salim Ali Centre for Ornithology and Natural History(SACON)focused on the standardisation of population estimation techniques for Nicobar megapode across its distributional range to understand population trend of the species over time (long-term), role of habitat features in structuring megapode population within and across islands, nesting patterns of the Nicobar

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Megapodes across ecological gradients and document potential factors that influence their reproductive success, fine-scale movements and ranging patterns of Nicobar Megapodes within and across islands using advance technology, investigate dispersal, colonisation and meta-population dynamics of Nicobar Megapode populations across the islands, threat assessments to the Megapode populations due to natural and anthropogenic drivers through vulnerability and risk mapping and to create awareness among local communities on the Nicobar Megapode and assist in the identification and establishment of Conservation Areas and conduct capacity-building programs for local stakeholders for effective conservation of Nicobar Megapodes.

37. It is further humbly submitted by the answering Respondent that in respect of the tribes present in the A&N Islands, there are six Scheduled Tribes i.e., the Andamanese, Onges, Jarawas, Sentinelese, Nicobarese and Shompens notified by the President of India under Article 342 (1) of the Indian Constitution (Andaman & Nicobar Islands Scheduled Tribes Order No. 58, dated 31.03.1959. Except Nicobarese the rest of the 05 tribes are categorized into Particularly Vulnerable Tribal Groups (PVTGs).

38. The tribes of A&N Islands are in different stages of socio-economic condition. The Nicobarese have joined the mainstream and the Sentinelese are still in isolation practicing primordial hunting and gathering way of life. The other tribes namely Jarawa, Onge, Andamanese and Shompen are partly in contact with the outside population but they prefer to remain in their own abode particularly Shompen, Sentinelese and the Jarawa.

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39. The Administration is granting maximum autonomy to the Particularly Vulnerable Tribal Groups (PVTGs) especially Jarawa and Shompen with minimum and regulated intervention and that there shall be no intervention in their cultural life and that they will be left

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at liberty to develop according to their own genius and at their own pace. The Administration is not making any attempt to bring them to the mainstream society against their conscious will.

40. The only habitation of Shompens or Nicobarese in the project area is at New Chingen, Rajiv Nagar (Nicobarese of west coast settled after Tsunami) (both are outside the tribal reserved area), old Chingen and Temporary hut (an interaction point only) at Laxmi Nagar. Only 04 Shompens are living in Old Chingen though they frequently interact with their relatives at New Chingen. Further, the Administration is not proposing displacement of any tribal habitations.

41. The answering Respondent respectfully submits that the A&N Administration is fully committed for the well-being and welfare of the PVTGs of the islands. They are the heritage of mankind not for the islands only but for the world. The Administration has constituted an Autonomous Body i.e. Andaman Adim Janjati Vikas Samiti (AAJVS) and the General Body and Executive Committee are chaired by the Hon'ble Lt. Governor and the Chief Secretary. The Shompens generally live in deep forest.

42. The Administration through AAJVS is providing the following welfare measures for the wellbeing of Shompens :-

a. One Medical Sub-centre with ANM at New Chingen village
b. A Pharmacist of AAJVS provides the primary health care to Shompens in the field.
c. A special ward has been constructed at PHC Campbell Bay to provide treatment by Medical Officer.
d. Specialized medical care is provided at GB Pant Hospital, Port Blair and hospitals in mainland, as and when required.
e. Primary School at New Chingen village.

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f. Rice, Dal, Salt & Match Box are provided to the Shompens at Chingen and Laful Bay regularly as per the Shompen Policy of 2015.

g. Supply of Iron and other material for fishing, hunting & agriculture activities is supplied

h. Fruit bearing crops have been raised at Trinket/ Laful Bay The Andaman and Nicobar Administration notified the Policy on Shompen Tribe of Great Nicobar Island on 22.05.2015 with the approval of the Government of India, Ministry of the Tribal Affairs.

43. The Shompen Policy has set out the following objectives:-

i. Recognize the social, ecological and economic diversity among Shompen.

ii. Eliminate through phased reduction, any exploitation and unsustainable dependency

iii. Provide appropriate opportunity for health and medical requirements.

iv. Ensure their integrity and wellbeing through developing channels of consultation and participation only based on their willingness

v. Preserve and protect their cultural heritage including language. The Administration is strictly implementing the Shompen Policy without any undue interference with their lifestyle. Further, the Administration follows the objective to ensure their integrity and wellbeing through developing channels of communication, consultation and participation only based on their willingness.

44. Furthermore, while considering the proposal of sustainable development of Great Nicobar Island, the administration has already consented that-

(a) The project will not disturb or displace any Shompen/ Nicobari tribal or their habitation,

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(b) There will be a clear demarcation of land so that there is no scope of conflict arising in future,

(c) Habitat rights of the tribal will be duly taken care of as per the Forest Rights Act.

These factors were taken into account while preparing Environmental Impact Assessment (EIA) Report. The Shompen tribes would be eligible under the FRA, 2006 and the RFCTLARR, 2013 for compensation for the loss of their habitat (if any). A fair compensation will be devised and compensatory package would be developed exclusively and in addition to the resources already available, for the welfare and development of Shompen tribal community.

45. It is respectfully submitted as part of the rigorous examination of the project from the point of view of ensuring adequate environmental safeguards that the project was again put up in the 306th EAC meeting held on 22.08.2022 and 23.08.2022. For conservation of wildlife habitat, the Project Proponent presented that for facilitating unhindered movement of wildlife between forest and the sea shore and for facilitating safe passage for crossing of the arboreal animals as well as for passage of snakes, crabs, crocodiles etc, wildlife corridors would be provided at 8 locations along the eastern side of the island connecting forest and seashore through via-ducts in the north south arterial road had been proposed and incorporated in the master plan of the integrated project.

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46. Further, 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 was clarified that already 3 new wildlife sanctuaries had been identified at Little Nicobar, Menchal and Meroe Islands for conservation and protection of Leatherback turtles, Megapode and Corals respectively and Ministry

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of Home Affairs (MHA) accorded approval on 21.03.2022 for new wildlife sanctuaries to be created even while the project was being appraised. As such no Wildlife clearance is required for the aforesaid project.

47. The Project Proponent also 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 so that neither ships nor boats can enter the 'TURTLE NESTING AREA', thereby protecting the turtles from any disturbance because of the port operation.

    Copy of the Minutes of the 306th EAC meeting held on 22.08.2022-23.08.2022 is herewith attached and marked as **Annexure- V.**

48. It is humbly submitted that the Expert Members of the EAC have found the proposal to be in order and verified that all the conditions as mentioned in the ToR letter have been complied with and have recommended granting EC/CRZ clearance. The EAC has also recommended stipulation of additional specific conditions over and above the Standard EC conditions stipulated by the answering Respondent for this category of project.

49. It is further submitted that the breeding grounds of leatherback turtles are in no way getting altered due to the project. Only a portion of the Galathea bay (Eastern flank) is to be developed as ICTT and the large nesting areas (Western flank) are being retained as such for nesting of leather backs and efforts and strategies shall be put in place by the Project Proponent to enable active use of the Galathea beach area for nesting by leatherback turtles.

50. Furthermore, areas namely 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

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of the leatherback conservation plan. Also, the Pemayya Bay, Alexandria Bay, Casuarina Bay and other potential leatherback turtle nesting sites such as Nanjappa Bay, Dogmar, Pulo Bed, Pulokunji, etc. have been included as part of Leatherback turtle conservation plan. As such, adequate measures have been proposed for protection of nesting beaches and sea turtles including leatherback turtles.

Summary of the suggested mitigation measures are listed below:

i. Lighting can be minimized through reduction, shielding, lowering, and/or use of turtle-friendly lights without compromising people and operations safety.

ii. Monitoring and protection of coastal environments include Nests identification and protection, Eggs counting, Incubation period monitoring, Hatchling success, Collection of biometric data from individuals, Record of non-reproductive events, Veterinary centre for treating animals, and contribution to scientific knowledge

iii. Environmental education programs for port team as well as for locals to address the effects of pollution due to artificial light intensity on turtle nesting beaches

iv. A standard plan and Technical Guidelines for Photopollution as well as photomitigation to be adapted.

v. Community outreach and scientific research

vi. Daily patrolling including night patrols along with the project site with a 2km stretch to document the impact and to reduce the same and to ensure the safeguard and relocation of eggs for hatching.

vii. Special protection and care to be taken for turtle eggs to provide safeguard those against the threats like poaching, predation, inundation, or erosion in their natural environment

viii. Protecting in situ or safely relocated into a hatchery until they hatch, and then hatchlings to be safely released into the sea.

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ix. Community engagement and habitat improvement activities at the offset site.

x. Conservational program, UN - Sustainable Development Goals (SDGs)- 4, 6, 8, 14, 15, and 17 should be adopted and managed sustainably.

xi. Dredging protocol and the operational protocol needs to be established in consultation with Specialist Group or agencies.

xii. Use of "trailing suction hopper dredgers" procedures to be adopted to develop regulatory measures and to ensure effectiveness.

xiii. Installation of deflectors to clear turtles from the path of the suctioning equipment.

xiv. Installations of inflow and outflow screens to monitor and detect turtles

xv. Natural calamities, physicochemical parameters, and oceanic actions should be considered for the dredging operation.

xvi. Introducing a unique lighting system in the port area including the types of light and the intensity control of emitted light to decrease the potential downstream impacts on nestling adult turtles and emerging hatchlings at the nestling site.

xvii. Use of low-pressure sodium vapor lamps or other light sources that exclude wavelengths less than 520 nm as these wavelengths are not visible to turtles. Lighting, for roadway, wharf, mast, or elevated structure lights should use full 90° cut-off light fixtures. To minimize light spill to the sky, fixtures were to be installed at around 15° below the horizontal plane.

xviii. All lighting should be of minimum lamp wattage

xix. There should be no use of fluorescent, mercury vapor, metal halide, or other broad-spectrum high-intensity discharge lamps.

xx. There should be no floodlighting, up-lighting, or other forms of directional lighting aimed above the horizon.

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xxi. Conservation plan for other beaches where turtle nesting are observes.

xxii. Protection and improvement of the habitat to support turtle nesting.

51. Based on the aforementioned facts, the answering Respondent also submits that the EIA/EMP report prepared by the project proponent is based on the study conducted for a limited duration of time as per the procedure laid down in the EIA Notification, 2006 and its subsequent amendments and other Office Memorandums issued by the answering Respondent from time to time. The EMP prepared by the project proponent was thoroughly examined by the EAC. The EAC has prescribed specific recommendations for each of the sensitive component of the project like Leatherback Sea Turtle, Nicobar Megapode, Saltwater Crocodile, native flora, Nicobar Macaque, Robber Crab and other endemic bird species of Great Nicobar, Mangrove Restoration, Coral translocation, Welfare of local tribal population of Shompen and Nicobaris, etc. Further, as far as migratory birds are concerned, as per ZSI, GNI do not fall under any migratory bird route. However, the resident bird population in GNI is significant. A total of 123 winter migrants are reported from Andaman and Nicobar Islands, of which 59 species are recorded from Andaman Islands and 34 species recorded from Nicobar Islands. Coastal wetlands in India provide winter protection for migratory waterfowl from different parts of the world such as Asia, Europe and Mediterranean regions. Nicobar Islands are no exception; these islands also support good numbers of wetland birds during migratory season. The details are addressed in Chapter 3 of the EIA report.

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52. The EAC has prescribed the setting up of a long-term field research unit in Andaman and Nicobar Islands with revised budgetary provisions as the project life-cycle is for 30 years till year 2052. For

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example, for the conservation of Leatherback Turtle, the EAC prescribed that WII need to revise proposal for 30 years along with budgetary provisions and implementation timeline and submitted to the Project Proponent. Based on the revised proposal sent by WII, corresponding amount for first 10 years will be released by the Project Proponent (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.

53. It was only after subjecting the project to the intense environmental rigour as outlined in the previous paras and after taking into account the recommendations of the Expert Appraisal Committee that Environment Clearance was granted to the Project vide letter dated 11.11.2022. The conditions mentioned in the letter comprise those specific to the flora and fauna species in and around the project area. Some of such environmental safeguards are as follows:-

a. Leatherback Sea Turtle: Buffer area of 500 mts from high tide line around Pemayya Bay to be declared as Costal Protection Area with stringent controls on any development within the earmarked area. Wildlife Institute of India (WII) will establish its long-term field research unit in Andaman and Nicobar (A&N) 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. WII will submit proposal for 30 years along with budgetary provisions and implementation timeline to ANIIDCO, which shall arrange to provide the necessary financial and administrative support for the same.

b. Nicobar Megapod: Salim Ali Centre for Ornithology and Natural History (SACON) and WII, in close collaboration, will undertake

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comprehensive studies and conservation measures for endemic Nicobar Megapod. A&N Forest Department (A&NFD) will ensure implementation of conservation measures as recommended by SACON and WII from the allocated budget based on the proposal submitted to ANIIDCO.

c. Saltwater Crocodile: WII has prepared a 'Conservation & Management Plan of Salt Water Crocodile (Crocodylusporosus) in Great Nicobar Island'. The Conservation & Management Plan is divided into two components as Monitoring and Management plans. WII and A&NFD will submit the proposal with the requisite budget allocation and timeline and will accordingly implement the plan.

d. Impact of invasive species on native flora: To understand the impact and to prevent adverse impact of invasive species, a specific action plan will be developed by Botanical Survey of India (BSI) and will be submitted to the Project Proponent (ANIIDCO), which shall provide necessary funds for its implementation.

e. Impact on inter-tidal flora and fauna: The ZSI report emphasizes the 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.

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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 necessary proposal along with budgetary provisions will be developed by SACON and submitted to the Project Proponent, i.e., ANIIDCO, which shall provide the necessary funds and administrative support for the same.

g. Mangrove Restoration: The Mangrove Conservation and Management Plan for Great Nicobar Island has been prepared by

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the Department of Environment and Forests, A&N Administration. The conservation plan incorporates the strategies for restoration and revival of the mangrove areas through ecological restoration and enrichment planting. A&N Forest Department is the implementing agency for the conservation and restoration of mangroves for which budgetary provisions is to be made available by the Project Proponent.

h. Coral translocation: The Coral Conservation Plan prepared by Zoological Survey of India (ZSI) addresses both the conservation strategies for coral colonies around Great Nicobar Island (GNI) as well as translocation strategies for ten hectares of impacted corals. ZSI provided detailed plan for coral translocation with budget allocation and timeline for implementation for which ANIIDCO shall provide the necessary financial and administrative support to ZSI.As per the ZSI report submitted, corals do not exist in the Galathea Bay area, therefore, the area where the port is proposed is not covered under CRZ IA. However, on the eastern peninsula part (outside the construction area) some corals were noticed. Dredging activities in the nearshore waters of the developmental projects during the construction phase may affect some corals patches. There is no impact on coral reefs due to the proposed project activities. However, if the coral colonies (if any) in the proposed areas are impacted due to proposed construction activities, it shall be translocated at suitable place after conducting detailed investigations on the type of corals getting impacted.

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54. Further, with regard to the welfare of local tribal population of Shompen and Nicobarese, it was stated that the project activities shall not disturb Shompen tribe and their habitations and 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 intervened and a Committee has been specifically

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constituted under the Chairmanship of the Collector to oversee the welfare and other issues related to the Shompen and Nicobarese tribes.

55. The Expert Appraisal Committee (EAC) further recommended that the Project Proponent must constitute three independent Monitoring Committees to oversee the implementation of Environmental Management Plan namely:-

a. 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 each of EAC-CRZ and Infra 1 EAC.

b. Committee to oversee biodiversity related matters: The Committee will be chaired by PCCF (WL) A&N Forest Department. The other members of the Committee will include directors of WII, SACON, ZSI, and Botanical Survey of India, representative of PP, representative of NitiAayog, representative of Collector - A&N Administration, 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.

c. 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 will include Director - A&N

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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 also from Infra-1 EAC.

Copy of the Environment Clearance accorded by the answering Respondent vide letter dated 11.11.2022 accorded to the Project Proponent is annexed hereto and marked as **Annexure- VI**.

56. As against the contention raised by the Appellant regarding Cumulative Impact Assessment not having being carried out, it is submitted that the answering Respondent, vide Office Memorandum dated 24.12.2010, mandated that Integrated and inter-linked projects having multi-sectoral components shall prepare a common EIA report, covering impact of each of the component in a comprehensive manner after obtaining TORs from each of the respective sectoral Expert Appraisal Committees (EACs).The proponent shall prepare a common EIA report covering all the sectors comprehensively and hold public hearing based on the EIA report so prepared, for each component as per provision of EIA Notification, 2006.Therefore, Member Secretaries of the Infra- II sector, Thermal sector and Nuclear, Defence and Strategic (NDS) sector, Costal Regulation Zone (CRZ) sector were co-opted for comprehensive appraisal of the various components of the Project. The ToR was prepared after taking comments from all the Member Secretaries of the sectors. Further, while appraisal of the project for grant of ToR and Environment/CRZ Clearance, the members of the EAC Committee for the Infra- II sector EAC, Thermal sector EAC, Nuclear, Defence and Strategic (NDS) sector EAC were also co-opted for the comprehensive appraisal of the project. Copy of the Office

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Memorandum dated 24.12.2010 issued by the answering Respondent is annexed hereto and marked as **Annexure- VII**. Additionally, the NITIAayog publication titled 'Transforming the Islands through Creativity & Innovation' provides a methodology for calculation of Carrying Capacity and recognises the importance of regular monitoring of targets set through assessment of Carrying Capacity. Chapter – 9 of the EIA report titled "Carrying Capacity and Cost Benefit Analysis" has addressed the issue of carrying capacity. A framework has been developed to assess the impact of future development and tourism on Great Nicobar on the island's valuable natural and human assets. The framework is based on three primary considerations: environmental conservation, socio-cultural preservation, and the legal and policy considerations for development and tourism. Several Key Performance Indicators (KPIs) have been developed to guide development and tourism and are meant to help arrive at a maximum carrying capacity for population (year-round) and tourism (seasonal).

57. Further, the contention of the Appellant that the observation made in the EIA Report that shoreline has not changed for 5 years, is deeply short-sighted and unscientific, is denied forthwith, not being borne out of facts. The answering Respondent respectfully submits that one of the specific conditions while granting the EC to the Project Proponent was, *"periodical study on shore line changes and coastal geomorphology shall be conducted and mitigation measures like living shoreline be carried out in line with the conservation plan. The details shall be submitted along with the six monthly monitoring report to the regional office of MoEFCC."*

Thus, it is amply clear that the EAC has duly considered the aforementioned aspect while granting EC.

58. The Appellant has further alleged that the answering Respondent has failed to see that Wildlife Clearance has not been obtained by the

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Project Proponent. In this behalf, the answering Respondent submits that the Environment Clearance is not linked with the Wildlife Clearance and both are independent from each other.

59. It is further submitted that the answering Respondent, vide OM dated 08.06.2022 clarified that the baseline data used for preparation of EIA/EMP reports may be collected at any stage, irrespective of the request for ToR or the issue thereof. However, such baseline data and the public consultation should not be older than three years, at the time of submission of the proposal, for grant of Environmental Clearance (EC), as per ToRs prescribed. In the present case, the baseline was collected during December, 2020 to March, 2021. The ToR for the project was issued on 25th May, 2021 and the application for EC was received buy the answering Respondent on 07.03.2022. Therefore, the EIA is submitted well within the validity period of the data as mentioned in the OM dated 08.06.2022. Copy of the OM dated 08.06.2022 issued by the answering Respondent is herewith annexed and marked as **Annexure- VIII**.

In addition to this, it is stated that due diligence was exercised in the examination of the EIA Report by the Project Proponent and all requisite information was sought from the Project Proponent by the EAC twice in the meetings and the final EIA Report was acknowledged and accepted by the EAC only after the compliances were duly made by the Project Proponent.

60. It is respectfully submitted by the answering Respondent that the contentions raised by the Appellant is devoid of any substance as the project was granted Environment Clearance after taking into consideration the detailed studies conducted by the Project Proponent regarding the impact of the project on ecosystem, biodiversity, flora and fauna and the directions given by the

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answering Respondent in the various EAC meetings referred to in the forgoing paras.

61. That as regards to impact of the project on Earth's Climate and Sea Level Rise it is humbly submitted that climate change is a global issue. Further, India has already displayed its commitment for the Paris Agreement by updating its Nationally Determined Contribution and communicating the same to UNFCCC in August, 2022. India is committed to addressing the challenge of Climate Change at global level through firm adherence to multilateralism based on equity and the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC), as enshrined in the United Nations Framework Convention on Climate Change (UNFCCC) and based on national circumstances.

62. Furthermore, in reply to the contentions raised by the Appellant in Appeal No. 29 of 2022, the answering Respondent respectfully submits that the proposal received from the UT administration was placed before the Forest Advisory Committee (FAC) in its meeting held on 21.09.2022. Keeping in view the strategic nature of the project, the meeting of the FAC was held separately and the minutes of the said meeting are therefore not available in public domain.

63. The answering Respondent, based on the recommendation of the FAC and after due consideration, accorded the In-principal/Stage-I approval for diversion of 130.75 Sq. Km of forest land (121.87 Sq. Km of forest land and 8.88 Sq. Km of deemed forest land) in favour of ANIIDCO for sustainable development in Great Nicobar with stipulated conditions and requisite mitigation measures vide letter dated 27.10.2022.

64. The FAC during its meeting observed that since the islands have extreme shortage of non-forest land and that the project is for holistic development of these islands has forest area for the implementation of the project which is site specific, cannot be avoided. Otherwise

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also, if the project of this magnitude is in other big islands such as North Andaman, Middle Andaman, South Andaman, Rutland, Baratang and Kamorta, substantial forest areas would have to be diverted there as well.

65. It is respectfully submitted that the diversion of forest for the instant project is as per the provisions of the National Forest Policy, 1988, which says that in hills and in mountain regions, the aim should be to maintain two-third of the area under forest cover. Despite the diversion of proposed forest land for this project in Great Nicobar Island, the remaining forest cover still be more than two-third of the geographical area of island. Moreover, if the proposed area with respect to the entire forest area of the A&N island is considered, it amounts to only 1.82%.

66. Further, the site inspection of instant proposal was conducted by IRO Chennai. The Regional Officer, IRO Chennai, in his specific recommendation, mentioned that considering all aspects of conservation of the flora and fauna and the area's biodiversity, several suggestions/mitigation measures have been mentioned in the report and considering the strategic importance of the project, it has recommended the project for prior approval under FCA, 1980subject to consideration of conditions/mitigation measures.

67. It is submitted that the answering Respondent, at this stage has accorded Stage-I approval to the instant proposal and the final approval (Stage- II approval) shall be subject to the submission of satisfactory compliance report vis-à-vis Stage-I approval by the UT administration and work can start on the ground only after this approval i.e., after Stage-II approval. Thus, the averment made by the Appellant that the Stage- I approval is equivalent to the Working permission is incorrect.

68. It is also respectfully submitted that the area proposed for development is approximately 18% of the total area in Great Nicobar

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island. Remaining area of 82% is covered under Protected Forests, National Parks, Eco Sensitive Zones and Biosphere Reserve and managed for conservation of biodiversity at ecosystem, species and genetic levels. Thus, 82% of Great Nicobar Island will be protected and conserved to take care of ecosystem structure, functions and services.

69. The total estimated number of tree count in 130.75 sq.km of forest land to be diverted is 18.65 lakh. However, the estimated number of trees to be felled in forest area earmarked for development is 9.64 lakh. Further, it is also expected that about 15% of development area will remain as green and open spaces. Thus, potential tree felling would be less than 9.64 lakhs. Further, this tree felling will also be done in a phased manner as per the progress of the project and after insuring compensatory afforestation.

70. Since, the scope of plantation in Andaman and Nicobar Islands is very limited, therefore, suitable areas for Compensatory Afforestation were required to be identified outside the UT. The States of Madhya Pradesh and Haryana have agreed to provide the requisite land for compensatory afforestation. The issue of Compensatory Afforestation (CA) was considered by the FAC, which observed that the plantation of native species in the non-notified forest lands in the arid landscape and in the vicinity of the urban areas would provide greater ecological value and accordingly it has been stipulated that the UT administration shall submit detailed CA scheme along with the site suitability certificates and KML files of the proposed CA sites on non-notified forest land in the State of Haryana in conformity with the guidelines issued by the Ministry. The sites will be inspected by the IRO concerned. In case these areas in Haryana do not fulfil CA norms, the areas for CA may be identified on Degraded Forest Land (DFL) in Madhya Pradesh or States adjoining to NCR.

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71. It is respectfully submitted that the activity wise detail of the mitigation measures along with the cost estimates and the plan of execution of the Environment Management Plan (EMP) will have to be submitted by the UT administration before the Stage-II approval. Further, the UT administration has to ensure that all the statutory clearances under various Acts, Rules, guidelines and court orders are obtained before handing over the forest land to the user agency.

72. That the conditions of approval also provide for additional mitigation measures to compensate for the loss of mangroves. As per these conditions, Mangrove plantations & their maintenance (as part of the CA or as a special CA program) shall be taken up at the cost of the User Agency by the UT Forest Department wherever possible on the coast of Great Nicobar Island and adjoining areas/islands falling in the landscape.

73. Keeping above in view, adequate safeguards and mitigation measures have been stipulated in the conditions of Stage-1 approval under FCA, 1980 to keep the impact of unavoidable strategic project at minimum possible level and compensate the loss of ecosystem services. The concerns raised by the Appellant are therefore not based on facts.

74. In addition to the above and in view of the diversion of large forest land in an ecologically sensitive area, the provision for a long-term monitoring mechanism has been made for the wildlife conservation mitigation measures, safeguards in the interest of local community, compensatory afforestation, compliance of conditions of the environmental clearance, CRZ conditions besides keeping a watch on requirement of any further mitigations. A High level Committee, co-terminus with the project duration has been constituted specifically for these purposes.

75. Therefore, from the above submissions made by the answering Respondent, it is clear that the Central Government has accorded in-

principle (Stage-I), Environment Clearance and CRZ Clearance in the matter after taking all the aspects of conservation sustainable development of strategic and national importance into account and after due diligence by way of designated EAC and FAC meetings held as part of the deliberations fort ensuring adequate environmental safeguards.

76. In view of the response to the various issues raised by the Appellants as mentioned above, it is prayed that this Hon'ble Tribunal may take on record and consider above submissions and dismiss the present appeal being devoid of merit or pass any other appropriate order, which the answering Respondent shall duly comply with and thus render justice.

77. The answering Respondent craves liberty to file additional information, if any, till *pendente lite*.

DEPONENT

वन महानिरीक्षक
INSPECTOR GENERAL OF FORESTS
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE
एकीकृत क्षेत्रीय कार्यालय/INTEGRATED REGIONAL OFFICE
आई बी-198, सेक्टर-III, सॉल्ट लेक सिटि, कोलकाता-700106
IB-198, SECTOR-III, SALT LAKE CITY, KOLKATA - 700106

VERIFICATION

I, the aforementioned Deponent do hereby declare on this 22nd day of February, 2023 that the contents of the affidavit are true to my knowledge and belief and nothing material has been concealed there from.

S. CHAUDHURI
★NOTARY★
GOVT. OF INDIA
Regd. No.-6584/08
Bidhannagar Court
Dist.-North 24 Pgs.

22 FEB 2023

DEPONENT

वन महानिरीक्षक
INSPECTOR GENERAL OF FORESTS
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
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एकीकृत क्षेत्रीय कार्यालय/INTEGRATED REGIONAL OFFICE
आई बी-198, सेक्टर-III, सॉल्ट लेक सिटि, कोलकाता-700106
IB-198, SECTOR-III, SALT LAKE CITY, KOLKATA - 700106

Minutes of the 258th meeting of Expert Appraisal Committee held on 17th -18th March, 2021 through Video Conferencing 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 Complexes 7(c); Ports, harbours, break waters, dredging 7(e) and National Highways 7(f)

The 258th Meeting of Expert Appraisal Committee (EAC) of Infra-1 (IA-III) was held through Video Conferencing at the Ministry of Environment, Forest & Climate Change (MoEF&CC), Indira Paryavaran Bhavan, New Delhi on **17th – 18th March, 2021** under the Chairmanship of Dr. Deepak Arun Apte. A list of participants is annexed as **Annexure-A**.

1. OPENING REMARKS OF THE CHAIRMAN

At the outset, Dr. Deepak Arun Apte, 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 256th EAC meeting held on 3rd – 4th March, 2021.

3. AGENDA WISE CONSIDERATION OF PROPOSALS:

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

Agenda No. 3.1

Development of Litibeda-Ranchi 4-lane access-controlled Greenfield Highway from Litibeda (Junction of SH-10 in Odisha) to Ranchi (Sithiyo) in the State of Jharkhand under Bharatmala Pariyojana (Ch 0+000) to Ch 147+500) [total length - 147.500 km) by M/s National Highways Authority of India - Further consideration for Terms of Reference (Proposal No IA/JH/NCP/186689/2020 File No 10-69/2020-IA.III)

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

2. The abovementioned proposal was earlier placed before the EAC during its 249th meeting on 14th December 2020. The proposal was deferred for the want of a) Details of the proposed alignment and its alternatives to be verified by the Project Elephant of the MoEF&CC to ascertain if the proposed alignment will be passing through the elephant corridor and if yes will it cause major fragmentation of the elephant corridor in the region,

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and b) Details of the road alignment and existing and known elephant corridor to be provided to the Committee in KML file.

3.1.2 At this instance, the aforementioned proposal was further placed before the EAC during 258th meeting on 17th -18th March, 2021. The project proponent along with the EIA consultant M/s URS in Association with AECOM India Pvt. Ltd. & C. E. Testing Company Pvt. Ltd has made a presentation through Video Conferencing and provided the following information-

3.1.3 The proposed project is for Development of Litibeda-Ranchi 4-Lane access-controlled Greenfield Highway from Litibeda (Junction of SH-10 (Odisha)) to Ranchi (Sithiyo) in the State of Jharkhand under Bharatmala Pariyojana. The proposed alignment starts at Litibeda (Design Km 0+000) from Intersection of SH 10 and ends at Ch. 147+500 on Ranchi Ring Road. The proposed project includes 9 major bridges, 100 minor bridges, 136 culverts, 3 Interchanges, 51 VUP/LVUP/SVUP, 2 Vehicular Overpass, 2 Way side Amenities, 3 Toll Plaza, Truck Parking at four locations and 74.50 km length of embankment with average height of > 2.5 m.

3.1.4 Total Length of the Proposed Project is 147.500 Km. About 880.11 ha land (Govt./Pvt. Land 853.49 Ha + Forest Land 26.62 Ha) acquisition will be required for project implementation as per Land Acquisition Act, 1956. The width of proposed Right of way (PROW) is 60 m. At location of interchanges, highway amenities, toll plaza and truck parking, extra land has been proposed as per the actual design requirement.

3.1.5 The proposed project falls under 7(f), Category-A as per EIA notification 2006. Total investment/cost of the project is Rs 3015.06 Crore.

3.1.6 The terrain of the proposed alignment is plain (flat) land and is predominantly an agricultural land (91.2%) followed by built-up area (3.14%), Govt land (1.51%) and Forest/tree cover (4.15%).

3.1.7 The proposed Greenfield highway does not cross over Main Canal network at any locations. It is crossings over minor canals and natural drains. Construction of bridges and culverts has been proposed to prevent diversion of these minor canal and natural drains. Seven main water bodies will be impacted due to the proposed highway.

3.1.8 Total water demand for the project is 4532176 KL. No ground water will be extracted. If required, ground water extraction will be done after obtaining NoC from the CGWA/ State Ground Water Department.

3.1.9 Fly ash will be utilized for construction of embankment as per IRC Guidelines (IRC: SP: 58-2001). Quantity of fly ash to be utilized for the project is 2,340,000cum.

3.1.10 The Proposed project will involve diversion of about 26.62 ha of forest land. About 21498 trees are proposed to be felled in the forest and non-forest area. Prior permission would be taken from the concern authority before tree felling/cutting. There is no protected area within 10 km boundary of the PROW. The proposed project is 3.150 km away from the boundary of ESZ of Palkot Wildlife Sanctuary.

3.1.11 The socioeconomic survey will be undertaken on sample representative of the project influence area and population. The sample households would be selected from various socio-economic groups of the clusters/ settlements.

3.1.12 Benefits of the project: This Proposed Road will not only improve the mobility in between Jharkhand and Odisha, it will also improve the connectivity among other states like Chhattisgarh, Bihar, Uttar Pradesh and West Bengal. The mobility between industries in Jharkahnd (Jamshedpur, Patratu, Bokaro, Dhanbad) and Odisha (Rourkela, Jharsuguda, Sambalpur, Angul) will increase. The proposed alignment will reduces travel length by 98 km (40%) and travel time by 4.5 hr. i.e. 70% (From 6.5 hr. to 2 hr.) from Ranchi (Jharkhand) to Litibeda (In Odisha) and thus will serve as life line between Jharkhand & Odisha. Besides above, about 1000 people during construction phase and about 100 peoples during operation phase at toll plaza and for road surveillance and maintenance work will be employed.

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

3.1.14 PP mentioned that a communication has been sent to Chief Wild Life Warden, Jharkhand for the information. Further, Member Secretary appraised the Committee that based on the Minutes of the Meeting, an internal communication has been sent to Project Elephant Division for vetting of proposed alignment. The Project Elephant Division will revert back with inputs/comments after seeking information from concerned CWLW, analysing the details and DSS analysis of road alignment vis-a-vis effect on elephant conservation issues.

3.1.15 The EAC, taking into account the submission made by the project proponent and the status provided by the Member Secretary for the aforementioned proposal had a detailed deliberation during its 258th meeting on 17th -18th March, 2021 and recommended the proposal for granting the Terms of Reference with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects.

i. Approval of road alignment for the purpose of TOR is subject to approval of alignment by State CWLW and PE divn of MoEFCC. Any modification in alignment or any alternate alignment suggested by CWLW and approved by the PE division of MoEFCC will be considered final for the purpose of EIA study.
ii. Provisions in the EMP shall be made as per the wildlife conservation plan approved by the CWLW and also as per the conditions stipulated by CWLW in approval of the alignment / modified alignment/ alternate alignment. Patrolling team and watch tower for the movement of animals to avoid human animal conflict should be provided alongwith the financial allocation in the mitigation plan.

iii. Provisions shall also be made in Wildlife conservation plan and EMP for erection of watch towers and engagement of patrolling team for patrolling along the road stretches passing through forest area for monitoring the crossing of animals through these roads, initially for first 5 years at the project cost.

iv. Details of animal crossing points/Corridors identified across the road alignment in forest area and the animal crossing structures proposed therein shall be given in the EIA study

v. The proponent shall carry out a detailed traffic flow study to assess inflow of traffic from adjoining areas like airport/habitation such as 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.

vi. Cumulative impact assessment study to be carried out along the entire stretch including the other packages in the current stretch under consideration.

vii. The alignment of road should be such that the cutting of trees is kept at bare minimum and for this the proponent shall obtain permission from the competent authorities. List of all tall and old trees made chainage wise and alignment be made in a way to avoid cutting such trees.

viii. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th 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.

ix. In pursuance of Ministry's OM no stated above 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.

x. 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.

xi. 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. 3.2

Development of 6 Lane National Highway from the Junction of Eastern Peripheral Expressway at Khekra to Saharanpur bypass at Latifpur Village from Km 0.000 to Km 119.790 of Delhi to Dehradun Economic Corridor under Bharatmala Pariyojana by M/s National Highways Authority of India - Environmental Clearance (Proposal No. IA/UP/NCP/162955/2020 and File No. 10-44/2020-IA.III)

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

3.2.1 The project proponent along with EIA Consultant M/s PDCOR Limited Jaipur, has made a presentation through Video Conferencing and provided the following information:

3.2.2 The proposed project is a Greenfield Alignment project under the Bharatmala Pariyojna, which starts from the junction of Eastern Peripheral Expressway at Khekra village at Ch. 0+000 (28°53'4.09"N 77°14'45.19"E) passing through major districts such as Baghpat, Muzaffarnagar, shamli and terminated at Saharanpur bypass at Latifpur Village at Ch. 119+790 (29°53'13.67"N 77°35'15.08"E in the state of Uttar Pradesh. The proposed project includes 1 RoB, 7 Interchanges, 2 Major Bridges, 20 Minor Bridges, 5 Minor Bride cum LVUP, 13 nos. VUP, 49 nos. LVUP, 271 nos. Culvert (Box -184, Pipe – 87) along the project stretch for free passage to villagers & domesticated animals and to avoid any impact on local hydrology.

3.2.3 The proposed project falls under 7 (f) Category A, Highways. Terms of Reference (ToR) was issued vide File No. 10-44/2020-IA.III dated 24th August 2020. Total Investment/Cost of the project is Rs. 5524.46 crores (including R&R, LA and utility).

3.2.4 Total length of proposed alignment is 119.790 Km with proposed Right of Way (ROW) 70 m having 6 lane carriageway all through the project road other than the area of Toll Plaza, and way side amenities.

3.2.5 About 959.36 ha of land shall be acquired for the project as per NH Act, 1956 and RFCTLARR, 2013. About 4.328 ha forest land is proposed for diversion. The joint survey is under progress with Forest Department. The terrain of the proposed alignment is plain (flat) land and is predominantly an agricultural land.

3.2.6 Public hearing was conducted on the following date and place.

S. No	Date	Venue	Districts	State
1.	18.02.2021	Zilla Panchyayat, Sabhagar, Muzaffarnagar, U.P.	Muzaffarnagar	Uttar Pradesh
2.	22.02.2021	Collectorate Sabhagar, Shamli. U.P.	Shamli	Uttar Pradesh
3.	23.02.2021	Public Forum Auditorium, Saharanpur, U.P.	Saharanpur	Uttar Pradesh
4.	03.03.2021	Magistrate Office, Baghpat, U.P.	Baghpat	Uttar Pradesh

3.2.7 The proposed project alignment is crossing 4 small private ponds, 1 major canal (Eastern Yamuna Canal) intersecting the alignment at few locations and 2 rivers (namely Hindon and Dhamola) intersecting the proposed alignment at 4 locations. Appropriate numbers of bridges and culverts have been proposed to maintain the natural flow of water bodies.

3.2.8 Total water requirement for the proposed project is approx. 8,79,302 KL (2409 KLD) during construction stage, which will be sourced from existing surface as well as from ground water. NOC for the same will be obtained from the concerned authority by the Concessionaire/ Contractor prior to start of construction work under supervision of Proponent/ supervision consultant.

3.2.9 Rainwater harvesting structures will be provided at the locations where the first aquifer of ground water table is more than 8-10 m. The provision of rain water harvesting will be executed as per IR: -SP:50-2013 guidelines. In general at 500 meter interval, rain water recharge pits are provisioned depending on site suitability.

3.2.10 Minimum debris/waste material will be generated and it will be re-utilized in project work, like in raising of embankment, making approach/haul road and will as in construction yard. Approx. 300 Kg/day domestic waste will be generated during construction phase of road, which will be disposed off in nearby approved landfill or with the construction yard in disposal pit. Mobile toilet will be provided at major construction site. Toilet with septic tank will be provided in worker camp/ construction yard.

3.2.11 Cross roadside and canal side trees to be felled for contraction of road, which are notified as protected forest. Other than this, majority of trees are private trees located in the agricultural field and commercial garden. Total 11,840 nos. of trees are proposed to be felled. Approx. 50,000 nos. of avenue trees are proposed to plant on available RoW in both side of project as per IRC:SP:21-2009.

3.2.12 During the socio-economic survey, it has been found that total 309 nos. of structures (includes tubewells, borewells, brick kiln, boundary wall, temples, House etc.), 1438 nos. of families (PAFs) are getting affected. The R&R plan has been prepared based on Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 and National Highway Act, 1956. The R&R cost is INR 2182.6 Cr.

3.2.13 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 and 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 in IRC:SP 55 and NHAI Safety Manual will be prepared and strictly implemented.

3.2.14 Benefits of the Project: The entire region will be benefitted from the proposed project, as it provides connectivity to important districts of Uttar Pradesh such as Baghpat, Shamli, and Saharanpur further given connectivity to Meerut and Muzaffarnagar and at the end point of Saharanpur bypass and provides spur connectivity to Dehradun. It also gives connectivity to important tourist place/places of Uttarakhand through Dehradun. Project corridor is a shorter route for fright from Delhi to Saharanpur bypass and also to Dehradun. Approx. 1000 people during construction and approx. 100 people will be employed during the operation phase.

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

3.2.16 The EAC, taking into account the submission made by the project proponent had a detailed deliberation during its 258th meeting on 17th -18th March, 2021 and **recommended the proposal for grant of Environment Clearance** with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

i. Project alignment should be managed in such a way to save the Heritage/old trees supposed to be affected by the proposed alignment.
ii. Faunal bio-diversity study has to be conducted and a report shall be submitted along with 6 monthly compliance report.
iii. The proponent shall obtain Forest Clearance for diversion of forest land as per Forest (Conservation) Act, 1980. Proponent shall submit an undertaking that work on non-forestry land may only be executed upto such point (to be selected by the user agency) on either side of forest land if it is explicitly certified by the user agency that in case approval under the Forest (Conservation) Act, 1980, for diversion of forest land is declined, it is technically feasible to execute the project along an alternate alignment without involving diversion of forest land. Details of all such stretches along with alternate alignment identified to bypass the forest land should be explicitly provided in the proposal seeking approval under the Forest (Conservation) Act, 1980 and the EIA Notification, 2006.
iv. EMP be revised to the extent that provisions are made in EMP for erection of watch towers (at intervals suggested by concern DFO) and engagement of patrolling team for patrolling along the road stretches passing through forest area for monitoring the crossing of animals through these roads, initially for first 5 years at the project cost.
v. Commencement of work in non-forest land will not confer any right to NHAI for granting approval under the Forest (Conservation) Act, 1980.
vi. 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. A general guideline for Borrow area operation and rehabilitation given in Annexure 5.3 of the EIA report shall be followed.

vii. Quarry areas shall be barricaded during mining operations. The abandoned quarry shall be developed as water reservoirs with proper fencing around quarry area. Guidelines for Quarry area operation and rehabilitation given in Annexure 5.3 of the EIA report shall be followed.

viii. In all the construction sites within 150m 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 equipments used in construction shall strictly conform to the CPCB/SPCB noise standards.

ix. 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.

x. 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.

xi. About 24700 nos. of trees and 5500 saplings (size less than 30 cm) are likely to be felled. Afforestation using compensatory plantation in the ratio of 1:10 shall be carried out. 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 Ficus species on both sides of the alignment. Special attention shall be given for protecting giant trees, and locally important trees (having cultural importance) and should be identified chainage wise.

xii. 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 be implemented and become part of EMP.

xiii. 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. Major water bodies have been observed in the vicinity of the proposed road alignment & may be potential human elephant conflict points, appropriate nos of animal safe passages as per the guideline framed by the Wildlife Institute of India and in consultation with Chief Wildlife Warden.

xiv. Prepare the traffic prediction report for complete project (including all packages of this project) considering the cumulative impact of the traffic on the environment and submit

to the Ministry and concerned Regional Office within 3 months.

xv. 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.

xvi. The proponent shall obtain permission from the competent authorities for tree felling along the proposed alignment.

xvii. Rain water harvesting pit shall be at least 3 - 5 m above the highest ground water table.

Agenda No. 3.3

Development of Economic Corridors, Inter-Corridors, feeder routes and Coastal Road primarily to improve the efficiency of freight movement in India (Lot-3Odisha & Jharkhand/Package-2) Raipur-Vishakhapatnam (Ch.124.661 - Ch. 365.033 km) (Length 240.372 km) in the State of Odisha by M/s National Highways Authority of India under Bharatmala Pariyojana - Further consideration for Environmental Clearance (Proposal No. IA/OR/NCP/131730/2019 and File No 10-4/2020-IA.III)

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

3.3.1 The abovementioned proposal was earlier placed before the EAC during its 256th meeting on 4th March, 2021. The proposal was deferred for the want of some requisite information/documents.

3.3.2 At this instance, the aforementioned proposal was further placed before the EAC during 258th meeting on 17th -18th March, 2021. The project proponent alongwith EIA consultant M/s Enviro Infra Solutions Pvt. Ltd., Ghaziabad in association with CEMC Pvt. Ltd., made a presentation through Video conferencing and provided the following information-

3.3.3 The Ministry of Road Transport and Highways (MoRTH) through National Highways Authority of India (NHAI) has decided the assignment of Development of Economic Corridors, Inter-corridors and feeder routes and Coastal road primarily to improve the efficiency of freight movement in India under Bharatmala Pariyojana Lot-3/Odisha & Jharkhand/Package-2 having length of proposed alignment 464.662 km (which is totally green field) which starts from near Abhanpur (ch. 0.000) and ends at Sabbavaram village in Vishakhapatnam district.

3.3.4 The proposed NH is a Green field alignment project and proposed for 6 lane carriageway. The project highway starts from Dhanara village in Nabarangpur district to Tumbigura village in Koraput district in the state of Odisha from CH: 124+661

(20°01'44.59"N 81°51'58.13"E) to 365+033 (18°25'42.52"N 83°02'29.23"E) having a total length of 240.372 Kms.

3.3.5 The proposed project falls under 7 (f) Category A, Highways. Terms of Reference (ToR) was issued vide File No. 10-4/2020-IA.III dated 02nd March 2020. Total Investment/Cost of the project is Rs. 723800 Lakhs (Rs. 7238 Cr.).

3.3.6 Public Hearing was conducted on different dates and places as below-

S. No.	Date	Location
1.	07.12.2020	Police Ground Nabarangpur (Near Police Station, Nabarangpur), Nabarangpur district
2.	21.01.2021	Govt. Boys High School Play Ground (Near R.T.O Koraput), Koraput District

3.3.7 The existing land use pattern around the proposed National Highway is primarily comprises of predominantly agricultural land, followed by Reserve & Protected forest land, land for cattle grazing, village settlements and village ponds/nallah. The proposed alignment passes mostly through uninhabited area avoiding village establishments. The agriculture practiced is mostly multicrops due to the network of canals/rivers and main crops grown in the area are Wheat, maize, soybean etc. The proposed highway lies generally in plain terrain. However certain length of highway lies in rolling & hilly terrain.

3.3.8 The land acquisition for the proposed highway is 1308.024 ha (Private land 702.520Ha + Government land 244.360 ha + Forest land 361.144 ha). The compensation towards the acquisition of land will be made as per the provisions of the NH Act 1956 and applicable clauses and procedures as laid down in the RFCT LARR Act, 2013. The estimated cost for Rehabilitation & Resettlement including land cost has been worked out to Rs. 149.70 Crores.

3.3.9 The stage-1 forest clearance for diversion of 361.144 ha forest land is under process at DFO level. The proposed RoW of the project is 60 m in General & 45 m in Forest area. The alignment will involve cutting of approx. 67,050 nos. of trees.

3.3.10 The natural drainage of the project impacted area shall be maintained through improvement of 295 nos. of culverts, 16 nos. of major bridges and 76 nos. minor of bridges. The proposed alignment does not pass through any flood prone area.

3.3.11 The water requirement is 7046473 KL during construction stage and will be extracted from local surface water resources i.e. from nearby canals/rivers after getting necessary permission from concerned authority by the appointed contractor. No ground water shall be extracted.

3.3.12 About 1000 kg/day Municipal solid waste shall be generated during construction phase and 50 kg/day (approx.) during operation phase at tolls and wayside amenities area within PROW. Bio-degradable waste shall be disposed through bio composting and other waste through landfill site.

3.3.13 Energy conservation: Provision for solar power plant has been recommended in the nearby villages and its budget has been incorporated in EMP budget.

3.3.14 Rainwater harvesting structures shall be provided at the interval of 500 m on either sides of carriageway as per availability of RoW and depending on the water table of first aquifer. The cost for construction of 180 rainwater harvesting structures is Rs 9.00 Crores including its maintenance.

3.3.15 The proposed alignment does not pass through Wildlife Sanctuary/National Park and its eco sensitive zone. The proposed project does not passes through any CRZ locations.

3.3.16 The site specific Wildlife Conservation Plan (including construction of 25 nos. of animal underpasses of adequate length) and 20 nos. of canopy bridges with appropriate mitigation measures in consultation with the Chief Wildlife Warden of the state along with implementation schedule and appropriate monitoring mechanism have been prepared. Two tunnels have been proposed at Ch. 339.240 and at. Ch. 346.560 having total length of 3.030 km and 1.930 km, respectively.

3.3.17 Benefits of the project: The proposed project would act as the prime artery for the economic flow to this region. It will enhanced connectivity between rural & urban population which will benefit the all sections of the society like general population, small-medium-large scale industries, farmers, businessmen etc. The project will improve access to higher education facilities & modern health facilities and will strengthen both rural & urban economies which in turn will improve economic scenario of the state and country. Faster transportation will strengthen tourist development in the area. During the construction of the road project around 3000 persons would be employed temporarily. However due to construction of toll plazas approx. 100 persons will be employed on permanent basis.

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

3.3.19 The EAC, taking into account the submission made by the project proponent had a detailed deliberation during its 258th meeting on 17th -18th March, 2021 and **recommended the proposal for grant of Environment Clearance** with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

i. Apart from land compensation, the loss for crop has also to be compensated.
ii. There shall be no activity of wall construction in the forest zone.
iii. EMP be revised to the extent that provisions are made in EMP for erection of watch towers (at intervals suggested by concern DFO) and engagement of patrolling teams

for patrolling along the road stretches passing through forest area for monitoring the crossing of animals through these roads, initially for first 5 years at the project cost.

iv. The proponent shall obtain Forest Clearance for diversion of forest land as per Forest (Conservation) Act, 1980. Proponent shall submit an undertaking that work on non-forestry land may only be executed upto such point (to be selected by the user agency) on either side of forest land if it is explicitly certified by the user agency that in case approval under the Forest (Conservation) Act, 1980, for diversion of forest land is declined, it is technically feasible to execute the project along an alternate alignment without involving diversion of forest land. Details of all such stretches along with alternate alignment identified to bypass the forest land should be explicitly provided in the proposal seeking approval under the Forest (Conservation) Act, 1980 and the EIA Notification, 2006.

v. Commencement of work in non-forest land will not confer any right to NHAI for granting approval under the Forest (Conservation) Act, 1980.

vi. 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. A general guideline for Borrow area operation and rehabilitation given in Annexure 5.3 of the EIA report shall be followed.

vii. Quarry areas shall be barricaded during mining operations. The abandoned quarry shall be developed as water reservoirs with proper fencing around quarry area. Guidelines for Quarry area operation and rehabilitation given in Annexure 5.3 of the EIA report shall be followed.

viii. In all the construction sites within 150m 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 equipments used in construction shall strictly conform to the CPCB/SPCB noise standards.

ix. 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.

x. 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.

xi. About 67,050 nos. of trees are likely to be felled. Afforestation using compensatory plantation in the ratio of 1:10 shall be carried out. 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 significant number of Ficus species on both sides of the alignment. Special attention shall be given for protecting giant and old trees and locally important trees (having cultural importance) and should be identified chainage wise.

xii. 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 be implemented and become part of EMP.

xiii. 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. Major water bodies have been observed in the vicinity of the proposed road alignment & may be potential human elephant conflict points, appropriate nos of animal safe passages as per the guideline framed by the Wildlife Institute of India and in consultation with Chief Wildlife Warden.

xiv. Prepare the traffic prediction report for complete project (including all packages of this project) considering the cumulative impact of the traffic on the environment and submit to the Ministry and concerned Regional Office within 3 months.

xv. 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.

xvi. The proponent shall obtain permission from the competent authorities for tree felling along the proposed alignment.

xvii. Rain water harvesting pit shall be at least 3 - 5 m above the highest ground water table.

