

Minutes of the 333rd meeting of Expert Appraisal Committee held on 11th-12th July, 2023 NARMADA Conference Hall on 11-12th July, 2023 Narmada Conference Hall, Ground Floor, Jal Wing, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, 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 Complexes 7(c); Ports, harbors, breakwaters, dredging 7(e) and National Highways 7(f).

The 333rd Meeting of Expert Appraisal Committee (EAC) of Infra-1 (IA-III) was held at NARMADA Conference Hall in the Ministry of Environment, Forest & Climate Change (MoEF&CC), Indira Paryavaran Bhavan, New Delhi during 11th-12th July, 2023 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 330th EAC Meeting held on 19th-20th June, 2023. The Committee also confirmed the following inadvertent typographical errors in the earlier MoM.

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 4/6 lane Urukunnu-Kadampattukonam Economic corridor, inter corridor, Feeder routes & Coastal roads to improve the efficiency of freight movement in India (Lot-3/ Andhra Pradesh, Karnataka, Goa & Kerala/Package-3) in the state of Kerala starts with its junction at NH-744 near Urukunnu village in Kollam district and ends at Kadampattukonam with its junction at NH-66 (total length 38.3 km) in Thiruvananthapuram district in the state of Kerala by M/s National Highway Authority of India- Environmental Clearance.

Proposal No.: IA/KL/INFRA1/428571/2023. File no: 10/18/2022-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/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 abovementioned proposal was considered in the 333rd meetings of Expert Appraisal Committee held during 11th-12th July, 2023. The project proponent along with the DPR and EIA consultant M/s Chaitanya Projects Consultancy Pvt. Ltd., has made a presentation and provided the following information with respect to the quarries raised in the earlier meeting however, during deliberation, EAC observed the following: -

3.1.1. The proposal is for development of 4/6 lane Urukunnu-Kadampattukonam Economic corridor, inter corridor, Feeder routes & Coastal roads to improve the efficiency of freight movement in India (Lot-3/ Andhra Pradesh, Karnataka, Goa & Kerala/Package-3) in the state of Kerala starts with its junction at NH-744 near Urukunnu village in Kollam district and ends at Kadampattukonam with its junction at NH-66 (total length 38.3 km) in Thiruvananthapuram district in the state of Kerala by M/s National Highway Authority of India.

3.1.2. The proposed alignment starts from its junction with NH-744 near Urukunnu village in Kollam district at design km 21+055(8^o59'23.36"N, 77^o0'36.84"E) and ends at Kadampattukonam with its junction at NH-66 in Thiruvananthapuram district at design km 59+347(8^o47'45.02"N, 76^o46'9.34"E) in the state of Kerala. It is passing through Kollam and Thiruvananthapuram districts of Kerala state. The proposed project will give connectivity to the region that lies between the start point (NH-744 near Urukunnu village, Kollam) and the end point (NH-66 near Kadampattukonam, Thiruvananthapuram) of the project road.

3.1.3. The proposed project falls under Schedule 7(f), Highway, Category “A” of EIA Notification 2006. Total estimated civil cost of the project is about Rs.1260.48 Cr.

3.1.4. ToR was granted vide letter No. 10/18/2022-IA.III dated 9th May, 2022 during the 294th EAC meeting on 11th - 12th April 2022.

3.1.5. Public hearing: Public Hearing was conducted by Kerala State Pollution Control Board (KSPCB) as follows.

| S.No | Date | Venue | District and State | Chaired by |
|------|------------|--|----------------------------|--------------------------------|
| 1 | 21.03.2023 | Shabana Auditorium, Pallickal | Thiruvananthapuram, Kerala | Additional District Magistrate |
| 2 | 17.03.2023 | Sree Padmam Palace Auditorium, Chadayamangalam | Kollam, Kerala | Deputy Collector |

3.1.6. Land use/ Land cover of the project site.

| S. No | Landuse/Land cover | Area (ha.) | Area (%) |
|------------|------------------------------|------------|----------|
| 1 | Forest land | 16.41 | 9.5 |
| 2 | Agriculture land | 20.99 | 12.2 |
| 3 | Surface water bodies | 0.28 | 0.2 |
| 4 | Settlements | 28.12 | 16.3 |
| 5 | Roads / Other infrastructure | 5.28 | 3.1 |
| 6 | Plantation / Green belt | 101.49 | 58.8 |
| Total area | | 172.57 | 100.0 |

3.1.7. Right of Way (RoW): The proposed RoW for the alignment is 45 m in revenue land and 30m-45m in forest areas.

3.1.8. Terrain and Topographical features: The terrain of the alignment is Rolling and Hilly terrain.

3.1.9. Details of water bodies, impact on drainage: The proposed alignment is passing through two rivers (Kallada and Ithikkara) and few streams within the proposed RoW. The details are as following:

| S. No. | Chainage | Surface water body type |
|--------|----------|-------------------------|
| 1 | 23+100 | Kallada river |
| 2 | 25+457 | Stream |
| 3 | 28+282 | Stream |
| 4 | 29+924 | Stream |
| 5 | 30+765 | Stream |
| 6 | 31+067 | Stream |
| 7 | 32+192 | Stream |
| 8 | 37+500 | Ithikkara river |

3.1.10. Water requirement: During construction phases 490 KLD and during operation phase 80 KLD water will be required, water will be sourced from Surface & Ground water during

construction phase and other sources are to be used for operation phase. Required NOC will be taken from appropriate authorities like CGWB/ PHED during construction and operation phase by the contractor.

3.1.11. Diversion of forest land: The proposed project involves diversion of forest land is 16.41 ha in Kollam and Thiruvananthapuram districts. PP vide letter no. 13004/PIU-TVM/NH-744/Environment/2023/151 dated 11th July, 2023 inter-alia clarified that at the following chainage's Kerala Forest Development Corporation (KFDC) and Rehabilitation Plantation Ltd (RPL) agro Plantation is carried out for revenue purpose. The major tree species are: Palm, Rubber and Acacia. (i) Ch.25+050 to 26+900 & 27+850 to 28+100–Area:8.09 ha. (District Kollam, Division Punalur). (ii) Ch. 50+180 to 50+620 & 50+950 to 51+575–Area: 3.11 ha. (District Thiruvananthapuram, Division Thiruvananthapuram). Further also submitted that there is existing road from Ch.24+700 to 28+600 which is bypassing the above mentioned forest patches mentioned at (i) and there is existing road from Ch.45+200 to 53+200 which is bypassing the above mentioned forest patches mentioned at (ii). The traffic of the proposed green filed alignment may detour through the existing MDR, ODR, SH in case of forest clearance is being declined.

3.1.12. The proposed alignment does not pass through any Wildlife Sanctuary/National Park however the alignment is 7 km away from the Shendurney WLS in Kollam district. There are three schedule –I species namely Indian Python, Bengal Monitor Lizard and Common Peafowl

3.1.13. Waste Management: Construction & demolition waste: It will be used in the project filling. STP details: It is proposed to setup on-site Sewage Treatment Plant (STP) with capacity of 100 KLD using Mobile STP unit technology or Soak Pit or Septic tank as per requirement. It is considered that 100% of the wastewater generated will be treated properly.

3.1.14. Tree cutting and Green belt development: Approx. 69500 trees are recorded in Corridor of impact which is to be felled, including trees of forest areas as well as road side plantations. The green belt development should be taken up by the project proponents in consultation with the Forest Department of the Government of Kerala. Minimum 1 no. of row, (@5-8 m spacing) of trees on either sides of the proposed highway shall be planted and approx.18000 nos. of avenue tree to be planted. It is stated that the indigenous species of local economic and ecological (soil and water conservation) importance need be given priority over commercial and non- native species.

3.1.15. Details of Rain Water Harvesting: A total of 80 Rainwater Harvesting (RWH) structures are proposed to be constructed, at suitable locations along the proposed alignment. Rainwater collected in rains will pass through the RWH to aquifer. The RWH structures shall be built alongside the proposed drainage system, each RWH unit will have a 300 mm thick coarse sand layer, followed by 300 mm. thick layer of gravel of 5-10 mm size, 300 mm coarse sand, 200 mm PVC slotted pipe.

3.1.16. Land acquisition and R&R issues involved: The total land required for the proposed project is 172.57ha, the land is comprised as Government land, Private land, Private + Government and Forest land. The details area as following.

| S. No. | District | Type of Land | Area in ha. |
|--------|--------------------|-------------------------------|-------------|
| 1 | Kollam | Govt. Land (including forest) | 15.96 |
| | | Private Land | 74.12 |
| | | Private + Govt. Land | 36.97 |
| 2 | Thiruvananthapuram | Govt. Land (including forest) | 6.57 |
| | | Private Land | 38.95 |
| Total | | | 172.57 |

Approximately the total Project Affected families (PAFs) & Project Affected Persons (PAPs) area estimated is 1752 & 7185 respectively and the cost is estimated is Rs.1358.28 Cr for land Acquisition and Rehabilitation & Resettlement.

3.1.17. Employment potential: The proposed project during the construction phase total 215 people will get employment out of which 15 people will get permanent employment and 200 people will get temporary employment. During operation phase 5 people will get permanent employment and 8 people will get temporary employment.

3.1.18. Benefits of the project: Proposed highway will promote 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 for agricultural and other goods movement. Vehicle operating cost be reduced due to improved road quality which leads to savings in travel time and also reduces fuel consumption. Quicker movement of goods will also increase and help the economy, perishable commodities will reach faster.

3.1.19. Details of Court case: There are three court cases (i) WP(C) 11425 of 2023), (ii) WP(C)_6338_2023 and (iii) WP(C) 11936 of 2023. Before the Hon'ble High court nos. of litigation for the project before the Hon'ble High Court of Kerala.

3.1.20. During the deliberation, the EAC observed and noted the following:

- i. The Hon'ble high court in the order dated 17.03.2023 in the WP(C)_6338_2023 & order dated 17.03.2023 in I.A.No.1/2023 in W.P.(C) No.6338/2023 was appointed an Advocate Commissioner in WP(C)_6338_2023 to conduct a site inspection and to report on matter.

3.1.21. The EAC, taking into account the submission made by the project proponent, had a detailed deliberation in its 333rd EAC meeting on 11th – 12th July, 2023 and recommended the proposal for grant of Environmental Clearance with specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