Agenda No. 3.4 (This will be moved to any other item during compilataion)

Development of Urban Extension Road-II (NH-344M) from Design chainage Km 0.000 to Km 38.111. Development of link road (new NH344P) (Km 0.000 to Km 29.600) between Bawana Industrial Area Delhi (from Km 7.750 of UER II) till bypass of NH-352A at village Barwasni, Sonipat in Haryana as spur of Urban Extension Road-II (NH-344M) in the state of Delhi/Haryana. Development of link road (new NH-344N) (Km 0.000 to Km 7.500) between Dichaon Kalan till Bahadurgarh Bypass/NH10 in the state of NCT of Delhi/Haryana. (Total Length of Project: 75.211 Km) by M/s National Highways Authority of India (NHAI) - Reconsideration for Environmental Clearance (Proposal No. IA/DL/MIS/104396/2019 and File No 10-30/2019-IA.III)

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

3.4.1 The Terms of Reference (ToR) for the aforementioned project was accorded in 217th EAC meeting on 27th June 2019 *vide* F. No. 10-30/2019-IA.III dated 19th July 2019. Based on the recommendation of EAC in its 225th meeting held on 22nd October, 2019, the Ministry amended the ToR dated 19th July 2019 by removing the following specific condition no. 4(ii) at page no. 7.

"Study to be carried out on Acoustic and Light Proofing measures considering the Wildlife Institute of India manual and other studies by the reputed institutes on the matter. The study shall be carried by the qualified professionals, scientists from any national institute having requisite experience to conduct such study."

3.4.2 Subsequently, the proposal was submitted to the Ministry for the want of Environmental clearance. The EAC had a detailed deliberation during its 247th meeting during 23rd –24th November, 2020 and recommended the proposal for grant of Environmental Clearance with specific conditions which also includes condition no. (iii) that "A revised biodiversity survey to be undertaken with the help of institute of repute or a team of experts of national repute and submitted to the Committee that is duly endorsed by Chief Wildlife Warden of the state" as mentioned in the MoM of 247th EAC meeting under Agenda item No. 3.1.

3.4.3 The PP vide e-mail dated 30th December 2020 requested the Ministry to amend the above mentioned Para (iii) of recommendation in 247th EAC MoM, since, the said condition was already removed from the ToR dated 19th July 2019 as amended on 22nd October, 2019.

3.4.4 It is further informed to the Committee that the EC letter has not yet been issued for the project for the want of declaration letter from the PP for forest clearance.

3.4.5 After detailed deliberation it has been decided by the EAC that since, the specific condition Para no. (iii) has already been removed from the ToR, the same shall be omitted from the 247th EAC MoM and EC conditions, as well.

Agenda No. 3.5

Establishment of Devakothikoppa Industrial Area at by M/s Karnataka Industrial Areas Development Board - Extension of validity of Terms of Reference (Proposal No IA/KA/NCP/201623/2021 and File No 21-55/2017-IA.III)

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

3.5.1 The project proponent along with EIA consultant M/s Hubert Enviro Cares Systems Pvt Ltd has made a presentation through Video Conferencing before the EAC and requested for extension of validity of Terms of Reference for the period of one year as per MoEF&CC Notification dated 14th September, 2016. Terms of Reference for the aforementioned project

was granted vide letter No. 21-55/2017-IA-III dated 20th March, 2017, which is valid up to 19th March, 2021.

3.5.2 The PP *vide* on-line application dated 4th March 2021 alongwith a letter no. KIADB/EE/DVG/2020-21, dated 10th March 2021 has submitted that the EIA/EMP documents have been submitted to KSPCB for conducting the Public Hearing (PH) with required fees. However, due to pandemic situation, there is delay in getting date for PH.

3.5.3 In view of the above reason, the PP has requested to extend the validity period of ToR for one more year, so that they will upload the final EIA/EMP report for appraisal after conducting the PH.

3.5.4 It has been appraised to the Committee that as per Govt. notification, dated 18th January, 2021 *"the period from the 1st April, 2020 to the 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of Terms of Reference granted under the provisions of this notification in view of outbreak of Corona Virus (COVID-19) and subsequent lockdowns (total or partial) declared for its control, however, all activities undertaken during this period in respect of the said Terms of Reference shall be treated as valid."*

3.5.5 The EAC, taking into account the submissions made by the project proponent and the Notification issued by the Ministry dated 18th January, 2021 stated that there is no need for the project proponent to extend the validity of ToR letter; in view of the Notification issued by the Ministry the ToR is valid upto 19th March, 2022. Project proponent will notify the Ministry in case of any changes in the proposed land area.

Agenda No. 3.6

Development of Integrated Manufacturing Cluster (IMC) under Amritsar Kolkata Industrial Corridor (AKIC) Project at Raghunathpur, Purulia, West Bengal by M/s West Bengal Industrial Development Corporation Ltd. - Terms of Reference (Proposal No. IA/WB/NCP/147335/2020 F. No. 21-32/2020-IA.III)

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

3.6.1 The aforementioned proposal was earlier placed before the EAC during its 234th meeting on 27th April, 2020. After detailed deliberations by the EAC, the proposal was returned in its present form.

3.6.2 At this instance, the aforementioned proposal was further placed before the EAC during 258th meeting on 17th -18th March, 2021. The project proponent alongwith EIA Consultant M/s EQMS India Pvt. Ltd., Delhi has made a presentation through Video Conferencing and provided the following information to the committee:

3.6.3 The proposed project is for development of Amritsar Kolkata Industrial Corridor Project (AKIC) in the States of Northern and Eastern region of India. The State of West Bengal has identified a site in Raghunathpur area of Purulia district for development of "Integrated Manufacturing Cluster" as RIMC under AKIC region after assessing feasibility and potential of proposed location. Land is in possession of West Bengal Industrial Development Corporation (WBIDC) which is also the nodal agency to coordinate and supervise project development activities related to RIMC Project. The project site is well connected to the Highway, airways, rail and waterways.

3.6.4 The proposed project falls under 7(c), Category A. Total project cost is Rs. 114877 Lakh (1,148.77 crore).

3.6.5 The total land area of the project is 952.0755 ha. The identified land is an industrial land under possession of WBIDC. Presently, majority of this Industrial land is barren and under developed. A small portion of this industrial land is under cultivation. The topography/terrain of this site is slightly undulated and required cutting and filling for development towards flat topography. The proposed development of this Industrial land is in the form of an Industrial township with Industrial Manufacturing cluster.

3.6.6 The identified land is under possession of WBIDC. There is no habitation present within the project area. The local people do not dependent on the identified land. Since, no population is living in the allocated land; hence, no R&R issue is involved with this project.

3.6.7 List of industries to be housed with the proposed project site is as following:

Sl. No.	Industry Proposed	Schedule as per EIA Notification-2006	Category with threshold limit	Category as per CPCB
1	Non - toxic secondary metallurgical processing Industries, each of capacity > 5000 metric tons/ annum.	3 (a)	Category B (ii)	Red
2	Standalone cement clinker grinding units, each of capacity <1.0 million metric tons/ annum.	3 (b)	Category B	Red
3	Engineering & manufacturing	Not applicable	Not applicable	Orange
4	Auto component and automobile	Not applicable	Not applicable	Orange
5	Refractory & ceramics	Not applicable	Not applicable	Orange
6	Machinery & equipment	Not applicable	Not applicable	Orange/Green
7	Ancillary & MSME cluster	Not applicable	Not applicable	Orange
8	Fabricated metal products	Not applicable	Not applicable	Orange
9	Electronics and electrical equipment	Not applicable	Not applicable	Orange

3.6.8 Details of water bodies, impact on drainage: Uttala river is flowing along the north-western boundary of the RIMC-I. Besides that, few ponds are also available within the project area. Storm water management approach in RIMC is envisaged to utilize existing water bodies as Flood Retention ponds to store runoff and reduce peak discharge.

3.6.9 Total water requirement during the construction phase is 3.750 MLD, which will be sourced from the surface water through tankers. Total water requirement during the operation phase is 20 MLD, which will be sourced from the Panchet Dam. Water will be arranged by WBIDC from Panchet dam operated by Damodar Valley Corporation (DVC). Panchet dam is a perennial water storage reservoir to be used as a source of water for RIMC as Distance from RIMC to Panchet dam is approximately 9 km (from intake point). The WBIDCL already approached for confirmation on availability of water vide letter WBIDC/AKIC/2016-17/2413 dated 25/03/2019. No ground water abstraction shall be done for the proposed project.

3.6.10 No major tree vegetation is present on the identified land. However, some tree species like Mahua (*Madhuca longifolia*), Imli (*Tamarindus indica*), Arjun (*Terminalia arjuna*), Jamun(*Syzygium cumini*), Bargad (*Ficus benghalensis*), Neem (*Azadirachta indica*), Palash (*Butea monosperma*), Chatim (*Alstonia scholaris*), Tal (*Borassus flabellifer*), Khajur (*Phoenix dactylifera*), Simul (*Bombax ceiba*), Koroi (*Albizia procera*), Karanj (*Millettia pinnata*), Gulmohar (*Delonix regia*), Kadam (*Neolamarckia cadamba*), Shisam (*Dalbergia sissoo*) etc. are present on the site. Eucalyptus (*Eucalyptus globulus*) plantation also exists in the project area. Details of tree inventory shall be done in later stage during the baseline Environment Study. Forest clearance is not applicable as no diversion of forest land is involved in the proposed project.

3.6.11 There is no Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves etc. within 10 km of the project site. The project area is also not located within the Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC. The project area is not located within CRZ area.

3.6.12 About 29.3 MLD waste water/ effluent/ Sewage will be generated during the operation phase. Total sewage generated from the residential area is about 13.3 MLD Gravity sewage collection network has been proposed to collect and convey domestic sewage to the proposed Sewage Treatment Plant (STP). The STP will be built in phases in modular and scalable approach. The sewage shall be treated to applicable standards and shall be utilized for non-potable uses, including horticulture, flushing and water bodies recharge etc.

3.6.13 Total wastewater generated in RIMC (Industrial area) is about 15.75 MLD. The treatment of this wastewater shall be done in centralized CETP which shall be built in phases in modular and scalable approach. The treatment of this wastewater shall be done in CETP of 7.5 MLD and remaining 8.8 MLD shall be treated by the individual industry operators. Individual industries shall pre-treat the effluent prior to discharge in effluent collection network. Gravity effluent collection network with intermediate pumping stations has been proposed for collection of pre-treated effluent. Pre-treated effluent shall be collected and treated up to desired level prior to recycling for non-potable requirements of industries for

process and non-process requirement i.e. flushing, horticulture etc. The proposed project will comply zero discharge plan.

3.6.14 Benefits of the Project: Macro policy level changes coupled with development and availability of ready to use Manufacturing Zones like Raghunathpur will be an impetus towards higher Gross State Domestic Product (GSDP) including higher job creation in the state. Financial benefits anticipated due to savings in taxes along with higher lease rates for developed Raghunathpur Industrial zone is expected to deliver an overall financial gain to the industrial units. Proposed Skill Development Framework suggests conducting skill mapping of region, organizing skill gap studies, assessment of employability, preparing delivery mechanism for enhancing the employability, quality assurance and certification. Total Working Population projected for RIMC is 71125. IMC at Raghunathpur Industrial Park aims to generate and transfer socio-economic benefit to local and regional population in terms of offering immense employment opportunities, skill development, and improvement in livelihood. Proposed industry sectors are highly manpower intensive and have huge potential for indirect job creation in the region. According to National Manufacturing Policy 2011, every job created in the manufacturing sector creates two-three additional jobs in related activities resulting in up to approximately 1.7 Lakh indirect Job due to RIMC (considering multiplier factor of 2.5). A vocational Training (Skill development) Institute has also been proposed as part of RIP Master Plan.

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

3.6.16 The EAC, taking into account the submission made by the project proponent had a detailed deliberation during its 258th meeting on 17th -18th March, 2021 and **recommended the proposal for grant of Terms of Reference** with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

i. The proponent shall submit a detailed physical and fiscal targets and means of achieving as a part of the EMP in the EIA Report.
ii. Both red and green category projects should be set aside in separate areas.
iii. The planning of Industrial Estate should be based on the criteria mentioned in this Ministry's Technical EIA Guidance Manual for Industrial Estate (2009) as well as CPCB's Zoning Atlas Guidelines for siting industries.
iv. No ground water shall be used in any case. Proponent is required to obtain permission from competent authority to use water from river or other surface water sources. Consent to Operate shall not be issued without obtaining permission competent authority for use of surface water.
v. Provide detailed water balance statement a scheme to achieve ZLD by each industrial unit as well as for utilization of treated sewage.
vi. Since, natural drainage pattern is seen in/around the proposed project site, it is important to have a detailed hydrogeological study on the catchment area of the drainage system within core zone of the project area
vii. Detailed biodiversity study of the project area.
viii. All tall and old and heritage native trees should be enumerated, GPS tagged and detailed in EIA EMP and plotting design should be such that all such trees are protected
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 25th October, 2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report

x. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent, based on the commitments made during the public hearing, shall include all the activities required to be taken to fulfill 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.

xi. In pursuance of Ministry's OM No stated above 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.

xii. As proposed by PP themselves the cement clinker industry should be dropped from the list of industries in IMC.

xiii. Extent of the green area and green belt should be increased. The width of green belt along the river bank/waterbodies shall be increase to at least 50 meters.

Agenda No. 3.7

Development of Zaheerabad National Investment and Manufacturing Zone (NIMZ)in Sangareddy District of Telangana by M/s Telangana State Industrial Infrastructure Corporation Limited - Environmental Clearance (Proposal No. IA/TG/NCP/71421/2017 and File No. 21-237/2017-IA.III)

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

3.7.1 The project proponent along with EIA Consultant M/s L&T Infrastructure Engineering Limited, Hyderabad has made a presentation through Video Conferencing and provided the following information.

3.7.2 The proposed project is for Development of Zaheerabad National Investment and Manufacturing Zone (NIMZ) in Sangareddy District of Telangana State. Telangana State Industrial Infrastructure Corporation Limited (TSIIC) has proposed to establish NIMZ at Nyalkal and Jharasangam Mandal's near Zaheerabad in Sangareddy District of Telangana in an area of ~12,635 acres (Acres 12,635.14 guntas, 5,113 ha) and will house both Category A and Category B Industries listed in the EIA notification, in pursuit of NMP of Department of Industry and Policy Promotion (DIPP) of Government of India.

3.7.3 The project land falls in 17 revenue villages i.e., Ganeshpur, Husselli, Ganjoti, Mungi, Rukmapur, Hadnur, Namtabad, Mamidgi, Kalbemal, Basanthpur, Metalkunta, Gangwar, Rejinthal and Malkanpahad villages of Nyalkal Mandal and Chilepalle, Yelgoi and Bardipur villages of Jharasangam Mandal, Sangareddy District. The infrastructure development being proposed includes water supply, water distribution, internal roads, storm water drains, electrical distribution network, internal street lighting, wastewater and waste management facilities, technical and support buildings, housing along with allied facilities, logistic zone with its necessary utilities, amenities and services.

3.7.4 The proposed project falls under 7(C), Category A. Total project cost is Rs. 3.095 Crore. The Terms of Reference was accorded vide letter no. F.No.21-237/2017-IA.III dated 01st March, 2018.

3.7.5 The topography of the site is almost flat terrain with levels varying from 605 m to 660 m. Project site falls in seismic zone II (Least Active Zone). Nearest Road Connectivity is SH-14 and SH-16 -passes through site and NH-65 (Pune – Machilipatnam Road) - 10km south. Nearest Rail Connectivity is Metalkunta (1.4 km)- railway station and Zaheerabad (10 km) railway station. Nearest Seaport is JNPT (600 km) on west coast and Krishnapatnam Port (465 km) on east coast. Nearest Airport is Rajiv Gandhi International Airport (RGIA) at Shamshabad, Hyderabad. It is located to the southeast of the site at a distance of 125 km by road (105 km aerial distance) and Bidar Airport is located at 17 km by road from the NIMZ site and is currently under Indian Air Force Station.

3.7.6 The project site is mostly comprised of barren and vacant lands. Few pockets of farmlands are also located within the site Land Use Type in project site are Scrub Land (44.6%), Agriculture Crop Land (27.65%), Fallow (26.21%), Plantation (0.8%)), Rocky Area (0.43%). Built-up (Rural (0.31%)), Waterbodies (Tanks/pond/lakes: 0.02%).

3.7.7 Following industries are proposed to be housed with the project site-

Proposed Sector	Anticipated Types of industries/activities	Category as per EIA notification, 2006	Category as per CPCB
Electrical equipment	Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus (includes electric motors, generators and motor generator sets, switchgear and switchboard apparatus etc.)	Not Applicable	Orange
	Manufacture of batteries and accumulators (includes batteries, rechargeable batteries, etc.)		Red and Orange
	Manufacture of wiring and wiring devices (includes wires for live transmission, optical cables)		Orange
Metals	Manufacture of basic iron and steel (Ferro alloys, wire of steel by cold drawing, tube and tube fittings etc.)	Category A and B	Red and Orange
	Manufacture of basic precious and other non-ferrous metals (includes manufacture of copper from ore, lead etc.)		
	Casting of metals (includes manufacture of tubes, pipes and hollow profiles, casting of non-ferrous metals)		
Food and Agro Processing	Processing and preserving of meat (includes production, processing and preserving of meat and meat) products, aqua food related processing (fish and prawns etc.)	Not Applicable	Red
	Manufacture of dairy products (includes manufacturing of milk, milk powder, ice cream etc.)		Red
	Manufacture of grain mill products, starches and starch products (includes flour milling, rice		Orange and Green

	milling, milling of other grains)		
	Manufacture of other food products (includes manufacture of bakery products, noodles, Processing of edible nuts etc.)		Orange
	Manufacture of prepared animal feeds (manufacture of cattle feed, poultry feed, feed for pets etc.)		Orange
Non-metallic minerals (except Glass)	Manufacture of non-metallic mineral products etc. (Includes manufacture of refractory products, clay building materials-bricks, tiles, ceramic products, AAC blocks, kerb stones, etc.)	Not Applicable	Orange and Green
Automobile	Manufacture of motor vehicles (such as manufacturing of Tractors, Buses etc.)	Not Applicable	Red
	Manufacture of parts and accessories for motor vehicles (includes parts such as brakes, gearboxes, axles, seats, tyres, rubber products etc.)		Orange and Green
Machinery	Manufacture of general-purpose machinery (includes manufacture of hydraulic and pneumatic components, pumps, compressors, taps, valves, lifts, etc.), construction machinery, power machinery.	Not Applicable	Red, Orange and White
	Manufacture of special-purpose machinery (includes manufacture of agriculture implants, machine tools for drilling, milling, industrial machinery etc.)		
Transport equipment	Manufacture of Railway locomotives and rolling stock	Category A and B	Red
	Manufacture of Military fighting vehicles		

3.7.8 The nearest water bodies from the proposed development is Madhura Nadi at 0.2 km, S and Narinja Reservoir at 1.5 km, S. The existing streams/drains within the project site will be retained as per the ToR requirement from MoEF&CC. The drains passing through the area shall be routed as per the proposed drain routing plan. Due care will be taken during construction to avoid spillage of construction materials. An adequate drainage system will be provided at the site with separate collection streams to segregate the storm run-off from roads, open areas, material storage areas, vehicle wash water and other wastewater streams. Drainage system will be provided at construction yard. Measures will be taken to prevent silting of natural drainage due to runoff from construction areas. Proper drainage by providing surface drainage system from the development parcels and connecting to storm water network. Natural drainage wherever retained will be strengthened to receive the newly channelled drainage to withstand the increased flow rates. Storm water drainage network is to be designed wherever diversion of the drains is proposed. At all drains located near the discharge points into natural drains a desilting and filter chambers shall be provided at suitable intervals which shall be preferably located right below the manhole covers provided on top of the drain to enable periodic cleaning and de-silting of these wells.

3.7.9 Total water (one time) requirement for the proposed development is estimated as 119.34 MLD and 2.5 ML of fire water demand. After treatment of sewage in proposed STP of 43.64 MLD and effluent in CETPs of 27.3 MLD capacity, it is proposed to reuse the treated wastewater into the system which will be in the order of 61.64 MLD. Thus, the net water demand for the proposed NIMZ is 57.71 MLD and 2.5 ML of fire water demand. The

fresh water will be sourced from the Singur reservoir located at about 25 km from the project site. Water allocation consent letter has been obtained from Irrigation and CAD Department. The proposed development will not draw groundwater.

3.7.10 The public hearing was conducted on 20th January, 2021, by TSPCB. The meeting was conducted by the panel consisting of Collector, Joint Collector, Sangareddy District, and Environmental Engineer, Regional office Sangareddy, Telangana State Pollution Control Board. The budgetary estimate (Capital Cost) for Environmental Management is Rs. 300 Crores and the annual recurring cost is Rs. 29.7 Crores.

3.7.11 There is no Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves etc. within 10 km of the project site. The project area is also not located within the Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC. The project area is not located within CRZ area. No forest diversion is involved in the proposed project.

3.7.12 About 27.299 MLD Wastewater and 43.64 MLD Sewage will be generated. Member industry shall carry out primary treatment and shall discharge to CETP after meeting the inlet characteristics of CETP. Multiple CETPs will be developed and overall capacity of CETP will be in the order of 27.3 MLD. Sewage generated at site and at construction workers camp will be collected in holding tank and periodically transferred to temporary Sewage Treatment Plant (STP). In case of non-availability of nearby STP, mobile STP and septic tank with soak pits will be also be explored. No wastewater shall be disposed directly on land or on existing surface water resources without appropriate treatment. An STP of ~ 44 MLD capacities to handle sewage waste from overall site development is proposed and the treated wastewater is stored in an underground retention tank for 24hrs before conveyance for non-potable usage. The treated wastewater from CETP & STP shall be reused to reduce the usage of freshwater resources.

3.7.13 Municipal Solid waste of 154.37 TPD at 100% occupancy is estimated to be generated. Out of this, biodegradable waste constitutes to 123.5 TPD and the non-biodegradable waste constitutes to 30.87 TPD. Integrated solid waste management facility is proposed for handling of MSW generated. Industrial solid waste is estimated as 423 TPD which includes 85 TPD of hazardous waste and 338 TPD of non-hazardous waste. It has been estimated that about 13.2 tonnes of sludge will be generated daily (@300kg/ MLD) from the proposed STPs and about 8.2 tonnes/ day of sludge from the CETPs. Hazardous waste will be sent to nearest Hazardous waste management facility is located at Dundigal (78km from project site) near Hyderabad ORR. Non-hazardous waste will be given to TSPCB approved recyclers/vendors for further treatment and disposal.

3.7.14 The overall power requirement for the proposed NIMZ is 678.63 mVA. The nearest 220 kV supply tapping point is Sadhashivpet 220/132 kV substation, which will be utilised initially. Solar Power Harnessing would be adopted within NIMZ built up areas particularly at available roof tops. Estimated Installation Capacity and Cost for Solar Power Harness 26.55 MW.

3.7.15 Rainwater Harvesting shall be implemented at NIMZ to conserve rainwater. Roof top area, greenbelt/green area, road/paved area, and open areas proposed in the NIMZ are considered for estimating the rainwater which can be harvested. Estimated Volume of run-off that can be harvested is 1930631.34 m^3.

3.7.16 Approximately 2300 tree are envisaged to be cut. The total Green area planned in the layout is 1974.4 acres (15.6%) under layout periphery green belt, traffic rotaries, green buffer areas and open green spaces. In addition, each industrial plot will maintain 33% area of its area under Green areas around their industrial plot as per TSPCB guidelines. Approximately, 8,87,000 no. of trees are proposed to be planted in entire NIMZ at park level. The survival of the plantation shall be monitored frequently and survival rate of the plantation during operational phase shall not be less than 80%. A capital cost of INR 135 million (13.5 Crores) shall be earmarked for this purpose and INR of 6.75 million (0.675 Crores) shall be allocated for recurring expenses towards green belt development and maintenance. In addition to this, all other industrial units shall develop green areas within their premises as per the prevailing TSPCB provisions.

3.7.17 Benefits of the project: The development of the NIMZ is being envisaged by TSIIC taking into consideration the overall development of Industries in the state. The Nation, State and the region will have impetuous benefits from such development, such as Skill development and Training to the local population, technology transfer, shifting of manpower resources from low productivity to high productive activities, better quality of educational and medical facilities to the local people, improved local infrastructure, improved socio-economic conditions, employment opportunities, etc. NIMZ is envisaged to generate direct and indirect employment of 2,66,000 peoples. During operational phase, the NIMZ and associated facilities is likely to generate direct employment of 1,33,233 people. This project may generate indirect employment of around 1,33,233 people.

3.7.18 Details of Court cases: No Court case is pending against the proposed project. Land related cases are being dealt separately

3.7.19 The EAC, taking into account the submission made by the project proponent had a detailed deliberation during its 258th meeting on 17th -18th March, 2021 and **deferred** the proposal for want of following documents/ information:

i. The planning of Industrial Estate should be based on the criteria mentioned in the Ministry's Technical EIA Guidance Manual for Industrial Estate (2009) as well as CPCB's Zoning Atlas Guidelines for positioning of industries. Phase wise industrial planning be submitted.
ii. Automobile industry will be engaging in painting activity, which comes under Red category, hence industries can be clearly demarcated.
iii. Several representations were received by the Ministry on the issues related to land acquisition and compensation paid to the land owners. The EAC suggested Ministry to forward representations to the PP so that a detailed response in a tabular form be submitted on the issues raised by the stakeholders.
iv. The Proponent should submit a detailed report about direct and indirect type of employment opportunities during construction and operation phase.
v. An elaborate report presiding land acquired, compensatory details and the period for settlement has to be sorted according to the State Government Policy.
vi. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent, based on the commitments made during the public hearing, shall include all the activities required to be taken to fulfill 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.

vii. Detailed Risk Assessment and Management of the project shall be prepared and submitted.

viii. Hamlets proposed in the industrial area would lead to a negative impact hence settlements have to be planned in a safe zone and a modified plan be submitted.

ix. The proponent should develop a Greenery and Conservation management plan to sustain existing greenery.

x. All tall and old and heritage native trees should be enumerated, GPS tagged and detailed in EIA EMP and plotting design should be such that all such trees are protected

Agenda No. 3.8

Integrated development of International Container Transhipment 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. - Terms of Reference (Proposal No. IA/AN/NCP/201159/2021 and File No 10/17/2021-IA.III)

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

[*Note: The required documents of the proposed project were not submitted by the proponent on time for its appraisal by the committee.*]

3.8.1 The project proponent along with EIA Consultant M/s AECOM India Private Ltd. Gurgaon made a presentation through Video Conferencing and provided the following information:

3.8.2 Andaman and Nicobar Islands Integrated Development Corporation Limited (ANIIDCO) propose Holistic Development of Great Nicobar Island in Andaman and Nicobar Islands. 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, Diesel and Solar based power plant in Eastern and Southern parts of Great Nicobar Islands.

3.8.3 As a part of Holistic Development of Great Nicobar Islands, Deep Berth Port (with ancillary areas for International Trans-shipment terminal) as primary component is planned along with International airport (with ancillary area), power generation and distribution network and township are planned which are interlinked projects to ICTT.

3.8.4 The total area required for the proposed project is 16610 ha (Port (ICTT) - 766 ha + Airport - 845 ha + Township & Area Development- 14960 ha + Power Plant – 39 ha). This area excludes the reclamation areas for port and airport which are 227 ha and 194 ha of

reclamation area, respectively. The proposed Project site is in not connected through any road. Currently, the access is through sea and air route only. Approach roads shall be developed within the Islands.

3.8.5 The proposed project fall under 7 (e) Ports, harbours; 7 (a) Airport Project; 1 (d) Power Plant; and 8 (b) Township & Area Development project, Category A, Scheduled to the EIA Notification, 2006. The ICTT can be developed at a cost of Rs. 35,95,900 lakhs. The international airport can be developed over a 5-year period, including one year for procurement. The cost of the Airport is estimated at Rs. 10,35,900 lakhs. will requires development of simultaneous primary and secondary urban infrastructure networks such as roads, public transport, energy and electrical power, as well as water, wastewater, and storm water facilities and services, which will form the skeleton of the proposed township master plan. Therefore the PP has submitted the proposal to the EAC (Infra-1) in order to facilitate a comprehensive appraisal.

3.8.6 Land use has been worked out to get the most out of the planned Transshipment terminal. As per the estimated traffic of 14.2 Million TEU's during Final Phase, the total reclaimed land (227 Ha) has been redistributed between berths (13%), container storage (70%), building & utilities (1%), road & pavements (9%) & Green areas (6%). Green zone has been assigned keeping in view of the diverse flora & fauna of the Nicobar region.

3.8.7 There will be change in Terrain/topography due to the proposed project development, which will be covered with the integrated project and road network in the site. There will be optimum use of the undulating topography in landscaping and site planning for enhancing the image ability of the place.

3.8.8 Water bodies & impact on drainage: Adjacent to Andaman Sea some water bodies exist such as Matait Anla Near Gandhi Nagar, South Bay (Galathea), Mata Taruwa Bay, Pemayya Bay near Pulobaha, Nanjappa Bay near Pulo Bekka, Galathea River or Dak Kea, Dak Aleh, Dak Ubho, Dak Tolai Near Pulabaha, Dak Air, and Dak Thena. Impact on drainage is being studied.

3.8.9 Total Water Demand during Operational Phase shall be 160 MLD, 90 MLD shall be Potable/Fresh Water Demand. Source of Fresh/Potable Water will be River Water/ Sea Water. NOC shall be worked in during EIA study. No water ground water extraction/usage proposed.

3.8.10. Tree cutting: No details are available

3.8.11 Diversion of about 13,075 ha of forest land is involved in the proposed project.

3.8.12 Within 10 km of the proposed project sites includes some protected areas such as Galathea National Park (107.103 sq. km), Campbell Bay National Park (391.751 sq. km) and Biosphere reserve (732.798 sq. km). The proposed integrated developments are planned away from ESA/ESZ of these protected areas. The proposed project sites fall under CRZ area. The CRZ studies and mapping is being carried out by National Centre for Sustainable Coastal Management, MoEF&CC, Chennai

3.8.13 STP/CETP: The combined STP capacity shall be 110 MLD and design is being carried out. The Treated Wastewater/Sewage shall be used for non-potable purpose such as flushing, irrigation, washing etc

3.8.14 Owning to the naturally available water depths, relatively lower quantity of dredging is required. Backup area will be mainly created by way of reclamation. Part of material for reclamation shall be obtained from the dredged material and the balance requirement shall be met through the borrowed fill, either through back up land grading site or brought from distant locations through the barges/ships. Unsuitable dredged material shall be disposed at an identified offshore location in about 40 m contour. The location shall be duly selected after mathematical model studies of dredged plume dispersion.

3.8.15 Terminal yards for storage of cargo/containers and during construction temporary facilities will be provided to store construction materials. Open Storage Yard will be provided for container stacking, temporary storage for construction materials. Storage of HSD from DG sets and other equipment / Machinery.

3.8.16 Emissions from ships, vehicles during transportation and operational phase shall be controlled basis MARPOL convention protocol. Adequate pollution control measures will be taken during storage and handling of material. There shall be regular inspection, barriers at the perimeter of storage materials, proper maintenance of vehicles etc. The details of the emissions and control measures will be provided in EIA report.

3.8.17 Fugitive emissions are envisaged from material handling and transportation areas during the construction stage. These will be controlled by good housekeeping, sprinkling water in the dust prone areas, providing paved roads and proper fencing.

3.8.18 Spills are unlikely to occur during normal operations, as the primary in ICTT would be containers which would be handled using specialised equipment. In the event of accidental spills of cargo during transfer from / to the ships. Soil and groundwater remediation activity will be undertaken as per the requirement. Emission control norms and spill contingency shall be adhered to in all the cases.

3.8.19 The coastal stretches on the western coast are used both by Shompens and Nicobarese for fishing purposes. In terms of fisheries, the site has huge potential for oceanic tuna, which is virtually unexploited, and offers ample scope for deep sea fishing

3.8.20 The area is inhibited by settlers from the mainland and aboriginal tribes Shompen and Nicobarese. No project activities are envisaged in the areas where the aboriginal tribes reside and therefore no impacts on the social and economic conditions are expected. However, due to the proposed development the likely change in the livelihood patterns, socio economic conditions, social behaviours, disease patterns, dependency on natural resource etc., for the settler community will be improved. The proposed development will generate significant number of jobs over the next two decades and catalyse the socio-economic growth of the local population in addition to improving connectivity and developing eco-tourism of the region.

3.8.21 Land acquisition and R&R issues are involved in 2 out of 7 revenue villages.

3.8.22 Benefits of the project: The proposed ICTT will allow India to participate in the regional and global maritime economy by becoming a major player in cargo transhipment. The proposed airport will support both the maritime sector and the tourism sector, which will attract international and national tourists to Great Nicobar to experience the outstanding natural environment and participate in sustainable tourism activities. A Mixed-use urban development in the vicinity of these major infrastructure works will also be necessary to support quality of life for the residents that will generate and enable growth in the various economic sectors over time. This will require the development of simultaneous primary and secondary urban infrastructure networks such as roads, public transport, energy and electrical power, as well as water, wastewater, and storm water facilities and services, which will form the skeleton of the proposed township master plan. It is estimated that after the project is fully implemented, it has the potential to generate around 2.6 Lakh jobs opportunity.
3.8.23 Details of Court cases: No Court case is pending against the proposed project. Land related cases are being dealt separately.

3.8.24 The EAC at the outset noted that this project encompasses development of simultaneous primary and secondary urban infrastructure networks such as roads, public transport, energy and electrical power, as well as water, wastewater, and storm water facilities and services, which will form the skeleton of the proposed township master plan. Therefore the PP has submitted the proposal to the EAC (Infra-1) in order to facilitate a comprehensive appraisal. The EAC taking into account the submissions made by the project proponent had a detailed deliberation during its 258th meeting on 17th -18th March, 2021 and **deferred** the proposal due to non-submission of the proper documents and for the want of following documents/ information:

i. Details of Township & Area Development project for which 14960 ha of land will be require out of 16610 ha, however, no details have been provided. Details regarding component of Township & Area Development project along with proposed land use, site grading shall be submitted. A note on feasibility of habitation in light of hazards such as seismic, Tsunami etc to be included.

ii. Detailed requirement of the freshwater along with the source of water for various component of the project detailing water budget shall be calculated and submitted.

iii. The site proposed for Port be re-analysed in terms of impact on Leatherback Turtle and other geo-seismological view. Alternate site should also be explored as a precautionary principal.

iv. Geographical Meteorological study report be obtained from Indian Meteorological Department and National Centre for Seismology and submit assessment with regard to the proposed activities.

v. Conformity of proposed integrated development in relation to latest CZMP at 1: 4000 scale and Island Development plan for Great Nicobar should be provided.

vi. Area statement indicating total area of great Nicobar, components of proposed activities, ecologically sensitives areas and non-development areas, forest area etc., to be provided.

Agenda 3.11

Any other item with the permission of Chair.

No other items were discussed by the Committee

Annexure-A

Following members were present during the 258th EAC (Infra-1) meeting held on 17th – 18th March, 2021:

S. No.	Name	Designation	Remarks
1.	Dr. Deepak ArunApte	Chairman	Present
2.	Sh. S. Jeyakrishnan	Member	Present
3.	Sh. Manmohan Singh Negi	Member	Present
4.	Sh. Sham Wagh	Member	Present
5.	Dr. MukeshKhare	Member	Requested absentia
6.	Dr. Ashok Kumar Pachauri	Member	Present
7.	Dr. V.K Jain	Member	Absent
8.	Dr. Manoranjan Hota	Member	Present
9.	Sh. R Debroy	Member	Absent
10.	Dr. Rajesh Chandra	Member	Absent
11.	Dr. M.V Ramana Murthy	Member	Present
12.	Smt. Bindu Manghat	Member	Absent
13.	Dr. Niraj Sharma	Member	Present
14.	Sh. Amardeep Raju,	Scientist 'E' & Member Secretary, MoEF&CC	Present
15.	Dr. Rajesh P Rastogi	Scientist 'C', MoEF&CC	Present

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Minutes of the 260th meeting of Expert Appraisal Committee held on 5th - 6th April, 2021 through Video Conferencing 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 Complexes 7(c); Ports, harbours, break waters, dredging 7(e) and National Highways 7(f)

The 260th Meeting of Expert Appraisal Committee (EAC) of Infra-1 (IA-III) was held through Video Conferencing at the Ministry of Environment, Forest & Climate Change (MoEF&CC), Indira Paryavaran Bhavan, New Delhi on **5th – 6th April, 2021** under the Chairmanship of Dr. Deepak Arun Apte. A list of participants is annexed as **Annexure-A**.

1. OPENING REMARKS OF THE CHAIRMAN

At the outset, Dr. Deepak Arun Apte, 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. Dr. V.K. Jain requested leave of absence due to health issues.

2. CONFIRMATION OF THE MINUTES OF THE LAST MEETING

The Committee confirmed the Minutes of 258th EAC meeting held on 17th – 18th March, 2021.

i. *In the 254th meeting of EAC held on 11th February, 2021 following table is inserted for the Agenda Item No 3.7*

PP has requested for the following amendments in the Environmental and CRZ Clearance issued by the Ministry vide letter no. 11-42/2013-IA.III, dated 4th July, 2016.

S. No.	Plant Facility	As per EC issued on 04.07.2016	Amendment requested
1	Handling Capacity	Phase 1: 3.60 MTPA; Phase 2: 7.20 MTPA	7.2 MTPA
2	Offshore LNG Facility	Offshore LNG FSRU, FSU etc	GBS with LNG storage and regasification
3	Mooring Dolphins	Six mooring dolphins each for FSU and LNGC	Four (04) mooring piles with walkways
4	Estimated project cost	Rs. 870 Cr Phase1 and Rs. 400 Cr for Phase2	Rs. 1270 Cr
5	Regasification technology- Intermediate Fluid Vaporiser	propane will be used as an intermediate fluid	glycol water will be used as an intermediate fluid

SUDIP CHAUDHURI NOTARY 6504/2008 GHAZIABAD COURT

6	*Loading/unloading Arms and Hoses*	*Eight (8) 16'' loading/unloading arms*	*Four (4) 16'' loading/unloading arms*
7	*Floating Storage and Regasification Unit (FSRU)*	*FSRU-barge with 6m draft, regasification modules*	*Regasification unit will be on top of GBS*
8	*LNG Carrier Capacity*	*75,000 m^3 to 155,000 m^3*	*175,000 m^3*
9	*LNG Storage*	*LNG carrier-174,000m^3-266,000m^3, buffer-40000m^3*	*210,000 m3 tank inside GBS*
10	*Breasting Dolphins*	*Three (03) breasting dolphins for each of FSU, LNG*	*Fenders are attached to GBS it self*

ii. *In the Minutes of 256th Meeting of Expert Appraisal Committee (EAC) held on 3rd - 4th March, 2021, following is inserted:*

S. No	MoM of 256th EAC	Revision
3.1 – 3(v)	*No objection certificate from the Pardip port for this activity be submitted.*	*The master plan of Pardip port shouldn't overlap with activities of proposed port and hence, an undertaking in this regard may be submitted to the Ministry*

3. AGENDA WISE CONSIDERATION OF PROPOSALS:

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

Agenda No. 3.1

Development of 4 lane inter-corridor (Greenfield alignment) from Shiwrampur (Ch. 55+002) to Ramnagar (Ch. 109+327) under Bharatmala Pariyojna (Lot-5, Pkg-7) in state of Bihar (Package-2, Length- 54.325 km) by M/s National Highways Authority of India - Terms of Reference (Proposal No IA/BR/NCP/205173/2021 File No 10/18/2021-IA.III)

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

The project proponent along with the EIA consultant M/s P & M Solution, Uttar Pradesh has made a presentation through Video Conferencing and provided the following information-

3.1.1 The proposed project is for Development of 4 lane inter corridor (Green field alignment) starts from Shiwrampur District (Ch. 55+002), Jehanbad to Ramnagar District (Ch. 109+327), Patna under Bharatmala Pariyojna (Lot-5/Package-7) in the state of Bihar (Package-II). The

proposed road passes through three Districts viz. Jehanabad, Patna and Nalanda in the state of Bihar and is connected with Berka, Kukari, Sohjana, Jamalpur, Maheva, Malathi, Supi, Kako, Modanganj, Milkidrvra, Shadipur in Jehanabad District; Dhanrua, Nasaratpur, Chhati, Tadwa, Fatuha in Patna District, and Verthu, Abbupur, Salempur and Kandhauli in Nalanda District. The total length of the proposed alignment is 54.325 km approx.

3.1.2 The proposed project falls under 7(f), Category-A, Highway as per EIA notification 2006. Total investment/cost of the project is Rs 1,075.41 Crores.

3.1.3 The Proposed Right of Way (RoW) is 60 m. The terrain of the alignment area is mainly plain and rolling area. The project alignment involves acquisition of 341.66 ha of land which includes 309.89 ha of private land, 28.77 ha Government land and 3 ha forest land. Compensation for land acquisition will be given as per RFCT LARR Act, 2013. For diversion of forest land, the forest proposal shall be prepared after consultation with concerned forest officer, if it attracts FC under section 2, 1980.

3.1.4 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.

3.1.5 There are 03 nos. of Rivers, 24 nos. of Canals, 20 nos. of Nalahs falling along the alignment. There shall be no major impact on the drainage system as 147 numbers of structures (such as culverts, minor bridges, major bridges etc.) will be constructed. The road will have 3 Major Bridges, 44 no's of Minor Bridges, 4 no's of Vehicular underpass, 03 no's of LVUP, 02 no's of SVUP, 2 nos. of Interchanges/Flyover, 1 nos. ROB and 88 nos. of Box Culverts.

3.1.6 The total requirement of water for construction is estimated to 12,777.59 KL. Water will be extracted from surface sources. The ground water will be abstracted for camp site after obtaining permission from the competent authority.

3.1.7 A total of 1100 nos. of trees falls in proposed ROW. However, bare minimum no. of trees shall be felled for construction of four lane road. Detailed tree inventories will be provided after joint enumeration with the appropriate authority in EIA. Avenue plantation shall be carried out as per IRC SP: 21:2009 on available ROW apart from statutory requirements.

3.1.8 A total number of 25 structures will be affected due to proposed Road. 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.

3.1.9 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.

3.1.10 Benefits of the Project: The main objective of the proposed project is to reduce the distance and travel time from North-Bihar to South Bihar and to give connectivity to remote areas and major cities. The project will enhance economic development in the area through industrial areas, Agriculture (Market access), commercial development and consequent employment. The junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic. The proposed road would act as the prime artery for the economic flow to this region. It will enhance 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. 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.

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

3.1.12 The EAC noted that the NHAI has submitted 5 proposals from Package-I to Package-V which can be seen in the MOM from agenda item 3.1 to 3.5. All the packages are in the same alignment however divided into 5 packages for convenience. The Kacchi Dargah–Bidupur Bridge currently under construction will span the river Ganges, connecting Kacchi Dargah in Patna and Bidupur in Hajipur in the state of Bihar. The proposed completion date is Nov 2021. This bridge will provide an easy roadway link between the northern and southern parts of Bihar and will connect two major national highways, linking NH 30 (Patna-Bakhtiyarpur Road) to NH 333 (Hajipur Samastipur Road). The bridge will reduce the load on Mahatma Gandhi Setu and will also reduce the traffic in the capital city of Patna. The bridge will be a major connecting bridge between North and South Bihar.

3.1.13 The concrete laying in well foundations started on 19 July 2017 on the Raghopur side. Total 67 foundations to be constructed (65 DD type well foundations and 2 Circular Well foundations). The length of main bridge is 9.750 Km (75+65x150+75) and the length of both side approach roads is 1.5 Km (South/Kachhi Dargah side) and 8.5 Km (North/Bidupur/Kalyanpur Side). Total length of the project is 19.750 Km.

3.1.14 The project is being implemented by L&T Construction, JV with Daewoo E&C from Korea. The estimated project cost is Rs. 3115 Cr. The proposed bridge is one of the longest bridges on river Ganga. The project authority is Road Construction Department, Bihar.

3.1.15 In case construction of Kacchi Dargah–Bidupur Bridge could not be completed, the existing bridge (Gandhi Setu) can be used as alternative alignment/connectivity from Kacchi Dargah (End point of Package-3) to Kalyanpur (Starting point of Package-IV) through existing NH- 30 (Patna-Bakhtiyarpur Road) and NH-103 (Hajipur Samastipur Road). The existing Gandhi Setu is located approximate 10 Km away from end point of Pakage-3 and Starting point of Package-4.

3.1.16 The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 260th meeting during 5th - 6th April, 2021 and **recommended the proposal for grant of Terms of Reference (ToR)** with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

i. Apart from land compensation, the loss for crop has also to be compensated.

ii. 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.

iii. Cumulative impact assessment study to be carried out along the entire stretch including the other packages in the current stretch under consideration.

iv. The alignment of road should be such that the cutting of trees is kept at bare minimum and for this the proponent shall obtain permission from the competent authorities. Alignment also should be such that it will avoid cutting old and large and heritage trees if any. All such trees to be geotagged.

v. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th 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.

vi. In pursuance of Ministry's OM no stated above 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.

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. 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. 3.2

Development of 4 lane inter corridor (Greenfield alignment) from Amas (Old NH-2/New NH-19) (Ch. 00+000) to Shiwrampur (Ch. 55+002) under Bharatmala Pariyojna(Lot-5/Package-7) in state of Bihar (Package-I Length -55.002 km) by M/s National Highways Authority of India – Terms of Reference (Proposal No. IA/BR/NCP/204598/2021 and File No. 10/19/2021-IA.III)

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

The project proponent along with the EIA consultant M/s P & M Solution, Uttar Pradesh has made a presentation through Video Conferencing and provided the following information-

3.2.1. The proposed project is for Development of 4 lane inter corridor (Green field alignment) starts from existing National Highway 2 (New NH-19) from Amas (Ch.00+000) to Shiwrampur (Ch. 55+002) under Bharatmala Pariyojna (Lot-5/Package-7) in the state of Bihar (Package-I). The proposed road passes through Gaya District in the state of Bihar and passes through approx. 60 villages such as Amas, Guraru, Paraiya, Itawa, Koiri Bigha, Manda, Deal Chak, Salaipura, Parsohad, Anantpur, Burma Tilori road, Kormath, Shekhipur, Mungara, Nepa Chak, Fatehpur, Tekari, Bela Ganj, etc. The total length of the proposed alignment is approx. 55.002 km.

3.2.2. The proposed project falls under 7(f), Category-A, Highway as per EIA notification 2006. Total investment/cost of the project is Rs 1207.91 Crores.

3.2.3. The alignment is mainly passing through agriculture land. The Proposed Right of Way (RoW) is 60 m. The terrain of the alignment area is mainly flat to undulating in nature. The project alignment involves acquisition of 376.50 ha of land which includes 310.18 ha of private land, 60.82 ha Government land and 5.5 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.

3.2.4. 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.

3.2.5. There are 04 nos. of Rivers, 7 nos. of Canals, 20 nos. of Nalahs, falling along the alignment. There shall be no major impact on the drainage system as 151 numbers of structures (such as culverts, minor bridges, major bridges etc.) will be constructed. The Proposed road will have 4 Major Bridges, 27 no.s of Minor Bridges, 2 nos. of Vehicular underpass, 05 no.s of LVUP, 12 no.s of SVUP, 3 nos. of Interchanges/Flyover, 2 nos. ROB and 96 nos. of Box Culverts.

3.2.6. The total water requirement during construction is estimated to 12956 KL. Water will be extracted from surface sources. The ground water will be abstracted for camp site after obtaining permission from the competent authority.

3.2.7. The proposed alignment will require cutting of approximately 1300 nos. of trees. However, bare minimum no. of trees shall be felled for construction of four lane road. Detailed tree inventories will be provided after joint enumeration with the appropriate authority in EIA. Avenue plantation shall be carried out as per IRC SP: 21:2009 on available ROW apart from statutory requirements.

3.2.8. A total number of 50 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.

3.2.9. 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.

3.2.10. Benefits of the Project: The main objective of the proposed project is to reduce the distance and travel time from NH- 2 to NH-57 and North-Bihar to South Bihar and to give connectivity to remote areas and major cities. The project will enhance economic development in the area through industrial areas, Agriculture (Market access), commercial development and consequent employment. The junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic. The proposed road would act as the prime artery for the economic flow to this region. It will enhance 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. 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.

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

3.2.12. The EAC noted that the NHAI has posed 5 proposals from Package-I to Package-V which can be seen in the MOM from agenda item 3.1 to 3.5. All the packages are in the same alignment however divided into 5 packages for convenience. The Kacchi Dargah–Bidupur Bridge currently under construction will span the river Ganges, connecting Kacchi Dargah in Patna and Bidupur in Hajipur in the state of Bihar. The proposed completion date is Nov 2021. This bridge will provide an easy roadway link between the northern and southern parts of Bihar and will connect two major national highways, linking NH 30 (Patna-Bakhtiyarpur Road) to NH 333 (Hajipur Samastipur Road). The bridge will reduce the load on Mahatma Gandhi Setu and will also reduce the traffic in the capital city of Patna. The bridge will be a major connecting bridge between North and South Bihar.

3.2.13. The concrete laying in well foundations started on 19 July 2017 on the Raghopur side. Total 67 foundations to be constructed (65 DD type well foundations and 2 Circular Well foundations). The length of main bridge is 9.750 Km (75+65x150+75) and the length of both side approach roads is 1.5 Km (South/Kachhi Dargah side) and 8.5 Km (North/Bidupur/Kalyanpur Side). Total length of the project is 19.750 Km.

3.2.14. The project is being implemented by L&T Construction. JV with Daewoo E&C from Korea. The estimated project cost is Rs. 3115 Cr. The proposed bridge is one of the longest bridges on river Ganga. The project authority is Road Construction Department, Bihar.

3.2.15. In case construction of Kacchi Dargah–Bidupur Bridge could not be completed, the existing bridge (Gandhi Setu) can be used as alternative alignment/connectivity from Kacchi Dargah (End point of Package-3) to Kalyanpur (Starting point of Package-IV) through existing NH- 30 (Patna-Bakhtiyarpur Road) and NH-103 (Hajipur Samastipur Road). The existing Gandhi Setu is located approximate 10 Km away from end point of Pakage-3 and Starting point of Package-4.

3.2.16. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 260th meeting during 5th - 6th April, 2021 and **recommended the proposal for grant of Terms of Reference (ToR)** with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

i. Apart from land compensation, the loss for crop has also to be compensated.

ii. 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.

iii. Cumulative impact assessment study to be carried out along the entire stretch including the other packages in the current stretch under consideration.

iv. The alignment of road should be such that the cutting of trees is kept at bare minimum and for this the proponent shall obtain permission from the competent authorities. Alignment also should be such that it will avoid cutting old and large and heritage trees if any. All such trees to be geotagged.

v. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th 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.

vi. In pursuance of Ministry's OM no stated above 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.

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. 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. 3.3

Development of 4 lane inter corridor (Greenfield alignment) from Kalyanpur (Ch. 0+000) to Tal Dasraha (Ch. 47+000) (Package-IV, Length - 47.0 km) under Bharatmala Pariyojana (Lot-5, Package-7) in state of Bihar by M/s National Highways Authority of India - Terms of Reference (Proposal No. IA/BR/NCP/205952/2021 and File No. 10/20/2021-IA.III)

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

The project proponent along with the EIA consultant M/s P & M Solution, Uttar Pradesh has made a presentation through Video Conferencing and provided the following information-

3.3.1. The proposed project is for Development of 4 lane inter corridor (Green field alignment) starts from Kalyanpur (new NH 19: Ch. 0+000 Km) to Tal Dasraha (Ch. 47+000 Km) under Bharatmala Pariyojna (Lot-5/Package-7) in the state of Bihar (Package-IV). The proposed road passes through 2 districts viz. Vaishali and Samastipur district in the state of Bihar and passes through approx. 57 villages. The major settlements along the alignment are Raja Pakad, Jandaha, Patepur, Hazipur, Mahua in Vaishali district and Samastipur, Kalyanpur and Varishnagar in Samastipur district. The total length of the proposed alignment is approx. 47.000 km.

3.3.2. The proposed project falls under 7(f), Category-A, Highway as per EIA notification 2006. Total investment/cost of the project is Rs 1165.54 Crores.

3.3.3. The alignment is mainly passing through agriculture land. The Proposed Right of Way (RoW) is 60 m. The terrain of the alignment area is mainly flat to undulating in nature. The project alignment involves acquisition of 304.54 ha of land which includes 294.03 ha of private land, 8.87 ha Government land and 1.5 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.

3.3.4. 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.

3.3.5. There are 02 nos. of rivers, 23 Nos. of Canals, 04 Nos. of Nalahs, falling along the alignment. There shall be no major impact on the drainage system as 113 numbers of structures (such as culverts, minor bridges, major bridges etc.) will be constructed. The Proposed road will have 2 Major Bridges, 6 no.s of Minor Bridges, 4 nos. of Trumpet/Flyover, 5 no.s of VUP, 5 no.s of LVUP, 15 nos. of SVUP, 1 nos. ROB and 75 nos. of Box Culverts.

3.3.6. The total water requirement during construction is estimated to 13329 KL. Water will be extracted from surface sources. The ground water will be abstracted for camp site after obtaining permission from the competent authority.

3.3.7. The proposed alignment will require cutting of approximately 1750 nos. of trees. However, bare minimum no. of trees shall be felled for construction of four lane road. Detailed tree inventories will be provided after joint enumeration with the appropriate authority in EIA. Avenue plantation shall be carried out as per IRC SP: 21:2009 on available ROW apart from statutory requirements.

3.3.8. A total number of 30 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.

3.3.9. 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.

3.3.10. Benefits of the Project: 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. 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.

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

3.3.12. The EAC noted that the NHAI has posed 5 proposals from Package-I to Package-V which can be seen in the MOM from agenda item 3.1 to 3.5. All the packages are in the same alignment however divided into 5 packages for convenience. The Kacchi Dargah–Biduput Bridge currently under construction will span the river Ganges, connecting Kacchi Dargah in Patna and Bidupur in Hajipur in the state of Bihar. The proposed completion date is Nov 2021. This bridge will provide an easy roadway link between the northern and southern parts of Bihar and will connect two major national highways, linking NH 30 (Patna-Bakhtiyarpur Road) to NH 333 (Hajipur Samastipur Road). The bridge will reduce the load on Mahatma Gandhi Setu and will also reduce the traffic in the capital city of Patna. The bridge will be a major connecting bridge between North and South Bihar.

3.3.13. The concrete laying in well foundations started on 19 July 2017 on the Raghopur side. Total 67 foundations to be constructed (65 DD type well foundations and 2 Circular Well foundations). The length of main bridge is 9.750 Km (75+65x150+75) and the length of both side approach roads is 1.5 Km (South/Kachhi Dargah side) and 8.5 Km (North/Bidupur/Kalyanpur Side). Total length of the project is 19.750 Km.

3.3.14. The project is being implemented by L&T Construction, JV with Daewoo E&C from Korea. The estimated project cost is Rs. 3115 Cr. The proposed bridge is one of the longest bridges on river Ganga. The project authority is Road Construction Department, Bihar.

3.3.15. In case construction of Kacchi Dargah–Bidupur Bridge could not be completed, the existing bridge (Gandhi Setu) can be used as alternative alignment/connectivity from Kacchi Dargah (End point of Package-3) to Kalyanpur (Starting point of Package-IV) through existing NH- 30 (Patna-Bakhtiyarpur Road) and NH-103 (Hajipur Samastipur Road). The existing Gandhi Setu is located approximate 10 Km away from end point of Pakage-3 and Starting point of Package-4.

3.3.16. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 260th meeting during 5th - 6th April, 2021 and **recommended the proposal for grant of Terms of Reference (ToR)** with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

i. Apart from land compensation, the loss for crop has also to be compensated.

ii. 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.

iii. Cumulative impact assessment study to be carried out along the entire stretch including the other packages in the current stretch under consideration.

iv. The alignment of road should be such that the cutting of trees is kept at bare minimum and for this the proponent shall obtain permission from the competent authorities. Alignment also should be such that it will avoid cutting old and large and heritage trees if any. All such trees to be geotagged.

v. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th 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.

vi. In pursuance of Ministry's OM no stated above 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.

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. 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. 3.4

Development of 4 lane inter corridor (Greenfield alignment) from Tal-Dasraha (Ch. 47+000) to Bela Nawada (NH 57) (Ch. 89+100) (Package-5, Length - 42.100 km) under Bharatmala Pariyojana (Lot-5, Package-7) in the state of Bihar by M/s National Highways Authority of India - Terms of Reference (Proposal No. IA/BR/NCP/205963/2021 and File No. 10/21/2021-IA.III)

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

The project proponent along with the EIA consultant M/s P & M Solution, Uttar Pradesh has made a presentation through Video Conferencing and provided the following information-

3.4.1. The proposed project is for Development of 4 lane inter corridor (Green field alignment) starts from Tal Dasraha (Ch. 47+000) to Bela Nawada (NH 57; Ch. 89+100) under Bharatmala Pariyojna (Lot-5/Package-7) in the state of Bihar (Package-V). 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. 42.100 km.

3.4.2. 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.

3.4.3. The alignment is mainly passing through agriculture land. The Proposed Right of Way (RoW) is 60 m. The terrain of the alignment area is mainly flat to undulating in nature. The project alignment involves acquisition of 265.33 ha of land which includes 236.83 ha of private land. 25.5 ha Government land and 3.2 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.

3.4.4. 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.

3.4.5. There are 04 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 no.s numbers of structures (such as culverts, minor bridges, major bridges etc.) will be constructed. The Proposed road will have 5 Major Bridges, 7 no.s of Minor Bridges, 2 nos. of Fly over, 04 no.s of Vehicular underpass, 5 no.s LVUP, 14 no.s of SVUP, 2 nos. ROB and 81 nos. of Box Culverts.

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

3.4.7. The proposed alignment will require cutting of approximately 1700 nos. of trees. However, bare minimum no. of trees shall be felled for construction of four lane road. Detailed tree inventories will be provided after joint enumeration with the appropriate authority in EIA. Avenue plantation shall be carried out as per IRC SP: 21:2009 on available ROW apart from statutory requirements.

3.4.8. 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.

3.4.9. 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.

3.4.10. 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. 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.

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

3.4.12. The EAC noted that the NHAI has posed 5 proposals from Package-I to Package-V which can be seen in the MOM from agenda item 3.1 to 3.5. All the packages are in the same alignment however divided into 5 packages for convenience. The Kacchi Dargah–Bidupur Bridge currently under construction will span the river Ganges, connecting Kacchi Dargah in Patna and Bidupur in Hajipur in the state of Bihar. The proposed completion date is Nov 2021. This bridge will provide an easy roadway link between the northern and southern parts of Bihar and will connect two major national highways, linking NH 30 (Patna-Bakhtiyarpur Road) to NH 333 (Hajipur Samastipur Road). The bridge will reduce the load on Mahatma Gandhi Setu and will also reduce the traffic in the capital city of Patna. The bridge will be a major connecting bridge between North and South Bihar.

3.4.13. The concrete laying in well foundations started on 19 July 2017 on the Raghopur side. Total 67 foundations to be constructed (65 DD type well foundations and 2 Circular Well foundations). The length of main bridge is 9.750 Km (75+65x150+75) and the length of both side approach roads is 1.5 Km (South/Kachhi Dargah side) and 8.5 Km (North/Bidupur/Kalyanpur Side). Total length of the project is 19.750 Km.

3.4.14. The project is being implemented by L&T Construction, JV with Daewoo E&C from Korea. The estimated project cost is Rs. 3115 Cr. The proposed bridge is one of the longest bridges on river Ganga. The project authority is Road Construction Department, Bihar.

3.4.15. In case construction of Kacchi Dargah–Bidupur Bridge could not be completed, the existing bridge (Gandhi Setu) can be used as alternative alignment/connectivity from Kacchi Dargah (End point of Package-3) to Kalyanpur (Starting point of Package-IV) through existing NH- 30 (Patna-Bakhtiyarpur Road) and NH-103 (Hajipur Samastipur Road). The existing Gandhi Setu is located approximate 10 Km away from end point of Pakage-3 and Starting point of Package-4.

3.4.16. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 260th meeting during 5th - 6th April, 2021 and **recommended the proposal for grant of Terms of Reference (ToR)** with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

i. Apart from land compensation, the loss for crop has also to be compensated.

ii. 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.

iii. Cumulative impact assessment study to be carried out along the entire stretch including the other packages in the current stretch under consideration.

iv. The alignment of road should be such that the cutting of trees is kept at bare minimum and for this the proponent shall obtain permission from the competent authorities. Alignment also should be such that it will avoid cutting old and large and heritage trees if any. All such trees to be geotagged.

v. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th 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.

vi. In pursuance of Ministry's OM no stated above 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.

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. 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. 3.5

Development of 4 lane inter corridor (Greenfield alignment) from Amas (Old NH-2/New NH-19) to Shiwrampur under Bharatmala Pariyojana (Lot-5, Package-7) in the state of Bihar - Package-III from Ramnagar (Ch. 00+000 to Kachchi Dargah (Ch.14+257) - Length 14.257 km by M/s National Highways Authority of India - Terms of Reference (Proposal No. IA/BR/NCP/206000/2021 and File No. 10/22/2021-IA.III).

[*Note: The PP/Consultant has provided erroneous project title as the correct project name is "Development of 4 lanes inter corridor (Green field alignment) from Ramnagar to Kachchi Dargah under Bharatmala Pariyojna in state of Bihar (Lot-5/Package-7). Package-III (Km chainage from 00+000 to 14+257)". Further, in the proposed project there is diversion of 1 ha Forest land; however, in form-1, the PP has incorrectly mentioned that 0 ha of Forest land is involved. It may be mentioned that the NHAI has been asked several times to submit the technically correct information. Despite several verbal requests, the NHAI/consultant is submitting their proposal with several mistakes.*]

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

The project proponent along with the EIA consultant M/s P & M Solution, Uttar Pradesh has made a presentation through Video Conferencing and provided the following information-

3.5.1. The proposed project is for Development of 4 lane inter corridor (Green field alignment) starts from Ramnagar (Ch. 0+000) to Kachchi Dargah (Ch. 14+257) under Bharatmala Pariyojna (Lot-5/Package-7) in the state of Bihar (Package-III). The proposed road passes through Patna district in the state of Bihar and passes through 20 villages. The major settlements along the alignment are Patna City and Fathua. The total length of the proposed alignment is approx. 14.257 km.

3.5.2. The proposed project falls under 7(f), Category-A, Highway as per EIA notification 2006. Total investment/cost of the project is Rs 1082.4 Crores.

3.5.3. The alignment is mainly passing through agriculture land. The Proposed Right of Way (RoW) is 60 m. The terrain of the alignment area is mainly plain and rolling area. The project alignment involves acquisition of 99.00 ha of land which includes 85.20 ha of private land, 12.80 ha Government land and 1 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.

3.5.4. 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.

3.5.5. There are 01 nos. of rivers, 07 Nos. of Canals, 20 Nos. of Nalahs, falling along the alignment. There shall be no major impact on the drainage system as 65 numbers of structures (such as culverts, minor bridges, major bridges etc.) will be constructed. The Proposed road will have 1 Major Bridges, 07 no.s of Minor Bridges, 02 nos. of Vehicular underpass, 12 no.s of SVUP, 1 nos. of Interchanges/Flyover, and 42 nos. of Box Culverts.

3.5.6. The total water requirement during construction is estimated to 5687 KL. Water will be extracted from surface sources. The ground water will be abstracted for camp site after obtaining permission from the competent authority.

3.5.7. The proposed alignment will require cutting of approximately 1000 nos. of trees. However, bare minimum no. of trees shall be felled for construction of four lane road. Detailed tree inventories will be provided after joint enumeration with the appropriate authority in EIA. Avenue plantation shall be carried out as per IRC SP: 21:2009 on available ROW apart from statutory requirements.

3.5.8. A total number of 20 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.

3.5.9. 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.

3.5.10. Benefits of the Project: The main objective of the proposed project is to reduce the distance and travel time from North-Bihar to South Bihar and to give connectivity to remote areas and major cities. The project will enhance economic development in the area through industrial areas, Agriculture (Market access), commercial development and consequent employment. The junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic. The proposed road would act as the prime artery for the economic flow to this region. It will enhance 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. 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.

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

3.5.12. The EAC noted that the NHAI has posed 5 proposals from Package-I to Package-V which can be seen in the MOM from agenda item 3.1 to 3.5. All the packages are in the same alignment however divided into 5 packages for convenience. The Kacchi Dargah–Bidupur Bridge currently under construction will span the river Ganges, connecting Kacchi Dargah in Patna and Bidupur in Hajipur in the state of Bihar. The proposed completion date is Nov 2021.

This bridge will provide an easy roadway link between the northern and southern parts of Bihar and will connect two major national highways, linking NH 30 (Patna-Bakhtiyarpur Road) to NH 333 (Hajipur Samastipur Road). The bridge will reduce the load on Mahatma Gandhi Setu and will also reduce the traffic in the capital city of Patna. The bridge will be a major connecting bridge between North and South Bihar.

3.5.13. The concrete laying in well foundations started on 19 July 2017 on the Raghopur side. Total 67 foundations to be constructed (65 DD type well foundations and 2 Circular Well foundations). The length of main bridge is 9.750 Km (75+65x150+75) and the length of both side approach roads is 1.5 Km (South/Kachhi Dargah side) and 8.5 Km (North/Bidupur/Kalyanpur Side). Total length of the project is 19.750 Km.

3.5.14. The project is being implemented by L&T Construction, JV with Daewoo E&C from Korea. The estimated project cost is Rs. 3115 Cr. The proposed bridge is one of the longest bridges on river Ganga. The project authority is Road Construction Department, Bihar.

3.5.15. In case construction of Kacchi Dargah–Bidupur Bridge could not be completed, the existing bridge (Gandhi Setu) can be used as alternative alignment/connectivity from Kacchi Dargah (End point of Package-3) to Kalyanpur (Starting point of Package-IV) through existing NH- 30 (Patna-Bakhtiyarpur Road) and NH-103 (Hajipur Samastipur Road). The existing Gandhi Setu is located approximate 10 Km away from end point of Pakage-3 and Starting point of Package-4.

3.5.16. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 260th meeting during 5th - 6th April, 2021 and **recommended the proposal for grant of Terms of Reference (ToR)** with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

i. Apart from land compensation, the loss for crop has also to be compensated.

ii. 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.

iii. Cumulative impact assessment study to be carried out along the entire stretch including the other packages in the current stretch under consideration.

iv. The alignment of road should be such that the cutting of trees is kept at bare minimum and for this the proponent shall obtain permission from the competent authorities. Alignment also should be such that it will avoid cutting old and large and heritage trees if any. All such trees to be geotagged.

v. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th 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.

vi. In pursuance of Ministry's OM no stated above 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.

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. 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. 3.6

Developmental expansion of Industrial park over an area of 1415.25 ha in addition to existing Developed area of 290.37 ha within total permitted area of 1705.62 ha in respect of Khed City Multi-product Industrial Park at Khed Taluka, District Pune, Maharashtra by M/s Khed Economic Infrastructure Pvt. Ltd - Environmental Clearance (Proposal No IA/MH/NCP/203636/2008 and File No 21-944/2007-IA.III)

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

3.6.1 The Environmental clearance subsequent to Public hearing of the above proposal was earlier granted *vide* letter No. 21-944/2007-IA.III, dated 20th May 2010 for 4500 Ha of land (2000 Ha of processing area + 2000 Ha of non-processing area + 500 Ha of domestic tariff area). The validity of this EC was further extended for two years i.e., up to 19th May 2017 vide letter No. of even number dated 19th February 2016 and then for further three years. i.e., up to up to19th May, 2020 vide letter No. of even number dated 11th August 2017. ***Further, MOEF&CC vide its***

notification dated 27th September 2020 extended the validity of the EC's expiring in the year 2020-2021 upto 31st March 2021.

3.6.2 As stated above, initially, the project was planned to be spread over an area of 4,500 Ha falling in jurisdiction of Gram Panchayats of Khed and Shirur Talukas, but MIDC was able to acquire only 1705.62 Ha of land therefore only 1705.62 Ha was leased out by MIDC to KEIPL vide two lease deeds for the period of 95 years for Phase I in four villages viz. Dawdi, Kanerhsar, Nimgaon in Khed Taluka and Kendur of Shirur Taluka. Further, MPCB has granted Consent to Operate for Processing Area (PA) and Domestic Tariff Area on plot area of 192.67 Ha, out of total plot area of 1705.62 Ha for a period upto 31stMarch, 2021. Subsequently, MPCB has also granted Consent to Operate for Domestic Tariff Area-II on plot area of 97.7 Ha, out of total area of 1705.62 Ha for period up to31stOctober, 2024. [Remaining/Balance Area: 1705.62 Ha - 192.67 Ha - 97.7 Ha = 1415.25 Ha]

3.6.3 In order to regularize the validity of EC and development of Industrial park over balance area of 1415.25 Ha out of total acquired area of 1705.62 Ha, it was necessary to obtain a fresh EC with this expansion proposal.

3.6.4 For the want of fresh Terms of Reference (TOR) followed by EC, the above mentioned proposal was earlier considered by Expert Appraisal Committee (EAC) in its 235th and 237th EAC meetings held on 26th May, 2020 and 29th June 2020, respectively. The MOEF & CC *vide* letter no. 21-944/2007/-IA-III, dated 20th July 2020 issued the TOR to KEIPL, with a mandate to conduct Public Consultation/ Hearing.

3.6.5 Further, The PP vide letter No. KEIPL/EC/Public Hearing/56/20-21, dated 17th December, 2020 had submitted on-line application on dated 26th Dec 2020, requesting for amendment/modification of ToR letter No. 21-944/2007/-IA-III, dated 20th July 2020 "*exemption of Public Hearing*". The EAC, taking into account the submission made by the project proponent and the detailed deliberation during its 253rd meeting on 18th – 19th January, 2021, recommended the proposal for amendment/modification (i.e., exemption of Public Hearing) in Terms of Reference, which was issued vide letter No. 21-944/2007/-IA-III, dated 20th July 2020. *Subsequently, a revised ToR was accorded by the Ministry with "exemption of Public Hearing" vide a ToR letter of even no., dated 25th February, 2021.*

3.6.6 At this instant, the PP *vide* Proposal No. IA/MH/NCP/203636/2008 has submitted application on-line on dated 16th Mar 2021, requesting for fresh Environmental clearance under the project type "Expansion" of the aforementioned project. The proposal was placed before the EAC in its 260th meeting during 5th - 6th April, 2021, in favor of Environmental clearance. The project proponent alongwith EIA consultant M/s Ardra Consulting Services Pvt. Ltd.

Bhubaneswar, Odisha, has made a presentation through Video Conferencing and provided the following information-

3.6.7 The proposed project is for developmental expansion of Industrial park over an area of 1415.25 ha in addition to existing Developed area of 290.37 ha within total permitted area of 1705.62 ha in respect of Khed City Multi-product Industrial Park at Khed, Pune, Maharashtra by M/s Khed Economic Infrastructure Pvt. Ltd.

3.6.8 The proposed project falls under 7(c)-Industrial estates/ parks/ complexes/ areas, export processing Zones: Industrial Park, Category-A, as per EIA notification 2006.

3.6.9 ToR for the proposed project was issued *vide* Proposal no. IA/MH/NCP/152981/2020, dated 20th July, 2020 and subsequently, ToR amendment letter was issued vide Proposal no. IA/MH/NCP/190021/2020, dated 25th February, 2021.

3.6.10 Total investment/cost of the project is Rs 327431 Lakh. The Capital cost to be invested over development in next 10 year is Rs159715 Lakh. The EMP cost is Rs 48421 Lakh (capital cost) & Rs 28940 Lakh (recurring cost).

3.6.11 Public hearing (PH) was conducted during previous Environmental Clearance *vide* letter No.21- 944/2007-I-A-III dated 20th May 2010. For the proposed expansion project, PH was exempted *vide* ToR amendment letter dated 25th February, 2021.

3.6.12 Total Area of the proposed Project is 1705.62 ha, out of which 290.37 ha has already been developed and balance 1415.25 ha need to be developed. The topography in and around the site is mostly undulated with steep slopes on edges of the plateau. The Landuse/Landcover of project site is as following:

Sr No	Land Use/Land Cover	Existing Land Use	Proposed Land Use	Total land use
		Area (ha)	Additional Area (ha)	Area (ha)
1	Industrial	175.83	697.22	873.05
2	Amenities/ Utilities	17.57	75.52	93.09
3	Roads	37.53	44.39	81.92
4	Supporting activities for residential and commercial	17.77	315.68	333.45
5	Open Spaces/ greenbelt	41.67	133.44	175.11
6	Authorized area under Khed City Development Limited (KDL)*	-----	149.00	149.00
Total		290.37	1415.25	1705.62

3.6.13 The industries related to Health care, FMCG, Renewable and non-renewable energy, Auto and engineering. Heavy Industries, Light Industries, Electronics and Electrical products, Automobiles, Biotechnology, Pharmaceutical, IT/ITES/Food Processing, Textile and apparel, Gems, Jewellery, Plastics, aviation and logistics shall be housed with the proposed project. No water polluting and chemical industries are proposed under Pharmaceutical category.

3.6.14 No water bodies are present in the project site, and no natural drainage is getting disturbed. However, Vel River and Bhima River is present at a distance of 1.0 Km at East side and 2.0 km at western side, respectively. There is one pond namely Thitewadi tank at a distance of 1.7 km East.
3.6.15 The water requirement for the project is 75.40 MLD that will be drawn from Bhima River and Chaskaman dam. Necessary permission is in place. Ground water will not be abstracted during construction & operation phase of the project. Surface water from Chaskman dam of 50 MLD and Watekarwadi K.T. weir on Bhima River of 1.73 MLD will be transfer to proposed Industrial Park. As per the estimation, the average water requirement for the proposed project will be 0.2 MLD during the construction phase and 75.20 MLD during the operation phase. KEIPL provides water to the units through the exclusive arrangement with Irrigation department of Govt. of Maharashtra from the Bhima River and Chaskaman Dam.

3.6.16 No further land acquisition is proposed in the present developmental expansion project application for fresh EC. A certified compliance report has been issued by the Nagpur regional office of MoEF&CC. No forest land diversion is involved in the project.

3.6.17 There are no protected areas under international conventions, national or local legislation for their ecological, landscape, cultural or other related value within 15 km radius. No new Rehabilitation of communities/villages is required. Land acquisition and rehabilitation of communities are implemented.

3.6.18 Waste Management: Solid waste management System has been planned and will be in place as per the provisions of the MSW (M&H) rules 2016.

3.6.19 Common effluent treatment plant of 1.0 MLD capacity and STP of 35 KLD capacity based on MBBR technology is proposed.

3.6.20 Total 22,148 trees are reported from Khed City Project area. The current cumulative status of tree felling is shown below.

S. No	No. of Trees Felled within Project Area	Total
1	1027*	1027
2	Total No. of Trees Transplanted	45
3	**Total No. of Trees impacted** (No.s) (1+2)	1072

* Majority with girth around 10 cms, mainly non scheduled species
Note: KEIPL has planted 111314 numbers of local tree saplings and 50735 numbers of shrubs.

3.6.21 Greenbelt development is recommended for implementation, in area of 177.71 Ha. KEIPL will consider maintaining 50 m green belt between industrial units and residential areas and the all possibilities while the plots are handed over to customers. Green belt to a width of 15 meters, thick vegetation along boundaries, Roads and plots setbacks is provided. To ensure a permanent green shield around the periphery planting is considered in two phases:

3.6.22 Rainwater harvesting structures are developed in the project site. KEIPL has constructed 11 surface rain water harvesting structures to catch 189.23 TCM of rain water, out of which 9 structures are Earthen Nala Bunds and 2 are Cement Nala Bunds. The Total capacity for rain water harvesting in the project area has been enhanced to 340.367 ML from 304.23 ML by further strengthening of 7 Earthen Nala Bunds.

3.6.23 Socio-economic condition of local people: Local villagers which are nearby to Khed City are having agriculture as main occupation. Some people from these villages are having their own business like cement agencies, kirana and essentials supply shops, dairy, package water supply. Some people are associated with Khed City in terms of contract works like earth works, road construction, manpower supply to the industries located in the Khed City, and some are even doing regular jobs in these industries.

3.6.24 Benefits of the project: *Employment Generation*: The project will provide employment to a large number of local people. Skilled, semi-skilled and unskilled man power will be utilized during construction and operation phase. This will positively impact the economic condition of the study area. *Microclimate improvement of the surrounding*: Due to increase/enhancement of the forests and greenery, the project area will possess an enriched ecological profile with significant improvement in micro-climate. *Improvement in the health and educational profile of the area*: The development of planned residential and industrial growth shall necessitate the erection of education and health infrastructure. The project will undertake their creation with quality. *Improvement in infrastructure facility*: In order to facilitate the industries in the Integrated Industrial area and in order to enhance their productivity, it is proposed to improve existing connectivity and add green-field connectivity projects. *Economy improvement*: After implementation of the Project, a host and variety of industries will be established in the area. This will give rise to employment to the local people. The industrial development will also promote allied businesses and facilities in the area. This will result in considerable improvement in the economic condition of the study area.

3.6.25 Details of Court cases: Earlier, there were two legal aspects with regards to KEIPL projects. Land owners had approached Hon'ble High Court and further before Hon'ble Supreme Court. In

the year 2013 Honourable Supreme Court dismissed the allegations made by the land owners. KEIPL's EC was also challenged before the Honourable National Green Tribunal, New Delhi and further before Hon'ble Supreme Court, which was also dismissed and the EC was confirmed.

3.6.26 The Committee notes that the PP during ToR stage submitted that they are continuing the "sectors" approved in the earlier EC granted by the Ministry vide letter dated 20th May, 2010. No new sectors has been included in the expansion application. No chemical industries are proposed under Pharmaceutical category. Only formulation unit is proposed as per continuation with prior EC.

3.6.27 The sectors approved in the earlier EC are heavy industry, light industries, electronics and electrical products, automobiles, biotechnology, pharmaceutical, IT/ITES/Food Processing, textiles and apparels, gems, jewellery, plastics, aviation and logistic. However, at the time of appraisal PP submitted a layout map showing maximum red category industry. Further there is no legend on the map to know the sectoral division of the industries.

3.6.28 The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 260th meeting during 5th - 6th April, 2021 and **deferred the proposal** for want of following documents/ information:

i. Layout map showing the existing industrial development vis-à-vis proposed industries with sectors specified on the layout map.
ii. Detailed list of industries as envisaged in the original EC and revised ToR issued on 20th July, 2020 and subsequently, ToR amendment dated 25th February, 2021.
iii. The infrastructure which is already in place and the proposed infrastructure should be clearly highlighted on the layout map with legend. The existing green belt and the proposed green belt should be clearly highlighted.
iv. The map should be clear in all perspective including legend, scale, North mark etc.

Agenda No. 3.7

Developmental of Greenfield Bhavanapadu Port, District Srikakulam, Andhra Pradesh by M/s Andhra Pradesh Maritime Board – Terms of Reference (Proposal No IA/AP/MIS/173542/2020 and File No 10-56/2020-IA.III)

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

Note- It may be mentioned this proposal was considered in 243rd EAC meeting during 28th -30th September, 2020 and was deferred for want of some requisite information. Further, the proposal was reconsidered in 256th EAC meeting held on 3rd – 4th March, 2021 and it was observed that the land for the site selected for project has been already allotted by the State Government to Singareni Collieries Company Limited (SCCL) as a part of compensatory afforestation. EAC observed that the same site cannot be allotted by the State Government to another project and therefore, the proposal was deferred till the availability of land for the proposed port is ascertained by the competent authority of the state government. ***However, the PP/consultant has given false/ misleading information at point 3 of the Annexure III (Required for ToR: New/Expansion/Amendment Proposals) as shown below-***

3	Whether the proposal was considered in earlier meetings of EAC: If yes, provide date of EAC meeting and reasons for deferment, if any	No

The project proponent along with the EIA consultant M/s P & M Solution, Uttar Pradesh has made a presentation through Video Conferencing and provided the following information-

3.7.1. The proposed project is for development of Greenfield Bhavanapadu Port at Srikakulam, Andhra Pradesh by M/s Andhra Pradesh Maritime Board.

3.7.2. The proposed project falls under 7(e) - Ports & Harbors, Category-A (cargo handling capacity > 5 million TPA), as per EIA notification 2006. Total investment/cost of the project is Rs 309190 Lakhs.

3.7.3. Total area for Port development for Phase-I is about 1010 Acres i.e., 408.73 Ha (Port Development 660 acres i.e., 267.093 ha and area for external infrastructure like road and rail connectivity is 350 Acres i.e., 141.64 Ha). The Land use/land cover of project site is as following-

S. No.	Land use category	Area (in Ha)	Area in %
1	Agriculture Land	12	2.87
2	Settlement	00	0.03
3	Waterbody	169	41.44
4	Forest	141	34.55
5	Wetland	1	0.27
6	Open scrub	85	20.84
Total		**408**	**100.00**

3.7.4. The total Land required for Phase I is 660 acres (267.093 ha) out of which government land and forest is 379 acres (153.376 Ha) and 281 acres (113.717 Ha), respectively. The Total Forest Land Area Identified is 471.35 Acres (190.74 Ha) (for master plan).

3.7.5. Total Water Requirement for the proposed project is 111295 litres (31455 litres for administrative building + 9240 litres for Workshop Building + 70600 litres for Miscellaneous Facilities). The water demand shall be met from the nearby reservoir. No ground water shall be abstracted or used for any commercial purposes of Port Operations.

3.7.6. Bushes and scrubs with Trees will be cut due to Development of proposed Bhavanapadu Port. Care will be taken to relocate the trees and necessary permission will be sought from the competent authority. The details will be provided in the EIA report.

3.7.7. The project site is in CRZ III area & part of the area will fall under harbor, berth, north & south break water & turning circle will fall under CRZ 1B. Bhavanapadu Port Area falls under rural area & hence categorized as CRZ III. Average Density of Population of Srikakulam district is 462 / Sqkm (Census 2011), hence Bhavanapadu being a part of it will fall under CRZ-III B. Demarcation of coastal regulation zone, High Tide Line/Low Tide Line & Land Use map will be prepared through MoEFCC authorized / accredited institute & the same will be presented in Environmental Impact Assessment Report.

3.7.8. Total Domestic Effluent Generation will be 69.04 KLD. STP of 70 KLD will be provided for domestic Effluent.

3.7.9. The details on the shoreline change will be studied by doing modelling and littoral drift studies as required & the same will be submitted during Environmental Impact Assessment Study (Report) in detail.

3.7.10. The estimated capital dredging quantity & dredging areas for the proposed port is as follows:

a. Entrance / Approach Channel /Turning Circle/ Sand trap – 10.88 Mm3
b. Berthing Area/ Port Basin – 10.377 Mm3
c. Providing Navigational aids and shore marks – Lump Sum (LS)
d. Mobilisation and Demobilisation of dredgers and other ancillary equipment's – (LS)
e. Total estimated dredging quantity for Phase I development is 21.177 Million cum (Mm3).

3.7.11. Cargo stacking and storage facilities will be developed for handling cargos with commodities like –

a. Raw cashew. Lime stone, Edible oil, other commodities, containers, Mineral sands, cashew, soya meal, Granite, Ferro products, Jute products, Iron & Steel scrap, Iron ore, Iron & steel products, Fertilizers. Thermal coal/ Coking coal
b. There is deposition of dust in to the air at the time of construction and cargo handling.
c. Dust suppression systems (e.g. water Sprinkling/misting at the bulk storage).

3.7.12. There are no fishing boats, no fish landing centres observed within the project site boundary. There is one Fishery Harbour near to the port. However, the Fishery Harbour is outside the port boundary. Hence, development of Bhavanapadu port shall not disturb the fishery Harbour operations.

3.7.13. R & R issues: Land Compensation and R & R is planned per the land acquisition plan for Project Affected Family's (PAF's) and budget is established as per the District Collector Letter RC no. 806/2015 G.1 dated .23/8/2018. Rehabilitation and Resettlement (R & R) will be taken up

adhering to The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation & Resettlement Act, 2013 (No. 30 of 2013) – Andhra Pradesh Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2014, Notification – Orders Issued GO. MS. No. 389 dated 20/11/2014.

3.7.14. Benefits of the project: The project has considerable benefits from the social perspective. The proposed project will have positive impact on social and economic improvement of the region by overall improvement in living standard through creation of new direct and Indirect Jobs, increase in volume of general trade, general improvement in infrastructural facility with better transport and communication network. It is estimated that, this project will generate 10,000 No. of Direct and indirect Employment. As per the Feasibility Assessment, the project is found to be viable from all aspects such as technical, economic, environmental and social aspects.

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

3.7.16. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 260th meeting during 5th - 6th April, 2021 and **deferred the proposal** with following comments:

It was observed by the committee in the earlier meeting that the land for the site selected for project has been already allotted by the State Government to Singareni Collieries Company Limited (SCCL) as a part of compensatory afforestation. EAC observed that the same site cannot be allotted by the State Government to another project and therefore, the proposal was deferred till the availability of land for the proposed port is ascertained by the competent authority of the state government.

PP further submitted the letter No. INI0-01-PORTS-I/129/2020-PORTS, dated 20.03.2021 that the Special Chief Secretary has given confirmation for land being allotted for the proposed port including forest and revenue land and assured that the Go AP & AP Maritime Board will follow the due process involved in obtaining Forest Clearance from the Central Government and comply the conditions stipulated while granting Stage-I & Stage-II clearances by MoEF&CC.

The EAC observed that the land was accorded to Singareni collieries in the year 2001, however the Notification (reserve or protected forest) for the same has not been issues till date. Money has been deposited for the compensatory afforestation to CAMPA. Further, the compensatory afforestation work has also been completed. However, the forest land has not been de-notified; in fact the Notification work itself is pending. PP informed that an alternative site for afforestation has been identified in YSR district of AP.

The Committee decided that the ToR for the project cannot be accorded to a piece of land for which the land records are not clear and land is not in possession of the PP. The EAC, taking into account the above fact **deferred the proposal.**

Agenda No. 3.8

Integrated development of International Container Transhipment 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. - Further consideration for Terms of Reference (Proposal No. IA/AN/NCP/201159/2021 and File No 10/87/2021-IA.III)

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

3.8.1 The proposal was considered in the 258th meeting of Expert Appraisal Committee held on 17th -18th March, 2021. The proposal was deferred by the EAC for want of additional information from the proponent.

3.8.2 PP submitted the requisite information and the proposal was further considered in the EAC in its 260th meeting held on 5th - 6th April, 2021. The DPR consultant engaged for the project is M/s AECOM India Pvt Ltd.

3.8.3 It has been mentioned that total township area is 149.60 Sq.km. Revenue land is 28.27 Sq.km. Revenue land (deemed forest) is 8.37 Sq.km, and forest land is 112.96 Sq.km. Regarding Site grading, all details related to port and airport are included in the PEFR. For township related site grading, same shall be conducted during the detailed engineering studies. Regarding water requirement, it has been mentioned that the total Water Demand for the project area is estimated at 160 MLD (Fresh Water Demand 90 MLD and Recycled Water Demand 70 MLD).

RESIDENTIAL	**36.66**	**22.07**
Residential Mixed-Use (Medium density)	29.1	
Residential (Medium Density)	2.98	
Residential Low Density	4.58	
COMMERCIAL	6.44	3.88
Commercial Mixed-Use	4.33	
Commercial Office	0.41	
Tourism and Hospitality	1.70	

INSTITUTIONAL	15.14	9.11
Institutional Campus	15.14	
INDUSTRIAL	0.31	0.19
Industrial	0.31	
TRANSPORT	24.01	14.46
Ports and Marine	7.66	
Aviation	8.45	
Logistics	7.90	
UTILITIES	1.2025	0.72
Power Plant	0.39	
Other Utilities (includes Solid Waste disposal)	0.81	
OPEN SPACE	73.0575	43.98
Greens	9.61	
Eco-Tourism	40.81	
Coastal tourism	22.64	
DEFENCE AREA	9.28	5.59
TOTAL PROJECT AREA	166.10	100.00
TOWNSHIP AREA	149.60	90.01

3.8.4 In order to have minimal dependency on surface water from Galathea River, it is being proposed to create rainwater harvesting reservoirs within the project area. Approximate 2.5 Sq.km of area is being identified for creation of water reservoirs which will store rainwater from surface runoff. Detail watershed studies and mathematical modelling will be carried out at the detail design stage and will be included in the EIA report. A LIDAR survey for the island was conducted for detailed terrain mapping. The data is classified as restricted by Ministry of Defence. Necessary approvals are being obtained for doing detail analysis on the LIDAR data collected. Final water sourcing will be included in the EIA report to be submitted. In case of inadequacy of water from these sources, alternate sources will be explored and presented at the time of EIA submission.

3.8.5 Regarding impact on Leatherback Turtle and other geo-seismological view it has been mentioned that the most technically and financially feasible location is Galathea Bay. All emphasis will be given to avoid any impact on the turtle nesting sites and detail mitigation strategies shall be covered in the EIA report including but not limiting to offshore break water provision to have unhindered turtle movement to nesting grounds. Further, comparative analysis of all location viz Galathea Bay, Casuarina Bay, Anderson Bay, Pemayya Bay, Campbell Bay was presented

3.8.6 Regarding Geographical Meteorological study and Seismology status, it has been mentioned that there is no IMD station in Great Nicobar Island. The data from INS Baaz station in Great Nicobar Island (Navy facility) has been procured and shall be used for all modelling

studies. All relevant reports available with National Centre for Seismology will also be procured and analyzed during the EIA study.

3.8.7 Regarding conformity of proposed integrated development in relation to latest CZMP at 1: 4000 scale and Island Development plan for Great Nicobar it has been mentioned that approvals as per ICRZ notification 2019 shall be obtained for undertaking proposed development. The CRZ maps at 1:4000 scale as mandated in the notification shall be submitted along with application for CRZ clearance. However, PP has to submit all documents at the time EC+CRZ (combined clearance) as mentioned in the procedure for CRZ clearance for permissible and regulated activities at item 8 of CRZ Notification 2019 alongwith recommendation of the A&N CZMA for all activities proposed under aforesaid integrated development project.

Following break-up for Area statement is provided.

S. No.	Description	Area in Sqkm
1	Total Area of Great Nicobar Island	910.04
2	Forest Area	865.84
3	Campbell National Park*	391.75
4	Campbell National Park Eco sensitive Zone	65.81
5	Galatea National Park*	107.10
6	Galatea National Park Eco sensitive Zone	14.93
7	Tribal Reserve Area	751.41
8	Revenue Area	44.20
9	Developable area (Project area)	166.10

* (The notified areas of Galathea National Park, Campbell Bay National Park and Biosphere Reserve are 110 sq. km, 426.23 sq. km and 885 sq. km respectively. However, on account of reconciliation of area of Great Nicobar Island by Survey of India vide letter dated 01.09.2020, there is revision in the area of Galathea National Park, Campbell Bay National Park and Biosphere Reserve).

Of the total 166.1 sq.km project area,

i. Revenue land 44.2 sq.km,
   a. Revenue land (allotted) = 23.53 sq.km.
   b. Revenue land (vacant)= 6.62 sq.km
   c. Revenue land (encroached) = 2.0 sq.km.
   d. Others (roads and water bodies) = 3.16 sq.km.
   e. Revenue land (Deemed Forest) = 8.88 sq.km.

ii. Forest area - 121.87 sq.km

3.8.8 The Committee notes that the site selection for the port component has been done keeping primarily the technical and financial viability in place. The environmental aspects were not given much weightage while selecting the site. The Island has large number of endangered species including Leatherback Turtle at the Galathea Bay. It would be ideal to involve an independent organisation/institution with specialized skills such as IIT, NIOT, NCCR, NIO etc for technical aspect while research institutes such as Zoological Survey of India (ZSI), SACON and Wildlife Institute of India (WII) for ecological assessment with expertise on Island ecosystems, its terrestrial and marine flora and fauna. An independent study/evaluation for the suitability of the proposed port site with specific focus on Leatherback Turtle, Nicobar Magapod and Dugong should be carried out and submitted its recommendations. The report shall become the part of EIA/EMP report and the recommended selection of the site could be further considered in the EAC for the merits of site in in terms of environmental sensitivity.

3.8.9 Committee also of the view that the consultant agency for conducting the EIA study shall be independent of the agency involved in preparation of DPR and should involve the experts from the organisations which were involved in assessing the impact of Tsunami on and its mitigation in the A&N islands. Consultant agency should also involve senior scientists from WII or ZSI or IISc or SACON in ecological and biodiversity studies.

3.8.10 Committee further opined that since the project is appraised by single Committee (Infra-1) with involvement of Member Secretaries of concerned sector, it is advisable to take comments from all sectors so that specific ToRs for each sector can be provided for EIA studies.

3.8.11 The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 260th meeting during 5th - 6th April, 2021 and **recommended the proposal for grant of Terms of Reference (ToR).** The sector specific ToRs are obtained from the respective sector. The EIA/EMP studies shall be conducted based on the sector specific ToRs as mentioned below, in addition to all standard ToRs applicable for such projects.

A. **International Container Transhipment Terminal (ICTT)**

i. The Island has large number of endangered species such as Leatherback Turtle at the Galathea Bay. The area also has a presence of Nicobar Megapod, an endemic species and possibility of other endangered species such as Dugong and Saltwater Crocodiles. An independent evaluation of impact of proposed port site at Galathea Bay including its backend support infrastructure on the ecology and biodiversity shall be carried out by engaging a nationally recognized institutes such as Zoological Survey of India or SACON or Wildlife Institute of India or consortium of these three institutes and submit detailed study including findings, recommendations and comprehensive mitigation plan to the Ministry. The report shall specifically include key components such as impact of dredging and reclamation, port operations, ship movement, illumination, habitat alteration, breakwater, underwater noise, oil pollution etc on the movement and nesting beaches of Leatherback as well as shore

morphology and sand grain profile at the nesting sites. The report shall become the part of EIA/EMP report and the selection of the site shall be based on the recommendations and environment management plan prescribed in the report. The study also should examine other alternate sites suggested in the presentation such as Casuarina Bay, Anderson Bay, Pemayya Bay and Campbell Bay based on environmental, ecological and economic considerations, and choose one appropriate site having minimum impacts on ecology and environment with specific focus on Leatherback Turtle and other endangered species (both terrestrial and marine). A detailed comparison of the sites in this regard shall be submitted. The study should emphasize impact on Leatherback Turtles and Nicobar Magapod and its past and present distribution including nesting of these species.

ii. An independent study for assessment of biodiversity and Wildlife value of all the alternative sites for ICTT port shall be conducted by engaging a nationally recognized institutes such as WII or ZSI or IISc or SACON or consortium of these institutes. Diversity and wildlife value so assessed by these organisations or a team of these organisations shall form one of the criteria for cost benefit analysis of all the alternative sites. The report along with Cost Benefit Analysis shall be incorporated in EIA/EMP report

iii. The alternate sites than proposed Galathea Bay for International Container Transhipment Terminal should be explored through detailed studies with more focus on environmental and ecological impact of ICTT during construction and its operation, specially movements of vessels on turtles.

iv. The ecologically fragile area including CRZ 1A area etc shall be demarcated in conformity with latest approved CZMP as per notification of 2019 and superimposed on the layout plan at 1: 4000 scale and submitted. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.

v. Risk analysis for handling different types of cargos shall be conducted and submitted. Focus also should be given on how such a cargo will affect Leatherback nesting areas.

vi. Detailed study well supported by strong historical data through simulation studies, whether the selected site can withstand the cyclone/storm surge and Tsunami.

vii. Erosion and accretion study at the mouth of the Galathea Bay and entire island with reputed national institute to be submitted through predictive modelling for port area reclamation, construction and breakwaters. The study should highlight impact of these on Leatherback nesting sites.

viii. Recommendation of the A&N CZMA shall be obtained and submitted. Submit superimposing of latest CZMP as per CRZ (2011) on the CRZ map. Submit a complete set of documents required as per para 4.2 (i) of CRZ Notification, 2011.

ix. Comprehensive study of the impact of dredging and reclamation and port operations including oil spills on marine ecology and marine biodiversity with specific focus on corals, mangroves, sandy shores and mud flat should be done by engaging a nationally recognized institutes such as Zoological Survey of India or SACON or Wildlife Institute of India or consortium of these three institutes and draw up a management and mitigation plan. Being sensitive area, proposed plan of online monitoring of water quality drilling dredging and disposal should be submitted.

x. A specific study to be undertaken to ascertain the impact of proposed development on the migratory birds by engaging a nationally recognized institutes such as Zoological Survey of India or SACON or Wildlife Institute of India covering both inward and return migration period. The studies should specially focus on migratory bird species composition, impact due to habitat destruction, impact due to oil spillage and risk of all the hazards that has potential to damage the fragile environment. A comprehensive mitigation plan also to be developed.

xi. A detailed and comprehensive study for assessment of requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract) shall be conducted and submitted.

xii. A detailed study for assessing the carrying capacity of the areas proposed for development shall be conducted and incorporated in EIA/EMP Report

xiii. An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site.

xiv. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA.

xv. Disaster Management Plan for the project shall be prepared and submitted.

xvi. Oil spill management plan should be drawn as per NOS DCP and submitted

xvii. The details about number of labourers, number of labour camps and its construction, their basic requirements such as transport, fuel for cooking, freshwater, sanitation, health and emergency evacuation etc to be provided in detail.

xviii. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made. It should be ensured that tribes such as Shompen and Nicobarese and anthropological organisations well versed in

communication with and involved in welfare of Shompen and Nicobarese are adequately represented in the Public Hearing.

B. **Greenfield International Airport (4000 Peak Hour Passengers-PHP)**

i. The E.I.A. will give a justification for land requirements along with a comparison to the guidelines established by the Airport Authority of India/Ministry of Civil Aviation in this regard.

ii. An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, on the flora and fauna of the region shall be made.

iii. Detailed studies on Bird Hazzard to the proposed airport and flight operations and its mitigation measures should be carried out (both migratory and resident birds) by engaging a nationally recognized institutes such as SACON or Wildlife Institute of India.

iv. Impact of proposed Port on the Flight Safety and operations and Airport security should be examined in detailed

v. Layout maps of proposed project indicating runway, Aerodrome building, parking, greenbelt area, utilities etc.

vi. The ecologically fragile area including CRZ IA area etc shall be demarcated and superimposed on the layout plan and submitted.

vii. An independent study for assessment of biodiversity and Wildlife value of all the alternative sites for ICTT port shall be conducted by the organisations in this field like WII, ZSI, IIS and SACON. Diversity and wildlife value so assessed by these organisations or a team of these organisations shall form one of the criteria for cost benefit analysis of all the alternative sites. The report along with Cost Benefit Analysis shall be incorporated in EIA/EMP report

viii. An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

ix. The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area inside the Airport premises.

x. An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.

xi. A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy Conservation Building Code (ECBC) 2017 of the Bureau of Energy Efficiency, Government of India. The energy system includes air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.

xii. Details of emission, effluents, solid waste and hazardous waste generation and their management. Air quality modelling and noise modelling shall be carried out for the

emissions from various types of aircraft. Detail plan for impact of noise on the sensitive environment specially the wildlife sanctuaries and national parks.

xiii. The impact of aircraft emissions in different scenarios of idling, taxiing, take off and touchdown shall be examined and a management plan suggested.

xiv. The impact of air emissions from speed controlled and other vehicles plying within the Airport shall be examined and management plan drawn up.

xv. A detailed management plan, drawn up in consultation with the competent District Authorities, shall be submitted for the regulation of unauthorized development and encroachments within a 05 Km radians of the Aerodrome.

xvi. The details about number of labourers, number of labour camps and its construction, their basic requirements such as transport, fuel for cooking, freshwater, sanitation, health and emergency evacuation etc to be provided in detail.

xvii. Noise monitoring and impact assessment shall be done for each representative area (as per the Noise Rules of MoEF&CC). A noise management plan shall be submitted to conform to the guidelines of the MoEF&CC and the DGCA. Noise monitoring shall also be carried out in the funnel area of flight path.

xviii. A detailed and comprehensive study for assessment of requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract) shall be conducted and submitted.

xix. A detailed study for assessing the carrying capacity of the areas proposed for development shall be conducted and incorporated in EIA/EMP Report

xx. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made. It should be ensured that tribes such as Shompen and Nicobarese and anthropological organisations well versed in communication with and involved in welfare of Shompen and Nicobarese are adequately represented in the Public Hearing.

xxi. Recommendation of the A&N CZMA shall be obtained and submitted.

xxii. Details of fuel tank farm and its risk assessment.

xxiii. The report should give a detailed impact analysis and management plan for handling of the following wastes for the existing and proposed scenarios. The management plan will include compliance to the provisions of the MSW Rules, 2016.