- i. The Hon'ble high court in the order dated 17.03.2023 in the WP(C)_6338_2023 & order dated 17.03.2023 in I.A.No.1/2023 in W.P.(C) No.6338/2023 has appointed an Advocate Commissioner to conduct a site inspection and to report on matter. All the recommendations in the report shall be complied with
- i. The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable, Grant of environmental clearance does not necessarily imply that wildlife clearance and other clearances shall be granted to the project and that their proposal for wildlife clearance and other clearances will be considered by the respective authorities on its merit and decision taken.
- ii. The existing road from Ch.45+200 to 53+200 is bypassing the above mentioned forest patches. The proposed alignment shall align with the existing MDR, ODR, SH without widening and expansion of the existing road in case forest clearance is not granted.
- iii. All commitments made in the Wildlife Management & Conservation Plan submitted to the Ministry shall be implemented in letter and spirit. The status of implementation of Wildlife Management & Conservation Plan shall be submitted to the Regional Office of the Ministry along with 6 monthly compliance report.
- iv. Wildlife movement during the construction be monitored by forest department and if found necessary additional over/underpasses be developed. Provision for the same be made in the project budget.
- v. The proponent shall obtain Forest Clearance for diversion of forest land as per Forest (Conservation) Act, 1980.
- vi. Commencement of work in non-forest land will not confer any right to NHAI for granting approval under the Forest (Conservation) Act, 1980.
- vii. Forest category should be differentiated into forest land and Non-forest land for the tree cutting.
- viii. 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/ non-survival of any transplanted tree) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). All the plantation will be

done by state forest department as deposit work and not by private contractors.

- ix. Trees with heronry (breeding ground for herons, egrets, etc), pelicanary or community nesting of birds like Painted Storks, Ibis, Egrets, Pelican, etc will not be allowed to fell. In case of presence of such, alignment will be required to be changed to save such trees.
- x. Green belt development (tree plantation) in lieu of the trees being felled in non forest land should be carried out by the respective State forest departments 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.
- xi. Apart from land compensation, the loss for crop has also to be compensated.
- xii. Road side tree plantation of local fruit bearing species or in nearby village in collaboration with Gram Panchayats.
- xiii. Besides all the structures proposed, an additional adequate number of Culverts shall be provided for water supply to the agricultural land. All the Culverts proposed in the project shall be distinguished into water supply for the people and water supply for the agricultural land.
- xiv. 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.
- xv. 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 equipments used in construction shall strictly conform to the CPCB/SPCB noise standards.
- xvi. 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.
- xvii. 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.
- xviii. 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.
- xix. 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.

- xx. Rain water harvesting pit shall be at least 3 - 5 m above the highest ground water table.
- xxi. 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.
- xxii. 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.
- xxiii. 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 Hearing. 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.

Agenda No. 3.2

Berthing Jetty, Conveyor Corridor with Backup Facilities and Approach Road for Raigad Cement Bulk Terminal of ACL at Amba River, Village Shahbaj, Taluka Alibag, District Raigad, Maharashtra by M/s Adani Cementation Limited.-Environmental Clearance.

Proposal No.: IA/MH/INFRA1/408716/2022. File no: 10-77/2018-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/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 and EIA consultant M/s Indomer Coastal Hydraulics(P) LTD made a presentation in the Ministry and provided the following information-

3.2.2. The proposal is for Berthing Jetty, Conveyor Corridor with Backup Facilities and Approach Road for Raigad Cement Bulk Terminal of ACL at Amba River, Village Shahbaj, Taluka Alibag, District Raigad, Maharashtra by M/s Adani Cementation Limited.

3.2.3. The proposed development in Alibag will be accommodated in around 11ha area. Out of which, the development of cement grinding plant beyond the CRZ area is planned in 5 Ha and the berthing jetty, conveyor corridor with backup facility and approach road is planned in 6 Ha. This waterfront and riverbank development attracts an area of 0.6497 Ha falling in mangrove reserve forest. It is estimated that around 6 hectare areas including 0.6497Ha. Mangrove Reserved Forest will be required to establish the proposed Berthing Jetty, Conveyor Corridor with Backup storage facilities and Approach Road. Around 2.2 hectare has been allocated for the Berthing Jetty, 1.3 hectare (including 0.6497Ha. Mangrove Reserved Forest) will be used for Conveyor Corridor & Approach Road and 2.5 Ha shall be dedicated for Backup and storage facilities as per permissible activity in CRZ -III (Rural) area.

3.2.4. The proposed project falls under Schedule 7(e), Ports Ports, Harbours, Category “A” of EIA Notification 2006. Total estimated civil cost of the project is about Rs. 171.6 Crores.

3.2.5. ToR proposal was considered during the 36th EAC(Infra-2) meeting during 26th-28th November, 2018 the committee recommended for grant of TOR. Ministry granted the Terms of References (ToR) vide letter no. F.No.10-77/2018-IA-III dated 13th December, 2018 subsequently amendment in TOR is obtained vide letter dated 9th October, 2019 and 06.12.2021 respectively.

3.2.6. Public Hearing: Public Hearing was conducted by Maharashtra State Pollution Control Board (SPCB) as follows.

| S.No | Date | Venue | District and State | Chaired by |
|------|------------------------------|---|--------------------|--------------------------------|
| 1 | 18 th April, 2022 | Jay Mangal Karyalaya, Pandawa Devi, At Post-Poynad, Tal- Alibag | Raigad | Additional District Magistrate |

3.2.7. Land use/ Land cover of the project site.

| S. No. | LULC | Area (ha) | % | Remarks, if any |
|--------|---------------------------|-----------|----|-------------------------------------|
| 1 | Waterfront area (CRZ IVB) | 2.2000 | 37 | Berthing Jetty |
| 2 | Mangrove Forest (CRZ IA) | 0.6497 | 11 | Conveyor Corridor and Approach Road |
| 3 | Intertidal area (CRZ IB) | 0.5503 | 09 | |

| | | | | |
|-------|------------------------|--------|-----|-----------------------|
| 4 | Agriculture (CRZ -III) | 2.6000 | 43 | for Backup Facilities |
| Total | | 6.0000 | 100 | |

3.2.8. Terrain and Topographical features: Amba River is estuarine in nature and influenced by tide. Existing elevation of proposed project area varies between 4.66 m to 4.86 m from CD. Existing bund of about 2.5 m at 100m distance from project boundary which has been marked as HTL with respect to proposed integrated project area by 'Institute of Remote Sensing' Chennai and will be strengthen. Highest Flood Level of Amba River near the site is around (+) 4.4 m with respect to CD. Onshore facilities of the Terminal are planned in the land generally flat with average Ground Level above Chart Datum. There is no habitation in the proposed onshore Facilities area.