(a) Trash collected in flight and disposed at the Aerodrome including the segregation mechanism.
(b) Toilet wastes and sewage collected from aircrafts and disposed at the Aerodrome.
(c) Maintenance and workshop wastes.
(d) Wastes arising out of eateries and shops situated within the Aerodrome.

C. **Township & Area development**

i. The ecologically fragile area including CRZ 1A area etc shall be demarcated and superimposed on the layout plan and submitted.

ii. Seismic and Tsunami hazard map on entire island and its relation to each component of the integrated project should be detailed. All the facilities should be analysed for these hazards, with emphasis on future possible events

iii. An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

iv. The details about number of labourers, number of labour camps and its construction, their basic requirements such as transport, fuel for cooking, freshwater, sanitation, health and emergency evacuation etc to be provided in detail.

v. A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy Conservation Building Code (ECBC-R) 2018 of the Bureau of Energy Efficiency, Government of India. The energy system includes air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.

vi. A detailed and comprehensive study for assessment of requirement of water, power, with source of supply, status of approval. water balance diagram, man-power requirement (regular and contract) shall be conducted and submitted.

vii. A specific study should be conducted to enumerate the anticipated impact and mitigation of increased illumination and noise on nocturnal bird and mammal fauna.

viii. A detailed study for assessing the carrying capacity of the areas proposed for development shall be conducted and incorporated in EIA/EMP Report.

ix. Details of emission, effluents, solid waste and hazardous waste generation and their management.

x. Specify plan of Administration of A & N to prevent further encroachment on the forest land with the proposed increased population considering that already 2 sq km revenue land has been encroached by existing population as envisaged in the ToR presentation

xi. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made. It should be ensured that tribes such as Shompen and Nicobarese and anthropological organisations well versed in communication with and involved in welfare of Shompen and Nicobarese are adequately represented in the Public Hearing.

xii. Recommendation of the A&N CZMA shall be obtained and submitted.

D. **450 MVA Gas and Solar based power plant**

i) The proposed project shall be given a unique name in consonance with the name submitted to other Government Departments etc. for its better identification and reference.

ii) Vision document specifying prospective long term plan of the project shall be formulated and submitted.

iii) The project proponent needs to identify minimum three potential sites based on environmental, ecological and economic considerations, and choose one appropriate site

having minimum impacts on ecology and environment. A detailed comparison of the sites in this regard shall be submitted.

iv) Executive summary of the project indicating relevant details along with recent photographs of the proposed site (s) shall be provided. Response to the issues raised during Public Hearing and the written representations (if any), along with a time bound Action Plan and budgetary allocations to address the same, shall be provided in a tabular form, against each action proposed.

v) Harnessing solar power within the premises of the plant particularly at available roof tops and other available areas shall be formulated and for expansion projects, status of implementation shall also be submitted.

vi) The geographical coordinates (WGS 84) of the proposed site (plant boundary), including location of ash pond along with topo sheet (1:50,000 scale) and IRS satellite map of the area, shall be submitted. Elevation of plant site and ash pond with respect to HFL of water body/nallah/River and high tide level from the sea shall be specified, if the site is located in proximity to them.

vii) Layout plan indicating break-up of plant area, ash pond, green belt, infrasuructure, roads etc. shall be provided.

viii) Land requirement for the project shall be optimized and in any case not more than what has been specified by CEA from time to time. Item wise break up of land requirement shall be provided.

ix) Present land use (including land class/kism) as per the revenue records and State Govt. records of the proposed site shall be furnished. Information on land to be acquired including coal transportation system, laying of pipeline, ROW, transmission lines etc. shall be specifically submitted. Status of land acquisition and litigation, if any, should be provided.

x) Impact of transmission lines on migratory birds and large raptors by engaging a nationally recognized institutes such as Zoological Survey of India or SACON or Wildlife Institute of India.

xi) If the project involves forest land, details of application, including date of application, area applied for, and application registration number, for diversion under FCA and its status should be provided along with copies of relevant documents.

xii) The land acquisition and R&R scheme with a time bound Action Plan should be formulated and addressed in the EIA report.

xiii) Satellite imagery and authenticated topo sheet indicating drainage, cropping pattern, water bodies (wetland, river system, stream, nallahs, ponds etc.), location of nearest habitations (villages), creeks, mangroves, rivers, reservoirs etc. in the study area shall be provided.

xiv) Location of any National Park, Sanctuary, Elephant/Tiger Reserve (existing as well as proposed), migratory routes / wildlife corridor, if any, within 10 km of the project site shall be specified and marked on the map duly authenticated by the Chief Wildlife Warden of the State or an officer authorized by him.

xv) Topography of the study area supported by toposheet on 1:50,000 scale of Survey of India, along with a large scale map preferably of 1:25,000 scale and the specific information whether the site requires any filling shall be provided. In that case, details of filling, quantity of required fill material; its source, transportation etc. shall be submitted.

xvi) A detailed study on land use pattern in the study area shall be carried out including identification of common property resources (such as grazing and community land, water resources etc.) available and Action Plan for its protection and management shall be

formulated. If acquisition of grazing land is involved, it shall be ensured that an equal area of grazing land be acquired and developed and detailed plan submitted.

xvii) A mineralogical map of the proposed site (including soil type) and information (if available) that the site is not located on potentially mineable mineral deposit shall be submitted.

xviii) Details of fly ash utilization plan as per the latest fly ash Utilization Notification of GOI along with firm agreements / MoU with contracting parties including other usages etc. shall be submitted. The plan shall also include disposal method / mechanism of bottom ash.

xix) The water requirement shall be optimized (by adopting measures such as dry fly ash and dry bottom ash disposal system, air cooled condenser, concept of zero discharge) and in any case not more than that stipulated by CEA from time to time, to be submitted along with details of source of water and water balance diagram. Details of water balance calculated shall take into account reuse and re-circulation of effluents.

xx) Water body/Nallah (if any) passing across the site should not be disturbed as far as possible. In case any Nallah / drain is proposed to be diverted, it shall be ensured that the diversion does not disturb the natural drainage pattern of the area. Details of proposed diversion shall be furnished duly approved by the concerned Department of the State.

xxi) It shall also be ensured that a minimum of 500 m distance of plant boundary is kept from the HFL of river system / streams etc. and the boundary of site should also be located 500 m away from railway track and National Highways.

xxii) Hydro-geological study of the area shall be carried out through an institute/ organization of repute to assess the impact on ground and surface water regimes. Specific mitigation measures shall be spelt out and time bound Action Plan for its implementation shall be submitted.

xxiii) Detailed Studies on the impacts of the ecology including fisheries of the River/Estuary/Sea due to the proposed withdrawal of water / discharge of treated wastewater into the River/Sea etc shall be carried out and submitted along with the EIA Report. In case of requirement of marine impact assessment study, the location of intake and outfall shall be clearly specified along with depth of water drawl and discharge into open sea.

xxiv) Source of water and its sustainability even in lean season shall be provided along with details of ecological impacts arising out of withdrawal of water and taking into account inter-state shares (if any). Information on other competing sources downstream of the proposed project and commitment regarding availability of requisite quantity of water from the Competent Authority shall be provided along with letter / document stating firm allocation of water.

xxv) Detailed plan for rainwater harvesting and its proposed utilization in the plant shall be furnished.

xxvi) Feasibility of near zero discharge concept shall be critically examined and its details submitted.

xxvii) Optimization of Cycles of Concentration (COC) along with other water conservation measures in the project shall be specified.

xxviii) Plan for recirculation of ash pond water and its implementation shall be submitted.

xxix) Detailed plan for conducting monitoring of water quality regularly with proper maintenance of records shall be formulated. Detail of methodology and identification of monitoring points (between the plant and drainage in the direction of flow of surface / ground water) shall be submitted. It shall be ensured that parameter to be monitored also include heavy metals. A provision for long-term monitoring of ground water table using Piezometer shall be incorporated in EIA, particularly from the study area.

xxx) Socio-economic study of the study area comprising of 10 km from the plant site shall be carried out through a reputed institute / agency which shall consist of detail assessment of the impact on livelihood of the local communities.

xxxi) Action Plan for identification of local employable youth for training in skills, relevant to the project, for eventual employment in the project itself shall be formulated and numbers specified during construction & operation phases of the Project.

xxxii) If the area has tribal population it shall be ensured that the rights of tribals are well protected. The project proponent shall accordingly identify tribal issues under various provisions of the law of the land.

xxxiii) Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made. It should be ensured that tribes such as Shompen and Nicobarese and anthropological organisations well versed in communication with and involved in welfare of Shompen and Nicobarese are adequately represented in the Public Hearing.

xxxiv) While formulating CER schemes it shall be ensured that an in-built monitoring mechanism for the schemes identified are in place and mechanism for conducting annual social audit from the nearest government institute of repute in the region shall be prepared. The project proponent shall also provide Action Plan for the status of implementation of the scheme from time to time and dovetail the same with any Govt. scheme(s). CER details done in the past should be clearly spelt out in case of expansion projects.

xxxv) R&R plan, as applicable, shall be formulated wherein mechanism for protecting the rights and livelihood of the people in the region who are likely to be impacted, is taken into consideration. R&R plan shall be formulated after a detailed census of population based on socio economic surveys who were dependant on land falling in the project, as well as, population who were dependant on land not owned by them.

xxxvi) Assessment of occupational health and endemic diseases of environmental origin in the study area shall be carried out and Action Plan to mitigate the same shall be prepared.

xxxvii) Occupational health and safety measures for the workers including identification of work related health hazards shall be formulated. The company shall engage full time qualified doctors who are trained in occupational health. Health monitoring of the workers shall be conducted at periodic intervals and health records maintained. Awareness programme for workers due to likely adverse impact on their health due to working in non-conducive environment shall be carried out and precautionary measures like use of personal equipment etc. shall be provided. Review of impact of various health measures undertaken at intervals of two to three years shall be conducted with an excellent follow up plan of action wherever required.

xxxviii) One complete season site specific meteorological and AAQ data (except monsoon season) as per latest MoEFCC Notification shall be collected and the dates of monitoring shall be recorded. The parameters to be covered for AAQ shall include PM_{10}, $PM_{2.5}$, SO_2, NO_x, CO and Hg. The location of the monitoring stations should be so decided so as to take into consideration of the upwind direction, pre-dominant downwind direction, other dominant directions, habitation and sensitive receptors. There should be at least one monitoring station each in the upwind and in the pre-dominant downwind direction at a location where maximum ground level concentration is likely to occur.

xxxix) In case of expansion project, air quality monitoring data of 104 observations a year for relevant parameters at air quality monitoring stations as identified/stipulated shall be submitted to assess for compliance of AAQ Standards (annual average as well as 24 hrs).

xl) A list of industries existing and proposed in the study area shall be furnished.

xli) Cumulative impacts of all sources of emissions including handling and transportation of existing and proposed projects on the environment of the area shall be assessed in detail. Details of the Model used and the input data used for modelling shall also be provided. The air quality contours should be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The windrose and isopleths should also be shown on the location map. The cumulative study should also include impacts on water, soil and socio-economics.

xlii) Radio activity and heavy metal contents of coal to be sourced shall be examined and submitted along with laboratory reports.

xliii) Fuel analysis shall be provided. Details of auxiliary fuel, if any, including its quantity, quality, storage etc should also be furnished.

xliv) Quantity of fuel required, its source and characteristics and documentary evidence to substantiate confirmed fuel linkage shall be furnished. The Ministry's Notification dated 02.01.2014 regarding ash content in coal shall be complied. For the expansion projects, the compliance of the existing units to the said Notification shall also be submitted

xlv) Details of transportation of fuel from the source (including port handling) to the proposed plant and its impact on ambient AAQ shall be suitably assessed and submitted. If transportation entails a long distance it shall be ensured that rail transportation to the site shall be first assessed. Wagon loading at source shall preferably be through silo/conveyor belt.

xlvi) For proposals based on imported coal, inland transportation and port handling and rail movement shall be examined and details furnished. The approval of the Port and Rail Authorities shall be submitted.

xlvii) Details regarding infrastructure facilities such as sanitation, fuel, restrooms, medical facilities, safety during construction phase etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase should be adequately catered for and details furnished.

xlviii) EMP to mitigate the adverse impacts due to the project along with item - wise cost of its implementation in a time bound manner shall be specified.

xlix) A Disaster Management Plan (DMP) along with risk assessment study including fire and explosion issues due to storage and use of fuel should be carried out. It should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the proposed activities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures should be provided. Measures to guard against fire hazards should also be invariably provided. Mock drills shall be suitably carried out from time to time to check the efficiency of the plans drawn.

l) The DMP so formulated shall include measures against likely Fires/Tsunami/Cyclones/Storm Surges/Earthquakes etc. as applicable. It shall be ensured that DMP consists of both On-site and Off-site plans, complete with details of containing likely disaster and shall specifically mention personnel identified for the task. Smaller

version of the plan for different possible disasters shall be prepared both in English and local languages and circulated widely.

ii) Detailed scheme for raising green belt of native species of appropriate width (50 to 100 m) and consisting of at least 3 tiers around plant boundary with tree density of 2000 to 2500 trees per ha with a good survival rate of around 80% shall be submitted. Photographic evidence must be created and submitted periodically including NRSA reports in case of expansion projects. A shrub layer beneath tree layer would serve as an effective sieve for dust and sink for CO_2 and other gaseous pollutants and hence a stratified green belt should be developed.

iii) Over and above the green belt, as carbon sink, plan for additional plantation shall be drawn by identifying blocks of degraded forests, in close consultation with the District Forests Department. In pursuance to this the project proponent shall formulate time bound Action Plans along with financial allocation and shall submit status of implementation to the Ministry every six months.

iiii) The details about number of labourers, number of labour camps and its construction, their basic requirements such as transport, fuel for cooking, freshwater, sanitation, health and emergency evacuation etc to be provided in detail.

iv) Corporate Environment Policy

a. Does the company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
b. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
c. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions. Details of this system may be given.
d. Does the company has compliance management system in place wherein compliance status along with compliances / violations of environmental norms are reported to the CMD and the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.

All the above details should be adequately brought out in the EIA report and in the presentation to the Committee.

v) Details of litigation pending or otherwise with respect to project in any Court, Tribunal etc. shall invariably be furnished.

Special Conditions

1) Cumulative Impact Assessment of all above proposed four sectors (ICTT, Greenfield International Airport, Township and Area Development and 450 MVA Gas and Solar based power plant) to be undertaken keeping in focus ecological and environmental impacts on Great Nicobar Island

2) Detailed freshwater requirement and augmentation plan, its impact and mitigation plan on native, endangered and endemic freshwater flora and fauna to be developed for all above four sectors.
3) Public hearing: It should be ensured that tribes such as Shompen and Nicobarese and anthropological organisations well versed in communication with and involved in welfare of Shompen and Nicobarese are adequately represented in the Public Hearing. Details of the same to be provided in EIA-EMP of all above four sectors.

Annexure-A

Following members were present during the 260th EAC (Infra-1) meeting held on 5th – 6th April, 2021

S. No.	Name	Designation	Remarks	
			Day 1	Day 2
1.	Dr. Deepak ArunApte	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. MukeshKhare	Member	Absent	Absent
6.	Dr. Ashok Kumar Pachauri	Member	Absent	Present
7.	Dr. V.K Jain	Member	Absent	Absent
8.	Dr. Manoranjan Hota	Member	Present	Present
9.	Sh. R Debroy	Member	Absent	Absent
10.	Dr. Rajesh Chandra	Member	Absent	Absent
11.	Dr. M.V Ramana Murthy	Member	Present	Present
12.	Smt.Bindu Manghat	Member	Absent	Absent
13.	Dr. Niraj Sharma	Member	Present	Present
14.	Sh. Amardeep Raju,	Scientist 'E' & Member Secretary, MoEF&CC	Present	Present
15.	Dr. H. Kharkwal	Scientist 'E' & Member Secretary (CRZ), MoEF&CC	-	Present
16.	Sh. Lalit Bokoloya	Scientist 'F' & Member Secretary (Infra-II), MoEF&CC	-	Present
17.	Dr. Rajesh P Rastogi	Scientist 'C', MoEF&CC	Present	Present

File No. 10/17/2021-IA.III
[Proposal No. IA/AN/NCP/201159/2021]
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan,
Jor Bagh Road, Aliganj
New Delhi - 110 003

Dated: 25th May, 2021

To

The General Manager
Andaman and Nicobar Islands Integrated Development Corpoartion
ANIIDCO Ltd., Vikas Bhawan, Port Blair – 744 101.

Subject: Integrated development of International Container Transhipment 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 - Terms of Reference

Sir,

This has reference to your online proposal submitted to this Ministry on 15th March 2021, seeking Terms of Reference (TOR) for the aforementioned project as per the provisions of the Environment Impact Assessment (EIA) Notification, 2006 and subsequent amendments under the Environment (Protection) Act, 1986.

2. The above mentioned proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure, CRZ and other miscellaneous projects in its 260th meeting during 5th -6th April, 2021, in the Ministry of Environment, Forest and Climate Change, New Delhi.

3. The project proponent alongwith the DPR consultant M/s AECOM India Pvt Ltd. engaged for the project has made a presentation through Video Conferencing and provided the following information.

i. Andaman and Nicobar Islands Integrated Development Corporation Limited (ANIIDCO) propose Holistic Development of Great Nicobar Island in Andaman and Nicobar Islands. 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, Diesel and Solar based power plant in Eastern and Southern parts of Great Nicobar Islands.

ii. As a part of Holistic Development of Great Nicobar Islands, Deep Berth Port (with ancillary areas for International Trans-shipment terminal) as primary component is planned along with International airport (with ancillary area), power generation and distribution network and township are planned which are interlinked projects to ICTT.

iii. The total area required for the proposed project is 16610 ha (Port (ICTT) - 766 ha + Airport - 845 ha + Township & Area Development- 14960 ha + Power Plant – 39 ha). This area excludes the reclamation areas for port and airport which are 227 ha and 194 ha of reclamation area, respectively. The proposed Project site is in not connected through any road. Currently, the access is through sea and air route only. Approach roads shall be developed within the Islands.

iv. It has been mentioned that total township area is 149.60 Sq.km. Revenue land is 28.27 Sq.km, Revenue land (deemed forest) is 8.37 Sq.km, and forest land is 112.96 Sq km. Regarding Site grading, all details related to port and airport are included in the PEFR. For township related site grading, same shall be conducted during the detailed engineering studies.

LANDUSE AREA CHART- GNI		
Land Use Category	Area (sq.km.)	Percentage (%)
RESIDENTIAL	**36.66**	**22.07**
Residential Mixed-Use (Medium density)	29.1	
Residential (Medium Density)	2.98	
Residential Low Density	4.58	
COMMERCIAL	**6.44**	**3.88**
Commercial Mixed-Use	4.33	
Commercial Office	0.41	
Tourism and Hospitality	1.70	
INSTITUTIONAL	**15.14**	**9.11**
Institutional Campus	15.14	
INDUSTRIAL	**0.31**	**0.19**
Industrial	0.31	
TRANSPORT	**24.01**	**14.46**
Ports and Marine	7.66	
Aviation	8.45	
Logistics	7.90	
UTILITIES	**1.2025**	**0.72**
Power Plant	0.39	
Other Utilities (includes Solid Waste disposal)	0.81	
OPEN SPACE	**73.0575**	**43.98**
Greens	9.61	
Eco-Tourism	40.81	
Coastal tourism	22.64	
DEFENCE AREA	**9.28**	**5.59**
TOTAL PROJECT AREA	**166.10**	**100.00**
TOWNSHIP AREA	**149.60**	**90.01**

v. The proposed project fall under 7 (e) Ports, harbours; 7 (a) Airport Project; 1 (d) Power Plant; and 8 (b) Township & Area Development project, Category A, Schedulec to the EIA Notification, 2006. The ICTT can be developed at a cost of Rs. 35,95,900

lakhs. The international airport can be developed over a 5-year period, including one year for procurement. The cost of the Airport is estimated at Rs. 10,35,900 lakhs.

vi. Land use has been worked out to get the most out of the planned Transshipment terminal. As per the estimated traffic of 14.2 Million TEU's during Final Phase, the total reclaimed land (227 Ha) has been redistributed between berths (13%), container storage (70%), building & utilities (1%), road & pavements (9%) & Green areas (6%). Green zone has been assigned keeping in view of the diverse flora & fauna of the Nicobar region.

vii. There will be change in Terrain/topography due to the proposed project development, which will be covered with the integrated project and road network in the site. There will be optimum use of the undulating topography in landscaping and site planning for enhancing the image ability of the place.

viii. Water bodies & impact on drainage: Adjacent to Andaman Sea some water bodies exist such as Matait Anla Near Gandhi Nagar, South Bay (Galathea), Mata Taruwa Bay, Pemayya Bay near Pulobaha, Nanjappa Bay near Pulo Bekka, Galathea River or Dak Kea, Dak Aleh, Dak Ubho, Dak Tolai Near Pulabaha, Dak Air, and Dak Thena. Impact on drainage is being studied.

ix. Total Water Demand during Operational Phase shall be 160 MLD. 90 MLD shall be Potable/Fresh Water Demand. Source of Fresh/Potable Water will be River Water/ Sea Water. NOC shall be worked in during EIA study. No water ground water extraction/usage proposed.

x. In order to have minimal dependency on surface water from Galathea River, it is being proposed to create rainwater harvesting reservoirs within the project area. Approximate 2.5 Sq.km of area is being identified for creation of water reservoirs which will store rainwater from surface runoff. Detail watershed studies and mathematical modelling will be carried out at the detail design stage and will be included in the EIA report. A LIDAR survey for the island was conducted for detailed terrain mapping. The data is classified as restricted by Ministry of Defence. Necessary approvals are being obtained for doing detail analysis on the LIDAR data collected. Final water sourcing will be included in the EIA report to be submitted. In case of inadequacy of water from these sources, alternate sources will be explored and presented at the time of EIA submission.

xi. Regarding impact on Leatherback Turtle and other geo-seismological view it has been mentioned that the most technically and financially feasible location is Galathea Bay. All emphasis will be given to avoid any impact on the turtle nesting sites and detail mitigation strategies shall be covered in the EIA report including but not limiting to offshore break water provision to have unhindered turtle movement to nesting grounds. Further, comparative analysis of all location viz Galathea Bay, Casuarina Bay, Anderson Bay, Pemayya Bay, Campbell Bay shall be prepared.

xii. Regarding Geographical Meteorological study and Seismology status, it has been mentioned that there is no IMD station in Great Nicobar Island. The data from INS Baaz station in Great Nicobar Island (Navy facility) has been procured and shall be used for all modelling studies. All relevant reports available with National Centre for Seismology will also be procured and analyzed during the EIA study.

xiii. Regarding conformity of proposed integrated development in relation to latest CZMP at 1: 4000 scale and Island Development plan for Great Nicobar it has been mentioned that approvals as per ICRZ notification 2019 shall be obtained for undertaking proposed development. The CRZ maps at 1:4000 scale as mandated in the notification shall be submitted along with application for CRZ clearance. However, PP has to submit all documents at the time EC+CRZ (combined clearance) as mentioned in the procedure for CRZ clearance for permissible and regulated activities at item 8 of CRZ Notification 2019 alongwith recommendation of the A&N CZMA for all activities proposed under aforesaid integrated development project.

Following break-up for Area statement is provided.

S. No.	Description	Area in Sqkm
1	Total Area of Great Nicobar Island	910.04
2	Forest Area	865.84
3	Campbell National Park*	391.75
4	Campbell National Park Eco sensitive Zone	65.81
5	Galatea National Park*	107.10
6	Galatea National Park Eco sensitive Zone	14.93
7	Tribal Reserve Area	751.41
8	Revenue Area	44.20
9	Developable area (Project area)	166.10

* (The notified areas of Galathea National Park, Campbell Bay National Park and Biosphere Reserve are 110 sq. km, 426.23 sq. km and 885 sq. km respectively. However, on account of reconciliation of area of Great Nicobar Island by Survey of India vide letter dated 01.09.2020, there is revision in the area of Galathea National Park, Campbell Bay National Park and Biosphere Reserve).

Of the total 166.1 sq.km project area,

i. Revenue land 44.2 sq.km.
   a. Revenue land (allotted) = 23.53 sq.km.
   b. Revenue land (vacant)= 6.62 sq.km
   c. Revenue land (encroached) = 2.0 sq.km.
   d. Others (roads and water bodies) = 3.16 sq.km.
   e. Revenue land (Deemed Forest) = 8.88 sq.km.

ii. Forest area - 121.87 sq.km

xiv. Tree cutting: No information, to be worked out at later stage.

xv. Diversion of about 13,075 ha of forest land is involved in the proposed project.

xvi. The proposed project includes some protected area such as Galathea National Park (107.103 sq. km), Campbell Bay National Park (391.751 sq. km) and Biosphere reserve (732.798 sq. km) within 10 km of the project sites. The proposed integrated developments are planned away from ESA/ESZ area. The proposed project sites fall under CRZ area. The CRZ studies and mapping is being carried out by National Centre for Sustainable Coastal Management, MoEF&CC, Chennai.

xvii. STP/CETP: The ETP, CETP design is being carried out. The combined STP capacity shall be 110 MLD and design is being carried out. The Treated Wastewater/Sewage shall be used for Non-potable purpose such as flushing, irrigation, washing etc.

xviii. Owning to the naturally available water depths, relatively lower quantity of dredging is required. Backup area will be mainly created by way of reclamation. Part of material for reclamation shall be obtained from the dredged material and the balance requirement shall be met through the borrowed fill, either through back up land grading site or brought from distant locations through the barges/ships. Unsuitable dredged material shall be disposed at an identified offshore location in about 40 m contour. The location shall be duly selected after mathematical model studies of dredged plume dispersion.

xix. Terminal yards for storage of cargo/containers and during construction temporary facilities will be provided to store construction materials. Open Storage Yard will be provided for container stacking, temporary storage for construction materials. Storage of HSD from DG sets and other equipment / Machinery.

xx. Emissions from ships, vehicles during transportation and operational phase shall be controlled basis MARPOL convention protocol. Adequate pollution control measures will be taken during storage and handling of material. There shall be regular inspection, barriers at the perimeter of storage materials, proper maintenance of vehicles etc The details of the emissions and control measures will be provided in EIA report.

xxi. Fugitive emissions are envisaged from material handling and transportation areas during the construction stage. These will be controlled by good housekeeping, sprinkling water in the dust prone areas, providing paved roads and proper fencing.

xxii. Spills are unlikely to occur during normal operations, as the primary in ICTT would be containers which would be handled using specialised equipment. In the event of accidental spills of cargo during transfer from / to the ships, Soil and groundwater remediation activity will be undertaken as per the requirement. Emission control norms and spill contingency shall be adhered to in all the cases.

xxiii. The coastal stretches on the western coast are used both by Shompens and Nicobarese for fishing purposes. In terms of fisheries, the site has huge potential for oceanic tuna, which is virtually unexploited, and offers ample scope for deep sea fishing.

xxiv. The area is inhibited by settlers from the mainland and aboriginal tribes Shompen and Nicobarese. No project activities are envisages in the areas where the aboriginal tribes reside and therefore no impacts on the social and economic conditions are expected. However, due to the proposed development the likely change in the livelihood patterns, socio economic conditions, social behaviours, disease patterns, dependency on natural resource etc., for the settler community will be improved. The proposed development will generate significant number of jobs over the next two decades and catalyse the socio-economic growth of the local population in addition to improving connectivity and developing eco-tourism of the region.

xxv. Land acquisition and R&R issues are involved in 2 out of 7 revenue villages.

xxvi. Benefits of the project: The proposed ICTT will allow India to participate in the regional and global maritime economy by becoming a major player in cargo transhipment. The proposed airport will support both the maritime sector and the tourism sector, which will attract international and national tourists to Great Nicobar to experience the outstanding natural environment and participate in sustainable tourism activities. A Mixed-use urban development in the vicinity of these major

infrastructure works will also be necessary to support quality of life for the residents that will generate and enable growth in the various economic sectors over time. This will require the development of simultaneous primary and secondary urban infrastructure networks such as roads, public transport, energy and electrical power, as well as water, wastewater, and storm water facilities and services, which will form the skeleton of the proposed township master plan. It is estimated that after the project is fully implemented, it has the potential to generate around 2.6 Lakh jobs opportunity.

xxvii. Details of Court cases: No Court case is pending against the proposed project. Land related cases are being dealt separately.

4. The Committee notes that the site selection for the port component has been done keeping primarily the technical and financial viability in place. The environmental aspects were not given much weightage while selecting the site. The Island has large number of endangered species including Leatherback Turtle at the Galathea Bay. It would be ideal to involve an independent organisation/institution with specialized skills such as IIT, NIOT, NCCR, NIO etc for technical aspect while research institutes such as Zoological Survey of India (ZSI), SACON and Wildlife Institute of India (WII) for ecological assessment with expertise on Island ecosystems, its terrestrial and marine flora and fauna. An independent study/evaluation for the suitability of the proposed port site with specific focus on Leatherback Turtle, Nicobar Magapod and Dugong should be carried out and submitted along with its recommendations. The report shall become the part of EIA/EMP report and the recommended selection of the site could be further considered in the EAC for the merits of site in in terms of environmental sensitivity.

5. Committee also of the view that the consultant agency for conducting the EIA study shall be independent of the agency involved in preparation of DPR and should involve the experts from the organisations which were involved in assessing the impact of Tsunami on and its mitigation in the A&N islands. Consultant agency should also involve senior scientists from WII or ZSI or IISc or SACON in ecological and biodiversity studies.

6. Committee further opined that since the project is appraised by single Committee (Infra-1) with involvement of Member Secretaries of concerned sector, it is advisable to take comments from all sectors so that specific ToRs for each sector can be provided for EIA studies.

7. The EAC based on the information submitted and clarifications provided by the project proponent and detailed discussions held on all the issues during its 260th meeting on 5th - 6th April, 2021, recommended the project for grant of Terms of Reference (ToR) with stipulated specific conditions along with other Standard ToR Conditions.

8. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other Miscellaneous projects) and hereby decided to grant Terms of Reference for the "Integrated development of International Container Transhipment 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" and for preparation of EIA/EMP report with public consultations under the EIA Notification, 2006 as amended

and CRZ Notification 2011, subject to strict compliance of the following specific ToRs, in addition to all standard ToR conditions applicable for such projects.

A. **International Container Transhipment Terminal (ICTT)**

i. The Island has large number of endangered species such as Leatherback Turtle at the Galathea Bay. The area also has a presence of Nicobar Megapod, an endemic species and possibility of other endangered species such as Dugong and Saltwater Crocodiles. An independent evaluation of impact of proposed port site at Galathea Bay including its backend support infrastructure on the ecology and biodiversity shall be carried out by engaging a nationally recognized institutes such as Zoological Survey of India or SACON or Wildlife Institute of India or consortium of these three institutes and submit detailed study including findings, recommendations and comprehensive mitigation plan to the Ministry. The report shall specifically include key components such as impact of dredging and reclamation, port operations, ship movement, illumination, habitat alteration, breakwater, underwater noise, oil pollution etc on the movement and nesting beaches of Leatherback as well as shore morphology and sand grain profile at the nesting sites. The report shall become the part of EIA/EMP report and the selection of the site shall be based on the recommendations and environment management plan prescribed in the report. The study also should examine other alternate sites suggested in the presentation such as Casuarina Bay, Anderson Bay, Pemayya Bay and Campbell Bay based on environmental, ecological and economic considerations, and choose one appropriate site having minimum impacts on ecology and environment with specific focus on Leatherback Turtle and other endangered species (both terrestrial and marine). A detailed comparison of the sites in this regard shall be submitted. The study should emphasize impact on Leatherback Turtles and Nicobar Magapod and its past and present distribution including nesting of these species.

ii. An independent study for assessment of biodiversity and Wildlife value of all the alternative sites for ICTT port shall be conducted by engaging a nationally recognized institutes such as WII or ZSI or IISc or SACON or consortium of these institutes. Diversity and wildlife value so assessed by these organisations or a team of these organisations shall form one of the criteria for cost benefit analysis of all the alternative sites. The report along with Cost Benefit Analysis shall be incorporated in EIA/EMP report

iii. The alternate sites than proposed Galathea Bay for International Container Transhipment Terminal should be explored through detailed studies with more focus on environmental and ecological impact of ICTT during construction and its operation, specially movements of vessels on turtles.

iv. The ecologically fragile area including CRZ 1A area etc shall be demarcated in conformity with latest approved CZMP as per notification of 2019 and superimposed on the layout plan at 1: 4000 scale and submitted. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.

v. Risk analysis for handling different types of cargos shall be conducted and submitted. Focus also should be given on how such a cargo will affect Leatherback nesting areas.

vi. Detailed study well supported by strong historical data through simulation studies, whether the selected site can withstand the cyclone/storm surge and Tsunami.

vii. Erosion and accretion study at the mouth of the Galathea Bay and entire island with reputed national institute to be submitted through predictive modelling for port area reclamation, construction and breakwaters. The study should highlight impact of these on Leatherback nesting sites.

viii. Recommendation of the A&N CZMA shall be obtained and submitted. Submit superimposing of latest CZMP as per CRZ (2011) on the CRZ map. Submit a complete set of documents required as per para 4.2 (i) of CRZ Notification, 2011.

ix. Comprehensive study of the impact of dredging and reclamation and port operations including oil spills on marine ecology and marine biodiversity with specific focus on corals, mangroves, sandy shores and mud flat should be done by engaging a nationally recognized institutes such as Zoological Survey of India or SACON or Wildlife Institute of India or consortium of these three institutes and draw up a management and mitigation plan. Being sensitive area, proposed plan of online monitoring of water quality drilling dredging and disposal should be submitted.

x. A specific study to be undertaken to ascertain the impact of proposed development on the migratory birds by engaging a nationally recognized institutes such as Zoological Survey of India or SACON or Wildlife Institute of India covering both inward and return migration period. The studies should specially focus on migratory bird species composition, impact due to habitat destruction, impact due to oil spillage and risk of all the hazards that has potential to damage the fragile environment. A comprehensive mitigation plan also to be developed.

xi. A detailed and comprehensive study for assessment of requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract) shall be conducted and submitted.

xii. A detailed study for assessing the carrying capacity of the areas proposed for development shall be conducted and incorporated in EIA/EMP Report

xiii. An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site.

xiv. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA.

xv. Disaster Management Plan for the project shall be prepared and submitted.

xvi. Oil spill management plan should be drawn as per NOS DCP and submitted

xvii. The details about number of labourers, number of labour camps and its construction, their basic requirements such as transport, fuel for cooking, freshwater, sanitation, health and emergency evacuation etc to be provided in detail.

xviii. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made. It should be ensured that tribes such as Shompen and Nicobarese and anthropological organisations well versed in communication with and involved in welfare of Shompen and Nicobarese are adequately represented in the Public Hearing.

B. **Greenfield International Airport (4000 Peak Hour Passengers-PHP)**

i. The E.I.A. will give a justification for land requirements along with a comparison to the guidelines established by the Airport Authority of India/Ministry of Civil Aviation in this regard.

ii. An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, on the flora and fauna of the region shall be made.

iii. Detailed studies on Bird Hazzard to the proposed airport and flight operations and its mitigation measures should be carried out (both migratory and resident birds) by engaging a nationally recognized institutes such as SACON or Wildlife Institute of India.

iv. Impact of proposed Port on the Flight Safety and operations and Airport security should be examined in detailed

v. Layout maps of proposed project indicating runway, Aerodrome building, parking, greenbelt area, utilities etc.

vi. The ecologically fragile area including CRZ IA area etc shall be demarcated and superimposed on the layout plan and submitted.

vii. An independent study for assessment of biodiversity and Wildlife value of all the alternative sites for airport shall be conducted by the organisations in this field like WII, ZSI, IIS and SACON. Diversity and wildlife value so assessed by these organisations or a team of these organisations shall form one of the criteria for cost benefit analysis of all the alternative sites. The report along with Cost Benefit Analysis shall be incorporated in EIA/EMP report

viii. An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

ix. The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area inside the Airport premises.

x. An onsite disaster management plan shall be drawn up to account for risks and accidents This onsite plan shall be dovetailed with the onsite management plan for the district.

xi. A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy Conservation Building Code (ECBC) 2017 of the Bureau of Energy Efficiency, Government of India. The energy system includes air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.

xii. Details of emission, effluents, solid waste and hazardous waste generation and their management. Air quality modelling and noise modelling shall be carried out for the emissions from various types of aircraft. Detail plan for impact of noise on the sensitive environment specially the wildlife sanctuaries and national parks.

xiii. The impact of aircraft emissions in different scenarios of idling, taxiing, take off and touchdown shall be examined and a management plan suggested.

xiv. The impact of air emissions from speed controlled and other vehicles plying within the Airport shall be examined and management plan drawn up.

xv. A detailed management plan, drawn up in consultation with the competent District Authorities, shall be submitted for the regulation of unauthorized development and encroachments within a 05 Km radians of the Aerodrome.

xvi. The details about number of labourers, number of labour camps and its construction, their basic requirements such as transport, fuel for cooking, freshwater, sanitation, health and emergency evacuation etc to be provided in detail.

xvii. Noise monitoring and impact assessment shall be done for each representative area (as per the Noise Rules of MoEF&CC). A noise management plan shall be submitted to conform to the guidelines of the MoEF&CC and the DGCA. Noise monitoring shall also be carried out in the funnel area of flight path.

xviii. A detailed and comprehensive study for assessment of requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract) shall be conducted and submitted.

xix. A detailed study for assessing the carrying capacity of the areas proposed for development shall be conducted and incorporated in EIA/EMP Report

xx. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made. It should be ensured that tribes such as Shompen and Nicobarese and anthropological organisations well versed in communication with and involved in welfare of Shompen and Nicobarese are adequately represented in the Public Hearing.

xxi. Recommendation of the A&N CZMA shall be obtained and submitted.

xxii. Details of fuel tank farm and its risk assessment.

xxiii. The report should give a detailed impact analysis and management plan for handling of the following wastes for the existing and proposed scenarios. The management plan will include compliance to the provisions of the MSW Rules, 2016.

(a) Trash collected in flight and disposed at the Aerodrome including the segregation mechanism.

(b) Toilet wastes and sewage collected from aircrafts and disposed at the Aerodrome.

(c) Maintenance and workshop wastes.

(d) Wastes arising out of eateries and shops situated within the Aerodrome.

C. **Township & Area development**

i. The ecologically fragile area including CRZ IA area etc shall be demarcated and superimposed on the layout plan and submitted.

ii. Seismic and Tsunami hazard map on entire island and its relation to each component of the integrated project should be detailed. All the facilities should be analysed for these hazards, with emphasis on future possible events

iii. An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

iv. The details about number of labourers, number of labour camps and its construction, their basic requirements such as transport, fuel for cooking, freshwater, sanitation, health and emergency evacuation etc to be provided in detail.

v. A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy Conservation Building Code (ECBC-R) 2018 of the Bureau of Energy Efficiency, Government of India. The energy system includes air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.

vi. A detailed and comprehensive study for assessment of requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract) shall be conducted and submitted.

vii. A specific study should be conducted to enumerate the anticipated impact and mitigation of increased illumination and noise on nocturnal bird and mammal fauna.

viii. A detailed study for assessing the carrying capacity of the areas proposed for development shall be conducted and incorporated in EIA/EMP Report.

ix. Details of emission, effluents, solid waste and hazardous waste generation and their management.

x. Specify plan of Administration of A & N to prevent further encroachment on the forest land with the proposed increased population considering that already 2 sq km revenue land has been encroached by existing population as envisaged in the ToR presentation

xi. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made. It should be ensured that tribes such as Shompen and Nicobarese and anthropological organisations well versed in communication with and involved in welfare of Shompen and Nicobarese are adequately represented in the Public Hearing.

xii. Recommendation of the A&N CZMA shall be obtained and submitted.

D. **450 MVA Gas and Solar based power plant**

i) The proposed project shall be given a unique name in consonance with the name submitted to other Government Departments etc. for its better identification and reference.

ii) Vision document specifying prospective long term plan of the project shall be formulated and submitted.

iii) The project proponent needs to identify minimum three potential sites based on environmental, ecological and economic considerations, and choose one appropriate site having minimum impacts on ecology and environment. A detailed comparison of the sites in this regard shall be submitted.

iv) Executive summary of the project indicating relevant details along with recent photographs of the proposed site (s) shall be provided. Response to the issues raised during Public Hearing and the written representations (if any), along with a time bound Action Plan and budgetary allocations to address the same, shall be provided in a tabular form, against each action proposed.

v) Harnessing solar power within the premises of the plant particularly at available roof tops and other available areas shall be formulated and for expansion projects, status of implementation shall also be submitted.

vi) The geographical coordinates (WGS 84) of the proposed site (plant boundary), including location of ash pond along with topo sheet (1:50,000 scale) and IRS satellite map of the area, shall be submitted. Elevation of plant site and ash pond with respect to HFL of water body/nallah/River and high tide level from the sea shall be specified, if the site is located in proximity to them.

vii) Layout plan indicating break-up of plant area, ash pond, green belt, infrastructure, roads etc. shall be provided.

viii) Land requirement for the project shall be optimized and in any case not more than what has been specified by CEA from time to time. Item wise break up of land requirement shall be provided.

ix) Present land use (including land class/kism) as per the revenue records and State Govt. records of the proposed site shall be furnished. Information on land to be acquired including coal transportation system, laying of pipeline, ROW, transmission lines etc. shall be specifically submitted. Status of land acquisition and litigation, if any, should be provided.

x) Impact of transmission lines on migratory birds and large raptors by engaging a nationally recognized institutes such as Zoological Survey of India or SACON or Wildlife Institute of India.

xi) If the project involves forest land, details of application, including date of application, area applied for, and application registration number, for diversion under FCA and its status should be provided along with copies of relevant documents.

xii) The land acquisition and R&R scheme with a time bound Action Plan should be formulated and addressed in the EIA report.

xiii) Satellite imagery and authenticated topo sheet indicating drainage, cropping pattern, water bodies (wetland, river system, stream, nallahs, ponds etc.), location of nearest habitations (villages), creeks, mangroves, rivers, reservoirs etc. in the study area shall be provided.

xiv) Location of any National Park, Sanctuary, Elephant/Tiger Reserve (existing as well as proposed), migratory routes / wildlife corridor, if any, within 10 km of the project

site shall be specified and marked on the map duly authenticated by the Chief Wildlife Warden of the State or an officer authorized by him.

xv) Topography of the study area supported by toposheet on 1:50,000 scale of Survey of India, along with a large scale map preferably of 1:25,000 scale and the specific information whether the site requires any filling shall be provided. In that case, details of filling, quantity of required fill material; its source, transportation etc. shall be submitted.

xvi) A detailed study on land use pattern in the study area shall be carried out including identification of common property resources (such as grazing and community land, water resources etc.) available and Action Plan for its protection and management shall be formulated. If acquisition of grazing land is involved, it shall be ensured that an equal area of grazing land be acquired and developed and detailed plan submitted.

xvii) A mineralogical map of the proposed site (including soil type) and information (if available) that the site is not located on potentially mineable mineral deposit shall be submitted.

xviii) Details of fly ash utilization plan as per the latest fly ash Utilization Notification of GOI along with firm agreements / MoU with contracting parties including other usages etc. shall be submitted. The plan shall also include disposal method / mechanism of bottom ash.

xix) The water requirement shall be optimized (by adopting measures such as dry fly ash and dry bottom ash disposal system, air cooled condenser, concept of zero discharge) and in any case not more than that stipulated by CEA from time to time, to be submitted along with details of source of water and water balance diagram. Details of water balance calculated shall take into account reuse and re-circulation of effluents.

xx) Water body/Nallah (if any) passing across the site should not be disturbed as far as possible. In case any Nallah / drain is proposed to be diverted, it shall be ensured that the diversion does not disturb the natural drainage pattern of the area. Details of proposed diversion shall be furnished duly approved by the concerned Department of the State.

xxi) It shall also be ensured that a minimum of 500 m distance of plant boundary is kept from the HFL of river system / streams etc. and the boundary of site should also be located 500 m away from railway track and National Highways.

xxii) Hydro-geological study of the area shall be carried out through an institute/ organization of repute to assess the impact on ground and surface water regimes. Specific mitigation measures shall be spelt out and time bound Action Plan for its implementation shall be submitted.

xxiii) Detailed Studies on the impacts of the ecology including fisheries of the River/Estuary/Sea due to the proposed withdrawal of water / discharge of treated wastewater into the River/Sea etc shall be carried out and submitted along with the EIA Report. In case of requirement of marine impact assessment study, the location of intake and outfall shall be clearly specified along with depth of water drawl and discharge into open sea.

xxiv) Source of water and its sustainability even in lean season shall be provided along with details of ecological impacts arising out of withdrawal of water and taking into account inter-state shares (if any). Information on other competing sources downstream of the proposed project and commitment regarding availability of

requisite quantity of water from the Competent Authority shall be provided along with letter / document stating firm allocation of water.

xxv) Detailed plan for rainwater harvesting and its proposed utilization in the plant shall be furnished.

xxvi) Feasibility of near zero discharge concept shall be critically examined and its details submitted.

xxvii) Optimization of Cycles of Concentration (COC) along with other water conservation measures in the project shall be specified.

xxviii) Plan for recirculation of ash pond water and its implementation shall be submitted.

xxix) Detailed plan for conducting monitoring of water quality regularly with proper maintenance of records shall be formulated. Detail of methodology and identification of monitoring points (between the plant and drainage in the direction of flow of surface / ground water) shall be submitted. It shall be ensured that parameter to be monitored also include heavy metals. A provision for long-term monitoring of ground water table using Piezometer shall be incorporated in EIA, particularly from the study area.

xxx) Socio-economic study of the study area comprising of 10 km from the plant site shall be carried out through a reputed institute / agency which shall consist of detail assessment of the impact on livelihood of the local communities.

xxxi) Action Plan for identification of local employable youth for training in skills, relevant to the project, for eventual employment in the project itself shall be formulated and numbers specified during construction & operation phases of the Project.

xxxii) If the area has tribal population it shall be ensured that the rights of tribals are well protected. The project proponent shall accordingly identify tribal issues under various provisions of the law of the land.

xxxiii) Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made. It should be ensured that tribes such as Shompen and Nicobarese and anthropological organisations well versed in communication with and involved in welfare of Shompen and Nicobarese are adequately represented in the Public Hearing.

xxxiv) R&R plan, as applicable, shall be formulated wherein mechanism for protecting the rights and livelihood of the people in the region who are likely to be impacted, is taken into consideration. R&R plan shall be formulated after a detailed census of population based on socio economic surveys who were dependant on land falling in the project, as well as, population who were dependant on land not owned by them.

xxxv) Assessment of occupational health and endemic diseases of environmental origin in the study area shall be carried out and Action Plan to mitigate the same shall be prepared.

xxxvi) Occupational health and safety measures for the workers including identification of work related health hazards shall be formulated. The company shall engage full time qualified doctors who are trained in occupational health. Health monitoring of the workers shall be conducted at periodic intervals and health records maintained. Awareness programme for workers due to likely adverse impact on their health due to working in non-conducive environment shall be carried out and precautionary measures like use of personal equipment etc. shall be provided. Review of impact of

various health measures undertaken at intervals of two to three years shall be conducted with an excellent follow up plan of action wherever required.

xxxvii) One complete season site specific meteorological and AAQ data (except monsoon season) as per latest MoEFCC Notification shall be collected and the dates of monitoring shall be recorded. The parameters to be covered for AAQ shall include PM10, PM2.5, SO2, NOx, CO and Hg. The location of the monitoring stations should be so decided so as to take into consideration of the upwind direction, pre-dominant downwind direction, other dominant directions, habitation and sensitive receptors. There should be at least one monitoring station each in the upwind and in the pre-dominant downwind direction at a location where maximum ground level concentration is likely to occur.

xxxviii) Cumulative impacts of all sources of emissions including handling and transportation of existing and proposed projects on the environment of the area shall be assessed in detail. Details of the Model used and the input data used for modelling shall also be provided. The air quality contours should be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The windrose and isopleths should also be shown on the location map. The cumulative study should also include impacts on water, soil and socio-economics.

xxxix) Radio activity and heavy metal contents of coal to be sourced shall be examined and submitted along with laboratory reports.

xl) Fuel analysis shall be provided. Details of auxiliary fuel, if any, including its quantity, quality, storage etc should also be furnished.

xli) Quantity of fuel required, its source and characteristics and documentary evidence to substantiate confirmed fuel linkage shall be furnished. The Ministry's Notification dated 02.01.2014 regarding ash content in coal shall be complied. For the expansion projects, the compliance of the existing units to the said Notification shall also be submitted

xlii) Details of transportation of fuel from the source (including port handling) to the proposed plant and its impact on ambient AAQ shall be suitably assessed and submitted. If transportation entails a long distance it shall be ensured that rail transportation to the site shall be first assessed. Wagon loading at source shall preferably be through silo/conveyor belt.

xliii) For proposals based on imported coal, inland transportation and port handling and rail movement shall be examined and details furnished. The approval of the Port and Rail Authorities shall be submitted.

xliv) Details regarding infrastructure facilities such as sanitation, fuel, restrooms, medical facilities, safety during construction phase etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase should be adequately catered for and details furnished.

xlv) EMP to mitigate the adverse impacts due to the project along with item - wise cost of its implementation in a time bound manner shall be specified.

xlvi) A Disaster Management Plan (DMP) along with risk assessment study including fire and explosion issues due to storage and use of fuel should be carried out. It should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the proposed activities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures should be provided. Measures to guard against

fire hazards should also be invariably provided. Mock drills shall be suitably carried out from time to time to check the efficiency of the plans drawn.

xlvii) The DMP so formulated shall include measures against likely Fires/Tsunami/Cyclones/Storm Surges/Earthquakes etc, as applicable. It shall be ensured that DMP consists of both On-site and Off-site plans, complete with details of containing likely disaster and shall specifically mention personnel identified for the task. Smaller version of the plan for different possible disasters shall be prepared both in English and local languages and circulated widely.

xlviii) Detailed scheme for raising green belt of native species of appropriate width (50 to 100 m) and consisting of at least 3 tiers around plant boundary with tree density of 2000 to 2500 trees per ha with a good survival rate of around 80% shall be submitted. Photographic evidence must be created and submitted periodically including NRSA reports in case of expansion projects. A shrub layer beneath tree layer would serve as an effective sieve for dust and sink for CO2 and other gaseous pollutants and hence a stratified green belt should be developed.

xlix) Over and above the green belt, as carbon sink, plan for additional plantation shall be drawn by identifying blocks of degraded forests, in close consultation with the District Forests Department. In pursuance to this the project proponent shall formulate time bound Action Plans along with financial allocation and shall submit status of implementation to the Ministry every six months.

l) The details about number of labourers, number of labour camps and its construction, their basic requirements such as transport, fuel for cooking, freshwater, sanitation, health and emergency evacuation etc to be provided in detail.

li) Corporate Environment Policy

a. Does the company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.

b. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.

c. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions. Details of this system may be given.

d. Does the company has compliance management system in place wherein compliance status along with compliances / violations of environmental norms are reported to the CMD and the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.

All the above details should be adequately brought out in the EIA report and in the presentation to the Committee.

lii) Details of litigation pending or otherwise with respect to project in any Court, Tribunal etc. shall invariably be furnished.

E. Special Conditions

1) Cumulative Impact Assessment of all above proposed four sectors (ICTT, Greenfield International Airport, Township and Area Development and 450 MVA Gas and Solar

based power plant) to be undertaken keeping in focus ecological and environmental impacts on Great Nicobar Island

2) Detailed freshwater requirement and augmentation plan, its impact and mitigation plan on native, endangered and endemic freshwater flora and fauna to be developed for all above four sectors.

3) Public hearing: It should be ensured that tribes such as Shompen and Nicobarese and anthropological organisations well versed in communication with and involved in welfare of Shompen and Nicobarese are adequately represented in the Public Hearing. Details of the same to be provided in EIA-EMP of all above four sectors.

F. GENERAL GUIDELINES

i. The EIA document shall be printed on both sides, as far as possible.

ii. All documents should be properly indexed, page numbered.

iii. Period/date of data collection should be clearly indicated.

iv. Authenticated English translation of all material provided in Regional languages.

v. The letter/application for EC should quote the MoEF&CC File No. and also attach a copy of the letter prescribing the TOR.

vi. The copy of the letter received from the Ministry on the TOR prescribed for the project should be attached as an annexure to the final EIA-EMP Report.

vii. The final EIA-EMP report submitted to the Ministry must incorporate the issues in TOR and that raised in Public Hearing. The index of the final EIAEMP report, must indicate the specific chapter and page no. of the EIA-EMP Report where the specific TOR prescribed by Ministry and the issue raised in the P.H. have been incorporated. Questionnaire related to the project (posted on MoEF&CC website) with all sections duly filled in shall also be submitted at the time of applying for EC.

viii. Grant of TOR does not mean grant of EC.

ix. Grant of TOR/EC to the present project does not mean grant of approvals in other regulations such as the Forest (Conservation) Act 1980 or the Wildlife (Protection) Act, 1972.

x. Grant of EC is also subject to Circulars and Office Memorandum issued under the EIA Notification 2006 and subsequent amendments, which are available on the MoEF&CC website: www.envfor.nic.in.

xi. The status of accreditation of the EIA consultant with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.

xii. On the front page of EIA/EMP reports, the name of the consultant/consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed TOR (TOR proposed by the project proponent and additional TOR given by the MoEF) have been complied with and the data submitted is factually correct (Refer MoEF office memorandum dated 4th August, 2009).

xiii. While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through which the samples have been got analysed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the Environment (Protection) Act, 1986 and the rules made there under (Please refer MoEF office memorandum dated 4th August, 2009). The project Coordinator of the EIA study shall also be mentioned.

xiv. All the TOR points as presented before EAC shall be covered.

9. A detailed draft EIA/EMP report shall be prepared in terms of the above additional TOR and should be submitted to the State Pollution Control Board for Public Hearing. Public Hearing to be conducted for the project in accordance with the provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing shall be conducted based on the TOR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the website.

10. The project proponent shall submit the detailed final EIA/EMP report prepared as per TOR including issues raised during Public Hearing to the Ministry for considering the proposal for environmental clearance before expiry of validity of ToR.

11. The consultants involved in preparation of EIA/EMP report after accreditation with Quality Council of India/National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/Laboratories including their status of approvals etc. vide notification of the MoEF dated 19th July, 2013.

12. The prescribed TOR would be valid for a period of four years for submission of the EIA/EMP Reports.

This issues with the approval of Competent Authority.

(Amardeep Raju)
Scientist 'E'

Copy to:

1. Member secretary, Andaman & Nicobar Islands Pollution Control Committee (ANIPCC), Department of Science and Technology, Dollygunj, Port Blair - 744103. South Andaman, A & N Islands.

2. Addl. Principal Chief Conservator of Forests (C), Ministry of Env., Forest and Climate Change, Regional Office (SEZ), Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai - 34.

(Amardeep Raju)
Scientist 'E'

Minutes of the 297th meeting of Expert Appraisal Committee held on 24th – 25th May, 2022 INDUS Conference hall in the Ministry of Environment, Forest & Climate Change (MoEF&CC), Indira Paryavaran Bhavan, New Delhi 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 Highways7(f).

The 297th Meeting of Expert Appraisal Committee (EAC) of Infra-1 (IA-III) was held at INDUS Conference hall in the Ministry of Environment, Forest & Climate Change (MoEF&CC), Indira Paryavaran Bhavan, New Delhi during **24th – 25th May, 2022** under the Chairmanship of Dr. Deepak Arun Apte. A list of participants is annexed as **Annexure-A**.

1. OPENING REMARKS OF THE CHAIRMAN

At the outset, Dr. Deepak Arun Apte, 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 296th EAC meeting held on 28th – 29th April, 2022.

AGENDA WISE CONSIDERATION OF PROPOSALS:

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

Agenda No. 3.1

Integrated development of International Container Transhipment 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 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."*

3.1.1. Ministry of Home Affairs vide letter no. 15020/10/2022 dated 30th March, 2022 mentioned that the Greenfield International Airport proposed at Gandhi Nagar-Shastri Nagar area of Great Nicobar Island as part of the Integrated development of the Island, will be developed as a joint military-civil, dual-use airport, under the operational control of Indian Navy. This project is for Defense, Strategic, National Security, and Public Purpose. In view of this, the portion of deliberation made for Airport component may not be made public due its strategic nature.

3.1.2. The abovementioned proposal was placed before the EAC in its 293rd meeting during 24th – 25th March, 2022. The EAC noted that the document submitted by the PP were received only 2 days before the EAC meeting and therefore members have sought some time to study the entire set of documents due to multiple components involved in the project. In view of this, the EAC *deferred* the proposal and informed to submit all relevant studies undertaken for the project. The PP accordingly submitted the relevant studies to the Committee. The proposal is reconsidered in the 297th EAC Meeting held on 24th-25th May, 2022. The project proponent along with the EIA Consultant M/s Vimta Labsand M/s AECOM India Pvt Ltd made a presentation in a hybrid (Physical-Video Conferencing) mode of meeting and provided the following information: -

3.1.3. The proposal is part of interlinked projects with Deep Berth Port (International Container Trans-shipment terminal -ICTT) as primary component and 3 interlinked projects i.e., Greenfield International Airport (4000 Peak Hour Passengers-PHP), Township & Area development; 450 MVA Gas, Diesel and Solar based power plant. There is no oil spill envisioned as the storage facility for DG sets is proposed within the Power plant site on land.

3.1.4. Water Bodies & impact on Drainage: Magar Nala is near Govind Nagar and Matai Nala Near Gandhi Nagar. No major drainage channels/ water bodies are being blocked/ impacted by proposed development. All major water channels/ nalas/ drains are being conserved and are part of green land use within the proposed land use plan.

3.1.5. Water requirements:

Activity	**Water Demand in KLD***
ICTT	2,100
Airport	1,000
Power Plant	1,500
Township	80,000
TOTAL	**86,600**
This demand includes recycled and reuse water. Total fresh water demand is 45 MLD which will be met through 2 reservoirs (rain fed) proposed within the project area. **The above figure represents the potable and recycled water demand. No groundwater extraction is proposed.	

3.1.6. Waste water Management: There will be 3 STPs, one with the capacity of 34 MLD, and other two with the capacity of 16 MLD proposed as part of integrated development.

Type of solid waste	**Quantities in TPD**	**Centralised solid waste management facility**
Biomedical waste	3	As per Bio-Medical Waste (BMW) Management Rules, 2016 and subsequent amendments
Municipal waste	200	As per SWM rules 2016 and subsequent amendments

Industrial waste	8	Waste will be transferred to the integrated solid waste facility at township for treatment and disposal
STP sludge	15-18	Used as manure for greenbelt development

3.1.7. Tree cutting and Green Belt Development: Total estimated tree cutting is 8,52,245 numbers.

3.1.8. Diversion of forest land: The holistic development of GNI requires diversion of 130.75 sq.km of forest land and application has been submitted to MoEFCC vide letter No: PCCF/FCA/325/VOL.II/249 dated 7th October 2020. Application for diversion of forest is under process.

3.1.9. The project site is within 10 kms radius of Galathea Bay National Park and Campbell Bay National Park. The project site is outside the Ecologically Sensitivity Zone (ESZ) notified around these 2 National Parks. Also UT Administration has intention notification for 3 Wildlife Sanctuaries namely Leatherback Turtles at Little Nicobar Island with an extent of 13.75 Sq. Km, Magapode at Menchal Island with an extent of 1.29 Sq.m, Corals at Meroe Island with an extent of 2.73 Sq.km for Leatherback Turtles, Magapodes and Corals, as part of the conservation of these species.

3.1.10. A leatherback turtle conservation Plan will be prepared as part of the Biodiversity Management Plan for the Nicobar Group of Islands and implemented to conserve and protect the leatherback turtles with a budget of 100 Crores and 12 Crores which has been earmarked for studies for leatherback conservation. Implementation of the "National Marine Turtle Action Plan of the Govt. of India 2021- 26" and Potential turtle nesting areas in Nicobar group of islands are protected and conserved.

3.1.11. Great Nicobar has a wider habitat for saltwater crocodiles. During construction phase the same shall be handled as per provisions of wildlife Act through Department of Forest and as per the action plan prepared by WII. Further, an action plan is also prepared as "Action plan of mitigation of human-crocodile conflicts in the Andaman and Nicobar Islands"

3.1.12. Apart from the above, ZSI has suggested for restoration of coral Reef/translocation. This is proposed on the basis of experience gained by ZSI in Gulf of Kutch, Gujrat. ZSI carried out Ecological Restoration in coral reef areas of Gulf of Kachchh with support of the Marine National Park Authority of Gujarat Forest Department. ZSI restored a total of about 2000 sq.m. degraded coral reef area in Gulf of Kutch and 2320 native coral were restored in Pirotan site, 1170 native coral were restored in Narara site, 1050 native coral were restored in Mithapur site. There projects were executed between 2012-18. The survival rate of the same at Pirotan site - 97.20%, Narara site - 96.50%, Mithapur site - 96.57%. Further, 9000 corals from 49,000 m² area will be translocation and restoration is being done in Narare Reef area of Kalubar Island, Gulf of Kutch which is 40 times bigger than the previous one with the approx budget of INR 10 Crores / ha.

3.1.13. Mangroves: 12-20ha of mangrove cover loss has been envisaged for the proposed port project and is mentioned in table 10.1 of Chapter 10 of the EIA report. The extent of loss of mangroves may be compensated in GNI by re-densification of existing mangroves or planting

of mangroves to non-forest area as per the principals of compensatory afforestation.

3.1.14. Shoreline change: The observed trend of the shoreline at the proposed project location reveals that the shoreline remains with not noticeable change over a period of 5 years from 2015 to 2020. The shoreline analysis shows that the project site at port is surrounded with elevated hill promontories and rocky shores.

3.1.15. Dredging and Reclamation: The total quantity of capital dredging for the development of port is about 17.7 million cum MIKE 21-PA (Particle Analysis) module was used to identify a suitable location for dumping the dredge spoil and to understand the dispersion pattern of disposed material after dumping. The maximum increase in seabed level over the disposal area is about 0.03 m at the proposed dumping location. Due to availability of deeper water depth of 600m the change in bed level at the proposed disposal location due to dumping is insignificant. The plume of suspended sediment after dumping tends to spread towards northeast to an extent of 1 km with an increase in seabed level of <0.008 m. Therefore, the proposed disposal location is found to be more ideal and it will not cause any adverse impact on the proposed port development facilities and the marine environment.

3.1.16. Reclamation: About 298 Ha area to be reclaimed. It is estimated that around 33.35 million m^3 material will be required for reclamation. Suitable dredged material shall be used for reclamation, remaining of reclamation shall be achieved by borrowed fill.

3.1.17. Cargo handling with dust control measures: Since the proposed port is International Container Transshipment Terminal (ICTT), there will be no dusty cargo, dry bulk cargo such as coal, iron ore or hazardous cargo, etc. will be handled at port. All the vehicles engaged for construction should have valid pollution check certificate as per the motor vehicle act. Further, any regulations related to vehicle emission issued by local government should also be adhered to. Generators and machineries are to be serviced and maintained regularly to avoid generation of dust and other air pollutants. Oil Spill Contingent Management Plan includes Boom containment, Spray of dispersant and Skimmers. No hazardous industries are envisaged at GNI however the containers may contain hazardous cargo, Hazardous cargo shall be handled in accordance with The Manufacture, Storage and Import of Hazardous Chemicals Rules, ACT 1989. Containers carrying hazardous cargo are labelled as Hazardous Cargos and stored at separate locations in the yard designated for the storage of hazardous cargo and a dedicated Nodal officer will be appointed who will be responsible to check the compliance of the regulations from time to time. Hazardous waste like used oil, insecticide/ herbicides, paints, solvents, lubricants etc. would be generated from the project, the same hazardous substances will be securely stored at site before transportation, Double chamber Incinerator has been proposed to treat the possible hazardous waste generated from Port, Airport, Power plant and the Township.

3.1.18. No marine disposal is involved in the proposed project.

3.1.19. Energy conservation: List of materials to be used for construction will be decided at the details design stage. However, the design will follow Energy conservation building code (ECBC 2017), Indian Green Building Council (IGBC) guidelines and Code of green buildings by Council of Architecture (COA).

3.1.20. Land acquisition and R&R issues: Total land acquisition required for project is

approximately 421.57 ha. Total families affected is 379 and total affected population is 1761.

3.1.21. While considering the proposal of sustainable development of Great Nicobar Island, the administration has consented in principal that (a) The project will not disturb or displace any Shompen/ Nicobari tribal or their habitation, (b) There will be a clear demarcation of land so that there is no scope of conflict that would arise in future, (c) Habitat rights of the tribal will be taken care of as per the Forest rights Act. These has also been considered while making Environmental Impact Assessment (EIA). The Shompens will be eligible under the FRA, 2006 and the RFCTLARR, 2013 for compensation for the loss of their habitat (if any). A fair compensation will be devised and compensatory package would be developed exclusively and in addition to the resources already available, for the welfare and development of Shompen, while ensuring that their survival as a community, unique identity, culture and heritage.

3.1.22. Rain Water Harvesting: Rainwater harvesting shall be mandated as part of development control regulations to be formulated at the stage of finalization of master plan post EIA and CRZ approval. Buildings/ Development within the proposed project area shall have appropriate provision for rainwater harvesting techniques in confirmation with approved development control regulations. This shall be regulated during building plan approval stage.

3.1.23. Employment Potential:

Item	2025	2040	2052
Direct Employment	6,939	24,734	51,423
Indirect Employment	10,408	37,101	77,135
Total Employment	17,347	61,835	128,558
Total Population	52,550	164,730	332,596

3.1.24. EAC Observations: The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 297th meeting during 24th – 25th May 2022 and made following observations.

Township

i) Some of the township clusters seems to have several defense installations abutted by commercial and tourism infrastructure. It is not advisable considering strategic and safety requirements. Revised layout in this regard shall be submitted.

ii) Golf course will not be permitted considering extremely water intensive activity and also considering very high number of endemic species that inhibit GNI. It is misfit in the holistic vision for the island.

iii) Many parts of the proposed road are falling with in the CRZ IA, CRZ I B yet no details have been given about the location and design of the road in such areas. Location of such parts of the road should be clearly spelt with undertaking that roads will be on stilt in such stretches. RoW of 55 meters has been proposed for the road which appears to be very wide even as per the standards fixed for National Highways and Expressways as per IRC guidelines of MoRTH. The Committee suggested that the width of RoW shall be revised in the master plan keeping the ROW not more than 30 m. Revised lay out of master plan should be submitted after excluding such excess width of 25 meter

which instead be kept and shown as green belt/ shelter belt without cutting existing trees on both side of road in revised layout.

iv) Over 50 Km of low-lying coastal area of the eastern side of the GNI is now being developed in the form of township and port as well as power plants which will obstruct the forest-sea shore- forest movement of several animals like Robber or Coconut Crab and birds, especially coastal birds like megapod. However, no provision for forest- sea shore wildlife corridors have been kept in the Master Plan Therefore, there is a need to revise the master plan layout keeping natural forest corridor between Campbell Bay / Galathea NPs and sea shore of at least 300-500 meter width generally at every 3 km interval. Such corridors shall be excluded from project area. Location of such corridors shall be identified in consultation with ANFD. Roads crossing such wildlife/ animal corridors shall have animal underpasses in the form of elevated roads or animal over bridges depending upon the terrain. No provision for canopy bridges for road crossing by Nicobar Long-tailed Macaque, Nicobar tree shrew and other arboreal animal as well as passages for like crocodiles, crabs, frogs, snakes and other amphibians/reptiles are made. Same need to be made in road design. Such provision shall be made in road design and revised layout of the masterplan generally at every 2 Km interval between green belt on both sides of roads as per WII guidelines and in consultation with SFD. Provide chainage wise details of canopy crossings and underpasses as mentioned above.

v) It is observed by the Committee that the building components do not have detailed information like waste management plan, its size and management, built-up area, amenities, water requirement, waste-water treatment etc. The Committee therefore suggested that a detailed plan for Phase-I may be submitted at this stage which shall have all details specifically for Phase-I. Broad plan for the other phases of the building component may also be submitted along with the detailed Phase-I plan.

vi) Considering above observations, revised plan for township be submitted

ICTT

vii) Considering the fact that due to ICTT construction in Galathea Bay, township development and other development activities as part of integrated development of Great Nicobar Islands the movement of Leatherback turtles as well as Nicobar Megapods and their nesting is likely to be disturbed and therefore the turtles and Nicobar Megapod birds are likely to shift their nesting sites in nearby western coast of the GNI and other areas. Though Andaman and Nicobar administration has declared some of the islands as WLS in little Andaman and other places for Leatherback turtles and Nicobar Megapods yet considering the Pemayya Bay, Casuarina Bay and Alexandria Bay as established sites for Leatherback and Nicobar Megapod nesting are potential site for developing them as Wildlife Sanctuaries/ Conservation Reserve in to additional legal protection for these species. All the areas except the area proposed for defense purpose in western coast of GNI including Pemayya and Casuarina Bay shall be excluded from the master plan as stated in the previous meeting observations as well.

viii) PP shall clearly demarcate the proposed dredging area, avoiding the dredging activity in Rocky areas to avoid any type of Disaster risk. The same shall be submitted to the Ministry.

ix) Though attempt have been made to mitigate the impact of ship movement on the movement of turtles to and from nesting sites in western flank of the Galatea Bay by way of providing isolated breakwater yet it may not be very useful because ship movement inside the port boundary beyond breakwaters may discourage the turtles to enter in the bay for nesting in western flank. However, if an undisturbed channel is created for turtle movements by way of extending the western breakwater between port area and western flank there may be some possibility of turtles approaching the western flank of the Bay. The same shall be explored and submitted to the Ministry

x) Though many parts of the proposed master plan for port falling within CRZ IA and CRZ IB (Viz area B, C, D etc) are proposed to be eliminated from masterplan yet the revised layout map of the project after excluding such areas have not been submitted.

xi) Wildlife Institute of India (who have done sea turtle monitoring and satellite tracking across parts of India for several decades) should submit detail road map with financial requirement for monitoring Leatherback Turtle movement through satellite tracking in GNI and habitat restoration & nest protection measures at all other nesting sites in A & N for minimum 10 years.

xii) SACON is requested to submit Nicobar Megapod monitoring and conservation plan for minimum 10 years.

Gas-based power plant

xiii) The clarity on power demand for phase 1 to be estimated and based on that gas/solar based power generation to be proposed. The numbers are to be quantified.

xiv) Oil spills are not modelled. Diesel/LNG is required for Power Plant. Impacts of accidental oil spill etc shall be submitted.

xv) Regarding the proposed Power Plant, the Committee proposed that Gas-Based power plant may take time to commission, therefore an alternate plan for the power supply and the location of such temporary plant may be submitted.

xvi) PP should carry out load carrying capacity in addition the location of FSRU (LNG) as to why it needs to be on the western bay. Committee asked to explore having Gas-based power plants on the eastern part of GNI instead of at Galathea Bay.

xvii) No details are available on what will be the alternate source of fuel for power till such time LNG facilities are commissioned. A detailed “plan of action” on how they plan to meet the power demands for the construction phase of ICTT, Airport etc to be provided. Committee felt that ideally they should use the existing HSD storage facility (may be with enhanced storage) instead of creating a new one.

xviii) with regards to Solar power the land requirement for installation of solar panels needs to be highlighted

Other Comments

xix) Measures taken for the notified sanctuaries shall be incorporate in the EIA/EMP report.

xx) Water balance and Power consumption for all components has to be detailed in EIA / EMP report.

xxi) PP shall submit the number of mounts of Nicobar Megapod are located over the proposed area and its impact on mounts shall be mapped, it is also requested to submit the measures taken for its protection and sustainability for Migratory birds.

xxii) Any alternate site proposed for inactive and active mounts shall be prepared along with the location maps showing in KML.

xxiii) Project proponents were asked to furnish the details of loss of mangrove cover with mitigation/conservation plan for the loss of mangrove. PP has not submitted any Mangrove conservation Plan/coral conservation plan which normally forms the part of EIA/EMP for CRZ purposes. No justification has been given for not including mangrove conservation plan including the plan for compensatory planting in lieu of loss of mangrove cover.

xxiv) Similarly coral conservation plan has not been included in the EIA/EMP without giving any justification for non-inclusion in EIA/EMP.

xxv) In response to EACs request for Saltwater Crocodile management plan, no plan have been submitted except the assurance of following Action plan for mitigation of Human crocodile conflict in A&N Islands along with the SOP. These areas of GNI being good nesting sites of Saltwater Crocodile are likely to fall in category of Crocodile Conservation Zones (CCZ) and therefore as per prescriptions of Action plan no human activities including tourism is permitted unless it is prescribed in wildlife management plan/working plan. Prescriptions for mitigation of conflict as per Action plan will be applicable only if areas within project site fall in human-crocodile co-existence zone or crocodile free zone. Therefore there is a need to submit the actual status of the Saltwater Crocodile habitat/nesting sites falling within the project area as per Action plan for mitigation of human crocodile conflict areas along with a Saltwater Crocodile conservation plan in case areas inside project fall in Crocodile conservation Zone category.

xxvi) Evacuation plans for natural disaster needs to spelt out clearly and in detail since this area is prone to Tsunami, frequent earthquakes and Cyclone etc

3.1.27 Conclusion and Recommendations: Accordingly, the EAC concluded and **recommended that PP shall submit following information** besides above observations to enable the EAC to take well informed decision regarding Environmental and CRZ Clearance

A. Exclusion of areas from Total Project areas: - Following areas should be excluded from the total project area for the reasons explained under observations as above

i. Areas proposed for any activity other than defense in the western coast of the GNI especially the areas of Pemayya Bay, Casuarina Bay and Alexandria Bay which can be used by Leatherback and other sea turtles and Nicobar Megapods and even by crocodiles as alternative nesting sites.

ii. RoW for the roads should be not more than 30 meters and remaining 25-meter width shall be excluded from the total project area and shall be kept as natural green belt on both sides of road without cutting any trees. Accordingly revised tree enumeration be submitted.

iii. Parts of proposed master plan for Ports which are falling within CRZ IA and IB areas (viz areas B C D etc shown in presentation) shall be excluded from the revised layout of master plan.

iv. Some of the township clusters seems to have several defense installations abutted by commercial and tourism infrastructure. It is not advisable considering strategic nature and safety requirements.

v. Golf course will not be permitted considering extremely water intensive activity and also considering very high number of endemic species that inhibit GNI. It is misfit in the holistic vision for the island.

vi. Patches of wildlife corridors as explained under (b)(ii) below shall also be excluded from the project area

B. Amendment in Port, Township and Road designs:

vii. Possibility of extending the western isolated breakwater up to base of the Galathea bay parallel to the eastern flank shall be explored so that an independent channel can be created between the port and the western flank of the bay for the possible unhindered movement of the turtles to and fro nesting grounds in western flank.

viii. 300 to 500 Mtr wide natural forest corridor should be kept as animal corridor at every 3 Km interval all along project area for facilitating movement of wildlife between forest and the sea shore so that development plants at GNI does not stop the access of several endemic and endangered wild animals like Nicobar Long-tailed Macaque, Nicobar tree shrew, Robber or Coconut crabs, Saltwater Crocodiles Nicobar Megapod, Nicobar Crake etc. to the sea which is actually the part of their habitat. This shall be done in consultation of A&NFD and wildlife experts. Chainage wise details to be provided in the road alignment

ix. Stretches of road crossing these above-mentioned wildlife corridors shall be elevated to facilitate the movement of wildlife under these elevated road stretches or alternatively wildlife over bridges can be constructed if terrain demands. Chainage wise details to be provided in the road alignment

x. Provision shall be made in road design for canopy walks/bridges for crossing the arboreal animals as well as for passage of snakes, crabs crocodiles etc and other amphibians/ reptiles. Chainage wise details to be provided in the road alignment

xi. The stretches of the road falling in CRZ IA and IB area shall be on stilts as per the prescriptions in CRZ notification. Revised lay out of plan shall clearly indicate such stretches along with geo coordinates and the mention of road on stilts shall also be made in the master plan as per this revised lay out. Chainage wise details to be provided in the road alignment

C. Submission of revised project area and layout of the masterplan: -

xii. After exclusion of the areas as mentioned in para A above and doing necessary amendment in master plan as mentioned in Para B above a revised project area and

revised layout /master plan shall be submitted.

D. Declaration of Protected Areas for conservation of the Turtles, Megapode bird and crocodiles: -

xiii. A&N FD in consultation with WII shall identify the areas in Pemayya Bay, Casuarina Bay and Alexandria Bay suitable for habitat and nesting ground of Leatherback turtles, Nicobar Megapode and Saltwater Crocodiles. Additional legal protection to these areas by way of declaring these areas as WLS or Conservation Reserves as per provisions of Wildlife Protection Act. This may help in ensuring the continued nesting of these animal/birds in Great Nicobar Islands. These will be in addition to the PAs already in the process of notification.

xiv. Wildlife corridors as proposed in above paras can also be declared as Conservation Reserves/ Community Reserves under WLPA.

E. Conservation/Mitigation Plans:

xv. Mangrove Conservation Plan: Mangrove areas falling inside the project areas should be clearly demarcated and area calculated. Total loss of Mangrove cover shall be intimated which shall form the basis for Mangrove Conservation Plan. Detailed Mangrove Conservation Plan should be prepared by PP in consultation with A&NFD which shall include compensatory planting of Mangrove as well as re-densification of the degraded mangrove areas in Great Nicobar, and other islands of Nicobar group and Andaman group of Islands. This plan shall form the part of EIA/EMP reports. PP shall also indicate the time frame for preparation of the plan and its inclusion in the EIA/EMP report.

xvi. Coral Conservation Plan: A detailed Coral Conservation/Translocation Plan shall be prepared by the PP in consultation with A&NFD and ZSI following IUCN sp translocation protocols and the same shall be made the part of EIA/EMP report. PP shall also indicate the time frame for preparation of the plan and its inclusion in the EIA/EMP report.

xvii. Crocodile Conservation and Management Plan: PP shall indicate the crocodile habitats and nesting grounds inside the project area along with the geo coordinates and intimate the status of such crocodile habitat and nesting grounds as per the Action Plan for Mitigation of Human-Crocodile Conflict in Andaman & Nicobar Islands. In case these identified crocodile habitats/nesting grounds are categorized as Crocodile Conservation Zone attempts shall be made to exclude these crocodile habitats/nesting grounds from the project area and in case it is unavoidable to exclude such areas then a crocodile Conservation Plan shall be made by PP in consultation with A&NFD and WII and same shall be part of EIA/EMP reports. PP shall also indicate the time frame for preparation of the plan and its inclusion in the EIA/EMP report.

xviii. Wildlife Institute of India should submit detail road map with financial requirement for monitoring Leatherback Turtle movement in GNI and habitat restoration & nest protection measures at all other nesting sites in A & N for minimum 10 years.

xix. SACON/ Wildlife Institute of India is requested to submit Nicobar Megapod monitoring and conservation plan for minimum 10 years.

xx. The PP has to submit revised ICRZ recommendation letter issued on 22/03/2022 by Andaman & Nicobar Islands Coastal Zone Management Authority (ANCZMA) especially regarding effective ICRZ area involved in various activities has been revised and part of holistic project now declared for Defence, Strategic, National Security, and Public Purpose.

Agenda No. 3.2

Development of 4 lane access controlled New Greenfield Highway from Warangal (Ch: 112+240) to Khammam (Ch: 220+480) section (total length 108.24 km) in the state of Telangana – Environmental Clearance.

[Proposal No. IA/TG/NCP/217090/2021 and File No. 10/32/2021-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 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 placed before the Expert Appraisal Committee (EAC) for Infrastructure, CRZ and other miscellaneous projects in its 297th meeting on 24th – 25th May 2022. The project proponent along with the EIA Consultant M/s Mantras Green Resources Ltd. (formerly known as Mantras Resources) made a presentation and presented at the Ministry in Physical mode and provided the following information:–

3.2.2. The proposed project is for "Development of 4 lane access controlled New Greenfield Highway from Warangal (Ch: 112+240) to Khammam (Ch: 220+480) section (total length 108.24 km) in the state of Telangana" The proposed project starts near Agrampahad village (Ch: 112+240) in Warangal district and ends at the outskirts of Khammam (Ch: 220+480) in the state of Telangana. The RoW for the proposed highway is 45 meters. Geographical location of the proposed alignment is Start from 18°02'37.12"N, 79°41'08.16"E t o 17°15'12.13"N, 80°12'42.87"E.

3.2.3. The Terms of Reference (ToR) proposal was considered by the Expert Appraisal Committee(EAC) for infrastructure, CRZ and other miscellaneous projects in its 268th meeting during 26th-27th July 2021 and the committee recommended for grant of ToR, Ministry granted the ToR vide File No. 10/32/2021-IA.III on dated 16thAugust 2021.

3.2.4. The Proposed project is a green field Highways. As per the EIA Notification, 2006 and its subsequent amendments, it is a category "A" project and will fall under the category-7(f) Highways of the EIA notification 2006, thus Environmental Clearance is required from the EAC of MoEF&CC. Total cost of the Project is for the proposed development is estimated to be Rs. 2899.21Cr.

3.2.5. The total land acquisition for the proposed highway is 567.74 ha out of which 50.159 ha is Govt land. The proposed alignment is not passing through any forest area in the State.

3.2.6. Land Use and Land Cover of 500 m buffer radius of project site:

Sl. No.	Category	Area (ha.)	Percentage (%)
1	Water body	549.22	4.69
2	Vegetation	1693.67	14.43
3	Built-up Area	754.41	6.43
4	Barren land	3577.23	30.50
5	Open scrub	2782.88	23.72
6	Agriculture land	2373.82	20.23
	Total	11731.23	100

3.2.7. Right of Way: The Proposed Right of Way is 45 m as per the requirement keeping in view the fully access controlled Highway with 4-lane dual carriage way configuration.

3.2.8. Public Hearing: The details are as following-

S. No.	**Date**	**Location**	**Name of District**	**Presided by**
1.	23.03.2022	Zilla Parishad High School, Gatlakaniparthy Village, Shayampet Mandal,	Hanumakonda	Additional District Collector
2.	2.02.2022	Grain Market Yard, Nekkonda (V&M),	Warangal	Collector and District Magistrate
3.	11.02.2022	The Gramapanchayat Office, Ayyagaripalle(V), Kuravi(M)	Mahabubabad	Additional District Collector
4.	26.03.2022	Open Land, Mandal Parishad Development Office, Raghunadhapalem (V&M)	Khammam	Additional Collector and Addl. District Magistrate
Major issues raised		● Service road along the side of proposed highway affected people demanded for vehicular underpass for day activities ● Providing the quality drinking water and irrigation facilities. ● Air and Noise Pollution was not a big concern. However, dust pollution in dry season and noise due to traffic movement sometimes disturbs immediate roadside dwellers. ● Green Belt development along the highway.		
Compliance by the PP		● Adequate Provision of underpasses to cross the highway are made in the project in the form of Interchanges/VUP"s-9 Nos, LVUPs-47 Nos, and also utility duct is provided for crossing of water pipelines & other cables if any at every		

	500m for facility of public and as per the request of Public, Cart tract/Utility corridors of 3.5 mts on both sides are provided for entire length of alignment. ● Hydrology study has been conducted as the part of the DPR study and the alignment will be constructed in such a way that there shall not be impact on the ground water sources and total 435 Numbers of Cross drainage structures are proposed. Major bridge -1 No, Minor Bridge – 44 Nos. Culverts – 390 nos. ● Baseline studies were conducted within 10 km radius as per the guidance manual from MoEF&CC. Upon summing up the emissions during construction and operation phase, The emissions shall fall within limits prescribed. Further to mitigate any abnormalities, EMP is in place to monitor. A budget of Rs.41,93,18,016.00 has been kept for Environmental Monitoring of air, water, soil, noise and Soil. In addition to it, Dense linear vegetation along the NH trees will be planted which may reduce the air & noise pollution. ● Plantation of native species shall be made and control of it vests with the forest department. The plantations shall be taken as per Green Highway Policy 2015. ● Adequate Provision of underpasses to cross the highway are made in the project in the form of Interchanges/VUP"s-9 Nos, LVUPs-47 Nos, and also utility duct is provided for crossing of water pipelines & other cables if any at every 500m for facility of public and as per the request of Public, Cart tract/Utility corridors of 3.5 mts on both sides are provided for entire length of alignment.

3.2.9. Land Use/Land Cover: The Land use pattern on 10 km on either side of the proposed National Highway primarily comprises of agricultural land, forest area, land for cattle grazing, village settlements and village ponds/nallah. The proposed alignment passes mostly through uninhabited area avoiding village establishments. The agriculture practiced is mostly multi crop due to the network of canals/rivers and main crops grown in the area are Wheat, rice, maize, sugarcane, cotton etc. The proposed highway lies generally in plain terrain. However certain length of highway lies in rolling terrain.

3.2.10. Rainwater harvesting: The proposed alignment is crossed One River, 38 Nala/Canal/Village pond and the natural drainage of the project impacted area shall be maintained through improvement of 390 nos. of culverts, 435 nos. of cross drainage structures and 01 major bridge and 44 nos minor of bridges. The proposed alignment does not pass through any flood prone area. Rainwater harvesting structures shall be provided at the interval

of 500 m on either side of carriageway as per availability of RoW and depending on the water table of first aquifer (Approx. 216 nos. of structures shall be constructed).

3.2.11. Water requirement: The peak water requirement is 2668323 KL during construction stage and will be extracted from local surface water resources i.e. from local surface water after getting necessary permission from concerned authority by the appointed contractor. No Groundwater extraction is proposed.

3.2.12. Diversion of Forest Land: The Proposed Project does not involve any Forest land. The proposed alignment does not pass through Wildlife Sanctuary/National Park and its eco sensitive zone within 10 km radius from the proposed project. The proposed project does not passes through any CRZ locations.

3.2.13. Tree cutting: About 4022 trees are to be felled. About 666trees/km on either side of proposed highway and median shall be planted in accordance to IRC SP21:2009 and Green Highway Policy 2015.

3.2.14. Waste Management: The total waste generation shall be 270 TPA. Construction and demolition waste due to demolition of existing structures & construction activities shall be managed as per Construction and Demolition Waste Management Rules, 2016. Municipal wastes generated from the construction workers camp shall be managed as per Solid Waste Management Rules, 2016. Hazardous wastes generated due to activities like maintenance and repair work on vehicles shall be managed as per Hazardous and Other Wastes (Management, & Trans-boundary Movement) Rules, 2016.

3.2.15. Parking requirement: As per the detailed field surveys and reconnaissance, truck lay byes and bus stop have been proposed. The rest area will provide common facilities like petrol pump, first aid medical facilities, restaurant and vehicle parking etc. For petrol pump, the guidelines issued by OISD of Ministry of Petroleum shall be followed. The facilities shall be planned at approximately 50 km interval.

3.2.16. R&R Issues: Total length of the project is 108.24 Km, passing through 4.86 km lies in Hanumakonda district,36.1km in the Warangal district, 50.6km in Mahabubabad district and 16.68km in Khammam district and the Total 48 No.of villages area affected (4 Hanamkonda, 18 villages in Warangal, 18 villages in Mahbubabad and 8 villages in Khammam district) in state of Telangana. Adequate compensation would be paid as per the measurement and prevailing state government norms. Further the compensation towards the acquisition of land will be made as per the provisions of the NH Act 1956 and applicable clauses and procedures as laid down in the RFCT LARR Act, 2013.

3.2.17. Employment Potential: Project shall provide direct employment opportunities for about 1400 persons(including permanent and temporary) based on Ministry of Road Transport & Highways.

3.2.18. Benefits of the Project: In addition to the direct benefits, there are number of indirect benefit attributed to Highway project. Lowering transportation cost for users and improving access to goods and services enables new and increased economic and social activity. After the development of state highway, the land prices may increase and there would be changes in development of business in order to take advantage of improved speed and reliability in the

transportation system. Hence these benefits will lead to increase property values, increased productivity, employment and economic growth. The indirect benefit of the proposed highway would work through the dynamic developmental externalities generated through the forward and backward linkages. A better connectivity will increase the business, which will reflect in the changes in the pattern of economic activities, income generation, price evolution, and employment condition. There will be also increase in greater accessibility to market, health and educational facilities.

3.2.19. The comprehensive socio-economic assessment for the proposed project has been carried out by the independent expert of Punjabi University, Patiala. The traffic study has been done at 9 homogenous sections all along the highway and with the help of the traffic study various numbers of Underpasses, VUP (vehicle underpasses), PUP (Pedestrian underpass, Culverts, Minor and major bridges, major and minor junctions, flyovers/interchanges etc have been designed and proposed on the National highway.

3.2.20. Details of Court Cases: No court cases are pending on this Project

3.2.21. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 296th meeting during 24th – 25th May 2022 and observe that regarding the above proposal several representations by local people regarding Public Hearing and bad effect of proposed project on environment and agriculture land were received. A DO letter from Hon'ble Minister for Panchayat Raj written to Hon'ble Ministry for Road Transport and Highways is also forwarded to the EAC and the Ministry. In this regards, the Committee is of the view that a detailed enquiry need to conduct by the District Collector and reply has to submit to the Ministry.

3.2.22. In view of the above, The EAC **deferred** the proposal. The Proposal may be placed before the EAC after receipt of enquiry report from the Concern District Collector.

Agenda No. 3.3

Subject: **Construction of 4 lane access controlled New Greenfield Highway section of Khammam - Vijayawada of length 89.429 km from V. Venkatayapalem village to Jakkampudi village (on NH-16) (Design Chainage 220+480 to 309+909) under Other Economic Corridor in the states of Telangana & Andhra Pradesh by M/s National Highways Authority of India(NHAI)– Environmental Clearance.**

[Proposal No. IA/TG/NCP/215098/2021 and File No. 10/30/2021-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. 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/validity Extension given, if any, will be revoked at the risk and cost of the project proponent.*

3.3.1. The above mentioned proposal was placed before the Expert Appraisal Committee (EAC) for Infrastructure, CRZ and other miscellaneous projects in its 297th meeting on 24th – 25th May 2022. The project proponent along with the EIA Consultant M/s Enviro Infra Solution Pvt.Ltd. made a presentation and presented at the Ministry in Physical mode and provided the

following information:–

3.3.2. The proposed proposal of "Construction of 4 lane Access Controlled New Greenfield Highway Section of Khammam to Vijayawada of length 89.429 km from V.Venkatayapalem village to Jakkampudi village (on NH-16) (Design Chainage 220+480 to 309+909) under other Economic Corridor in the states of Telangana & Andhra Pradesh by M/s National Highways Authority of India (NHAI)" The proposed project highway starts from V. Venkatayapalem village in Khammam district of Telangana state and terminates at Jakkampudi village in Krishna district of Andhra Pradesh state. The proposed Row is 45 m and the total Length of the Project is 89.429 km.

3.3.3. The proposed project falls under 7(f) - Category-A, Highway as per EIA notification 2006 and its subsequent amendments. Total cost of the project is Rs. 3091.76 crores.

3.3.4. The Proposed project scoped for Terms of Reference (ToR) was considered in 266th Meeting on 12th July 2021 wherein the committee recommended for grant of ToR and Ministry granted the ToR vide letter no. F. No. 10/30/2021-IA.III, dated 26th July, 2021.

3.3.5. The total land acquisition for the proposed highway is 433.02 ha out of which 22.75 ha is Government land and 410.27 ha is Private Land. The proposed RoW of the project is 45 m.

3.3.6. Public Hearing: The Public Hearing for the project was conducted by the Telanaga Pollution Control Board on 15.03.2022 at Khammam, which was presided by Additional District Collector & Additional District Magistrate, Khammam in the presence of Environmental Engineer, Regional office, Kothagudem and the Public Hearing in Andhra Pradesh was conducted by the Andhra Pollution Control Board on 03.03.2022. at Z.P.High School, G.Konduru(V&M), Krishna District, A.P which was presided by Additional District Magistrate, Krishna District in the presence of Environmental Engineer, Regional office, Vijayawada, APPCB.

Details of advertisement given	
Date of Public Consultation	15.03.2022 at Khammam, Telangana and 03.03.2022 Krishna District, Andhra Pradesh
Venue	Govt. Junior College & High School, Siripuram (V), Madhira (M), Khammam Dist, Telangana and Z.P.High School, G. Konduru(V&M), Krishna District, A.P
Presiding Officer	Additional District Magistrate
Major issues raised	Improvement of Road efficiency with economic growth. With the above approach to design, Construction and operation the project will be socially feasible. Reduction of the air and noise pollution in the vicinity of the highway. Provision of truck lay bays, bus bays, underpasses and Pedestrian underpasses in some villages. Villagers have also demanded

	service roads and Vehicular Underpass at every 500m in the built up areas and adequate compensation to the Project affected persons.
Compliances	The concerns raised by the villagers have been addressed in the project design. Baseline studies were conducted within 10 km radius as per the guidance manual from MoEF&CC. Upon summing up the emissions during construction and operation phase, The emissions shall fall within limits prescribed. Further to mitigate any abnormalities, EMP is in place to monitor The Compensation to project affected persons will be paid as per Right to Fair Compensation and Transparency in Land Acquisition, Resettlement and Rehabilitation Act, 2013, National Highways Act (NH Act), 1956.

3.3.7. The land use pattern on 10 km either side of the project highway is predominately agriculture followed by habitation, forest and waste land. The proposed project does not involve any diversion of forest land. The alignment does not pass through any wild life sanctuary, protected area and its eco sensitive zone. The proposed alignment passes mostly through uninhabited area avoiding village establishments. The agriculture practiced is mostly multicrop due to the network of canals/rivers and main crops grown in the area are Wheat, rice, maize, sugarcane, cotton etc.

3.3.8. There are 02 no's Rivers, 05 no's of local streams & 14 no's Canals are crossing the proposed alignment. The natural drainage of the project impacted area shall be maintained through improvement of 09 nos. of reconstruction of existing culverts, 01nos. of Widening of existing culverts, 431 no's of Box Culverts and 24 no's of Box Culverts. The proposed alignment does not pass through any flood prone area. The peak water requirement is 19,62,869 KLD during construction stage and will be extracted from local surface water resources i.e. from local surface/ground water after getting necessary permission from concerned authority by the appointed contractor. No Groundwater extraction is proposed.

3.3.9. Rainwater harvesting structures shall be provided at the interval of 500 m on either sides of carriageway as per availability of RoW and depending on the water table of first aquifer (Approx. 179 nos. of structures shall be constructed). The total cost of the rainwater harvesting structures including its maintenance is Rs. 8,95,0000and this cost has been covered in the EMP cost.

3.3.10. The proposed alignment does not pass through Wildlife Sanctuary/National Park and its eco sensitive zone within 10 km radius from the proposed project. The proposed project does not passes through any CRZ locations.

3.3.11. Tree cutting: The alignment will require cutting of approximately 53,396 no. of trees. Avenue plantation shall be carried out as IRC:SP:21:2009 on available RoW apart from statutory requirements.

3.3.12. Waste Management: Approx. 200 TPA waste during construction phase waste during operation phase at tolls and wayside amenities area within PROW may be generated. Bio degradable waste shall be disposed through bio composting and other waste through landfill site.

3.3.13. Parking requirement: As per the detailed field surveys and reconnaissance, truck lay byes and bus stop have been proposed. The rest area will provide common facilities like petrol pump, first aid medical facilities, restaurant and vehicle parking etc. For petrol pump, the guidelines issued by OISD of Ministry of Petroleum shall be followed. The facilities shall be planned at approximately 50 km interval.

3.3.14. R&R Issues: The total land acquisition for the proposed highway is 433.02 ha. The total no of PAFs area 4390 nos, The Project Adequate compensation would be paid as per the measurement and prevailing state government norms. Further the compensation towards the acquisition of land will be made as per the provisions of the NH Act 1956 and applicable clauses and procedures as laid down in the RFCT LARR Act, 2013. The estimated cost for Rehabilitation & Resettlement including land cost has been worked out to Rs. 381Crores.

3.3.15. Benefits of the project: The proposed project would act as the prime artery for the economic flow to this region. The project will enhance connectivity between rural & urban population which will benefit the all sections of the society like general population, small-medium-large scale industries, farmers, businessmen etc. Improved access to higher education facilities & modern health facilities. It will strengthen both rural & urban economies which in turn will improve economic scenario of the state and country. Faster transportation will strengthen tourist development in the area. Improved road connectivity will help in better implementation and management of government schemes. The proposal shows a potential of economic growth along the highway & including employment generation. Construction highway is expected to generate around 800 persons would be employed temporarily for a period of 2 years. However due to construction of toll plazas approx. 40 persons will be employed on permanent basis. Preference will be given to local people for employment.

3.3.16. The comprehensive socio-economic assessment for the proposed project has been carried out by the independent expert of Punjabi Universty, Patiala. The traffic study has been done at 9 homogenous sections all along the highway and with the help of the traffic study various numbers of Underpasses, VUP (vehicle underpasses), PUP (Pedestrian underpass, Culverts, Minor and major bridges, major and minor junctions, flyovers/interchanges etc have been designed and proposed on the National highway.

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

3.3.18. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 296th meeting during 24th – 25th May 2022 and observe that

regarding the above proposal several representations by local people regarding Public Hearing and bad effect of proposed project on environment and agriculture lands were received. A DO letter from Hon'ble Minister for Panchayat Raj written to Hon'ble Ministry for Road Transport and Highways is also forwarded to the EAC and the Ministry. In this regards, the Committee is of the view that a detailed enquiry need to conduct by the District Collector and reply has to submit to the Ministry.

3.3.19. In view of the above, The EAC **deferred** the proposal. The Proposal may be placed before the EAC after receipt of enquiry report from the Concern District Collector.

Agenda No. 3.4

Subject: Development of 6 lane Access Controlled Greenfield Highway of Shamli – Ambala Sec. from Km Ch. 0+000 to Km Ch. 120+970 (Total length: 120.970 km) in the States of Uttar Pradesh and Haryana under Bharatmala Pariyojana Phase II (Lot-9/Package-1) by M/s National Highways Authority of India – Environmental Clearance.

[Proposal No. IA/HR/NCP/231468/2021 and File No. 10/33/2021-IA.III]

"*The EAC noted that the Project Proponent and the consultant have submitted 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/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent."*

3.4.1. The proposed proposal is for 'Development of 6 lane Access Controlled Greenfield Highway of Shamli –Ambala Sec. from Km Ch. 0+000 to Km Ch. 120+970 (Total length: 120.970 km) in the States of Uttar Pradesh and Haryana under Bharatmala Pariyojana Phase II (Lot-9/Package-1) by M/s National Highways Authority of India'

3.4.2. The abovementioned proposal was placed before the EAC in its 297th meeting on 24th–25th May 2022. The project proponent along with the EIA Consultant M/s Mantras Green Resources Limited made a presentation and presented at the Ministry in Physical mode and provided the following information:-

3.4.3. The proposed highway starts near Gogwan Jalalpur village (Ch: 0+000) in Shamli district of Uttar Pradesh and ends at Sadopur village in Ambala district in Haryana. Total length of the proposed section is ~120.970 km. The proposed access-controlled highway is a complete greenfield project falls in Uttar Pradesh (Shamli, Saharanpur district), (Yamuna Nagar, Karnal, Kurukshetra, Ambala district) Haryana & Punjab State (SAS Nagar district). The RoW for the proposed highway is 60 meters. The Geo-coordinates of the proposed projects are in Latitude 29° 32' 57.51" N 77° 26' 33.68" E and Longitude 30° 24' 48.27" N, 76° 47' 1.26" E.

3.4.4. The Terms of Reference (ToR) proposal was considered in 271st EAC Meeting held on 26th -27th August, 2021 and The Terms of Reference (ToR) was granted by Ministry vide File No.10-33/2021-IA.III on dated 22nd Sept 2021 & amended on 6th Dec 2021.

3.4.5. Proposed project will fall under the category-7(f) Highways of the EIA notification 2006 and Total cost of the Project is for the proposed development is estimated to be Rs. 3963.80Cr.

3.4.6. The total land acquisition for the proposed highway is 893.81 ha out of which 5.97 ha is forest land. The Area is presented in the below table. The stage-1 Forest Clearance is under process at DFO level. The proposed RoW of the project is 60 m.