3.2.9. Details of water bodies, impact on drainage: The project alignment is passing through 4 rivers Amba river at 0.4Km(East), Bhogvathi River at 8.2KM(NE), Teenvira Dam at Approx 6.1KM(SW) and Shreegaon Dam at 6.0 Km(SW).

3.2.10. Water requirements: The total water requirement will be around 500 LPD water requirement will be limited to drinking purposes only i.e., and it will be sourced from local approved vendors. MoU with Local vendors will be made to supply domestic water.

3.2.11. Diversion of forest land: Around 0.6497 Ha. Mangrove Reserved Forest is falling under proposed Jetty project. ACL has applied in MOEFCC for Forest Clearance vide Proposal no. FP/MH/Others/40665/2019 dated 14.06.2019. Stage I forest clearance for diversion of Mangrove Forest has been obtained vide letter no.: Desk-17/Nodal/Thane/I.D-12816/812/2021-22 dated t. 20.08.2021 of Addl. PCCF and vide Letter No-FC-I/MH-243/2021-NGP dated 29.10.2021 of MoEF&CC. There are 03 Reserve Forests (RF), Reserve Forest patch ~4 km in East, ~6 km in South & ~8 km in WNW direction from project site. Mangroves are present at a distance of ~50 meter form project boundary.

3.2.12. The proposed project is not located any Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves is located within 10 km boundary of the proposed project. Two Schedule - I avifaunal species were recorded in the core and buffer zone of project area during the biological survey. The list of flora fauna duly authenticated by DFO, Alibag. Wildlife Conservation plan for Schedule - I has been prepared and submitted to DCF, Thane for the approval.

3.2.13. Waste Management: Generation of Municipal Solid Waste is not envisaged. No wastewater generation is envisaged. Hence CETP is not proposed. Details of STP: It is a greenfield project. Domestic wastewater generated from the office toilets will be treated in modular STP. The treated wastewater will be used for green belt development.

3.2.14. Tree cutting: The details on forest and mangroves have been studied separately 'Characteristics of Mangrove vegetation and it's Conservation and Management Plan' by Aditya Environmental Services Pvt Ltd, Mumbai. The project involved felling of 158 Mangrove trees in the area falling in diversion (Source: para 13.00 vide Letter no. Desk-

10/FCA/CR-55/19-20/OW-109/20-21 dated 01/07/2022 enclosed with Part – III of FC Stage-1).

3.2.15. Details of Rain Water Harvesting: Net Rainwater Harvested inside the Project Site 13804.73 cum/annum. Therefore, net water harvested is 100%.

3.2.16. CRZ area. The demarcation of CRZ survey has been carried out by Institute of Remote Sensing, Anna University, Chennai. The details are as following:

| S.no | Proposed facility. | Category of CRZ Area |
|------|---------------------------|-------------------------------|
| 1 | Berthing jetty | CRZ IVB |
| 2 | Approach road | CRZ IA (50 m mangrove buffer) |
| 3 | Backup & storage facility | CRZ IA & CRZ III |
| 4 | Conveyor corridor | CRZ IA, CRZ III & CRZ IVB |

3.2.17. The above proposal was considered in the 149th Meeting of the Maharashtra Coastal Zone Management Authority (MCZMA) held on 4th December, 2020. Whereas it was mentioned that the port facilities shall be developed in a phased manner (Phase-I & Phase II). As per the recommendations of the MCZMA the phase wise details are as following:

Phase-I: One Number of barge berth having total length of 160m & 25m wide having mechanized handling system of 1000 TPH for cement import and 400 TPH for fly ash/slag import.

- i. Approx. 400m of approach trestle connecting landslide facilities to jetty.
- ii. Development of cement blending unit in non CRZ area.
- iii. Captive jetty, plant approach road and the right of way of conveyor between jetty and blending unit in CRZ area.
- iv. Approx. 500m of conveyor connecting from jetty to cement blending plant area.
- v. Dredging in berth pocket area.
- vi. Unloading in berth pocket area.
- vii. Unloading mechanism at jetty: self-discharging vessel/mechanized unloading.
- viii. Support back up infrastructure for operations and maintenance of the proposed facilities.

Phase-II: three number of additional barge berths having total length of 460m and 25m wide 500m of pneumatic discharge pipe/conveyor connecting from jetty to cement blending plant area backup area development incremental supporting infrastructure.

3.2.18. Foreshore facilities: Berthing jetty with piled trestle will be developed along the banks of Amba River. There is no obstruction to the natural course of water flow and no change along the creek bank is envisaged.

3.2.19. Capital Dredging: The indicative level capital dredging estimates is 60,000 m³ for entire berthing area. The dredge material will be utilized for cement grinding unit area development. In case of any siltation in future in the proposed berthing area, a maintenance dredging volume of up to 30,000 m³ will be taken up. The dredged material arising out of maintenance dredging will be appropriately disposed at identified dredge spoil ground.

3.2.20. Land acquisition and R&R issues involved: No R&R is involved in the proposed project.

3.2.21. Employment potential: Manpower requirement will be about 40 as direct employments during construction. About 10 Direct and more than 400 indirect Employment will be required during operational phase. Preference will be given to the local based on their skills and experience.