S. No.	Date	**Location**	**Name of District**	**Presided by**
1	15th March, 2022	Community Centre Village- Tepla, Saha, Ambala	Ambala District, Punjab	Additional Deputy Commissioner
2	09 March, 2022	Block Development and Panchayat Office, Near Bus Stand, Indri	Karnal, Haryana	Additional Deputy Commissioner
3	25 March, 2022	Shree Sahid Udham Singh Kamboj Dharamsala, Radaur	Yamunanagar, Haryana	Additional Deputy Commissioner
4	16 March, 2022	Panchayat Bhavan, Village- Ghajlana, District- Kurukshetra	Kurukhetra, Punjab	Additional Deputy Commissioner
5	12 March, 2022	Community Centre, Village Nagla, Dera Bassi	SAS Nagar District, Punjab	Additional Deputy Commissioner
6	22 March, 2022	Conference Hall Collectorate Shamli	Shamli, Uttar Pradesh	Additional District Collector
7	28 March, 2022	Jan Manch, Sabhagar near Gandhi Park, Saharanpur	Saharanpur, Uttar Pradesh	Additional District Collector
Major issues raised		Water logging. water harvesting every 50 meter of the road facility for crossing of pipeline and wires will be provided. Tree cutting issues, Compensation regarding underground water pipeline. Improvement of Road efficiency with economic growth. With the above approach to design, Construction and operation the project will be socially feasible. Reduction of the air and noise pollution in the vicinity of the highway.		

	Provision of truck lay bays, bus bays, underpasses and Pedestrian underpasses in some villages. Villagers have also demanded service roads and Vehicular Underpass at every 500m in the built up areas and adequate compensation to the Project affected persons.
Compliances	Adequate number of bridges and culverts are proposed to maintain the natural flow of storm water. Rain water harvesting system is provided to solve the rain water logging problem. Compensation for the pipeline falling within the proposed ROW shall be made as per evaluation of the concerned department. The average distance of underpass/ flyover/culverts is All existing roads are provided with underpass and adequate Box type culverts will be provided, as per site requirement. approx. 500m Baseline studies were conducted within 10 km radius as per the guidance manual from MoEF&CC. Upon summing up the emissions during construction and operation phase, the emissions shall fall within limits prescribed. Further to mitigate any abnormalities, EMP is in place to monitor. Approx. 19632 trees will be cut & about 120000 trees will be planted for the complete project.

3.4.8. The Land use pattern on 10 km on either side of the proposed National Highway primarily comprises of agricultural land, forest area, land for cattle grazing, village settlements and village ponds/nallah. The proposed alignment passes mostly through uninhabited area avoiding village establishments. The agriculture practiced is mostly multicrop due to the network of canals/rivers and main crops grown in the area are Wheat, rice, maize, sugarcane, cotton etc. The proposed highway lies generally in plain terrain. However certain length of highway lies in rolling terrain.

3.4.9. The natural drainage of the project impacted area shall be maintained through improvement of 177 nos. of culverts, 8 nos. of major bridges and 21 nos. minor of bridges. Rainwater harvesting structures shall be provided at the interval of 500 m on either sides of carriageway as per availability of RoW and depending on the water table of first aquifer the proposed alignment does not pass through any flood prone area. The peak water requirement is 2,70,91,578 KLD during construction stage and will be extracted from local surface water resources i.e. from local surface/ground water (which is easily available) after getting necessary permission from concerned authority by the appointed contractor. No Groundwater extraction is proposed.

3.4.10. The proposed alignment does not pass through Wildlife Sanctuary/National Park and its eco sensitive zone within 10 km radius from the proposed project. The proposed project does not passes through any CRZ locations.

3.4.11. Tree cutting, types, number, girth size etc.: The alignment will involve cutting of approx. 19632 nos. of trees. The avenue plantation will be carried out as per IRC SP-21 and National Green Highway policy 2015 within the available ROW.

3.4.12. Parking requirement: As per the detailed field surveys and reconnaissance, truck lay byes and bus stop have been proposed. The rest area will provide common facilities like petrol pump, first aid medical facilities, restaurant and vehicle parking etc. For petrol pump, the guidelines issued by OISD of Ministry of Petroleum shall be followed. The facilities shall be planned at approximately 50 km interval.

3.4.13. R&R Issues: About 3719 nos. of Titleholders are likely to be affected due to proposed development. Adequate compensation would be paid as per the measurement and prevailing state government norms. Further the compensation towards the acquisition of land will be made as per the provisions of the NH Act 1956 and applicable clauses and procedures as laid down in the RFCT LARR Act, 2013.

3.4.14. Benefits of the project: The proposed project would act as the prime artery for the economic flow to this region. The project will enhance connectivity between rural & urban population which will benefit the all sections of the society like general population, small-medium-large scale industries, farmers, businessmen etc. Improved access to higher education facilities & modern health facilities. It will strengthen both rural & urban economies which in turn will improve economic scenario of the state and country. Faster transportation will strengthen tourist development in the area. Improved road connectivity will help in better implementation and management of government schemes. The proposal shows a potential of economic growth along the highway & including employment generation. Construction highway is expected to generate about 1600 employment of peoples.

3.4.15. The comprehensive socio-economic assessment for the proposed project has been carried out by the independent expert of Punjabi University, Patiala. The traffic study has been done at 9 homogenous sections all along the highway and with the help of the traffic study various numbers of Underpasses, VUP (vehicle underpasses), PUP (Pedestrian underpass, Culverts, Minor and major bridges, major and minor junctions, flyovers/interchanges etc have been designed and proposed on the National highway.

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

3.4.17. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 296th meeting during 24th – 25th May 2022 and **recommended** the proposal for grant of Environmental clearance with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

SPECIFIC CONDITIONS

i. 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 Chapter 4 and Chapter 9 of the EIA report shall be followed.

ii. 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 in Chapter 4 of the EIA report shall be followed.

iii. In all the construction sites within 150m 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.

iv. 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.

v. 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.

vi. About 15721 nos. of trees are likely to be felled along the proposed alignment after obtaining permission from the competent authorities. Afforestation using compensatory plantation in the ratio of 1:10 shall be carried out. 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 Ficus species on both sides of the alignment. Special attention shall be given for protecting giant trees, and locally important trees (having cultural importance).

vii. 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. 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.

viii. 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. Major water bodies have been observed in the vicinity of the proposed road alignment & may be potential human elephant conflict points, appropriate nos of animal safe passages as per the guideline framed by the Wildlife Institute of India.

ix. 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.

x. Rain water harvesting pit shall be at least 3 - 5 m above the highest ground water table.

Agenda No. 3.5

Subject: Expansion of Dighi Port at Taluka Murud and Taluka Shrivardhan, District Raigad, Maharashtra by M/s Dighi Port Limited – Terms of Reference Proposal No. IA/MH/NCP/269319/2022 and File No. 10/23/2022-IA.III

"*The EAC noted that the Project Proponent and the consultant have submitted 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/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent."*

3.5.1. The proposed proposal is for 'Expansion of Dighi Port at Taluka Murud and Taluka Shrivardhan, District Raigad, Maharashtra by M/s Dighi Port Limited'

3.5.2. The abovementioned proposal was placed before the EAC in its 297th meeting on 24th–25th May 2022. The project proponent along with the EIA Consultant M/s Aditya Environmental Services Pvt. Ltd made a presentation and presented at the Ministry in Physical mode and provided the following information:-

3.5.3. The proposed project is 'Expansion of Dighi Port located at Taluka Murud and Taluka Shrivardhan, District Raigad, Maharashtra by M/s Dighi Port Limited' Dighi lies in Raigad District of Maharashtra, at 18°16'29.24"N, 72°58'8.38"E & 18°16'56.67"N, 72°59'11.21"E.

3.5.4. Initially the Environment Clearance was granted by the Ministry of Environment & Forest (MoEF) vide letter no. 10-8/2005-IA-II dated 30th September 2005, thereafter EC Corrigendum was issued on 26th December 2005 for clarification regarding Phase I involving development of 4 new multipurpose berth and strengthening & upgrading of existing (one number) berth Subsequently EC Corrigendum was issued on 25th June 2012 to treat the EC issued on 30th September 2005 as EC and CRZ clearance and also DPL was permitted to handle LPG as per the corrigendum letter. Further corrigendum to EC & CRZ clearance was issued on 7th December 2021 mentioning the berth dimensions.

3.5.5. As per the existing approval DPL has a permission to construct 4 New multipurpose berths and strengthen upgrade existing (one number) berth having total key length 1650meters, to cater to all kinds of dry cargo, project cargo, container cargo, liquid cargo and Cryogenic

Gas upto -1600c. At present DPL is operating two multipurpose berths on south side (Dighi side). Out of the three approved berths on north side two berths are constructed and are in commissioning phase and one berth is yet to be constructed.

3.5.6. Now DPL is proposing construction of 6175 meters quary length berth including 2 SPM having 900mtr quary length as per the master plan along with back up infrastructure facilities for handling of all type of dry cargo, project cargo, ro-ro, container cargo, ship repair & ship building and all type of liquid cargo and cryogenic gas up to -160^{0}C.

3.5.7. The total length area of the project is 584.50ha, out of which, DPL envisages to development of 7825 meter (6175 new + 1650 existing approved) berth length for cargo handling capacity of 140 MMTPA (Existing 23.65 and expansion 116.35). The total reclamation area will be 445ha (already reclaimed 141 and expansion 304).

3.5.8. During the Meeting PP submitted the following:

S. No.	Component	As per Existing EC Approval	Construction Completed	Construction pending	Proposed expansion	Total after expansion
a)	Total quay length of berth	5 berths of 325 meter X 35 meter each	4 berths are constructed : 2 on North side and 2 on South side	1 berth of 325 m is pending for construction	6175 meter (North side: 1925 meter + South side: 4250 meter) + 1 berth of 325 m approved earlier on North side	7825 meter (North side: 2925 meter + South side: 4900 meter)
b)	Single Point Mooring (SPM)	-	-	-	2 SPM's	2 SPM's
c)	Cargo handling	23.65 Million metric ton per Annum	-	-	116.35 MMTPA	140 MMTPA

S. No.	Component	As per Existing EC Approval	Construction Completed	Construction pending	Proposed expansion	Total after expansion
		(MMTPA)				
d)	Total reclamation	141 Ha	114 Ha	-	304 Ha (North side: 160 Ha. + South side: 144 Ha.)	445 Ha
e)	Total land acquisition	139.5 Ha	-	-	Not proposed	139.5
f)	Total area of the project	280.5 Ha	-	-	304 Ha	584.5 Ha
g)	Total capital dredging	-	-	-	114 Million m^3	114 Million m^3
h)	Total water requirement	1.4 Million litres per day (MLD)	-	-	50 MLD	51.4 MLD
i)	Power requirement	240 MWh/day	-	-	700 MWh/day	900 MWh/day
j)	Type of cargo	All kinds of dry cargo (coal, bauxite, Fertilizer and Fertilizer raw material, molasses,	-	-	Handling and storage of multipurpose cargo including coal, iron ore, bulk, break bulk, general cargo, project cargo, dry cargo, container, RO-RO, ship building, ship repair, fertilizers and raw materials, automobiles and other non-hazardous	

S. No.	Component	As per Existing EC Approval	Construction Completed	Construction pending	Proposed expansion	Total after expansion
		cement, clinkers, Iron, Steel, sugar, project cargo, break bulk, container cargo, POL, LPG, all types of chemicals and other miscellaneous cargo			cargo. Liquid/ gas/ cryogenics up to -160°C to liquid cargo including class A, B, C, petroleum product, excluded petroleum products, non-classified chemicals and petroleum products, other hazardous, toxic and non-hazardous chemicals, crude etc.	

3.5.9. The Committee after deliberation noted that the PP has obtained the EC under the provisions of EIA notification 1994 the EC validity expires in 5 years. Therefore, the EC granted in 2005 is construed to the facilities established with in the validity period and operation. Through the present application submitted online, PP had applied for the expansion of the port project without considering and mentioning the part of the unit which was not completed in the earlier EC dated 2005. Now therefore the Committee advised the PP to include the incomplete part in the present expansion proposal & resubmit the proposal for consideration by the Ministry.

3.5.10. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 296th meeting during 24th – 25th May 2022 and **return in present form** and asked the PP to submit the revised Form-I and PFR.

Agenda No. 3.6

Subject: Development of 4/6 lane Greenfield Highway starts from Jalbehra (km 00.000) near Ismailabad to Patti Kankra (km 22.850) near Shahbad in the state of Haryana under Bharatmala Pariyojana (Lot-6/package-6) by M/s National Highways Authority of India (Total length – 22.850 km) – Environmental Clearance.

[Proposal No. IA/HR/NCP/242896/2021 and File No. 10/57/2021-IA.III]

"*The EAC noted that the Project Proponent and the consultant have submitted 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/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent."*

3.6.1. The abovementioned proposal was placed before the EAC in its 297th meeting on 24th – 25th May 2022. The project proponent along with the EIA Consultant M/s P and M Solution made a presentation and presented at the Ministry in Physical mode and provided the following information:

3.6.2. The Proposed project is of Development of 4/6 Lane Greenfield Highway Starts from Jalbehra to Patti Kankara. Connecting NH-152 with NH-44 and passing through important settlements like Ismailabad, Pehowa, and Shahbad of district Kurukshetra in the state of Haryana and the Total length of the Project is 22.850 Km. Project stretch commences from Jalbehra that is about 7 km from Ismailabad and terminates at Patti Kankara which is around 4 km from Shahbad in the state of Haryana. The Geo-Coordinates of the Proposed Project are Start from Location:30°5'28.59"N, 76°40'2.42"E and End at Location: 30°11'35.73"N, 76°51'55.09"E.

3.6.3. The Proposed Project was considered in the 284th meeting during 29th -30thDec, 2021, the Ministry granted the ToR on 28th Jan, 2022.

3.6.4. Proposed project will fall under the category-7(f) Highways of the EIA notification 2006 and Total cost of the Project is for the proposed development is estimated to be Rs 92722 Lakhs.

3.6.5. Landuse/Landcover of project site is as the following:

S.No.	Land use/Landover	Area (ha)	Percentage %	Remarks if any
1.	Private land	108.89	90.93	Agriculture/Barren Land
2.	Government land	3.197	2.67	Agriculture/Barren Land
3.	Forest land	7.663	6.40	-
	Total	**119.75**	**100**	-

3.6.6. Public Hearing: The Public Hearing in Haryana was conducted by the Haryana Pollution Control Board on 08th April, 2022 at Village – Jhansa, District Kurukshetra, Haryana, which was presided by Additional Deputy Commissioner, Kurukshetra in the presence of, Regional officer, Kurukshetra Region, HSPCB.

Date of Public Consultation	08th April, 2022
Venue	Village – Jhansa, District Kurukshetra, Haryana
Presiding Officer	Additional Deputy Commissioner
Major issues raised	Prevent the dust during the construction of the road, causing pollution water during construction, Reduction of the air and noise pollution in the vicinity of the highway, Provision of truck lay bays, bus bays, underpasses and Pedestrian underpasses in some villages. Villagers have also demanded

	service roads and Vehicular Underpass at every 500m in the built up areas and adequate compensation to the Project affected persons.
	Frequent water sprinkling will be done on RoW to suppress the dust arising during construction of project. The Proposed project involves Major Bridge(01), Minor Bridge(01) Flyover(01), Interchange(01), ROB(01), Vehicular underpass(01),LVUP(07), SVUP(10), and Box Culverts(23). Baseline studies were conducted within 10 km radius as per the guidance manual from MoEF&CC. Upon summing up the emissions during construction and operation phase, The emissions shall fall within limits prescribed. Further to mitigate any abnormalities, EMP is in place to monitor.

3.6.7. The natural drainage of the project impacted area shall be maintained through improvement of 23 nos. of culverts, 01 nos. of major bridges and 01 nos. minor of bridges. The proposed alignment does not pass through any flood prone area. The peak water requirement is 6833 KLD during construction stage and will be extracted from local surface water resources i.e. from local surface/ground water (which is easily available) after getting necessary permission from concerned authority by the appointed contractor. No Groundwater extraction is proposed.

3.6.8 Rainwater harvesting structures shall be provided at the interval of 500 m on either sides of carriageway as per availability of RoW and depending on the water table of first aquifer (Approx. 46 nos. of structures shall be constructed). The total cost of the rainwater harvesting structures including its maintenance is Rs. 23,00,000 and this cost has been covered in the EMP cost.

3.6.10. The proposed alignment does not pass through Wildlife Sanctuary/National Park and its eco sensitive zone within 10 km radius from the proposed project. The proposed project does not passes through any CRZ locations.

3.6.11. Tree cutting, types, number, girth size etc.: The alignment will involve cutting of approx. 1686 nos. of trees. The avenue plantation will be carried out as per IRC SP-21 and National Green Highway policy 2015 within the available ROW.

3.6.12. Diversion of Forest Land: Approx. 7.663 ha of forest land (Railway line crossing and canal crossing) need to be diverted for construction of proposed highway. Forest Diversion proposal has been prepared and submitted as per the guidelines and consultation with concerned authorities via proposal no. FP/HR/ROAD/151373/2022 dated 31/01/2022.

3.6.13. Waste Management: Waste Management: Approx. 63 TPA waste during construction phase waste during operation phase at tolls and wayside amenities area within PROW may

be generated. Bio degradable waste shall be disposed through bio composting and other waste through landfill site.

3.6.14. Parking requirement: As per the detailed field surveys and reconnaissance, truck lay byes and bus stop have been proposed. The rest area will provide common facilities like petrol pump, first aid medical facilities, restaurant and vehicle parking etc. For petrol pump, the guidelines issued by OISD of Ministry of Petroleum shall be followed. The facilities shall be planned at approximately 50 km interval.

3.6.15. R&R Issues: Land Acquisition and R&R: About 119.75 ha land likely to be acquired, adequate compensation would be paid as per the measurement and prevailing state government norms. Further the compensation towards the acquisition of land will be made as per the provisions of the NH Act 1956 and applicable clauses and procedures as laid down in the RFCT LARR Act, 2013.

3.6.16. Benefits of the project: The proposed project would act as the prime artery for the economic flow to this region. The project will enhance connectivity between rural & urban population which will benefit the all sections of the society like general population, small-medium-large scale industries, farmers, businessmen etc. Improved access to higher education facilities & modern health facilities. It will strengthen both rural & urban economies which in turn will improve economic scenario of the state and country. Faster transportation will strengthen tourist development in the area. Improved road connectivity will help in better implementation and management of government schemes. The proposal shows a potential of economic growth along the highway & including employment generation. Construction highway is expected to generate about 500 employments of peoples during the construction phase and 70 persons during operation phase.

3.6.17. The comprehensive socio-economic assessment for the proposed project has been carried out by the independent expert of Punjabi University, Patiala. The traffic study has been done at 9 homogenous sections all along the highway and with the help of the traffic study various numbers of Underpasses, VUP (vehicle underpasses), PUP (Pedestrian underpass, Culverts, Minor and major bridges, major and minor junctions, flyovers/interchanges etc have been designed and proposed on the National highway.

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

3.6.19. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 296th meeting during 24th – 25th May 2022 and **recommended** the proposal for grant of Environmental clearance with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

SPECIFIC CONDITIONS

i. 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 Chapter 4 and Chapter 9 of the EIA report shall be followed.

ii. 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 in Chapter 4 of the EIA report shall be followed.

iii. In all the construction sites within 150m 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 equipments used in construction shall strictly conform to the CPCB/SPCB noise standards.

iv. 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.

v. 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.

vi. About 15721 nos. of trees are likely to be felled along the proposed alignment after obtaining permission from the competent authorities. Afforestation using compensatory plantation in the ratio of 1:10 shall be carried out. 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 Ficus species on both sides of the alignment. Special attention shall be given for protecting giant trees, and locally important trees (having cultural importance).

vii. 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. 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.

viii. 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. Major water bodies have been observed in the vicinity of the proposed road alignment & may be potential human elephant conflict points, appropriate nos of animal safe passages as per the guideline framed by the Wildlife

Institute of India.

ix. 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.

x. Rain water harvesting pit shall be at least 3 - 5 m above the highest ground water table.

Agenda No. 3.7

"Multi Product SEZ" at Mundra, District Kutch, Gujarat by M/s Adani Ports and SEZ Limited – Further consideration for amendment in specific conditions of Environmental and CRZ Clearance [Proposal No. IA/GJ/NCP/261191/2022 and File No. 10-138/2008-IA.III]

3.7.1 The proposal was considered in the 294th meeting of EAC held during 11th – 12th April 2022. The EAC deferred the proposal as the matter was under examination by the Ministry.

3.7.2 It is noted that while granting EC&CRZ clearance by the Ministry, certain conditions were stipulated by the Ministry based on the recommendations of the EAC. The PP has proposed to amend the Specific Condition No. (x) & (xi) regarding restriction of Industrial activity in CRZ area other than port related activities and No Development Zone till mangrove/creek plan finalization.

3.7.3 It has been informed that, as Mangrove Conservation Action Plan is now approved, PP has fully complied with the specific condition no. (xi) under EC & CRZ clearance dated 15th July, 2014 and therefore condition of CRZ area of SEZ as "No Development Zone" needs revision. Moreover, these CRZ area can be used for carrying out permissible activities either by APSEZ or any Industry through specific permissions and therefore the specific condition no. (x) under EC & CRZ clearance dated 15th July, 2014 on "No allotment of plots in CRZ area to Industries" needs revision.

In view of the above, PP has requested for following amendments:

Specific condition no.	Specific condition	Proposed amendment	Remarks
(x)	PP shall demarcate the CRZ area on land with GPS coordinates in consultation with GCZMA the agency which has done the HTL/LTL demarcation for the area. There shall be no allotment of plot/s in CRZ area to industries. No industrial activity within CRZ area except the port and harbor & the foreshore facilities shall be allowed as committed	CRZ area can be used for carrying out permissible activities either by APSEZ or any Industry through specific permissions and therefore the specific condition no. (x) under EC & CRZ clearance dated 15th July, 2014 on "No allotment of plots in CRZ area to Industries" needs revision.	• APSEZ has set up multiproduct SEZ to facilitate Industrial Development by utilizing its area optimally. APSEZ to carry out permissible activities & allot plots to individual industries to carry out permissible activities within CRZ area of SEZ in line with CRZ Notification, 2011 and its amendment till date. • Individual
(xi)	Till the approval of action plan for conservation and protection of	As Mangrove Conservation Action Plan is now approved, so APSEZ has	

	creeks/mangrove area, the CRZ area within SEZ shall be demarcated as "No Development Zone". PP shall not allow/ undertake any development in CRZ area of SEZ.	fully complied with the specific condition no. (xi) under EC & CRZ clearance dated 15th July, 2014 and therefore condition of CRZ area of SEZ as "No Development Zone" needs revision.	industries will obtain CRZ clearance from concerned authorities to carry out permissible activities within CRZ area.

3.7.4 The EAC, taking into account the clarification provided by the Ministry and submissions made by the PP had a detailed deliberation in its 297th meeting during 24th – 25th May, 2022 and **recommended** the proposal for the amendment in Environmental and CRZ Clearance as mentioned above in the para 3.7.3 issued by the Ministry to M/s Adani Ports and SEZ Limited, vide F. No. 10-138/2008-IA.III and dated 15th July 2014 with following conditions:

i. CRZ area within the project boundary can be used for carrying out permissible activities either by APSEZ or any Industry through specific permission. However, if activities other than those recommended by the GCZMA earlier is proposed, fresh recommendations need to be obtained.
ii. Individual industries/APSEZ will obtain CRZ clearance afresh from concerned authorities to carry out permissible activities within CRZ area.
iii. All the recommendations stipulated in the Mangrove Conservation Plan to be implemented in totality
iv. All other conditions mentioned in the letter No. 10-138/2008-IA.III and dated 15th July 2014 shall remain unchanged.

Agenda No. 3.7

Expansion of an operating notified SEZ, with an additional land of 45.86 acre, for Multi-Sectoral Chemical manufacturing facilities located at Plot 5, Vilayat GIDC Estate, Taluka Vagra, Dist Bharuch, Gujarat by M/s Jubilant Infrastructure Limited – Amendment in Environmental Clearance [Proposal No. IA/GJ/NCP/260879/2022 and File No. 10/24/2021-IA.III]

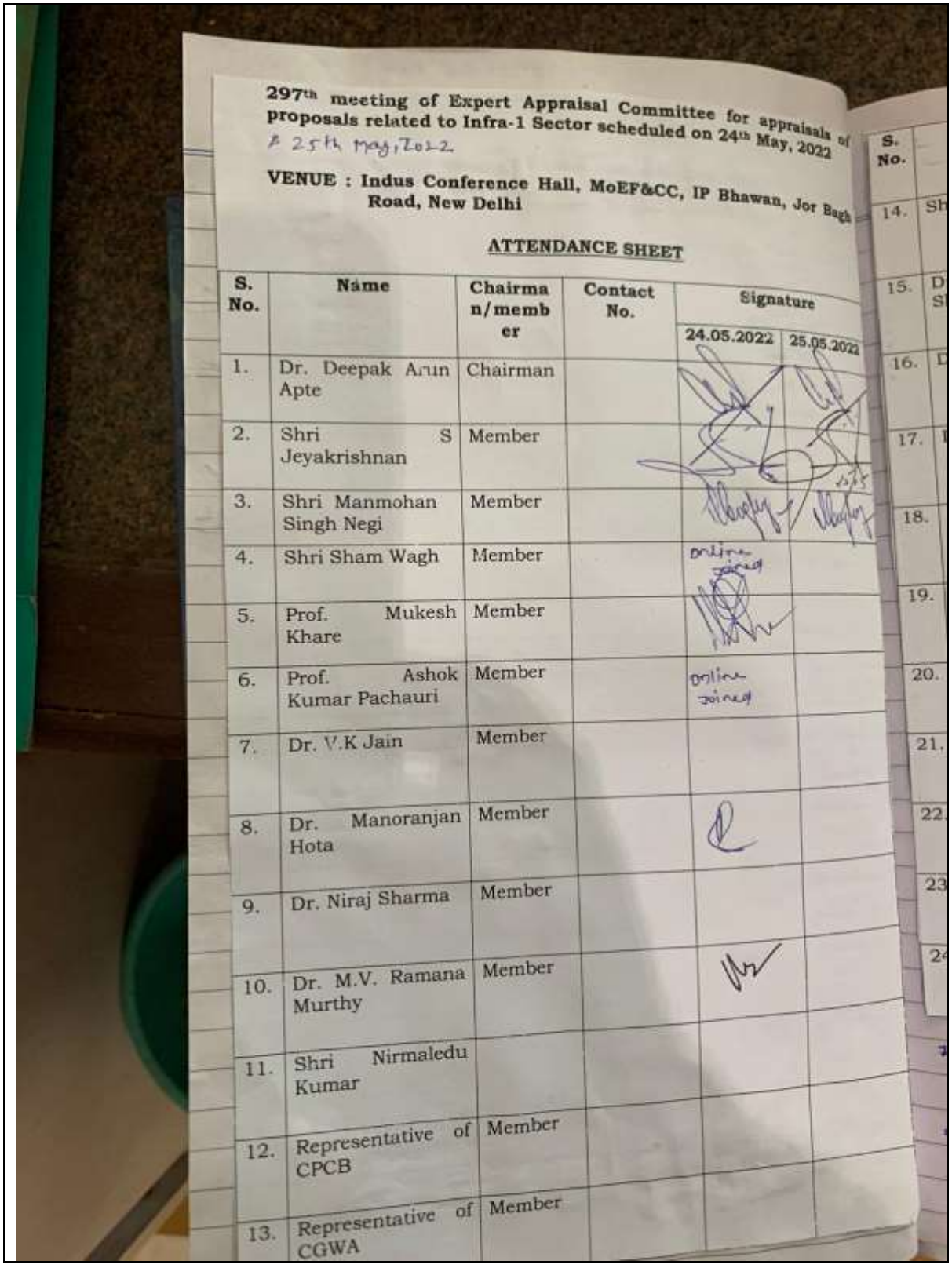
3.7.1 The proposal was considered in the 294th meeting of EAC held during 11th – 12th April 2022 and the EAC recommended the proposal for the amendment in Environmental and CRZ Clearance under clause 7(ii) of EIA Notification, 2006, as amended, issued by the Ministry in favor of M/s Jubilant Infrastructure Limited, vide letter no. EC22A031GJ117822 and File No. 10/24/2021-IA.III dated 14.02.2022 for "setting up of SEZ for chemicals in Vilayat GIDC in Taluka Vegra, district Bharuch along with captive power plant common ETP, TSDF".

3.7.2 The PP vide email requested for amendment in the MOM as para 3.6.9 of 294th meeting mentions "Final configuration after amendment is as following", however, PP clarified that para 3.6.8 is also part final amendment and that should also reflect in the amendment letter.

3.7.3 The EAC noted the request made by the PP and recommended the Ministry to take necessary action as mentioned above.

Annexure-A

Following members were present during the 297th EAC(Infra-1) meeting held on 24th – 25th May, 2022.

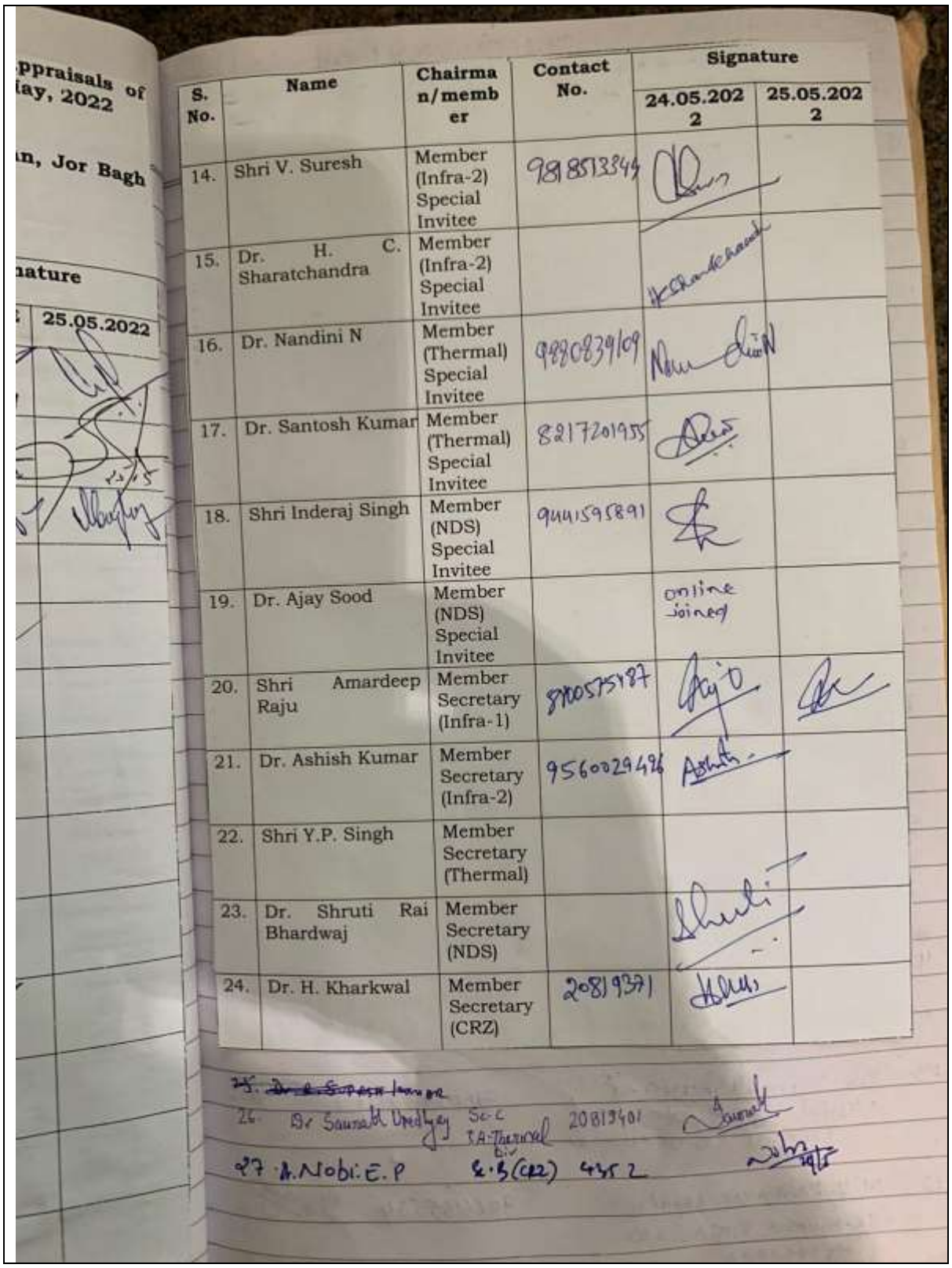


297th meeting of Expert Appraisal Committee for appraisals of proposals related to Infra-1 Sector scheduled on 24th May, 2022 & 25th May, 2022

VENUE : Indus Conference Hall, MoEF&CC, IP Bhawan, Jor Bagh Road, New Delhi

ATTENDANCE SHEET

S. No.	Name	Chairman/member	Contact No.	Signature 24.05.2022	Signature 25.05.2022
1.	Dr. Deepak Arun Apte	Chairman			
2.	Shri S Jeyakrishnan	Member			
3.	Shri Manmohan Singh Negi	Member			
4.	Shri Sham Wagh	Member		online joined	
5.	Prof. Mukesh Khare	Member			
6.	Prof. Ashok Kumar Pachauri	Member		online joined	
7.	Dr. V.K Jain	Member			
8.	Dr. Manoranjan Hota	Member			
9.	Dr. Niraj Sharma	Member			
10.	Dr. M.V. Ramana Murthy	Member			
11.	Shri Nirmaledu Kumar				
12.	Representative of CPCB	Member			
13.	Representative of CGWA	Member			



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25.05.2022

S. No.	Name	Chairman/member	Contact No.	Signature 24.05.2022	Signature 25.05.2022
14.	Shri V. Suresh	Member (Infra-2) Special Invitee	9818513349		
15.	Dr. H. C. Sharatchandra	Member (Infra-2) Special Invitee			
16.	Dr. Nandini N	Member (Thermal) Special Invitee	9880839109		
17.	Dr. Santosh Kumar	Member (Thermal) Special Invitee	8217201955		
18.	Shri Inderaj Singh	Member (NDS) Special Invitee	9441595891		
19.	Dr. Ajay Sood	Member (NDS) Special Invitee		online joined	
20.	Shri Amardeep Raju	Member Secretary (Infra-1)	8800535187		
21.	Dr. Ashish Kumar	Member Secretary (Infra-2)	9560029496		
22.	Shri Y.P. Singh	Member Secretary (Thermal)			
23.	Dr. Shruti Rai Bhardwaj	Member Secretary (NDS)			
24.	Dr. H. Kharkwal	Member Secretary (CRZ)	20819371		

~~25. Dr. B. Supresh Kumar~~

26 Dr Saurabh Upadhyay Sc-C SA-Thermal 20813401

27 A. Nobi. E. P E.E (CRZ) 4352

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Minutes of the 306th meeting of Expert Appraisal Committee held on 22nd - 23rd 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 306th Meeting of Expert Appraisal Committee (EAC) of Infra-1 (IA-III) was held through Video Conference during **22nd – 23rd 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 304th 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: 21st 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	**Total**	**265.33**	**100**	-

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	16th 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	10th 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 thatthere 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 NHAI 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 alignmentstarts from the Tal Dasraha (Ch-47+000) to Bela Nawada (NH57) (CH89+100) (package-5, Length-42.100) under BharatmalaPariyojana (Lot-5, Package-7) in state of Bihar.

iv. As submitted by the PP, as per the NHAI 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 BharatmalaPariyojana (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 306th meeting on 22nd-23rd 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), pelicanaryor 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 outby 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 306th EAC meeting held during 22nd -23rd 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 2450trees are falling within PROW. The tree enumeration for affected trees shall be undertaken during detailed EIA Study. The inventory will include tree species, grith 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 RFCTLARR 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 306thmeeting held on 22nd -23rd 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). pelicanaryor 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 30th 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 25th 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 306th EAC meeting held during 22nd -23rd 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 limitedmade 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 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.

3.3.4 The proposed proposal fall under 7(e) 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 306th EAC meeting during 22nd – 23rdAugust, 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 306th EAC meeting held during 22nd -23rd 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.

3.4.4Initially, 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 20, 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 MMTPA 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:

Name of the cargo	Existing Cargo Mix	Existing Cargo (MTPA) (Consented Quantity)	Final handling Capacity after amendment (MTPA)	Final Cargo Mix after amendment
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 306th EAC meeting during 22nd – 23rd 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 additionalarrangement 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 306th EAC meeting held during 22nd -23rd 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
	Total	**1363**	**100**

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 08th 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 andCluster 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 27thJuly 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 GIDCIndustrial 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 22nd – 23rd 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 currentlocation.

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, Chennaihas 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 302nd 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 306th EAC meeting held during 22nd -23rd 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	-
	Total	**352.36**	-

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

S. No	FocusSector	Anticipated Types of Industries	Activities	Categorizationof 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	Categorizationof 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	Other Industries	Manufacturing of vegetable oils	-	Nil	Orange	W12, Group A1G
8		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	FocusSector	Anticipated Types of Industries	Activities	Categorizationof 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 Hanumanthanagar ≈ 0.06 km (E), Canal near Bannikuppe ≈ 0.12 km (W), Suvarnamukhi R ≈ 0.53 km (W), Arkavati R ≈ 2.08 km (SW), Vrishabhavati R ≈ 3.73 km (N), Lake near Kagalhallidoddi ≈ 3.79 km(NNE), Bairamangala Left Bank Canal ≈ 3.81 km (N), MavathurKere ≈ 5.98 km (SSE),GattalKereHalla≈ 6.13 km (E), Kutle Hole ≈ 7.43 km (SE), Suvarnamukhi Reservoir ≈ 8.81 km (NNE), SubedaranakerekodihalliHalla ≈ 9 km(ENE), Bairamangala Right BankCanal ≈ 9.82 km (N), Rayatmala Hole ≈ 10.19 km (E), Antaragange Hole ≈ 12.21 km (E), RayatmalaKere ≈ 12.78 km (E), Byramangala Reservoir ≈ 13.39 km (N), Kebre Hole ≈ 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 306th meeting during 22nd-23rd 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), pelicanaryor 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

3.8Development of Industrial Park in area of 1050.45 Ha (2595.74 acres) at Kopparthy, 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. Sutahata, 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 28th February, 2020 for converting fourth jetty to liquid bulk cargo jetty. As per theamendment in EC letter dated 28.02.2020the following is amended in the existing EC dated 30.07.2015.

Attributes	Details as per EC & CRZ Clearance dated 30.07.2015	Amendment granted
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 dated30.07.2015mentioning that the pproject could not take off after obtaining Environmental & CRZ clearance during July, 2015due to change in market demand for dry bulk cargo. The issue was compounded with the changeof Govt. Policy regarding ban on iron ore export. Hence after neeessary market survey

it wasdecided to change the fourth jetty to liquid bulk cargo jetty. The liquid bulk cargo jetty wentrevision 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 cargojetty. 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 tostart shortly.

3.9.3The EAC based on the information submitted and clarifications provided by the project proponent and detailed discussions held on all the issues during its 206th meeting held on 22nd -23rd August, 2022, clarified that as per amendment notification dated 12th 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 18th January, 2021 period from the 1st April, 2020 to the 31st 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 Transhipment 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 293rd meeting of EAC held on 24th – 25th March, 2022 and again in the 297th meeting of EAC held on 24th – 25th 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 19th August, 2022 on PARIVESH portal for further consideration of the proposal. Accordingly, the proposal is again placed in the instant 306th meeting of EAC held on 22nd – 23rd 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:

a. National Memorial (Western tip of Galathea Bay),
b. Defence Purpose (Western tip of Galathea Bay),
c. Pemayya Buffer Area (Buffer area of 500m from HTL for safe nesting of Leatherback turtles),

(xi) The revised land-use breakup is as follows:

LANDUSE	Phase I (Area in Sq.km.)	Phase II (Area in Sq.km.)	Phase III (Area in Sq.km.)	Total (Area in Sq.km.)
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
Grand Total	**72.20**	**54.34**	**39.56**	**166.10**

(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 (*Crocodylusporosus*) 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

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 is 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 306thmeeting during 22nd – 23rd 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 southAndaman 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 WIIcorresponding 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 proposalsto PP with a copy to MoEFCCand 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 proposalswith 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 MoEFCCand EAC within three months of grant of EC and CRZ clearance. The Committee direct PP for the release the first five years budget payment toBSI 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 Nicobarthe 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 torelease the amount mentioned in the proposal toA&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 ZSIto 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 (*Tridacna*sp) 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 Shompentribe 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 threcindependent 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 implemenation 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 Committeeshall 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 I Committee.

ii. **Committee to oversee biodiversity related matters** – The Committee will be chaired by PCCF (WL) A & N Forest Deparment. 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 I 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 I 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 8th 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) orLight 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 shouldbe 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 permited. 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 andrevision. scrutiny, and follow-up of the processing time to time as per the expertopinion.

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 6th 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 mount 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 306th EAC (Infra-1) meeting held on 22nd – 23rd August, 2022.

S. No.	Name	Designation	Remarks	
			22nd August 2022	23rd 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
Co-opted members for Agenda Item No. 3.10.				
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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ENVIRONMENTAL CLEARANCE

PARIVESH
(Pro-Active and Responsive Facilitation by Interactive, and Virtuous Environment Single-Window Hub)

Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The GeneralManager
ANDAMAN AND NICOBAR ISLANDS INTEGRATED DEVELOPMENT CORPOARTION
ANIIDCO Ltd Vikash Bahwan,PO 180 Port Blair,Andamans,Andaman and Nicobar-744101

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/AN/NCP/260108/2021 dated 07 Mar 2022. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	**EC22A033AN125767**
2.	**File No.**	10/17/2021-IA-III
3.	**Project Type**	New
4.	**Category**	A
5.	**Project/Activity including Schedule No.**	7(e) Ports, Harbours
6.	**Name of Project**	Environmental and CRZ Clearance Integrated development of International Container Transhipment Terminal (ICTT)-14.2 Million TEU along with Greenfield International Airport (4000 Peak Hour Passengers-P
7.	**Name of Company/Organization**	ANDAMAN AND NICOBAR ISLANDS INTEGRATED DEVELOPMENT CORPOARTION
8.	**Location of Project**	Andaman and Nicobar
9.	**TOR Date**	25 May 2021

The project details along with terms and conditions are appended herewith from page no 2 onwards.

(e-signed)
Amardeep Raju
Scientist E
IA - (INFRA-1 sector)

Date: 11/11/2022

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

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SUDIP CHAUDHURI NOTARY

Subject: Integrated development of International Container Transhipment Terminal (ICTT)-14.2 Million TEU, 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 –reg.

2. The abovementioned proposal was considered in the 293rd meeting of EAC held on 24th – 25th March, 2022 and again in the 297th meeting of EAC held on 24th – 25th May, 2022. Based on the reply submitted to the queries raised by the EAC, the proposal is again placed in the 306th meeting of EAC held on 22nd – 23rd August, 2022. ToR was granted vide letter No. 10/17/2021-IA.III dated 25th May 2021.

3. The project proponent along with the EIA Consultant M/s Vimta Labs and M/s AECOM India Pvt Ltd made a presentation and provided the following information:-

4. Andaman and Nicobar Islands Integrated Development Corporation Limited (ANIIDCO) propose Holistic Development of Great Nicobar Island in Andaman and Nicobar Islands. Integrated development of International Container Transhipment Terminal (ICTT)-14.2 Million TEU, Township & Area development and 450 MVA Gas and Solar based power plant in Great Nicobar Islands, Nicobar District by M/s Andaman and Nicobar Islands Integrated Development Corporation Ltd.

5. As a part of Holistic Development of Great Nicobar Islands, Deep Berth Port (with ancillary areas for International Trans-shipment terminal) as primary component is planned along with power generation and distribution network; and township are planned which are interlinked projects to ICTT.

6. The proposed project fall under 7(e) Ports, harbours; 1 (d) Power Plant; and 8 (b) Township & Area Development project, Category A, Scheduled to the EIA Notification, 2006.

7. The total area required for the proposed project is 16610 ha. The proposed Project site is in not connected through any road. Currently, the access is through sea and air route only. Approach roads shall be developed within the Islands.

8. 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. Suggestion/opinion from MoD will be sought to finalise the buffer zones around Defence parcels. 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.

9. A separate land use category "Special Use" has been included in the land use plan. The subcategories under "Special Use" are:

a. National Memorial (Western tip of Galathea Bay),
b. Defence Purpose (Western tip of Galathea Bay),
c. Pemayya Buffer Area (Buffer area of 500m from HTL for safe nesting of Leatherback turtles),

10. Golf courses are now not proposed as any specific landuse in the master plan.

11. 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.

12. 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 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).

13. Water Bodies & impact on Drainage: Magar Nala is near Govind Nagar and Matai Nala Near Gandhi Nagar. No major drainage channels/ water bodies are being blocked/ impacted by proposed development. All major water channels/ nalas/ drains are being conserved and are part of green land use within the proposed land use plan.

14. Water bodies & impact on drainage: Adjacent to Andaman Sea some water bodies exist such as Matait Anla Near Gandhi Nagar, South Bay (Galathea), Mata Taruwa Bay, Pemayya Bay near Pulobaha, Nanjappa Bay near Pulo Bekka, Galathea River or Dak Kea, Dak Aleh, Dak Ubho, Dak Tolai Near Pulabaha, Dak Air, and Dak Thena.

15. Total Water Demand during Operational Phase shall be 160 MLD, 90 MLD shall be Potable/Fresh Water Demand. Source of Fresh/Potable Water will be River Water/Sea Water. No ground water extraction/usage proposed.

16. In order to have minimal dependency on surface water from Galathea River, it is being proposed to create rainwater harvesting reservoirs within the project area. Approximate 2.5 Sq.km of area is being identified for creation of water reservoirs which will store rainwater from surface runoff. Detail watershed studies and mathematical modelling will be carried out at the detail design stage.

17. 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.

18. Diversion of forest land: In-principle Approval/Stage-I Forest clearance over an area of 130.75 Sq. Km (121.87 Sq. Km of forest land and 8.88 Sq. Km of deemed forest land) in three phases has been accorded in favour of Andaman and Nicobar Islands Integrated Development Corporation(ANIIDCO) by the MoEF&CC vide letter no.8-22/2020-FC dated 27th October, 2022.

19. Waste Management: The Solid Waste Management System and hazardous wastes treatment system in the Centralized Solid Waste Management Facility(CSWMF) Waste management including collection, segregation, transportation and disposal will be done as per the provisions contained in Solid Waste Management Rules, 2016, Hazardous and Other Waste (Management & Transboundary, Movement) Rules, 2016, Construction and Demolition Waste Management Rule, 2016, Biomedical Waste (Management & Handing) Rule, 2016 and Battery Waste Management Rules, 2016 and as per guidelines issued by Govt. of India and the UT Administration from time to time.

20. Rainwater harvesting: A total area of about 2.57 sq km is en-marked for reservoirs for the full development for all phases. As a fall-back option, in the case of contingency against the commissioning of gas based power plant, the water reservoirs can be developed, over which about 90-100 MVA of Solar plant systems can be erected and commissioned to meet power demand.

21. Three (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.

22. Great Nicobar has a wider habitat for saltwater crocodiles. 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 (*Crocodylusporosus*) in Great Nicobar Island'. The Conservation & Management Plan is divided into two components as Monitoring and Management.

23. 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. Phase1 involves 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. Phase 2 of the conservation plan will develop effective site-specific actions for conservation of sea turtles.

24. 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.

25. For 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.

26. 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.

27. Shoreline change: The observed trend of the shoreline at the proposed project location reveals that the shoreline remains with not noticeable change over a period of 5 years from 2015 to 2020. The shoreline analysis shows that the project site at port is surrounded with elevated hill promontories and rocky shores.

28. Dredging and Reclamation: The total quantity of capital dredging for the development of port is about 17.7 million cu.m. MIKE 21-PA (Particle Analysis) module was used to identify a suitable location for dumping the dredge spoil and to understand the dispersion pattern of disposed material after dumping. The maximum increase in seabed level over the disposal area is about 0.03 m at the proposed dumping location. Due to availability of deeper water depth of 600m the change in bed level at the proposed disposal location due to dumping is insignificant. The plume of suspended sediment after dumping tends to spread towards northeast to an extent of 1 km with an increase in seabed level of <0.008 m. Therefore, the proposed disposal location is found to be more ideal and it will not cause any adverse impact on the proposed port development facilities and the marine environment.

29. Reclamation: About 298 Ha area to be reclaimed. It is estimated that around 33.35 million m^3 material will be required for reclamation. Suitable dredged material shall be used for reclamation, remaining of reclamation shall be achieved by borrowed fill.

30. Cargo handling with dust control measures: Since the proposed port is International Container Transshipment Terminal (ICTT), there will be no dusty cargo, dry bulk cargo such as coal, iron ore or hazardous cargo, etc. will be handled at port. All the vehicles engaged for

construction should have valid pollution check certificate as per the motor vehicle act. Further, any regulations related to vehicle emission issued by local government should also be adhered to. Generators and machineries are to be serviced and maintained regularly to avoid generation of dust and other air pollutants. Oil Spill Contingent Management Plan includes Boom containment, Spray of dispersant and Skimmers. No hazardous industries are envisaged at GNI however the containers may contain hazardous cargo, Hazardous cargo shall be handled in accordance with 'The Manufacture, Storage and Import of Hazardous Chemicals Rules, ACT 1989'. Containers carrying hazardous cargo are labelled as Hazardous Cargos and stored at separate locations in the yard designated for the storage of hazardous cargo and a dedicated Nodal Officer will be appointed who will be responsible to check the compliance of the regulations from time to time. Hazardous waste like used oil, insecticide/ herbicides, paints, solvents, lubricants etc. would be generated from the project. the same hazardous substances will be securely stored at site before transportation, Double chamber Incinerator has been proposed to treat the possible hazardous waste generated from Port, Power plant and the Township.

31. No marine disposal is involved in the proposed project.

32. Energy conservation: List of materials to be used for construction will be decided at the details design stage. However, the design will follow Energy Conservation Building Code (ECBC 2017), Indian Green Building Council (IGBC) guidelines and Code of green buildings by Council of Architecture (COA).

33. Land acquisition and R&R issues: Total land acquisition required for project is approximately 421.57 ha. Total families affected is 379 and total affected population is 1761.

34. Revised ICRZ recommendations have been received via letter 'No.PCCF/EPA/I/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.

35. 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.

36. Mangroves: 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.

37. 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.

38. Details of Court cases:

(i) Name of the Court (Supreme Court, High Court, NGT) One (1) case at Civil Judge Junior Division, Campbell Bay, Two(2) cases at Addl. District Judge, Port Blair and one (1) case at Hon'ble Court of Calcutta circuit bench at Port Blair.

(ii) Case No. Suit No.1 of 2021(Bose Barla Vs Admn.), Suit No.02 of 2018 (Anburoja vs Admn.), Suit No.11of 2018 (Kamble vs Admn) and W>P No.313 of 2019 (Shri M. Muthualagu vs A&N Admn.)

(iii)Case Details:

Case 1: Regularization/allotment of plaintiff's encroachment over a portion of Government land bearing Survey No129/P measuring an Area of 0.0200 hectres Campbell bay.