3.2.22. Benefits of the project: Development of proposed project will have direct benefit for the local people immensely in terms of continuous economic benefits. Improvements in Physical Infrastructure, Social Infrastructure, Employment Potential and Other Tangible Benefits through CSR activities are the key benefits expected from the project. The project will also contribute as Improvement of physical and social infrastructure to development of basic local amenities. Expansion/development/improvements in road network. Exposure to modern technologies used in production Increase in local income.

3.2.23. Details of Court cases: No court case no litigation pending against this project.

3.2.24. During the deliberation, the EAC observed and noted the following:

- i. The above said proposal obtained the recommendations of the Maharashtra Coastal Zone Management Authority (MCZMA) developed in a phased manner (Phase-I & Phase II). However, the instant proposal is applied for grant of EC and CRZ clearance for Phase-I and II.
- ii. The proposed Backup & storage facility and approach road are proposed at CRZ IA & CRZ III which is not allowed as per the CRZ notification, 2011.
- iii. The green belt development and rain water harvesting has been submitted w.r.t. plant and not submitted separately for the instant proposal though it is the interlinking proposal but as an entity two are separate projects thus PP shall submit the green belt development and rainwater harvesting details separately for the plant and port.
- iv. PP has mentioned that appropriate energy conservation measures like solar energy will be put in place at berthing jetty and plant. The details of the same shall be provided.

3.2.25. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 333rd meeting during 11th-12th July, 2023 and return the proposal is of the view that the instant proposal PP proposed before the MCZMA phased manner i.e. Phase-I and Phase-II, however PP submitted and presented the case as a whole together Phase-I and Phase-II. Accordingly, the proposal is returned in the present form. Further PP shall also submit the following details.

- i. PP submitted that MCZMA recommended the proposal however no letter has been submitted in this regard.
- ii. PP shall submit the port notification issued by the competent authority for constructing the port.
- iii. Site suitability studies carried out for the dumping grounds/locations of proposed dredging material shall be submitted.
- iv. The proposed Backup & storage facility facilities and approach road are proposed at CRZ IA & CRZ III which is not allowed. PP shall revise the project layout in accordance with the CRZ notification, 2011.
- v. The revised layout shall be super imposed on the approved CZMP 1:4000 map in line with the CRZ notification, 2011.
- vi. The dredge material will be utilized for cement grinding unit area development
- vii. Detailed Energy conservation measures shall be provided.
- viii. The protection and conservation measures taken for the biological environment (flora and fauna) shall be submitted.
- ix. Coal stock yard is proposed the coal stack yard shall be demarcated on the revised layout shall be super imposed on the approved CZMP 1:4000 map.
- x. Also need to submit the protection measures taken for controlling the air pollution for the coal stick yard and other hazards materials like cement shall be submitted.
- xi. No industrial wastewater will be generated due to the proposed development. However, domestic wastewater generated from the plant side will be treated in modular STP (proposed with grinding plant layout) and the treated water will be used for green belt development. Rainwater harvesting will be practiced at the cement grinding plant.
- xii. The above said proposal obtained the recommendations of the Maharashtra Coastal Zone Management Authority (MCZMA) developed in a phased manner (Phase-I & Phase II). However, the instant proposal is applied for grant of EC and CRZ clearance for Phase-I and II. The proposal shall revise as per the recommendations obtained by the MCZMA.

- xiii. The green belt development and rain water harvesting has been submitted w.r.t. plant and Port individually.

Agenda No. 3.3

Development of Industrial City over an area of 93.85 ha (231.9084 acres) at Shendra, MIDC, Aurangabad, Maharashtra by M/s Inspira Infra (Aurangabad) Ltd. Reconsideration of EC

Proposal no: IA/MH/INFRA1/424710/2023 File no: File No. 10/16/2022-IA.II.

“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/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 proposed project is intended to develop and set up a world class Industrial City on the possessed property of plot/land admeasuring about 93.85 Ha (231.8943 Acres) in five-star Industrial area, Shendra MIDC, Aurangabad, Maharashtra State. The project is located in between latitude 19° 54' 20.95" N & 19° 53' 39.64" N and Longitude between 75° 28' 51.74" E & 75° 29' 42.34" E.

3.3.2. The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 326th meeting during 10th-11th May, 2023 and deferred the proposal for want of following information:-

3.3.3. The abovementioned proposal was placed before the EAC in its 326th meeting during 10th-11th May, 2023; the EAC deferred the proposal for want of additional information/documents. At this instance, the aforementioned proposal was further placed before the EAC during 333rd meeting on 11th-12th July, 2023. The project proponent along with EIA consultant M/s Ardra Consulting Services Pvt. Ltd., Bhubaneswar, Odisha made a presentation through Video Conferencing and submitted the following information. –

| S. no | Information sought on 326th meeting during 10 th -11 th May, 2023 | Reply submitted during 333 rd EAC meeting on 11 th -12 th July, 2023. |
|-------|---|--|
| 1 | Justification for considering the instant proposal as a Category A project as per the EIA Notification, 2006 as Amended time to time. | In accordance with the feasibility study, the project proponent is proposed to accommodate the pesticides specific intermediates industry in the layout plan of project area in plots numbers 21-B & 22-B. The layout has been designed strategically in respect of said plots away from housing and commercial areas admeasuring area up to 13798 SqMts. “All units producing technical grade pesticides” falls under Category A of Schedule 5(b), as per EIA Notification 2006. In |