Case 2: Allotment of Tsunami Permanent Shelter at Campbell Bay.

Case 3: Regularization/allotment of plaintiff's encroachment over a portion of government land bearing Survey No 47/P at Laxmi Nagar.

Case 4: Allotment of Tsunami Permanent Shelter at Campbell Bay Tehsil.

39. Employment Potential: The project around 6,939 persons directly and 10,408 persons would be employed by 2025, around 24,734 persons directly, 37,101 persons indirectly would be employed by 2040 and 51,423 persons directly and 77,135 persons indirectly would be employed by 2052. Generally, locals are employed by the contractor.

40. Public Hearing: Public Hearing was conducted on 27.01.2022 at Community Hall, Gram Panchayat, Campbell Bay, Great Nicobar.

41. Benefits of the Project: ***Strategic benefits***:- Strong presence in Indian Ocean Region to counter the pressure being built by foreign powers growing presence. Capturing the Strategic location to develop a new Economic hub in India Ocean region. Improving connectivity with Indian mainland and other global cities. ***Socio-economic benefits***: Promoting sustainable tourism. The proposed ICTT will allow India to participate in the regional and global maritime economy by becoming a major player in cargo transshipment. A Mixed-use urban development in the vicinity of these major infrastructure works will also be necessary to support quality of life for the residents that will generate and enable growth in the various economic sectors over time. This will require the development of simultaneous primary and secondary urban infrastructure networks such as roads, public transport, energy and electrical power, as well as water, wastewater, and storm water facilities and services, which will form the skeleton of the proposed township master plan. It is estimated that after the project is fully implemented, it has the potential to generate around 1,28,558 jobs opportunity. Socio-economic growth of local population. Development of social infrastructure supporting existing population and proposed population.

42. 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.

43. 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 306thmeeting during 22nd – 23rd 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:

44. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other Miscellaneous projects and other co-opted members of Infra-2 EAC, members of Thermal EAC and NDS Committee) and hereby decided to grant Environmental Clearance and CRZ Clearance for the "Integrated development of International Container Transhipment Terminal (ICTT)-14.2 Million TEU, 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" under the EIA Notification, 2006 and ICRZ Notification, 2019 as amended, subject to strict compliance of the following specific conditions, 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 (*Tridacna*sp) 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 geo-fencing 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 10 years 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 Committee shall not exceed three years, and accordingly committees should be reconstituted every three years. The budget allocation of 10 Crore 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 Niti Aayog, representative of collector, representative of disaster management unit, representative from Central/State-UT Ground Water Authority and one member of EAC-CRZ and Infra I 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 Niti Aayog, 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 I 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 Niti Aayog, representative of A&N Administration and one member of EAC-CRZ and Infra I 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 8th 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 IUCN experts 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 on boarded 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 6th 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 mount 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.

XLII. The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.

STANDARD CONDITIONS:

A. International Container Transhipment Terminal (ICTT)

I. Statutory compliance:

(i) Construction activity shall be carried out strictly according to the provisions of ICRZ Notification, 2019 and the Coastal Zone Management Plan as drawn up by the State/UT Government. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.

(ii) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

(i) The project proponent shall install system to carryout Ambient Air Quality monitoring for common criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the project area at least at four locations, covering upwind and downwind directions.

(ii) Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed emission standards.

(iii) Shrouding shall be carried out in the work site enclosing the dock/proposed facility

area. This will act as dust curtain as well achieving zero dust discharge from the site. These curtain or shroud will be immensely effective in restricting disturbance from wind in affecting the dry dock operations, preventing waste dispersion, improving working conditions through provision of shade for the workers.

(iv) Dust collectors shall be deployed in all areas where blasting (surface cleaning) and painting operations are to be carried out, supplemented by stacks for effective dispersion.

(v) The Vessels shall comply the emission norms prescribed from time to time.

(vi) Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

III. Water quality monitoring and preservation:

(i) 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.

(ii) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality. Silt curtains shall be used to contain the spreading of suspended sediment during dredging within the dredging area.

(iii) No ships docking at the proposed project site will discharge its on-board waste water untreated in to the estuary/ channel. All such wastewater load will be diverted to the proposed Effluent Treatment Plant of the project site.

(iv) Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.

(v) Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.

(vi) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

(vii) No diversion of the natural course of the river shall be made without prior permission from the Ministry of Water resources.

(viii) All the erosion control measures shall be taken at water front facilities. Earth protection work shall be carried out to avoid erosion of soil from the shoreline/boundary line from the land area into the marine water body.

IV. Noise monitoring and prevention:

(i) Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

(ii) Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.

(iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

(iv) The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures:

(i) Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;

(ii) Provide LED lights in offices and project areas.

VI. Waste management:

(i) Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring reports.

(ii) Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.

(iii) The solid wastes shall be managed and disposed as per the norms of the Solid Waste Management Rules, 2016.

(iv) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

(v) A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.

(vi) Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

(vii) Oil spill contingency plan shall be prepared and part of DMP to tackle emergencies. The equipment and recovery of oil from a spill would be assessed. Guidelines given in MARPOL and Shipping Acts for oil spill management would be followed. Mechanism for integration of terminals oil contingency plan with the overall area contingency plan under the co-ordination of Coast should be covered.

VII. Green Belt:

(i) Green belt shall be developed in area as provided in project details with a native tree species in accordance with CPCB guidelines.

(ii) Top soil shall be separately stored and used in the development of green belt.

VIII. Marine Ecology:

(i) Dredging shall not be carried out during the fish breeding and spawning seasons.

(ii) Dredging, etc shall be carried out in the confined manner to reduce the impacts on

marine environment.

(iii) The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.

(iv) A detailed marine biodiversity management plan shall be prepared through the NIO or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity and submitted to and implemented to the satisfaction of the State Biodiversity Board and the CRZ authority. The report shall be based on a study of the impact of the project activities on the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, sub-tidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standards survey methods and include underwater photography.

(v) Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components including all micro, macro and mega floral and faunal components of marine biodiversity.

(vi) The project proponent shall ensure that water traffic does not impact the aquatic wildlife sanctuaries that fall along the stretch of the river.

B. Township & Area development

I. Statutory compliance:

i. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

ii. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.

iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.

iv. The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.

v. The project proponent shall obtain the necessary permission for drawl of ground water/surface water required for the project from the competent authority.

vi. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.

vii. The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.

viii. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

II. Air quality monitoring and preservation:

i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$) covering upwind and downwind directions during the construction period.
iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
vi. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
vii. Wet jet shall be provided for grinding and stone cutting.
viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
xii. For indoor air quality the ventilation provisions as per National Building Code of India.

III. Water quality monitoring and preservation:

i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.

iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation. car washing, thermal cooling, conditioning etc. shall be done.

viii. Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

xi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.

xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

xiii. All recharge should be limited to shallow aquifer.

xiv. No ground water shall be used during construction phase of the project.

xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the mauter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.

xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.

xviii. No sewage or untreated effluent water would be discharged through storm water drains.

xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent

expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

IV. Noise monitoring and prevention:

i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures:

i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.

ii. Outdoor and common area lighting shall be LED.

iii. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

iv. Energy conservation measures like installation of CFLs/LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.

v. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level local building bye-laws requirement, whichever is higher.

vi. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

VI. Waste Management:

i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.

ii. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.

iv. Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.

v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.

vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.

viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Cover:

i. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. 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.

ii. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

VIII. Transport

i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
b. Traffic calming measures.
c. Proper design of entry and exit points.
d. Parking norms as per local regulation.

ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

C. 450 MVA Gas and Solar based power plant.

I. Statutory Compliance

i. Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.

ii. The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.

iii. No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.

iv. Groundwater shall not be drawn during construction of the project. In case, groundwater is drawn during construction, necessary permission be obtained from CGWA.

II. Air quality monitoring and Management:

i. Stacks of prescribed height shall be provided with continuous online monitoring instruments for SOx, NOx and Particulate Matter as per extant rules.

ii. Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.

iii. Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM_{10}, $PM_{2.5}$, SO_2, NOxwithin the plant area at least at one location. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.

iv. Appropriate Air Pollution Control measures (DEs/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.

III. Noise pollution and its control measures:

i. The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
ii. Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
iii. Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.

IV Human Health Environment:

i. Bi-annual Health check-up of all the workers is to be conducted. The study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
ii. Baseline health status within study area shall be assessed and report be prepared. Mitigation measures should be taken to address the endemic diseases.
iii. Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.
iv. Sewage Treatment Plant shall be provided for domestic wastewater.

V. Risk Mitigation and Disaster Management:

i. Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.
ii. Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
iii. Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
iv. Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.

D Public hearing and human health issues:

(i) The work space shall be maintained as per international standards for occupational health and safety with provision of fresh air respirators, blowers, and fans to prevent any accumulation and inhalation of undesirable levels of pollutants including VOCs.

(ii) Workers shall be strictly enforced to wear personal protective equipments like dust mask, ear muffs or ear plugs, whenever and wherever necessary/ required. Special visco-elastic gloves will be used by labour exposed to hazards from vibration.

(iii) In case of repair of any old vessels, excessive care shall be taken while handling Asbestos & Freon gas. Besides, fully enclosed covering should be provided for the temporary storage of asbestos materials at site before disposal to CTSDF.

(iv) Safety training shall be given to all workers specific to their work area and every worker and employee will be engaged in fire hazard awareness training and mock drills which will be conducted regularly. All standard safety and occupational hazard measures shall be implemented and monitored by the concerned officials to prevent the

occurrence of untoward incidents/ accidents.

(v) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

(vi) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

(vii) Occupational health surveillance of the workers shall be done on a regular basis.

E. Environment Responsibility:

(i) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

(ii) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

(iii) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

F. Miscellaneous:

(i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

(ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

(iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

(iv) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

(v) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the

Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

(vi) The criteria pollutant levels namely: $PM_{2.5}$, PM_{10}, SO_2, NOx (ambient levels) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

(vii) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

(viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

(ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

(x) No further expansion or modifications in the project shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

(xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

(xii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

(xiii) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

(xiv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

(xv) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

(xvi) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

This issue with the approval of the Competent Authority

(Amardeep Raju)
Scientist-E

Copy to:

1. The Principal Secretary (Environment). Department of Environment and Forests Van Sadan, Haddo, Port Blair Andaman & Nicobar Islands.
2. Addl. Principal Chief Conservator of Forests (C), Andaman and Nicobar Coastal Zone Management Authority, Van Sadan, Haddo, Port Blair, Andaman & Nicobar Islands.
3. Member secretary, Andaman & Nicobar Islands Pollution Control Committee (ANIPCC), Department of Science and Technology, Dollygunj, Port Blair - 744103, South Andaman, A & N Islands.
4. Addl. Principal Chief Conservator of Forests (C), Ministry of Env., Forest and Climate Change, Regional Office (SEZ), Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai – 34.
5. The Member Secretary, Andaman and Nicobar Coastal Zone Management Authority, Van Sadan, Haddo, Port Blair, Andaman & Nicobar Islands.
6. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
7. Guard File/Record File
8. Notice Board.

(Amardeep Raju)
Scientist-E

Signature Not Verified
Digitally signed by Amardeep Raju
Scientist E
Date: 11/11/2022 2:36:09 PM

ANNEXURE - VII

NOTARY 6584/2008

No. J-11013/41/2006-IA.II(I)

Government of India
Ministry of Environment & Forests

Paryavaran Bhavan,
C.G.O. Complex, Lodi Road,
New Delhi-110003.
Telefax: 24362434

Dated the 24th December, 2010

OFFICE MEMORANDUM

Sub: Consideration of Integrated and Inter-linked projects -- Procedure Regarding.

The matter relating to the procedure for consideration of integrated and inter related projects for grant of environmental clearance under the provisions of EIA Notification, 2006 has been receiving attention of this Ministry for quite some time. After a detailed deliberations in the Ministry. It has been decided that the following procedure shall be adopted henceforth for consideration of such projects.

(i) Integrated and inter-linked projects having multi sectoral components shall prepare a common EIA report, covering impact of each of the component in a comprehensive manner after obtaining TORs from each of the respective sectoral Expert Appraisal Committees (EACs). For the purpose, the project proponent shall submit applications to each of the sector simultaneously giving full details of the project (comprehensively for the integrated / interlinked projects as also for the particular component, sector specific) in the prescribed format (Form-1) and the pre-feasibility report.

(ii) The respective sectoral Expert Appraisal Committees will consider the project with specific emphasis on their respective sectors and prescribe the TORs which will not be limited to the sector but would also encompass the entire project as a whole.

(iii) The proponent shall prepare a common EIA report covering all the sectors comprehensively and hold public hearing based on the EIA report so prepared, for each component as per provision of EIA Notification, 2006.

(iv) After the EIA report has been prepared and public hearing has been held, the proposals for environmental clearance in respect of all the sectoral components of the project shall be submitted simultaneously.

(v) The respective EACs will consider the sector specific proposals based on the common EIA report and will make their recommendations relating to that particular component. However, in doing so, the overall impact of the project as a whole will also be considered.

NOTARY 6584/2008

(vi) After the proposals relating to the various components have been considered by the respective EACs and their recommendations made, these proposals will be processed on individual files for obtaining simultaneous approval of the Competent Authority.

This issues with the approval of the Competent Authority.

(Dr. S.K. Aggarwal)
Director

To

1. All the Officers of IA Division
2. Chairpersons / Member Secretaries of all the SEIAAs/SEACs
3. Member Secretaries of all SPCBs / UTPCCs

Copy to:-

1. PS to MEF
2. PPS to Secretary (E&F)
3. PPS to AS(JMM)
4. Advisor (NB)
5. Website, MoEF
6. Guard File

F. No. IA3-22/10/2022-IA.III [E 177258]
Government of India
Ministry of Environment, Forest and Climate Change
(IA Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj,
New Delhi – 110003

Dated: 8th June, 2022

OFFICE MEMORANDUM

Subject: **Standardizing the validity of baseline data and public consultation reports for submission of proposal within the validity period of Terms of Reference (ToR) under the provisions of EIA Notification, 2006 – regarding.**

As per the provisions of EIA Notification, 2006, Terms of References (ToR) are being accorded to the various developmental projects listed in the schedule to the EIA Notification, 2006 except schedule 8(a) for undertaking EIA/EMP study. In this regard, Ministry issued Office Memorandum No. J-11013/41/2006-IA-II (I) (Part) dated 29th August 2017 stating that the validity period of ToR as three years for all the projects/activities and four years for River Valley and HEP Projects. This validity period could be further extended by a maximum period of one year, thereby making the outer limit for validity of ToR as four years for all projects/activities and five years for River Valley and HEP projects.

2. Further, in the above-mentioned O.M, it is also stated that the baseline data used for preparation of EIA/EMP reports may be collected at any stage, irrespective of the request for ToR or the issue thereof. However, such baseline data and the public consultation should not be older than three years, at the time of submission of the proposal, for grant of Environmental Clearance (EC), as per ToRs prescribed.

3. Thereafter, MoEF&CC also issued a gazette notification vide S.O.751 (E) dated 17/02/2020 stating that the Terms of Reference for the projects or activities except for River valley and Hydro-electric projects, issued by the concerned regulatory authority, shall have the validity of four years from the date of issue. In case of the River valley and Hydro-electric projects, the validity of ToR will be for five years.

4. Instances have been brought to the notice of this Ministry wherein the application for Environment Clearance are being submitted by the project proponent well within the validity period of the ToR but the baseline data is older than three years. In such situation, project proponent is required to start the entire process of baseline data collection *de novo*. Many a times, it is also observed that the delay in submission of EC proposal happens due to delay in rescheduling and conduct of public hearing for reasons beyond the control of project proponent.

DIP CHAUDHURI NOTARY 6584/2008

5. In many such cases where proposals are submitted with baseline data older than three years, the EAC prescribes for revalidation of data with fresh baseline data of 15 days/1 month/ 1 season on a case to case basis.

6. The aforesaid matter has been examined in the Ministry. In order to address this issue in a practical manner and to bring uniformity in handling such proposals, the following standard procedures shall be followed with immediate effect:

i. Baseline data used for preparation of EIA/EMP reports may be collected at any stage of the EC process or even before the grant of ToR.
ii. Public consultation shall be conducted after the grant of ToR. The Public consultation conducted after the expiry of ToR shall not be accepted by the Regulatory Authority.
iii. The baseline data and Public Hearing shall not be more than three years old at the time of submission of application for consideration of EC.
iv. At the time of application for EC, in case baseline data is older than three years, but less than five years old in the case of River valley and HEP Projects, or less than four years old in the case of other projects, the same shall be considered, subject to the condition that it is revalidated with one season fresh non-monsoon data collected after three years of the initial baseline data.
v. In case the proposal for EC along with EIA/EMP reports based on the ToRs prescribed is not submitted within the validity period of ToRs, and/or not complying with the above-mentioned criteria, the concerned Member Secretary shall not accept the proposal and process shall be initiated *de novo* by the PP.

7. This O.M. is issued in supersession of OM no. J-11013/41/2006-IA-II (I) (Part) dated 29th August 2017 and with the approval of the Competent Authority.

(Sundar Ramanathan)
Scientist E

To

1. Chairman, Central Pollution Control Board (CPCB).
2. Chairman of all the Expert Appraisal Committees
3. Chairperson/Member Secretaries of all the SEIAAs/SEACs
4. Chairpersons/Member Secretaries of all SPCBs/UTPCCs
5. All the Officers of I.A. Division

Copy for information to:

1. PS to Hon'ble Minister for Environment, Forest and Climate Change
2. PS to Hon'ble MoS (EF&CC)
3. PPS to Secretary (EF&CC)
4. PPS to DGF&SS (EF&CC)
5. PPS to AS(TK)/PPS to JS (SKB)
6. Website, MoEF&CC/Guard file.

Item Nos.01 -04 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, FINANCE CENTRE
KOLKATA

(By Hybrid Mode)

Appeal Nos. 29 to 31/2022/EZ

Conservation Action Trust & Anr. Appellants

Versus

The Ministry of Environment Forest
& Climate Change & Ors. Respondent(s)

WITH

Appeal No. 32/2022/EZ

Ashis Kothari Appellant

Versus

The Ministry of Environment Forest
& Climate Change & Ors. Respondent(s)

Date of hearing: 03.04.2023

CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE MR. JUSTICE B. AMIT STHALEKAR, JUDICIAL MEMBER
HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER

Appellant(s): Mr. Kaustav Dhar, Advocate a/w Ms. Ajeeya Choudhury, Advocate for the Appellant (in Appeal Nos. 29 to 31/2022/EZ)

Mr. A. Yogeshwaran, Advocate a/w Ms. Poongkhulali B., Advocate, Mr. Santanu Chakraborty, Advocate for the Appellant (in Appeal No. 32/2022/EZ)

Respondent(s): Ms. Aishwarya Bhati, ASG a/w Ms. Suhasini Sen, Advocate, Mr. Aman Jha, Advocate (in Virtual Mode), Mr. Apurba Ghosh, Advocate and Ms. Manisha Chava, Advocate for R-1

Mr. Vikramjit Banerjee, ASG a/w Mr. Shatadru Chakraborty, Advocate, Mr. Ramendu Agarwal, Advocate (in Virtual Mode), Mr. Dibesh Dwivedi, Advocate for R-2 & 3

Ms. Dhriti Banerjee, Director, ZSI (in Virtual Mode)

ORDER

Preliminary – subject matter of appeals

1. This order will deal with Appeal Nos. 29 to 32/2022/EZ as all the four Appeals pertain to Forest/Environmental Clearance (FC/EC) in respect of integrated **project (the project) by Andaman and Nicobar Islands Integrated Development Corporation (ANIDCO) in Great Nicobar Island**, the project proponent (PP), involving the following:-

   a. International Container Transshipment Terminal (ICTT)-14.2 Million TEU

   b. Greenfield International Airport (4000 Peak Hour Passengers-PHP)

   c. Township & Area development

   d. 450 MVA Gas and Solar based power plant over an extent of 16610 hectares (Ha) in the Great Nicobar Islands.

2. (a) is the main project of which (b) to (d) are integral parts.

3. Appeal No. 29/2022 is against Stage-I Clearance dated 27.10.2022 under the Forest (Conservation) Act, 1980 by MoEF&CC for diversion of 130.75 Sq. Km of forest land in the Great Nicobar Island. Appeal Nos. 30 to 32/2022, are against EC dated 04.11.2022 for the project by the MoEF&CC. **Appeal No. 29 to 31/2022 have been filed by Conservation Action Trust trust located at Bombay while Appeal No. 32/2022/EZ has been filed by one Mr. Ashis Kothari of Pune**. All the appeals came up for hearing on 11.01.2023 when notice was issued to the respondents including the MoEF&CC and the PP.

4. Challenge to the FC is inter-alia on the ground that impact of diversion of 130.75 Sq Km of pristine tropical rainforests on biodiversity, wildlife habitats and Tribals has not been considered. Crucial information

was withheld from Form-A. Forest land cannot be diverted for township and non-site specific projects. Mandatory process under the Forest Rights Rules has not been followed. PP being part of Andaman Administration could not have been associated with the impugned clearance. Forest dwelling community - Shompen (PVTG) and Coastal dwelling community Nicobarese (ST) have settlements in the area to be diverted and de-notified.

5. Challenge to the EC is inter-alia on the ground that appraisal conducted by the EAC is not in accordance with the EAC Notification dated 14.09.2006, EIA report has not been prepared as per ToRs, public hearing is vitiated, impact of the project on tribal population has not been considered, cumulative impact assessment has not been conducted. and ICRZ Notifications, 2019 have been violated. The project will result in destruction of forests, turtle nesting grounds, habitat of endangered endemic species, violation of the rights of indigenous communities in the Great Nicobar Island.

Details of the project and conditions for the Impugned EC

6. Perusal of impugned EC dated 04.11.2022 shows that the proposal for the project was considered in the 293rd meeting of EAC held on 24th – 25th March, 2022 and again in the 297th meeting of EAC held on 24th – 25th May, 2022. Based on the reply submitted to the queries raised by the EAC, the proposal is again placed in the 306th meeting of EAC held on 22nd – 23rd August, 2022. Some details of the project are mentioned as follows:

> *"6. The proposed project fall under 7(e) Ports, harbours; 1 (d) Power Plant; and 8 (b) Township & Area Development project, Category A, Scheduled to the EIA Notification, 2006.*
>
> *7. The total area required for the proposed project is 16610 ha. The proposed Project site is in not connected through any road. Currently, the access is through sea and air route only. Approach roads shall be developed within the Islands.*

8. *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. Suggestion/opinion from MoD will be sought to finalise the buffer zones around Defence parcels. 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.*

9. *A separate land use category "Special Use" has been included in the land use plan. The subcategories under "Special Use" are:*

a. *National Memorial (Western tip of Galathea Bay),*
b. *Defence Purpose (Western tip of Galathea Bay),*
c. *Pemayya Buffer Area (Buffer area of 500m from HTL for safe nesting of Leatherback turtles).*

10. *xxx.....xxx.....xxx*

11. *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.*

12. *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 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).*

13 to 22...xxx.....xxx.....xxx

23. ***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. Phase1 involves 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. Phase 2 of the conservation plan will develop effective site-specific actions for conservation of sea turtles.

24. 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.

25. ***For 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.***

26. 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.***

27. Shoreline change: The observed trend of the shoreline at the proposed project location reveals that the shoreline remains with not noticeable change over a period of 5 years from 2015 to 2020. The shoreline analysis shows that the project site at port is surrounded with elevated hill promontories and rocky shores.

28. Dredging and Reclamation: The total quantity of capital dredging for the development of port is about 17.7 million cu.m. MIKE 21-PA (Particle Analysis) module was used to identify a suitable location for dumping the dredge spoil and to understand the dispersion pattern of disposed material after dumping. The maximum increase in seabed level over the disposal area is about 0.03 m at the proposed dumping location. Due to availability of deeper water depth of 600m the change in bed level at the proposed disposal location due to dumping is

insignificant. The plume of suspended sediment after dumping tends to spread towards northeast to an extent of 1 km with an increase in seabed level of <0.008 m. Therefore, the proposed disposal location is found to be more ideal and it will not cause any adverse impact on the proposed port development facilities and the marine environment.

29. xxx.....xxx.....xxx

30. Cargo handling with dust control measures: Since the proposed port is International Container Transshipment Terminal (ICTT), there will be no dusty cargo, dry bulk cargo such as coal, iron ore or hazardous cargo, etc. will be handled at port. All the vehicles engaged for construction should have valid pollution check certificate as per the motor vehicle act. Further, any regulations related to vehicle emission issued by local government should also be adhered to. Generators and machineries are to be serviced and maintained regularly to avoid generation of dust and other air pollutants. Oil Spill Contingent Management Plan includes Boom containment, Spray of dispersant and Skimmers. No hazardous industries are envisaged at GNI however the containers may contain hazardous cargo, ***Hazardous cargo shall be handled in accordance with 'The Manufacture, Storage and Import of Hazardous Chemicals Rules, ACT 1989'. Containers carrying hazardous cargo are labelled as Hazardous Cargos and stored at separate locations in the yard designated for the storage of hazardous cargo and a dedicated Nodal Officer will be appointed who will be responsible to check the compliance of the regulations from time to time. Hazardous waste like used oil, insecticide/ herbicides, paints, solvents, lubricants etc. would be generated from the project, the same hazardous substances will be securely stored at site before transportation, Double chamber Incinerator has been proposed to treat the possible hazardous waste generated from Port, Power plant and the Township.***

31 to 32 xxx.....xxx.....xxx

33. Land acquisition and R&R issues: Total land acquisition required for project is approximately 421.57 ha. Total families affected is 379 and total affected population is 1761.

34. 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.

35 xxx.....xxx.....xxx

36. Mangroves: ***The Mangrove Conservation and Management Plan for Great Nicobar Island has been prepared by the Department of Environment and Forests, A&N Administration.***

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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.

37. ***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.***

38. xxx.....xxx.....xxx

39. Employment Potential: The project around 6,939 persons directly and 10,408 persons would be employed by 2025, around 24,734 persons directly, 37,101 persons indirectly would be employed by 2040 and 51,423 persons directly and 77,135 persons indirectly would be employed by 2052. Generally, locals are employed by the contractor.

40. Public Hearing: Public Hearing was conducted on 27.01.2022 at Community Hall, Gram Panchayat, Campbell Bay, Great Nicobar.

41. ***Benefits of the Project: Strategic benefits:- Strong presence in Indian Ocean Region to counter the pressure being built by foreign powers growing presence. Capturing the Strategic location to develop a new Economic hub in India Ocean region. Improving connectivity with Indian mainland and other global cities. Socio-economic benefits: Promoting sustainable tourism. The proposed ICTT will allow India to participate in the regional and global maritime economy by becoming a major player in cargo transshipment. A Mixed-use***

urban development in the vicinity of these major infrastructure works will also be necessary to support quality of life for the residents that will generate and enable growth in the various economic sectors over time. This will require the development of simultaneous primary and secondary urban infrastructure networks such as roads, public transport, energy and electrical power, as well as water, wastewater, and storm water facilities and services, which will form the skeleton of the proposed township master plan. It is estimated that after the project is fully implemented, it has the potential to generate around 1,28,558 jobs opportunity. Socio-economic growth of local population. Development of social infrastructure supporting existing population and proposed population.

42. 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.

43. 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 306th meeting during 22nd – 23rd 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:

44. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other Miscellaneous projects and other co-opted members of Infra-2 EAC, members of Thermal EAC and NDS Committee) and hereby decided to grant Environmental Clearance and CRZ Clearance for the "Integrated development of International Container Transhipment Terminal (ICTT)-14.2 Million TEU, 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" under the EIA Notification, 2006 and ICRZ Notification, 2019 as amended, subject to strict compliance of the following specific conditions, 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-*

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 geo-fencing 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 10 years 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 Committee shall not exceed three years, and accordingly committees should be reconstituted every three years. The budget allocation of 10 Crore is provided to meet the expanses of the committee meetings. For the first three years following:*

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 Niti Aayog, 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 Niti Aayog, 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 Niti Aayog, 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 8th 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.*

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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 IUCN experts 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 on boarded 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 6th 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 mount 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.***

XLII. ***The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.***

STANDARD CONDITIONS:

A. International Container Transhipment Terminal (ICTT)

I. Statutory compliance

(i) *Construction activity shall be carried out strictly according to the provisions of ICRZ Notification, 2019 and the Coastal Zone Management Plan as drawn up by the State/UT Government. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.*

(ii) *All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.*

II. Air quality monitoring and preservation:

(i) *The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the project area at least at four locations, covering upwind and downwind directions.*

(ii) *Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed emission standards.*

(iii) *Shrouding shall be carried out in the work site enclosing the dock/proposed facility area. This will act as dust curtain as well achieving zero dust discharge from the site. These curtain or shroud will be immensely effective in restricting disturbance from wind in affecting the dry dock operations, preventing waste dispersion, improving working conditions through provision of shade for the workers.*

(iv) *Dust collectors shall be deployed in all areas where blasting (surface cleaning) and painting operations are to be carried out, supplemented by stacks for effective dispersion.*

(v) *The Vessels shall comply the emission norms prescribed from time to time.*

(vi) *Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.*

III. Water quality monitoring and preservation:

(i) 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.

(ii) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality. Silt curtains shall be used to contain the spreading of suspended sediment during dredging within the dredging area.

(iii) No ships docking at the proposed project site will discharge its on-board waste water untreated in to the estuary/ channel. All such wastewater load will be diverted to the proposed Effluent Treatment Plant of the project site.

(iv) Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.

(v) Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.

(vi) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

(vii) No diversion of the natural course of the river shall be made without prior permission from the Ministry of Water resources.

(viii) All the erosion control measures shall be taken at water front facilities. Earth protection work shall be carried out

to avoid erosion of soil from the shoreline/boundary line from the land area into the marine water body.

IV. Noise monitoring and prevention:

(i) Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

(ii) Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.

(iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

(iv) The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures:

(i) Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;

(ii) Provide LED lights in offices and project areas.

VI. Waste management:

(i) Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring reports.

(ii) Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.

(iii) The solid wastes shall be managed and disposed as per the norms of the Solid Waste Management Rules, 2016.

(iv) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

(v) A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the

existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.

(vi) Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

(vii) Oil spill contingency plan shall be prepared and part of DMP to tackle emergencies. The equipment and recovery of oil from a spill would be assessed. Guidelines given in MARPOL and Shipping Acts for oil spill management would be followed. Mechanism for integration of terminals oil contingency plan with the overall area contingency plan under the co-ordination of Coast should be covered.

VII. Green Belt:

(i) Green belt shall be developed in area as provided in project details with a native tree species in accordance with CPCB guidelines.

(ii) Top soil shall be separately stored and used in the development of green belt.

VIII. Marine Ecology:

(i) Dredging shall not be carried out during the fish breeding and spawning seasons.

(ii) Dredging, etc shall be carried out in the confined manner to reduce the impacts on marine environment.

(iii) The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.

(iv) A detailed marine biodiversity management plan shall be prepared through the NIO or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity and submitted to and implemented to the satisfaction of the State Biodiversity Board and the CRZ authority. The report shall be based on a study of the impact of the project activities on the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, sub-tidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standards survey methods and include underwater photography.

(v) Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components including all micro, macro and mega floral and faunal components of marine biodiversity.

(vi) *The project proponent shall ensure that water traffic does not impact the aquatic wildlife sanctuaries that fall along the stretch of the river.*

B. Township & Area development

I. Statutory compliance:

(i) *The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.*

(ii) *The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.*

(iii) *The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.*

(iv) *The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.*

(v) *The project proponent shall obtain the necessary permission for drawl of ground water/surface water required for the project from the competent authority.*

(vi) *All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.*

(vii) *The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.*

(viii) *The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.*

II. Air quality monitoring and preservation:

(i) *Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.*

(ii) *A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.*

(iii) *The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g.*

PM10 and PM2.5) covering upwind and downwind directions during the construction period.

(iv) Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

(v) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/ tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

(vi) Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.

(vii) Wet jet shall be provided for grinding and stone cutting.

(viii) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(ix) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.

(x) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

(xi) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(xii) For indoor air quality the ventilation provisions as per National Building Code of India.

III. Water quality monitoring and preservation:

(i) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.

(ii) Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iii) *Total fresh water use shall not exceed the proposed requirement as provided in the project details.*

(iv) *The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.*

(v) *A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.*

(vi) *At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.*

(vii) *Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.*

(viii) *Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.*

(ix) *Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.*

(x) *Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.*

(xi) *The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.*

(xii) *A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.*

(xiii) *All recharge should be limited to shallow aquifer.*

(xiv) *No ground water shall be used during construction phase of the project.*

(xv) *Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.*

(xvi) *The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project*

proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

(xvii) Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.

(xviii) No sewage or untreated effluent water would be discharged through storm water drains.

(xix) Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

(xx) Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

(xxi) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

IV. Noise monitoring and prevention:

i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures:

i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.

ii. Outdoor and common area lighting shall be LED.

iii. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

iv. *Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.*

v. *Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.*

vi. *Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.*

VI. Waste Management:

i. *A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.*

ii. *Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.*

iii. *Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.*

iv. *Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/ day must be installed.*

v. *All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.*

vi. *Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.*

vii. *Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.*

viii. *Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.*

ix. *Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.*

x. *Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.*

VII. Green Cover:

i. *A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. 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.*

ii. *Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.*

VIII. Transport

i. *A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.*

a. *Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.*
b. *Traffic calming measures.*
c. *Proper design of entry and exit points.*
d. *Parking norms as per local regulation.*

ii. *Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.*

iii. *A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.*

C. 450 MVA Gas and Solar based power plant.

I. Statutory Compliance

i. *Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.*
ii. *The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.*
iii. *No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.*
iv. *Groundwater shall not be drawn during construction of the project. In case, groundwater is drawn during construction, necessary permission be obtained from CGWA.*

II. Air quality monitoring and Management:

i. *Stacks of prescribed height shall be provided with continuous online monitoring instruments for SOX, NOx and Particulate Matter as per extant rules.*
ii. *Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.*
iii. *Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM10, PM2.5, SO2, NOXwithin the plant area at least at one location. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.*
iv. *Appropriate Air Pollution Control measures (DEs/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.*

III. Noise pollution and its control measures:

i. *The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.*
ii. *Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.*
iii. *Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.*

IV Human Health Environment:

i. *Bi-annual Health check-up of all the workers is to be conducted. The study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the*

study shall also assess the health impacts due to air polluting agents.

ii. Baseline health status within study area shall be assessed and report be prepared. Mitigation measures should be taken to address the endemic diseases.

iii. Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.

iv. Sewage Treatment Plant shall be provided for domestic wastewater.

V. Risk Mitigation and Disaster Management:

i. Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.

ii. Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.

iii. Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.

iv. Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.

D Public hearing and human health issues:

(i) The work space shall be maintained as per international standards for occupational health and safety with provision of fresh air respirators, blowers, and fans to prevent any accumulation and inhalation of undesirable levels of pollutants including VOCs.

(ii) Workers shall be strictly enforced to wear personal protective equipments like dust mask, ear muffs or ear plugs, whenever and wherever necessary/ required. Special visco-elastic gloves will be used by labour exposed to hazards from vibration.

(iii) In case of repair of any old vessels, excessive care shall be taken while handling Asbestos & Freon gas. Besides, fully enclosed covering should be provided for the temporary storage of asbestos materials at site before disposal to CTSDF.

(iv) Safety training shall be given to all workers specific to their work area and every worker and employee will be engaged in fire hazard awareness training and mock drills which will be conducted regularly. All standard safety and occupational hazard measures shall be implemented and monitored by the concerned officials to prevent the

(v) occurrence of untoward incidents/ accidents.

(vi) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

(vii) *Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.*

(viii) *Occupational health surveillance of the workers shall be done on a regular basis.*

E. *Environment Responsibility:*

(i) *The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.*

(ii) *Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.*

(iii) *Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.*

F. *Miscellaneous:*

(i) *The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.*

(ii) *The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.*

(iii) *The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.*

(iv) *The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.*

(v) *The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.*

(vi) *The criteria pollutant levels namely; PM2.5, PM10, SO2, NOx (ambient levels) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.*

(vii) *The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.*

(viii) *The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.*

(ix) *The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.*

(x) *No further expansion or modifications in the project shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).*

(xi) *Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.*

(xii) *The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.*

(xiii) *The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.*

(xiv) *The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/ monitoring reports.*

(xv) *The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter."*

Appellants' contentions

7. Main contentions in the appeal are that the project will have adverse impact on rich bio-diversity of the area and damage the habitats of the

endangered species. Galathea bay is nesting ground for birds and the area is also part of CRZ-IA & IB. Location of port is expressly prohibited in CRZ-IA area, having presence of huge number of coral colonies. It will also lead to erosion of the coast. **Only one season data has been taken as against requirement of taking data for three seasons for comprehensive impact assessment**, studies have not been conducted as per ToR, turtle nesting sites will be disturbed, harm will be caused to dolphins and other species by dredging, consideration of sea level rise has also not been kept in mind. In power plant, apart from generation of power by solar and gas sources, 15% generation of power will be by diesel. Impact of combustion of diesel has not been considered. The area is a part of seismic zone-V having potential for disasters which aspect has not been considered. As per government policy, Shompen tribes and Nicobari communities have to be kept isolated which aspect has not been considered, ignoring Forest Rights Act, 2006 and Andaman and Nicobar Islands (Protection of Aboriginal Tribes) Regulation, 1956. EIA is not by accredited consultancy. There are two national parks - Campbell Bay National Park (in the North) and Galathea National Park (in the South) which will be adversely impacted.

Stand of the respondents

8. Stand of the MoEF&CC is that the proper appraisal has been conducted by the EAC in its meetings. EAC comprised not only members of Infra-I sector but also Member Secretaries of the Infra- II sector, Thermal sector and Nuclear, Defence and Strategic (NDS) sector, Coastal Regulation Zone (CRZ) sector for comprehensive appraisal of the various components of the Project both before grant of the ToR and thereafter at the time of appraisal for grant of the EC/CRZ Clearance. The project proponent was awarded detailed Terms of Reference with

18 specific ToRs for the ICTT, 23 specific ToRs for the Airport, 12 specific ToRs for the Township and Area Development Project and 52 specific ToRs for the Gas and Solar Based Power Plant, in addition to Special Conditions and all standard ToR conditions as applicable to such projects. A public hearing was held involving 138 participants on 27.01.2022. EIA Report was received on 7.03.2022. Thereafter, the project was again deliberated upon at the 293rd, 297th and 306th meetings of the EAC, before the Environmental Clearance was finally accorded on 4.11.2022. The Environmental Clearance accorded contains as many as 42 specific conditions dealing with each component of the project, in addition to all standard conditions applicable to each component dealing with statutory compliances, air quality monitoring and preservation, water quality monitoring and preservation, noise monitoring and preservation, energy conservation measures, waste management, green belt, marine ecology, transport, human health environment and mitigation and disaster management. Out of these specific conditions, the first condition itself comprises of 9 further sub-conditions dealing with (i) Leatherback Turtles (ii) Nicobar Megapode (iii) Saltwater Crocodile (iv) Impact of invasive species on native flora (v) Impact on inter-tidal flora and fauna (vi) Nicobar Macaque, Robber Crab and other endemic bird species of Greater Nicobar (vii) Mangrove Restoration (viii) Coral translocation and (ix) Welfare of local tribal population of Shompen and Nicobarese. PP has been asked to undertake studies as follows:-

"

(i) *Independent evaluation of impact of proposed port site at Galathea Bay by engaging a nationally recognized institute such as Zoological Survey of India ("ZSI") or Salim Ali Centre for Ornithology and Natural History ("SACON") or the Wildlife Institute of India ("WIT") or a consortium of these institutes.*

(ii) *Independent study for the assessment of biodiversity and Wildlife value of all alternative port sites by engaging nationally reputed institutes like WII, ZSI, SACON or the Indian Institute for Science ("IISc").*

(iii) *Comprehensive study of the impact of dredging and reclamation and port operations by ZSI, SACON or WII or a consortium of these institutes*

(iv) *A specific study on the impact of the proposed development on migratory birds by ZSI, SACON or WII covering both inward and return migration period.*

(v) *Involvement of an independent organization with specialized skill such as IIT, NIOT, NCCR, NIO, etc. for technical aspects of site selection of the port as well reputed research institutes such as WII, ZSI, SACON for ecological assessment.*

(vi) *In addition to the above, the Project Proponent also undertook multiple studies through reputed agencies during the preparation of an environmentally sound Environmental Management Plan ("EMP") such as: Marine Ecological Conservation of Island Fauna Diversity and Marine Ecological Studies, Comprehensive conservation plan for Nicobar Megapode, an assessment of the Environmental sensitiveness of sea turtle nesting beaches of the Great Nicobar island, Environmental Baseline Data Monitoring, Socio-Economic Survey, Environmental Impact Assessment Study, Topographic survey through helicopter mounted LIDAR and OLS Survey, Mathematical Modelling Study, Oceanographic Study, Hydrographic Survey and Bathymetric & Geophysical Survey, Soil Investigation Study, Traffic & Market Analysis for Port."*

9. It is further stated that there are stringent conservation and mitigation measures keeping in mind the need to balance the defence and strategic requirements of the Nation along with the seminal importance that is owed to the biodiversity and natural habitat of the region. Some of such measures are:-

(i) *WII would establish a long-term field research unit in the Andaman & Nicobar specifically for undertaking uninterrupted turtle research and carrying out necessary conservation interventions if required*

(ii) *WII and SACON would undertake comprehensive conservation measures for the endemic Nicobar Megapod, and two fail proposal for the same are to be submitted to the Project Proponent with a copy to the Answering Respondent.*

(iii) The Project Proponent would release funds within three months to the WII and A&N Forest Department for conservation measures for saltwater crocodiles

(iv) SACON would develop a detailed proposal for the conservation of the Nicobar Macaque, Robber Crab and other endemic bird species of Great Nicobar, which would then be implemented by the Project Proponent.

(v) Over and above all other conservation proposals, the Project Proponent is to separately provide funds to the A&N Forest Department for the 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 endemeic flora and fauna conservation.

(vi) Three independent monitoring committees are to be established by the Project Proponent for implementation of the Environment Management Plan, i.e. - one committee would oversee all pollution related matters, one committee would oversee the implementation of biodiversity related conditions and the third committee would oversee welfare and issues related to the Shompen and Nicobarese tribal populations.

(vii) Safe wildlife corridors at 8 locations along the eastern side of the island would be created.

(viii) The Mangrove Conservation and Management Plan for Greater Nicobar Island prepared by the A&N Administration would be adhered to.

(ix) The Coral Conservation Plan prepared by Zoological Survey of India (ZSI) addresses both the conservation strategies for coral colonies around Great Nicobar Island (GNI) as well as translocation strategies for ten hectares of impacted corals.

(x) Various restrictions on dredging, construction activity, waste management, disease control etc. have all be provided for within the Environmental Clearance."

10. The Tribals were duly represented at the public hearing and they will not be displaced. **The EAC has inter alia noted that - (i) the project will not disturb or displace any Shompen/Nicobari tribal or their habitation (ii) there will be a clear demarcation of land so that there is no scope of conflict arising in future, and (iii) the habitat rights of the tribal persons will be duly taken care of as per the provisions of Forest Rights Act in the unlikely event that any issue in this regard should arise. Further, the Environmental Clearance mandates that**

Project Proponent constitutes a specific committee to oversee all issues related to welfare of the Tribal population.

11. Further, **the project area does not fall within the boundary of any National Park or Wildlife Sanctuary or their Eco-Sensitive Zones and therefore, the project is not proposed to be established in any Eco Sensitive Zone of any Protected Area contrary to what has been claimed in the present appeal**. The Project Proponent further submitted that the project site is outside the Ecologically Sensitivity Zone (ESZ) notified around the two National Parks. The EAC, therefore directed the Project Proponent that **parts of the proposed master plan for Ports which are falling within CRZ IA and IB areas shall be excluded from the revised layout of master plan in order to safeguard the ecological sensitive areas of the coastal areas.** Inland Coastal Regulation Zone plans of Great Nicobar island as per ICRZ Notification, 2019 has been approved by the answering Respondent vide letter dated 1st June, 2021 i.e. before the grant of EC/CRZ clearance.

12. The diversion of forest for the instant project is as per the provisions of the National Forest Policy, 1988, which says that in hills and in mountain regions, the aim should be to maintain two-third of the area under forest cover. **Despite the diversion of proposed forest land for this project in Great Nicobar Island, the remaining forest cover still be more than two-third of the geographical area of island**. Moreover, if the proposed area with respect to the entire forest area of the A&N island is considered, it amounts to only 1.82%. It is also respectfully submitted that the area proposed for development is approximately 18% of the total area in Great Nicobar island. Remaining area of 82% covered under Protected Forests, National Parks, Eco Sensitive Zones and Biosphere Reserve and managed for conservation

of biodiversity at ecosystem, species and genetic levels. Thus, 82% of Great Nicobar Island will be protected and conserved to take care of ecosystem structure, functions and services. The Answering Respondent is also monitoring the steps being taken towards Compensatory Afforestation in this regard. Stage- 1 Clearance under the Forest Conservation Act, 1980 has been correctly accorded. In this regard, the answering Respondent respectfully submits that the proposal received from the UT administration was placed before the Forest Advisory Committee (FAC) in its meeting held on 21.09.2022. Keeping in view the strategic nature of the project, the meeting of the FAC was held separately and the minutes of the said meeting are therefore not available in public domain.

13. **Stand of the PP** is that the **project is for holistic development of Great Nicobar Island in view of its strategic, security and socio economic benefits.** It will transform the Island into a hub of port led development. NITI Aayog has studied and planned the holistic development of identified Islands. A&N Administration vide order dated 28.07.2020 appointed Andaman Nicobar Island Integrated Development Corporation Ltd. (ANIIDCO) as Project Proponent for development of various projects in question. On 18.12.2020, the NITI Aayog appointed a qualified Technical Consultant for preparation of Master Plan for Holistic of Great Nicobar Island who carried out land suitability assessment, eco sensitivity analysis, and carrying capacity assessment to delineate all environmentally sensitive areas and to provide a development suitability map of the Island. Accordingly, **EIA study has been undertaken to identify and analyse impact of the project on the environment and suggest various mitigation measures to ensure that the development takes place with minimal environmental and social impact**. Further, in compliance of the

Terms of Reference (ToR) issued by MoEF&CC vide letter dated 25.05.2021, assistance of technical organizations/institutions with expertise in ecological and biodiversity studies such as ZSI, WII, SACON etc. was taken for ecological assessment and their studies/ reports are part of the EIA report. As per the terms & conditions of grant of EC & CRZ Clearance vide letter dated 4.11.2022, wildlife conservation plans have been prepared for leatherback sea turtle, nicobar megapode, salt water crocodile, inter tidal flora 86 fauna, mangroves, nicobar macaque, robber crab, other endemic bird species and corals in consultation with Wildlife Institute of India (WII), Zoological Survey of India (ZSI), Salim Ali Centre for Ornithology and Natural History (SACON), Botanical Survey of India (BSI) and Institute of Forest Management (IIFM). Fund for the wildlife conservation plans shall be released to the institutes by the Respondent No. 2. Further, as per the terms & conditions of grant of EC & CRZ Clearance, three independent committees have been set upto oversee pollution related matters, biodiversity and welfare & issues related to Shopmen and Nicobarese tribes. The Government of India (GOI) has adopted a proactive policy aimed at transforming the Andaman and Nicobar Islands (A&N Islands), as an economic hub. Strategically located, the A&N Islands, larger than several island countries in themselves, are an asset in India's cultural, economic and strategic calculus. **The project will strengthen India's presence in the Andaman Sea and in Southeast Asia; and will create an economic hub with a major cargo transshipment terminal and a global tourism destination. The location of the project, besides being of strategic importance, presents immense opportunities to further strengthen India's trading position in the world by developing an International Transshipment terminal. A new transshipment port at GNI can be competitive because of the cost savings that shippers can realize using feeder ships to service ports around the rim of the Bay of Bengal.**

A new port at GNI highlights its locational advantages over competing ports in the region for accessing ports in Bay of Bengal region. The importance of the said project would further be evident from the following facts:

a) The Andaman and Nicobar Islands constitute just 0.2 per cent of India's landmass but account for 30 per cent of the country's 200-nautical-mile Exclusive Economic Zone (EEZ).

b) Great Nicobar Island is the largest of the Nicobar group of Islands which represents a huge, strategically located land mass in the Bay of Bengal, whose economic potential and strategic importance is enormous.

14. It is further stated that the project plan ensures that both development and environment go hand in hand. It is stated that the appeals are focusing only on environment without considering development. Both are to be considered. Reference has been made to judgement in Citizens For Green Doon and Others Versus Union of India and Others (2021 SCC OnLine SC 1243) pertaining to the Char Dham project. It is further stated that only 166.1 sq. km of area is proposed for development which is approximately 2% of the total area of A & N Islands. Further, 130.75 sq. km of forest area is proposed to be diverted for the project which is only approximately 1.82% of the total forest area of A & N Islands. A&N Administration is allowed to accept and process the Forest Clearance applications through offline mode as per Ministry's letter dated 12.06.2015. The PP filed online Terms of Reference (ToR) application to MoEF&CC on 03.03.2021 which was considered in the meeting of the Expert Appraisal Committee (EAC) and ToR was issued on 25.05.2021. The draft Environmental Impact Assessment (EIA) report was uploaded on the MoEF&CC portal on 24.12.2021. The public hearing on the draft EIA report

was held on 27.01.2022. Final EIA report, after incorporating the written suggestions/ objections and public hearing, was uploaded on the MoEF&CC portal on 07.03.2022. The EAC in its meeting held on 24.03.2022, considered the proposal and MoEF&CC on 4.11.2022 granted EC & CRZ clearance. A comprehensive EIA study was undertaken by QCI-NABET accredited consultants to evaluate environmental impact and identifying mitigation measures for the project. The following studies were undertaken as part of the EIA study by various technical organizations:

- Marine Ecological Conservation of Island Fauna Diversity and Marine Ecological Studies.
- An assessment of the Environmental sensitiveness of sea turtle nesting beaches of the Great Nicobar Island.
- Environmental Baseline Data Monitoring, Socio-Economic Survey, Environmental Impact Assessment Study.
- Topographic survey through helicopter mounted LIDAR and OLS Survey.
- Mathematical Modelling Study.
- Oceanographic Study, Hydrographic Survey and Bathymetric & Geophysical Survey.
- Soil Investigation Study.
- Traffic & Market Analysis for Port.