| | | | | | | |
|---|--|---|---|------------------------------------|--|---------------------------------------|
| | | view of this the project is to be appraised under Category A as per the EIA notification, 2006. | | | | |
| 2 | Zoning of the area in terms of 'type of industries' coming-up in the industrial area based on the resource requirement along with likely pollutants with quantity from the various industries. | Zonation of the project area in terms of type of industries coming-up in INSPIRA Infra industrial area along with the map is submitted. | | | | |
| 3 | List of Industries coming-up in the industrial area with the schedule covered under EIA Notification, 2006 and as per the CPCB categories. | S. no | Type of Industry | Schedule of EIA Notification, 2006 | Category As Per EIA Notification, 2006 | As Per CPCB Industrial Categorization |
| | | 1 | Engineering - metal products/ Metal forging/ Metal forging/ Engineering - metal products/ Metal forging/ Metal forging/ Engineering - metal products/ Engineering - metal products/ Engineering - metal products/ Engineering - metal products/ Engineering - metal products/ Engineering - metal products/ Engineering - metal products/ Metal forging/ Metal processing | 3(e) | Category B | Orange |
| | | 3 | Chemical formulation | 5(b) | Category A | Red |
| | | 4 | Cosmetic formulation | 5(e) | Category | Orange |

| | | | Category B | |
|---|--|------|------------|--------|
| 5 | Pharmaceutical Formulation/ Rubber/ Manufacturing of Detergents/ Plastic industry/ Rubber industry/ Manufacturing of silica gel/ Detergents and Soaps/ Ayurvedic and homeopathic Medicine/ Fertilizer blending Only/ Detergents and Soaps/ Food processing including boiling/ Rubber industry/ | 5(f) | Category B | Orange |
| 6 | Fermentation industry | 5(g) | Category B | Orange |
| 7 | CETP Area | 7(h) | Category B | Orange |
| 8 | Building & Constructions | 8(a) | Category B | |
| 9 | Food processing including boiling/ Thermocol/ Plastic processing and | - | - | Orange |

| | | | | | |
|--|--|---|--|--|--|
| | | <p>assembly/Engineering assembly/Engineering assembly/Thermocol packaging/Corrugated boxing/Processing and engineering/ Plastic industry/ Corrugated boxing/ Metal forging/ Heating refining and processing/ Plywood/ Coated electrode</p> <p>manufacturing/ Jute processing without dyeing/ Bakery and confectionery units/ Glass printing/ Plastic industry/ Engineering - metal</p> <p>products/ Coated electrode manufacturing/ Bakery and confectionery units/ Glass printing/ Engineering - metal</p> | | | |
|--|--|---|--|--|--|

| | | | | | | |
|--|--|----|---|---|---|-------|
| | | | <p>products/ Engineering – metal products/ Engineering assembly/ Dairy and dairy</p> <p>products/ Plywood/ Coated electrode</p> <p>manufacturing/ Plywood/ Cattle feed processing/ Metal cladding/ house hold chemicals/ Corrugated boxing/ Coated electrode</p> <p>manufacturing/ Glass printing/Cattle feed processing.</p> | | | |
| | | 10 | <p>Wood processing/ Packaging materials/ Assembly of electrical and electronics/ Light Engineering/ Control panel manufacturing/ Plastic Moulding/ Precision engineering/ CNC engineering/</p> | - | - | Green |

| | | | | | | |
|---|--|---|---|--|--|--|
| | | | Carpentry/ Precision engineering/ Heating refining and processing/ | | | |
| | | The detailed plot wise industries along with the Category wise (As per EIA notification 2006 and CPCB category) has been given in ADS reply Annexure-II. | | | | |
| 4 | NABET Accreditation Letter of the EIA consultant for the extension period. | QCI NABET vide letter no. QCI/NABET/ENV/ACO/23/2730 dated April 6, 2023 has communicated to the M/s Ardra Consulting Service(P) Ltd stating that the validity of Ardra Consulting Services(P) Ltd., is extended till July 5, 2023 or the completion of the accreditation process, whichever is earlier. | | | | |

3.3.4. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 333rd meeting held on 11-12 July, 2023 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:

- i. PP shall install ZLD unit. To achieve the Zero Liquid Discharge, waste water generated from different industrial operations shall be properly collected, treated to the prescribed standards and then recycled or reused for the identified uses.
- ii. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured/recorded to ensure 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.
- iii. Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall undertake all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing.
- iv. The industrial is bisecting the public road as agreed by the PP the industrial area shall have the exclusive underpass for connecting the industrial area.
- v. Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.

- vi. During construction phase, air pollution and the solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016.
- vii. This environmental clearance is only for the said Industrial Area. Any other activity within the Industrial Area would require separate environmental clearance, as applicable under EIA Notification, 2006 as amended from time to time. For all the individual units, environmental clearances, as applicable, shall be obtained from the respective regulatory authorities.
- viii. All the recommendation of the EMP shall be complied with letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to RO, MoEF&CC along with half yearly compliance report. vi. To achieve the Zero Liquid Discharge, waste water generated from different industrial operations shall be properly collected, treated to the prescribed standards and then recycled or reused for the identified uses.
- ix. The member units shall provide storage tanks for storage of effluent for monitoring the characteristics of effluent and to treat the same to meet the prescribed inlet norms before taking into the CETP for further treatment.
- x. Proper meters with recording facilities shall be provided to monitor the effluent quality and quantity from member industries to CETP and from CETP to the final disposal/re-use on a continuous basis.
- xi. Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- xii. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured/recorded to ensure 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.
- xiii. Ambient noise levels shall conform to the prescribed standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during development/ 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.
- xiv. Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016.