As part of the EIA study, alternate site analysis for Port, Airport and Power Plant were undertaken and requirement for power, water and solid waste management were worked out. Thereafter, baseline environmental studies for air, water, noise & ecological attributes were undertaken. **Mathematical modelling was undertaken for the Port project for shoreline changes, transportation study was undertaken for working out details of road network, impact assessment**

&mitigation measures for land environment, reclamation, change in coastline/shoreline, air emissions, noise pollution, waste water, solid waste, social ecology, coral reef, etc. were worked out; risk assessment study was undertaken for Port, Airport, Power Plant considering earthquake, tsunami, cyclone for preparation of management plan. Information and data obtained during the course of these studies were part of the comprehensive EIA report submitted to MoEF&CC. The Pollution Control Committee (PCC) uploaded the draft EIA report on the website of A&N Administration and after due publicity in local and mainland newspapers, broadcasting the information regarding public hearing in All India Radio (AIR) and Doordarshan, conducted public hearing on the draft EIA report on 27.01.2022 at 11.00 am in the community hall, Gram Panchayat, Campbell Bay, Nicobar District under the chairmanship of Deputy Commissioner (Nicobar). 138 participants including tribals, settlers, representatives of Tribal Council and Andaman Adim Janjati Vikas Samiti attended the public hearing alongwith the officials of A & N Administration. Written comments were received from 12 organizations/persons and 14 persons gave their comments during public hearing. All the written comments and verbal comments received during the public hearing were responded and the reply is part of the EIA report. The final EIA report after incorporating the written suggestions/objections and public hearing was uploaded on the MoEF&CC portal on 07.03.2022. Detailed site alternative analysis has been undertaken as part of EIA to identify the best location for Port, Airport and Power Plant. **Alternate site analysis has been carried out as part of EIA wherein multi criteria analysis of alternate site have been undertaken considering factors like land development, cost risk, dredging requirement, environmental issues, tribal, breakwater, etc. which is mentioned under Analysis of Alternatives under**

Chapter 5 of the EIA report. As per the alternate site analysis, Galathea Bay appears to be the most feasible in terms of technical, environmental and financial parameters, and was thus selected for further detailed evaluation.

15. The proposed development is integrated in nature and includes port, airport, power plant and all supporting infrastructure within the township. The township development provides all social and infrastructure amenities required to support the proposed development. The trunk infrastructure thus proposed spreads from North of Campbell Bay to Galathea Bay including seven revenue villages within project boundary. **As the availability of non-forest land is very limited in Great Nicobar Island and to have the integrated and strategic development of the island, forest land is required for which the diversion of forest land was proposed.** Residential township is required to cater to the requirement of personnel engaged in defence and Port development and therefore cannot be considered as standalone development. For the integrated development of GNI, only 130.75 sq. km of forest land is proposed for diversion which is around 1.82% of the existing forest area of A & N Islands. **Effectively only 7.11 sq. km Tribal Reserve area will be required for de-notification for the project which is only 0.21% of the total tribal reserve area of A 86 N Islands and thus 743.96 sq. km of the Great Nicobar Island will remain protected as Tribal Reserve**. Section 3 of A&N (Protection of Aboriginal Tribes) Regulation, 1956 empowers A&N Administration to declare reserve Tribal area specifying the limits of such area. Accordingly, the Empowered Committee of UT Administration has recommended de-notification of Tribal Reserve and Ministry of Tribal Affairs vide letter dated 18.11.2020 has given no objection for the proposal for de-notification of tribal reserve area in Great Nicobar Island subject to compliance under

Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. The Andaman & Nicobar Coastal Zone Management Authority (ANCZMA) meeting convened for recommending CRZ Clearance for various projects in A&N Islands held on 17.03.2022, the Principal Secretary (Environment & Forests) has attended the meeting and on 27.06.2022, the Commissioner-cum-Secretary (E&F) has attended member of the ANCZMA. Both the officers were not holding the charge of Managing Director of ANIIDCO (2nd Respondent). With regard to Forest Clearance, it is submitted that the A & N Administration had vide Order No. 639 dated 28.07.2020 designated the 2nd Respondent as the project proponent of various projects in GNI. As part of the recommendation of the State Govt. for diversion of forest land, the then Commissioner-cum-Secretary (E&F) had recommended the Holistic Development proposal of GNI on 07.10.2020. During that period **the then Commissioner-cum-Secretary (E & F) was not holding any charge in the office of the 2nd Respondent. Thus, there is no conflict of interest contrary to what has been alleged by the applicant in the present appeals.**

16. The MoEF&CC vide letter dated 01.06.2021 has conveyed its approval of the ICRZ Plans for the Great Nicobar Island as per ICRZ 2019. Para 5 (III)(A) of the ICRZ 2019 mandated that the draft ICRZ plans shall be prepared in 1:25000 scale and accordingly NCSCM has prepared the draft ICRZ maps in 1:25000 scale. After receipt of ICRZ map, the same was published in print and electronic media for wide publicity and for obtaining claims/suggestion/views from general public and other stakeholders. Public hearing on the draft Island Coastal Regulation Zone (ICRZ) Plan was also conducted. The ICRZ Plan of the Great Nicobar Island as per the ICRZ Notification 2019 was finalized after following the due process and after consulting the stakeholders in a fair and f transparent manner.

17. **As per the guidelines of Forest (Conservation) Act, 1980 formulated by the MoEF&CC dated 22.05.2019, the states/UTs having forest land of more than 75% of their respective total geographical area, shall not be insisted upon for providing non-forest land for raising compensatory afforestation and the same may be taken up in any other state/UT having deficient forest land/cover and having land bank for CA.** Since, the UT of Andaman 86 Nicobar Islands is having recorded forest cover of more than 75% of the geographical area, the compensatory afforestation is proposed to be raised in other States in conformity with the aforesaid guideline formulated by the MoEF&CC and in view of the fact that sufficient non-forest land for the purpose is not available in this UT. The project area does not fall within the boundary of any National Park or Wildlife Sanctuary or their Eco-Sensitive Zones. Therefore, the project is not proposed to be established in any Eco Sensitive Zone of any Protected Area contrary to what has been claimed in the present appeals.

Rejoinder

18. The appellants have filed rejoinders reiterating their stand in the main appeal.

Consideration by the Tribunal

19. We have heard learned counsel for the appellants – M/s Kaustav Dhar and A. Yogeshwaran and learned ASGs for the respondents - Ms. Aishwarya Bhati for MoEF&CC and Mr. Vikramjit Banerjee for ANIIDCO Ltd. and perused the record. We have given due consideration to the rival submissions already set out above.

20. Issue for consideration is whether the impugned FC/EC are liable to be interfered with either on account of failure of the authorities in following laid down procedure or on account of adverse impact on environment rendering the project unviable on anvil of sustainable development principle.

21. As already mentioned, main contentions on behalf of the appellants are that the area is rich in bio-diversity. It is covered by CRZ IA as per ICRZ Notification, 2019 where port is expressly prohibited. It has Mangroves, Corals and Coral reefs, Turtle nesting grounds, nesting ground of birds. It has high eroding stretches of critical habitats for turtle nesting, comprehensive EIA based on three seasons data has not been prepared, EIA report by Vimta, ZSI etc is not even a Rapid EIA, incorrect information in Form – I vitiates the EC, EIA report does not conform to TOR, no assessment of impact on biodiversity has been done in the EIA report, Public hearing is vitiated, impact of the project on Tribals has not been assessed, Wildlife clearance has not been taken, Port and Power plant are Red category activities prohibited in ESZ and Forest land cannot be diverted for township.

22. As against above, the stand of MoEF&CC and the PP is that the project is of great defence, national security and strategic significance for holistic development of Great Nicobar Island. It will strengthen India's presence in the Andaman Sea and in Southeast Asia and create an economic hub with a major cargo transshipment terminal and a global tourism destination. It presents immense opportunities to further strengthen India's trading position in the world by developing an International Transshipment terminal. A new transshipment port at GNI can be competitive because of the cost saving that shippers can realize using feeder ships to service ports around the rim of the Bay of Bengal. A

new port at GNI highlights its locational advantages over competing ports in the region for accessing ports in Bay of Bengal region. The airport will be developed as a joint military-civil dual use airport under the operational control of Indian Navy. There has been comprehensive evaluation by the EAC of Infra-I Sector with the association of Infra-II Sector, Thermal Sector, Nuclear Defence and Strategic (NDS) Sector, Coastal Regulation Zone (CRZ) Sector. Detailed ToRs were issued and public hearing was held with participation of 138 persons. EC has specific and general conditions ensuring protection of environment in every possible manner. Further studies will be conducted by relevant Institutions apart from taking conservation and mitigation measures with no disturbance to the tribal or eco-sensitive areas like National Park, Wildlife Sanctuaries with no damage to corals or mangroves. Since more than 75% area is on the forest, requirement of compensatory afforestation in the same area does not apply under the declared policy of the State.

23. During the hearing, Dr. Dhriti Banerjee, Director, Zoological Survey of India (ZSI) appeared by V.C. and explained that corals can be protected. Environmental impact can be sustainably managed. On being required, she has filed her specific statement as follows:

> *"The assessment made by ZSI revealed that the environmental impact can be managed sustainably to restore the pristine ecosystem though proper conservatory measures and have suggested long term environmental management plans for that area.*
>
> ***A total of 309 species of scleractinian corals under 66 genera, 19 families are recorded from Great Nicobar Island based on the comprehensive studies for last 14 years across all the coastal areas of this island. However, it has been noted that no major coral reef exists within the work area of the project. Only scattered coral reefs are available at the peninsular part of Galathea Bay. As per the detailed analysis, the environmental status and physicochemical status of the sampling sites are conducive to the oligotrophic environment. Hence, the overall benthic community of Galathea Bay is different from other major reefs. The size of the colonies reported from Galathea Bay is relatively small and most of the***

species are found scattered with small growth forms which may be due to the presence of an extremely high cover of algae (51.75%). The high density of Halimeda sp. growing in Galathea Bay is known for its quick growth rate and deposit of calcium on a higher scale.

During the construction in seafront areas, the marine ecosystem may be affected especially wherever there are coral reefs. The development of jetties and ports along the coastal areas is likely to have an impact on the entire benthic cover including coral reefs, seagrass, and seaweed habitats along with associated faunal communities.

Even though there are no coral reefs in the proposed site, coral reefs are recorded in the adjoining areas of the proposed project site. However, as a precautionary measure, to avoid damage to the corals by any means, it is a prerequisite to translocate the corals from the Galathea Bay adjoining up to the depth limit of 15 m.

Any coral colonies which are presumed to be get impacted by the proposed construction has been recommended by ZSI to be translocated to a suitable place where similar environment as well as topographic features prevails in the Great Nicobar.

Reef restoration and coral relocation due to coastal development and/or dredging, are among the most common reasons for transplantation and is world-wide solution, which could be easily executed in Great Nicobar in alternate suitable offshore habitats. Successful coral reef restoration has previously been accomplished by ZSI in Gulf of Kachchh and the transplanted corals had >90% survival and effectively transformed into a functional coral reef.

Rehabilitation, restoration and development of new reef areas by modern technologies can lead to protection and conservation of reef and reef associated fauna of Great Nicobar."

24. ANCZMA recommendations dated 8.7.2022 have also been filed which inter-alia are as follows:

"The effective ICRZ areas involved in various activities of the project are given as under.

S. No	Name of the Activity	Total area in Sq.km	ICRZ I		ICRZ III		ICRZ IV	
			IA	IB	NDZ	50-100M	IVB	IVA
1	Port	7.39	0.67	0.38	0.00	0.00	0.18	0.62
2	Airport	8.49	0.58	0.82	0.38	0.10	0.14	0.56
3	Power Plant	0.39	0.00	0.00	0.00	0.00	0.00	0.00
4	Township Defence	12.60	0.81	1.43	0.02	0.00	0.07	0.20

5	Township Other Landuse	137.27	4.93	5.92	1.69	0.45	2.50	3.55
6	Port reclamation area	2.27	0.06	0.11	0.00	0.00	0.00	2.10
7	Airport Reclamation on area	0.71	0.02	0.08	0.04	0.00	0.32	0.02
	Total	**169.08**	**7.07**	**8.74**	**2.13**	**0.55**	**3.21**	**7.05**

The project proponent submitted the revised area falling under various categories of ICRZ and the details are as follows.

Sr. No	Activity	Area in Sq.km	ICRZ I		ICRZ III		ICRZ IV	
			CRZ IA	CRZ IB	NDZ	5°. 100m	IVB	IVA
1	Port (ICIT)	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 169.08 reclaimed area)			**7.07**	**8.74**	**2.13**	**0.55**	**3.21**	**7.05**

It is mentioned that the revised effective area ICRZ involved in the project includes the same area of 7.07 sq.km in ICRZ IA and 8.74 Sq.km in ICRZ IB, 2.13 Sq.km in ICRZ III NDZ, 0.55 Sq.km in ICRZ III, 3.21 sq.km in ICRZ VI B and 7.05 Sq.km in ICRZ IVA. The only difference in the revised effective area mentioned by the project proponent is 0.57 sq.km and 0.25 sq.km instead of 0.67 sq.km and 0.38 sq.km in ICRZ IA and IB respectively in case of Port and 5.03 sq.km and 6.05 sq.km instead of 4.93 sq.km and 5.92 sq.km in ICRZ IA and IB respectively in the case of township (other land uses). In case of Airport reclamation, there is no CRZ IA involved and the area involved in ICRZ IB is 0.33

sq.km, 0.04 sq.km in NDZ of ICRZ III, 0.32 sq.km in ICRZ IV B and 0.02 Sq.km in ICRZ IV B. The proposed activities are permissible in ICRZ areas as per ICRZ notification 2019 as the Greenfield Airport Project is part of holistic Development of GNI project is now for Defence, Strategic, National Security, and Public Purpose.

Recommendation:

Taking into consideration of the above facts namely the revised ICRZ area involved in the holistic development of Great Nicobar Island and the green field airport project is for defence, strategic, National Security and public purpose, ANCZMA further recommends the project with revised ICRZ area involved in the project as above. The conditions stipulated in the earlier meeting dated 17.03.2022 and communicated vide letter No. PCCF/ EPA/ 1 / Vol-XVI/ 653 dated 22.03.2022 continue to remain valid and the project proponent has to follow those conditions while executing/implementing the project."

25. Copy of report of July 2021 prepared by ZSI has also been placed on record with following executive summary:

"Executive Summary

1. *The Andaman and Nicobar Islands comprise an accurate chain of 836 islands, islets and rocky outcrops (including 649 islands and 187 rocks and rocky islands), spreading in a linear distance of around 900 km in the Bay of Bengal and the Andaman Sea between latitudes 06° and 14°N and longitudes 92° and 94° E.*
2. *The archipelago has a total land area of 8249 sq km and a coastline of 1962 km. The Andaman Islands and Nicobar Islands are distinctly separated by the wide Ten Degree Channel which is about 150 km wide and 400 fathoms deep. The Andaman group consists of more than 324 major islands with an area of 6408 sq km and the Nicobar group comprises 24 major islands with the landmass of 1841 sq km.*
3. *The Andaman and Nicobar Islands have a Continental Shelf of 35,000 sq km with an EEZ of 0.6 million sq. km, includes the ecologically enriched faunal and floral diversities.*
4. *The Great Nicobar Island is the southernmost landmass in Andaman and Nicobar Archipelago. The total area of this island is 1044 km^2. It is a tropical and sub-tropical moist broadleaf forest biome and located in the Indo-Malayan bio-geographic zone. The Great Nicobar Biosphere Reserve (GNBR) of this island is one of the 11 Biosphere Reserves declared under the Man and Biosphere Programme of Ministry of Environment, and Forests, Government of India and UNESCO.*
5. *Great Nicobar Biosphere Reserve (GNBR) was declared on 6th January 1989 by the Government of India Order No. J-22010/ 14/ 89-CSC. The GNBR is comprised of Campbell Bay National Park in the north and Galathea National Park in the south. GNBR spread 885 km^2 in two zones. A total area of*

705 km^2 has been designated as Core Zone, and 180 km^2 is Buffer Zone.

6. The President of India is acting through the NITI Aayog, Government of India for holistic development of Great Nicobar Island.
7. As per the Vision Document prepared by NITI Aayog, a contiguous stretch of land is required in the south-eastern and south-western part of the island, which has a narrow strip ranging from 1.83 km to 3.8 km in the eastern side and 1.3 km to 5.4 km in the western side from the Galathea National Park which also happens to be the Protected Forest and Tribal Reserve.
8. In the eastern side, the NITI Aayog has proposed to construct an Airport, requiring 21.64 sq. km of land at the south eastern part and construction of Rapid Mass Transit System originating from Campbell Bay and terminating somewhere in the western part and running parallel to the coastline. In the southern part, besides the development of a major Transshipment Port, the area is also earmarked for future strategic Defence use in view of the developing geo-political scenario in the area. The south-western and western part of Great Nicobar Island outside the Galathea National Park are narrow and proposed to be used as Free Trade Zone as ancillary to the trans-shipment port leaving little area for declaration of ESZ and thereby the Committee recommended finalization of the ESZ notification of Galathea National Park. The proposed holistic development includes 1) Tourism and Hospitality; 2) Jetty and Marina; 3) Mixed use area; 4) Airport; 5) Port & 6) A Marina for Eco-Tourism.
9. AECOM is currently undertaking environmental monitoring for the Great Nicobar Island which is one of the largest islands in Andaman and Nicobar archipelago. In consultation with the concerned UT Administration and the concerned central ministries, it has been decided to undertake the holistic development of the Great Nicobar Island.
10. In view of this, AECOM, 9th Floor, Infinity Tower-'C', DLF Cyber City, DLF Phase-2, Gurgaon-122 002 has approached the Zoological Survey of India, Headquarters, Kolkata by electronic communication through an e-mail with the subject 'Andaman Project' dated 14th December 2020 to undertake 'Rapid Environmental Impact Assessment studies on Marine Ecology for the Master Plan of Development of Great Nicobar Island' to fulfill the requirement of Environmental and CRZ clearance from the Ministry of Environment, Forest and Climate Change, Government of India. Hence the present study has been executed.
11. Along the intertidal stations of the coastal waters of Great Nicobar Island, Station GB 1 (Galathea beach) witnessed the highest concentration of silicate (3.567 µg/ml) while station RB 1 (Rajiv Nagar Beach) had the least silicate concentration (2.131µg/ml).
12. The average phytoplankton abundance in the marine waters of sampling stations of Great Nicobar Island is about 24400 no./L (no. of organisms per litre). The phytoplankton abundance ranges from a maximum of 34200 no./L in the

station GB3 M to a minimum of 15200 no./L at station LB2 IT.

13. *The two major groups of phytoplankton observed are diatoms and mixotrophic (photosynthetic) dinoflagellates. The abundance of diatoms is much higher than the dinoflagellates across all stations, both in the intertidal and marine coastal study sites. This data is supported by the overall high silicate concentrations in the study area.*
14. *In terms of phytoplankton diversity, station LB M is the most diverse. Mixotrophic dinoflagellate diversity is high in Lakshman Beach stations, while diatom diversity is high in Galathea Bay stations.*
15. *The average microzooplankton abundance in the marine waters of sampling stations of Great Nicobar Island is about 19033 no./L (no. of organisms per litre). The microzooplankton abundance ranges from a maximum of 20800 no./L in the station GB3 M to a minimum of 16900 no./L at station LB3 IT.*
16. *The major microzooplankton groups recorded from the study area are Ciliophora, heterotrophic Dinoflagellata, Foraminifera, Radiolaria and larval forms of Copepoda, Decapoda, Bivalva to name a few. In the intertidal stations the larval forms, especially copepod nauplii and bivalve larvae dominate the numbers, followed by foraminiferans (except in Galathea beach stations, where ciliates are the dominant group.*
17. *A total of 17 groups of organisms or taxa were obtained in zooplankton collection namely, Copepoda, Ostracoda, Amphipoda, Decapoda, Siphonophora, Decapoda larvae, Polychaete, Polychaete larvae, Mollusca, Mollusca larvae, Appendularia, Thaliacea, Cumacea, Cladocera, Chaetognatha, fish/invertebrate eggs and fish larvae. Copepods comprised the major portion of the mesozooplankton biomass.*
18. *A total of 92 species of mesozooplanktons were recorded from the study among which Copepoda showed the maximum species diversity. Copepoda comprised of 34 species, Ostracoda comprised of 9 species, Euphausiacea comprised of 12 species, Decapoda constituted of 5 species, Chaetognatha constituted of 9 species, Anthoathecata constituted of 2 species, Siphonophorae constituted of 4 species, Amphipoda and Pteropoda comprised of 2 species each, Appendicularia comprised of 4 species and Thaliacea comprised of 9 species.*
19. *A total of 309 species of scleractinian corals under 66 genera, 19 families (including two genera under Scleractinia Incertae Sedis) are recorded from Great Nicobar Island. The present database of scleractinian species is prepared based on the available literature and studies made by the present author during period of last 12 years.*
20. *Among the recorded 309 species, 66 species are under threatened category (2 species are under Endangered and 64 species are under Vulnerable categories) as per the category and criteria of IUCN (2021), while 90 species are recorded under Near Threatened, 135 species are under Least Concern and 9 species are under Data Deficient categories, whereas 9 species are under not evaluated category.*

21. *A total of 245 species of scleractinian corals under 53 genera, 15 families (including 2 genera under Scleractinia Incertae Sedis) are recorded from seven sites including the proposed project site of Great Nicobar Island during the present study. A maximum of 117 species have been documented from Galathea Bay followed by 111 species from Sastri Nagar, 107 species from Campbell Bay, 102 species from Laxman Beach, 76 species from Gandhi Nagar, 25 species from Anderson Bay, and only 15 species Laxmi Nagar.*
22. *Thorough studies were carried out at the seven study locations of Great Nicobar Island to estimate the benthic cover. Maximum 39.27% of live coral cover was recorded from Campbell Bay region followed by 30.81% from Gandhi Nagar, 25.59% from Sastri Nagar, 24.10% from Laxman Beach, 19.92% from Anderson Bar, 17.46 from Galathea Bay, and the minimum of 13.45% from Laxmi Nager. Among the other algae, a maximum of 51.75% was recorded from Galathea Bay while the minimum of 5.52% from Anderson Bay.*
23. *The present study indicates a total of 491.7975 hect. reef areas across the seven study areas including 116.4173 hect. of reef areas at the Galathea Bay which is distributed up to the maximum extent of 1200m (perpendicular) from the coastline while most of the reefs are scattered in distribution within the limit of a mean distance of 500m, whereas the reef areas of Sastri Nagar are recorded with a total distributional cover of around 103.8703 hect. along with the mean distributional range from the coast is 250m (perpendicular) along with the maximum of 500m, while Laxman Beach represents the minimum of 34.4921 hect. Of reef areas within the mean proximity of 150m from the coast while the maximum distributional ranges are within 350m.*
24. *Great Nicobar Island is the land of two indigenous tribal population viz. Shompen and Nicobarese.*
25. *Shompens live in small groups in dense interior forests of the island and are entirely dependent on forest resources and sea products for their sustenance. They probably migrated into this area, several hundred years ago from nearby Malaysian regions. The Mongoloid Shompen Tribe, about 219 in number, is living within the Biosphere Reserve. They are shy in nature and avoid contact with outsiders. They live around and along the perennial freshwater rivers and constructs huts using palm and pandanus leaves. The Shompens are hunters and food gatherers leading a semi-nomadic life with stone-age civilization. They cultivate yams, pandanus, coconuts, arecanuts, bananas etc. They maintain small herds of pigs and also hunt wild pigs with spears and fish with harpoons.*
26. *The Nicobarese are horticulturists, are the second indigenous tribe, situated in mostly coastal areas of Great Nicobar Biosphere Reserve. Coconut, pandanus, banana, papaya, yam and other starchy roots and tubers are their principal items of crop. They also depend for food on hunting and fishing. Pig rearing is an important traditional practice of Nicobarese.*
27. *The Nicobarese live in villages located along the coast. The huts are made of wooden logs, stems of areca palm, coconut palm etc. while the roof is thatched with grass, canes,*

bamboo and coconut leaves. At present, their traditional beliefs and customs are changing and modern education and Government jobs are readily accepted if they are in their own place.

28. According to the data of Botanical Survey of India, approximately 600 species of flora reported from Great Nicobar Island. Among them, 86 species of plants found endemic to Great Nicobar Island. Of which 28 species are exclusively reported from Great Nicobar Island, while 18 species identified from entire Nicobar group of Islands and 40 species recorded from Andaman and Nicobar Islands. Considerable number of plant species reported from Great Nicobar Island has ethno-botanical significance
29. A total of 695 species of fauna with the endemism of 158 species, which is equivalent to 22.73% have been reported from Great Nicobar Island.
30. A total of 48 vertebrates, recorded as endemic to Andaman and Nicobar Islands, were found in Great Nicobar Island during the study period. Among them 3 species are mammals, 36 species are birds, 7 species are reptiles and 2 species are amphibians.
31. This reserve is home for several endemic and endangered species including Nicobar Megapode Megapodius nicobariensis, Edible-nest Swiftlet Aerodramus fuciphagus, NicobarTree Shrew Tupaia nicobarica, Long-tailed Macaque Macaca fascicularis, Saltwater Crocodile Crocodylus porosus, Giant Leatherback Sea Turtle Dermochelys coriacea, Reticulated python Pythonreticulatus and Coconut Crab Birgus latro.
32. The Saltwater Crocodile is a common species throughout the Andaman and Nicobar Islands. Population estimates of saltwater crocodiles in Great Nicobar Island are about 6 adults and 3 sub-adults-based on questionnaire. It was sighted at Indira Point, Mahar Nallah, Gandhi Nagar, Shastri Nagar, and Galathea Bay.
33. Out of the five species of turtles recorded from mainland coast of India, the leatherback turtle Dermochelys coriacea (Vandelli, 1764) is well known for its nesting in the Andaman and Nicobar Islands. Leatherback turtles nesting have been recorded mainly on the long and wide beaches at the mouth of the Dagmar and Alexandira rivers on the west coast and at the mouth of the Galathea River along its south eastern coast.
34. Globally, leatherback turtle status according to IUCN is listed as Vulnerable. The Northeast Indian leatherback subpopulation nests primarily in the Andaman and Nicobar Islands of India, in some parts of Sri Lanka and to a lesser extent in Thailand. The first documentation of leatherback turtle nesting in the Great Nicobar Island was by Dr. Satish Bhaskar in 1978-79 and subsequently by other researchers including A&NB Forest Department and NGOs and institutions in the Andaman & Nicobar Islands. The leatherback nesting population in the Nicobar is one of the four colonies that exceeds 1000 individuals in the Indo-Pacific, and hence of global significance.
35. The southern bay of Great Nicobar is Southeast Asia's largest leatherback turtle nesting site. In Galathea bay nesting, egg

laying and hatchling are more for Leatherback turtle compared to the other regions of Great Nicobar Island. In current year, estimation of the number of hatchlings is not completed; hence the number is not mentioned.

36. The number of nestings, eggs laid and number of hatchlings has been increasing over past four years. The number of hatchlings increases at a rate of 21 % from 2018 to 2019 while it increases at a rate of 147 % from 2019 to 2020. The nesting leatherback populations of this species have also shown an increase in the trend in Galathea Bay. It is estimated that the succession rate of hatchlings of leatherback turtle are 59% in 2018; 60% in 2019 and 63.5% in 2020. The hatchling process has not completed for this year and hence not enumerated and presented.

37. The Nicobar Megapode Megapodius nicobariensis abbotti (Oberholser, 1919) is an endemic bird species in the Nicobar group of Islands. According to the IUCN, this species was listed as Vulnerable (Birdlife International, 2000) and as per Govt. of India, Schedule-I of the Wildlife Protection Act (1972). As per the survey by ZSI, there are ~ 100 active mounds were recorded and ~ 202 megapodes were detected during the point-transect and playback surveys Megapodius nicobariensis abbotti occurs in all of the southern group of islands, it was estimated that 7 active mounds and 14 breeding pairs in Galathea.

38. The Long-Tailed Macaque Macaca fascicularis umbrosus (Miller, 1902) is the only non-human primates found on Nicobar group of Islands. In 2000, a total of 88 groups, having a mean size of 36 monkeys, were recorded in Great Nicobar, Little Nicobar and Katchal Islands. However, in 2006 a total of 40 groups, including 814 monkeys were recorded in Great Nicobar, Little Nicobar and Katchal Islands while assessing the impact of the Tsunami on the Long-Tailed Macaque of Nicobar Islands. This is the only primate in the Nicobar Islands, and is listed in Schedule I of the Indian Wildlife (Protection) Act, 1972.

39. The coconut crab or Robber crab or Palm thief (Birgus latro (Linnaeus, 1767)) is the largest terrestrial arthropod in the World (which is related to hermit crabs and lobsters). The crab is named because it is associated with coconut tree. It is listed as Schedule – I, Part - I under Wildlife Protection Act, 1972. The coconut crab populations are threatened with extinction in the Nicobar group of Islands, except for Menchal Island due to human predatory practices.

40. Prediction of Environmental Impacts, Environmental Management Plan and Recommendations are given in detail in the report for the proposed 14.2 Million TEU (Twenty Feet Equivalent Unit) ICTT Port, (main project), Airport (4,000 Peak hour passenger, Category 4F), Township and Area Development for 14,960 Ha and Power Plant (405 MVA Gas + Diesel) (Additional 45 MVA from solar power will be included in total power generation."

Finding

26. From above resume, it is patent that the project has great significance not only for economic development of the island and surrounding areas of strategic location but also for defense and national security. Even the appellants have not joined issue on these aspects. **While the Tribunal's consideration is confined to material on record, we have also noted (without any comment) media reports that the area is located in China's 'string of pearls' strategy[1] which is sought to be countered by Indian Authorities under India's 'Act East' policy. Indian Ocean has emerged as a key intersection zone of Indian and Chinese strategic interests. There are further media reports of huge poaching of environmental marine resources of Andaman by poachers from Myanmar for which number of people have been arrested. Poaching activities include destruction of corals, killing of sharks, taking away of valuable fishes[2]. The project will help bridge infrastructural gap in island and promote international trade saving huge amount on transhipment cargo[3].**

27. In view of above, what remains to be seen is whether the project is compliant with the mandatory environmental norms.

Forest Clearance

28. As regards forest clearance, it is seen that forest cover in the area is more than 75%. While forest is of great significance in tackling air pollution and climate change, development cannot be totally ignored. There is hardly

[1] https://idsa.in/askanexpert/why-has-india-necklace-diamonds-strategy-indian-ocean-region
[2] https://www.reuters.com/article/environment-india-poaching-andaman-dc-idUSDEL4606520070607
https://link.springer.com/article/10.1007/s11852-018-0640-y
[3] https://www.financialexpress.com/business/infrastructure-government-to-build-international-container-transhipment-port-in-great-nicobar-island-2961754/
https://economictimes.indiatimes.com/news/economy/infrastructure/centre-prepares-for-rs-41000-crore-international-transhipment-port-at-great-nicobar-island/articleshow/97379332.cms

any development in the area. There is need not only for economic development but also national security. These factors are not shown to be irrelevant. There is no conflict of interest as such. There is policy permitting afforestation outside the State if forest cover is more than 75%. Thus, no case is made out to interfere with the FC, considering the countervailing public interest in allowing diversion of forest land for the project which is subject to all relevant conditions. In Lafarge Umiam Mining (P) Ltd. v. Union of India, (2011) 7 SCC 338, it was observed :

> *" .. Time has come for us to apply the constitutional "doctrine of proportionality" to the matters concerning environment as a part of the process of judicial review in contradistinction to merit review. It cannot be gainsaid that utilisation of the environment and its natural resources has to be in a way that is consistent with principles of sustainable development and intergenerational equity, but balancing of these equities may entail policy choices. In the circumstances, barring exceptions, decisions relating to utilisation of natural resources have to be tested on the anvil of the well-recognised principles of judicial review. Have all the relevant factors been taken into account? Have any extraneous factors influenced the decision? Is the decision strictly in accordance with the legislative policy underlying the law (if any) that governs the field? Is the decision consistent with the principles of sustainable development in the sense that has the decision-maker taken into account the said principle and, on the basis of relevant considerations, arrived at a balanced decision? Thus, the Court should review the decision-making process to ensure that the decision of MoEF is fair and fully informed, based on the correct principles, and free from any bias or restraint. Once this is ensured, then the doctrine of "margin of appreciation" in favour of the decision-maker would come into play."*

29. Considering the above, we do not find any ground to interfere with the FC.

Environmental Clearance

30. Issues in this regard are alleged violation of ICRZ, 2019 for locating the port in prohibited area, ignoring soil erosion, damage to corals, wildlife habitats and tribals. Further issue is compliance of laid down procedure under the EIA notification, including public hearing. While it is true that EIA procedure is mandatory, it does not however follow that hyper technical

approach should be adopted ignoring ground realities about need of the country for development and national security. Every developmental activity is bound to have some adverse impact on environment but if impact can be mitigated and advantages to the society are greater, such project have to be allowed in larger public interest. In the present case, laid down procedure has been followed, public hearing held, EIA prepared, EAC evaluation undertaken, wildlife habitats protection, Tribal welfare considered and necessary conservation measures planned. MoEF&CC and the PP have stated that area proposed to be part of Port, falling in prohibited area as per CRZ notification will be left out, there will be no coverage of eco sensitive areas, corals will be protected and all other necessary measures taken.

31. The legal position has been discussed inter-alia in *G. Sundarrajan vs. Union of India & Ors.*[4] as follows:

> *"238.1. In Intellectuals Forum, Tirupathi v. State of A.P. and others*[5]*, it has been held that merely asserting an intention for development will not be enough to sanction the destruction of local ecological resources. What is required to be prescribed is the principle of sustainable development and find a balance between the developmental needs and the environmental degradation.*
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> *238.2. In Bombay Dying & Mfg. Co. Ltd. (3) v. Bombay Environmental Action Group and others*[6]*, while dealing with the concept of sustainable development and planned development vis-à-vis Article 21 of the Constitution, a two-Judge Bench has opined thus:- (SCC p. 521)*
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> > *"251. It is often felt that in the process of encouraging development the environment gets sidelined. However, with major threats to the environment, such as climate change, depletion of natural resources, the eutrophication*[7]** of water systems and biodiversity and global warming, the need to protect the environment has*

[4] (2013) 6 SCC 620
[5] (2006) 3 SCC 549
[5] (2006) 3 SCC 434
[7] *** Ed.:** Eutrophication of a water body is phenomenon that can impel a great deal of algae and other plankton or other plant life to reproduce quickly and lead to extermination of other aquatic life such as fish. Eutrophication occurs when excessive nutritional substances such as nitrogen and phosphorus are discharged into lakes, reservoirs and gulfs, etc.

become a priority. At the same time, it is also necessary to promote development. The harmonisation of the two needs has led to the concept of sustainable development, so much so that it has become the most significant and focal point of environmental legislation and judicial decisions relating to the same. Sustainable development, simply put, is a process in which development can be sustained over generations. Brundtland Report defines "sustainable development" as development that meets the needs of the present generations without compromising the ability of the future generations to meet their own needs. Making the concept of sustainable development operational for public policies raises important challenges that involve complex synergies and trade offs."

238.3. In M.C. Mehta v. Union of India and others[8], while stating about sustainable development and the needs of the present without compromising the ability of the future generation to meet their own needs, this Court has expressed thus:- (SCC pp. 166-67, para 46)

> *"46. ... The definition of "sustainable development" which Brundtland gave more than 3 decades back still holds good. The phrase covers the development that meets the needs of the present without compromising the ability of the future generation to meet their own needs. In Narmada Bachao Andolan v. Union of India[9] this Court observed that sustainable development means the type or extent of development that can take place and which can be sustained by nature/ecology with or without mitigation. In these matters, the required standard now is that the risk of harm to the environment or to human health is to be decided in public interest, according to a "reasonable person's" test. [See Chairman Barton: The Status of the Precautionary Principle in Australia (Vol. 22, 1998, Harv. Envtt. Law Review, p. 509 at p. 549-A) as referred to in para 28 in A.P. Pollution Control Board v. Prof. M.V. Nayudu[10].]"*

238.4. In Tirupur Dyeing Factory Owners Association v. Noyyal River Ayacutdars Protection Association and others[11], while dealing with the concept of sustainable development, the Court has observed as under:- (SCC p. 747, para 26)

> *"26. The concept of "sustainable development" has been explained that it covers the development that meets the needs of the person without compromising the ability of the future generation to meet their own needs. It means the development, that can take place and which can be sustained by nature/ecology with or without mitigation. Therefore, in such matters, the*

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[8] (2004) 12 SCC 118
[9] (2000) 10 SCC 664
[10] (1999) 2 SCC 718
[11] (2009) 9 SCC 737

*required standard is that the risk of harm to the environment or to human health is to be decided in public interest, according to a "reasonable person's" test. The development of the industries, irrigation resources and power projects are necessary to improve employment opportunities and generation of revenue, therefore, cannot be ignored. In such eventuality, a balance has to be struck for the reason that if the activity is allowed to go on, there may be irreparable damage to the environment and there may be irreparable damage to the economic interest. A similar view has been reiterated by this Court in T.N. Godavarman Thirumulpad (104) v. Union of India[12] and M.C. Mehta v. Union of India[13].***"***

238.5. In T.N. Godavarman Thirumalpad (through K.M. Chinnappa) v. Union of India and others[14], this Court observed that: (SCC p. 628, para 35)

> ***"****35. It cannot be disputed that no development is possible without some adverse effect on the ecology and environment, and the projects of public utility cannot be abandoned and it is necessary to adjust the interest of the people as well as the necessity to maintain the environment. A balance has to be struck between the two interests. Where the commercial venture or enterprise would bring in results which are far more useful for the people, difficulty of a small number of people has to be bypassed. The comparative hardships have to be balanced and the convenience and benefit to a larger section of the people has to get primacy over comparatively lesser hardship.***"***

238.6. In Narmada Bachao Andolan v. Union of India and others[43], a three-Judge Bench, while dealing with the public projects and policies, has opined that the court does not become the approving authority of such policies. Thereafter, the Bench observed thus:- (SCC p. 763, para 234)

> ***"****234. ... Normally such decisions are taken by the Government after due care and consideration. In a democracy welfare of the people at large, and not merely of a small section of the society, has to be the concern of a responsible Government.***"***

239. I have referred to the aforesaid pronouncements only to highlight that this Court has emphasized on striking a balance between the ecology and environment on onehand and the projects of public utility on the other. The trend of authorities is that a delicate balance has to be struck between the ecological impact and development.

240. The other principle that has been ingrained is that if a project is beneficial for the larger public, inconvenience to smaller number of

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[12] (2008) 2 SCC 222
[13] (2009) 6 SCC 142
[14] (2002) 10 SCC 606

people is to be accepted. It has to be respectfully accepted as a proposition of law that individual interest or, for that matter, smaller public interest must yield to the larger public interest. Inconvenience of some should be bypassed for a larger interest or cause of the society. But, a pregnant one, the present case really does not fall within the four corners of that principle. It is not a case of the land oustees. It is not a case of "some inconvenience". It is not comparable to the loss caused to property.

241. I have already emphasized upon the concept of living with the borrowed time of the future generation which essentially means not to ignore the intergenerational interests. Needless to emphasize, the dire need of the present society has to be treated with urgency, but, the said urgency cannot be conferred with absolute supremacy over life. Ouster from land or deprivation of some benefit of different nature relatively would come within the compartment of smaller public interest or certain inconveniences. But when it touches the very atom of life, which is the dearest and noblest possession of every person, it becomes the obligation of the constitutional courts to see how the delicate balance has been struck and can remain in a continuum in a sustained position. To elaborate, unless adequate care, caution and monitoring at every stage is taken and there is constant vigil, life of "some" can be in danger. That will be totally shattering of the constitutional guarantee enshrined under Article 21 of the Constitution. It would be guillotining the human right, for when the candle of life gets extinguished, all rights of that person perish with it. Safety, security and life would constitute a pyramid within the sanctity of Article 21 and no jettisoning is permissible. Therefore, I am obliged to think that the delicate balance in other spheres may have some allowance but in the case of establishment of a nuclear plant, the safety measures would not tolerate any lapse. The grammar has to be totally different.

242. I may hasten to clarify that I have not discussed anything about the ecology and environment which has been propounded before us, but I may particularly put that the proportionality of risk may not be "zero" regard being had to the nature's unpredictability. All efforts are to be made to avoid any man-made disaster. Though the concept of delicate balance and the doctrine of proportionality of risk factor gets attracted, yet the same commands the highest degree of constant alertness, for it is disaster affecting the living. The life of some cannot be sacrificed for the purpose of the eventual larger good."

Conclusion

32. We are of the opinion that there can be no two views about need for adequate studies of adverse impact on coral reefs, mangroves, turtle nesting sites, bird nesting sites, other wildlife, of erosion, disaster management and other conservation and mitigation measures. ICRZ 2019 has to be duly complied with about the location of the Port. Tribal rights and their rehabilitation has to be ensured. Compensatory

Afforestation/mangrove plantations have to be as per forest policy. Stand of the respondents shows that such studies have already been undertaken and further studies are proposed. The respondents are committed to comply with the ICRZ 2019 and tribal rights. They have also planned compensatory afforestation and mangrove plantations. Thus, by and large the project is compliant and EC does not call for interference.

33. However, there are some unanswered deficiencies pointed out by the appellants which need to be addressed. By way of instance, it is pointed out that out of 20668 coral colonies, 16150 are proposed to be translocated without any mention of threat to remaining 4518 coral colonies. It is pointed out that ICRZ Regulations prohibit destruction of corals. Further, data collected for impact assessment is only of one season as against requirement of three seasons. It is also shown that part of the project is in CRZ IA area where Port is prohibited. These aspects may call for revisiting the EC by a High-Powered Committee (HPC) which we propose to constitute. The same will be headed by Secretary, MoEF&CC, GoI. Other members will be Chief Secretary, Andaman & Nicobar, Zoological Survey of India, Botanical Survey of India, Central Pollution Control Board, nominee of Vice Chairman of Niti Aayog, nominee of Secretary, Ministry of Shipping and Director, Wildlife Institute of India. Secretary, MoEF&CC may appoint a nodal officer, not below the rank of Joint Secretary, for facilitating functioning of the Committee. The Committee may meet within two weeks from today and finalise its proceedings within two months. It will be open to the Committee to associate any other institution/expert. In the light of report of the Committee, the EC or its conditions may be re-looked into by the competent authority. Till then, further work in pursuance of impugned EC may not proceed except for the work which may not be of irreversible nature.

The appeals will stand disposed of accordingly.

A copy of this order be forwarded to Secretary, MoEF&CC, GoI, Chief Secretary, Andaman & Nicobar, Zoological Survey of India, Botanical Survey of India, CPCB, Vice Chairman of Niti Aayog, Secretary, Ministry of Shipping and Director, Wildlife Institute of India by e-mail for compliance.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

B. Amit Sthalekar, JM

Arun Kumar Tyagi, JM

Dr. A. Senthil Vel, EM

Dr. Afroz Ahmad, EM

April 03, 2023
Appeal Nos. 29 to 32/2022/EZ
SN+DV+AB

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F. No. IA3-3/9/2023-IA.III(Pt.)
Government of India
Ministry of Environment, Forest and Climate Change
Impact assessment (Infrastructure- 1) Division

Indira Paryavaran Bhawan
Jor Bagh raod, New Delhi-110003
Dated- 13th April, 2023

OFFICE MEMORANDUM

Sub: Constitution of the High Powered Committee (HPC) for revisiting the Environment Clearance dated 11.11.2022 granted by the MoEF&CC in compliance of the directions of the Hon'ble National Green Tribunal (EZ) in Appeals No. 29-32 of 2022-regarding

The above cited subject matter pertains to the appeal before NGT against the stage- I Forest Clearance granted on 27.10.2022 and Environment Clearance granted on 11.11.2022 in respect of integrated project by the Andaman and Nicobar Islands Integrated Development Corporation (ANIIDCO) in Great Nicobar Island involving the following: -

i. International Container Trans-Shipment Terminal (ICTT)-14.2 Million TEU
ii. Greenfield International Airport (4000 Peak Hour Passengers-PHP)
iii. Township & Area development Project
iv. 450 MVA Gas and Solar based Power Plant over an extent of 16610 hectares (Ha) in the Great Nicobar Islands

2. The aforesaid appeals were disposed of by the Tribunal vide judgment dated 03.04.2023 which observed that the integrated Project has great significance not only for economic development of the island and surrounding areas of strategic location but also from the point of view of defence and national security and therefore, Stage- I Forest Clearance and the Environment Clearance did not call for any interference.

3. The Tribunal, however, has directed that a High Powered Committee (HPC) be constituted to address the unanswered deficiencies pointed out by the appellants in the instant appeals and has also made broad suggestions regarding its members.

4. Accordingly, in compliance of the directions issued by the Tribunal vide judgment dated 03.04.2023, the following Committee is being hereby constituted comprising the following members: -

i. The Secretary, MoEF&CC, Government of India- Chairperson
ii. Chief Secretary, Andaman & Nicobar
iii. Additional Secretary, MoEF & CC - Member Secretary
iv. Director, Zoological Survey of India
v. Director, Botanical Survey of India
vi. Member Secretary, Central Pollution Control Board
vii. Nominee of Vice Chairman of Niti Aayog
viii. Nominee of Secretary, Ministry of Shipping
ix. Director, Wildlife Institute of India
x. Shri Amardeep Raju, Scientist –E-MS, EAC, Infra-I
xi. Any other Institution/Expert as deemed appropriate by the Chairperson.

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5. The Terms of Reference of the Committee shall be as follows :

   i. To review the proposal related to coral translocation submitted by the project proponent and regulatory provisions under ICRZ Notification, 2019 with respect to corals.
   ii. To review the data collection requirement for the project as per the EIA Notifictaion, 2006.
   iii. To review CRZ boundries of the port project with respect to ICRZ Notification, 2019.

6. The Committee may meet within two weeks from the date of the judgment and finalize its proceedings within two months.

7. It will be open to the Committee to associate any other institution/expert.

8. In the light of report of the Committee, the EC or its conditions may be re-looked into by the competent authority.

This issues with the approval of the Competent Authority.

Amardeep Raju
Scientist 'E'
IA (Infra-1)

To:

i. The Secretary, MoEF&CC, Government of India
ii. Chief Secretary, Andaman & Nicobar, Andaman & Nicobar Administration, Port Blair
iii. Zoological Survey of India, Zoological Survey of India, Prani Vigyan Bhawan, M-Block, New Alipore Kolkata-700053
iv. Botanical Survey of India, Botanical Survey of India, CGO Complex, 3rd MSO Building, Block F (5th and 6th Floor), DF Block, Sector I, Salt Lake City, Kolkata - 700 064
v. Central Pollution Control Board, The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
vi. Nominee of Vice Chairman of Niti Aayog, Sansad Marg, Sansad Marg Area, New Delhi, Delhi 110001.
vii. Nominee of Secretary, Ministry of Shipping, Transport Bhawan, Ministry of Shipping, New Delhi, Delhi 110001.
viii. Director, Wildlife Institute of India, Post Box #18, Chandrabani Dehradun – 248001, Uttarakhand.

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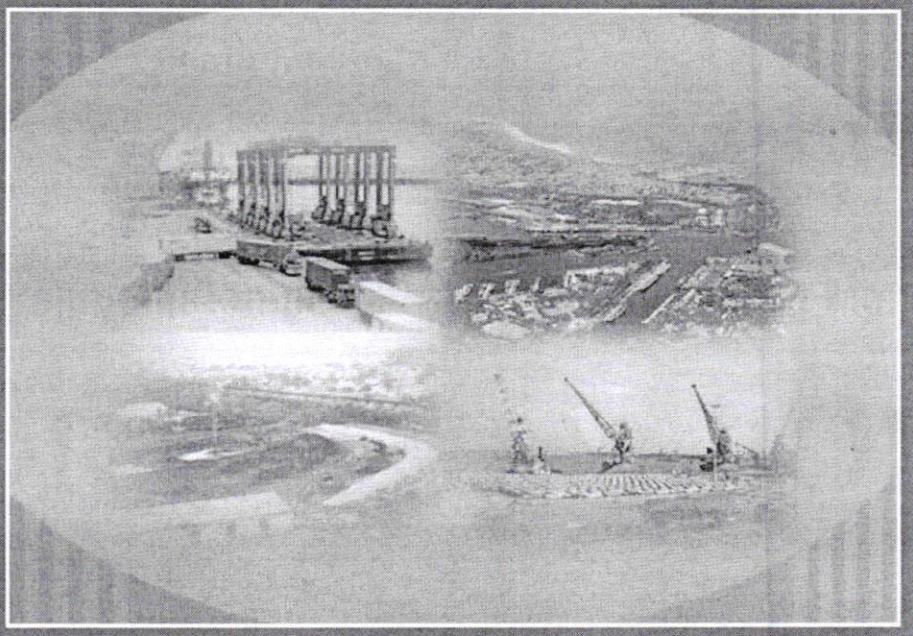
जहाँ है हरियाली ।
वहाँ है खुशहाली ॥

Ministry of Environment & Forests
GOVERNMENT OF INDIA, NEW DELHI

Environmental Impact Assessment Guidance Manual for

PORTS & HARBORS



Prepared by

Administrative Staff College of India
Bellavista, Khairatabad, Hyderabad

February 2010

given in the Wild Life Protection Act, 1972 and in the Red Book Data and a statement clearly specifying whether the study area forms a part of an ecologically sensitive area or migratory corridor of any endangered fauna.

4.5Air Environment

Meteorological Data

Meteorological data covering the following should be incorporated in the EIA report. The data for at least a 10 year period should be presented from the nearest meteorological station, except for the history of cyclones and tidal surges for which 100 year data is required.

- Wind speed and direction
- Rainfall
- Relative humidity
- Temperature
- Barometric pressures
- History of cyclones

Ambient Air Quality

Base line data of ambient air parameters namely particulate matter size less than 10ìm or PM_{10} ìg/m^3, particulate matter size less than 2.5 ìm or $PM_{2.5}$ ìg/m^3, sulphur dioxide (ìg/m^3), nitrogen dioxide (ìg/m^3), carbon monoxide (ìg/m^3) heavy metals and other harmful air pollutants depending upon the type of the cargo should be monitored.

This data should be collected in an area extending at least 5 km from the project boundary by observation at a number of locations. Specific importance should be attached to areas in close proximity of project say up to 1 km. One season data should be monitored other than monsoon as per the CPCB Norms. One station should be in the up-wind/ non-impact/ non-polluting area as a control station.

4.6 Noise

Baseline data on noise pollution at the project area and the neighbourhood up to 1 km or nearest residential areas is to be monitored as per the CPCB norms.

4.7 Socio-Economic and Occupational Health Environment

Baseline data at the project area shall include the demography, particularly on human settlements, health status of the communities, existing infrastructure facilities in the proposed area and area of impact due to the proposed activity. Present employment and livelihood of these populations, awareness of the population about the proposed activity shall also be included.

4.8 Existing Solid Waste Disposal Facilities

Details of authorized municipal solid waste facilities, biomedical treatment facilities and hazardous waste disposal facilities in the area should be inventorized, in case if it is proposed to utilize the same