- xv. Rain water harvesting for roof run-off and surface run-off, as plan submitted shall be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging shall be kept at least 4 mts above the highest ground water table.
- xvi. Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.
- xvii. An overall green area of at-least 33% in the Industrial Estate/SEZ/Industrial Parks etc should be developed with native species. The green area shall be 40% in case of critically polluted area. The project proponent of the Industrial Estate /SEZ/Industrial Parks etc shall comply with the additional commitment made by them in the EIA report regarding the development of green belt.
- xviii. The Industrial Estate /SEZ/Industrial Parks etc are directed to accordingly allocate the area to be developed as green cover to respective individual plots so as to achieve the above mentioned condition.
- xix. Wherever possible, plantations around the periphery of the industrial area/SEZ/park, in the downwind direction and along the road sides shall be provided for containment of pollution and for formation of a screen between the industrial area and the outer civil area. The choice of plants should include shrubs of height 1 to 1.5 m and tree of 3 to 5 m height. The intermixing of trees and shrubs should be such that the foliage area density in vertical is almost uniform.
- xx. The parameters like selection of plant species, procedure for plantation, density of tree plantation etc shall be as per the CPCB guidelines.
- xxi. All the topsoil excavated during development/construction activities should be stored for use in horticulture/landscape development within the project site. Report should be submitted to MoEF&CC and its Regional Office concerned.
- xxii. 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.

Agenda No. 3.4

Development of Kharagpur - Bardhaman - Morgram Section (NH116A) of Kharagpur - Siliguri Economic Corridor in the state of West Bengal under Bharatmala Pariyojana by M/s National Highway Authority of India-Terms of References.

Proposal No.: IA/WB/INFRA1/434998/2023; File no:10/39/2023-IA.III-Terms of References.

“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/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 project proponent along with the EIA consultant M/s Ultra-Tech. made a presentation in the Ministry and provided the following information: -

3.4.2. The proposal is for Development of Kharagpur - Bardhaman - Morgram Section (NH116A) of Kharagpur – Siliguri Economic Corridor in the state of West Bengal under Bharatmala Pariyojana by M/s National Highway Authority of India.

3.4.3. The proposed project falls under 7(f), Highway, Category A of EIA Notification 2006. The total approximate cost of the project is estimated to be Rs. 1128500 Lakhs.

3.4.4. During EAC, PP informed to the Committee that the instant proposal is for EC, however it is shown as TOR proposal.

3.4.5. The EAC noted that PP has requested for grant of EC for the above mentioned proposal however the application submitted on Parivesh Portal is for grant of fresh ToR along with FORM 1.

3.4.6. In view of the above, the EAC recommended that the project should be returned in the present form and advise the PP to fill the correct form for taking further necessary action.

Agenda No. 3.5

Proposed Expansion of Coastal Highway MSH-4 for Package- IV Starts from Khakashi Titha (388+371) to Gavatale (495+200), Vengurla Taluka, Sindhudurg District 106.829 Km in the State of Maharashtra by M/s Maharashtra State Road Development Corporation. -Terms of References.

Proposal No.: IA/MH/INFRA1/434398/2023; File no: 10/40/2023-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/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 the EIA consultant M/s Building Environment (India) Pvt. Ltd., Navi Mumbai. made a presentation in the Ministry and provided the following information: -

3.5.2. The proposal is for Expansion of Coastal Highway MSH-4 for Package- IV Starts from Khakashi Titha (388+371) to Gavatale (495+200), Vengurla Taluka, Sindhudurg District 106.829 Km in the State of Maharashtra. The start point of the project is in Jamsande village, Devgad Taluka, Sindhudurg District and ends at Aronda village, Sawantwadi Taluka, Sindhudurg District. The proposed project road shall lie from (16°22'42.65"N, 73°24'18.65"E) in the north to (15°44'42.20"N, 73°41'28.47"E) in the south. It passes through 60 villages under 5 Talukas, viz. The proposed expansion will have 2 Lanes with Paved Shoulder from CH: 388+371 to CH: 437+540 and 4 Lanes CH: 437+540 to 495+200 with Paved Shoulder with 1.5 m median. The details of the proposed alignment is as following:

| Sr. no | Road Section | Design Chainage | | Length (km) |
|--------------|--------------------------------------|-----------------|---------|----------------|
| | | From | To | |
| 1 | Khakshi titha to Hindale bypass | 388+371 | 406+400 | 18.02 |
| 2 | Hindale bypass to Malvan bypass | 406+400 | 436+700 | 30.3 |
| 3 | Malvan bypass to Parule bypass | 436+700 | 453+600 | 16.9 |
| 4 | Parule bypass to Mhapan bypass | 453+600 | 461+700 | 8.1 |
| 5 | Mhapan bypass to Vengurla bypass | 461+700 | 477+300 | 15.6 |
| 6 | Vengurla bypass to Sagartitha bypass | 477+300 | 489+400 | 12.1 |
| 7 | Sagartitha bypass to Reddy | 489+400 | 495+200 | 5.80 |
| Total | | | | 106.829 |

3.5.3. The proposed project falls under Schedule 7(f), Highways, Category “A” of EIA Notification 2006 as the proposed alignment is passing through Malvan Marine Sanctuary hence the General condition is applicable to the project. The total approximate cost of the project is estimated to be Rs. 3388.20 Crores.

3.5.4. Land use land cover of the project sit:

| Land Type | Affected Area (Ha.) | % Segregation |
|--------------------------------------|---------------------|---------------|
| Current land use | Area in Ha | |
| 200 to 500 m from HTL Zone-CRZ III B | 7.01 | 1.88 |
| 50 m Mangrove Buffer Zone- CRZ 1A | 1.63 | 0.44 |
| Agricultural land | 139.00 | 37.40 |
| Barren Land | 93.86 | 25.25 |
| Bridge | 0.75 | 0.20 |
| Builtup | 32.77 | 8.82 |
| Dense Mixed Jungle | 11.22 | 3.02 |
| Dense mixed Jungle with Cashew | 28.98 | 7.80 |
| Intertidal Zone CRZ-IB | 5.19 | 1.40 |
| Mangrove CRZ-1A | 0.20 | 0.05 |
| Mudflat CRZ-1A | 9.69 | 2.61 |
| Non-Agricultural land | 3.40 | 0.91 |
| Open Mixed Jungle | 30.88 | 8.31 |
| Sand Dunes-CRZ IA | 5.21 | 1.40 |
| Waterbody CRZ-IV B | 1.88 | 0.50 |
| | 371.66 | 100% |

3.5.5. ROW: PROW for all bypasses is 45 m and for balance alignment is 30 m

3.5.6. Terrain and topographical features: Majority of the road alignment goes through Agricultural Land (37.39%), Barren Land (25.25%), Jungle area(12.34%) i.e:- [Open Mixed jungle(8.30%), Dense Mixed Jungle with cashew(7.79%). Dense mixed jungle(3.02%)], Build up area(8.81%). Expansion of Major State Highway-4 along with bypasses passing mostly through plain & rolling terrain of coastal area of Konkan region. Part of the alignment also passing through Sand dunes (near Mithmumbari), Corals & Coral reefs (Kunkeshwar), biologically active mudflats, Mangroves, Turtle nesting grounds. Key sensitive receptors identified in the study area.

3.5.7. Details of water bodies, impact on drainage: The Proposed expansion of coastal highway is crossing the 7 rivers and creek i.e:- 1) Tara-Mumbri river, 2) Naringri river , 3) Achara river , 4) Gad river , 5) Karli river, 6) Creek (Mumgi bridge), 7) Mochemad river all these river crossings major bridge is proposed.

3.5.8. Water requirements: Approximately 500 KL of water would be required. The water shall be obtained from nearby surface/ ground water with prior consent.

3.5.9. Tree cutting: Plantations shall be done on either side of the road, as well as on the median, by MSRDC after the completion of project. Forest clearance will be obtained from MoEF&CC. Compensatory Afforestation will be prepared.

3.5.10. Diversion of forest: Preparation of Forest land diversion proposal is under consideration and will be applied. Alignment is passing through Alignment is passing through (~2.73 km from Buffer Zone boundary of the Malvan Marine Sanctuary. Also the proposed alignment (proposed Vengurla Bypass at Ch.478+600) is located at 700 mt away from Dutch Factory / Dutch Vakhar a Protected Monuments in Maharashtra.

3.5.11. CRZ details: The proposed alignment is passing through CRZ area approximately 27.177 Ha will fall in CRZ area. The details area as following:

| S.No | Details of CRZ | Area covered under CRZ |
|-------|--------------------------------------|------------------------|
| 1 | Intertidal Zone CRZ-IB | 4.571 Ha. |
| 2 | Mudflat CRZ-1A | 7.532 Ha. |
| 3 | 200 to 500 m from HTL Zone-CRZ III B | 5.351 Ha. |
| 4 | Water body CRZ-IV B | 2.526 Ha. |
| 5 | Sand Dunes-CRZ IA | 3.969 Ha. |
| 6 | 50 m Mangrove Buffer Zone- CRZ 1A | 1.466 Ha. |
| 7 | Mangrove CRZ-1A | 0.194 Ha. |
| Total | | 25.609ha |

3.5.12. Solid Waste Management: Municipal Solid Waste is expected to be generated from proposed Township and its facilities. Waste management during construction and operational phase shall be done as per MoEF & CC norms. Organic and inorganic wastes will be segregated and disposed off as per SWM rules and regulations.

3.5.13. Employment details: During the construction phase of the project which is likely to be completed within 36 months, manpower will be needed to take the part in various project activities. About 150 permanent persons, which includes, skilled, semi-skilled and unskilled

labours, will likely to get work. The project shall also induce 700 Indirect employment generation for cleaners, guards, local vendors, operation and maintenance workers etc. Indirect employment will be both temporary and permanent.

3.5.14. Benefits: The social benefits arising due to the project will be triggered off due to improved accessibility to various services such as easy access to markets, health facilities, schools, workplace etc. that in turn increases the income of the locals, and ultimately elevating their standard of living. Road user benefits will be from vehicle operating cost (VOC) savings, travel time saving, accident cost saving and saving in maintenance costs. The benefits are likely to accrue from 2024 onwards.

3.5.15. Details of Court case: The proposed highway does not have any court cases and litigations.

3.5.16. The EAC observed the following:

- i. *Govt. of Maharashtra has entrusted the work of up gradation and improvement of Revas-Reddi Coastal Highway MSH-4 with the total length of the proposed road is 488.20km; which is divided into 4 packages namely Package-I, II, III and IV. The Package-I is having the length of 134.884Km, while the length of package-II III and IV is 115.553Km, 129.818km and 106.829Km respectively. The Package-I and IV are covered under Category 'A' of EIA Notification 2006 due to applicability of General Conditions (GC) and package-II and III covered under Category 'B' of EIA Notification 2006 as these two packages covers under the State Highway(SHs).*
- ii. *Earlier ministry received phase-I proposal for grant of ToR, considering the sensitivity of the site, the EAC-Sub-Committee conducted the site visit of the entire stretch, the instant proposal is phase-IV which is the part of whole stretch however, as the EAC sub committee visited the site the recommendations of the site visit shall also include in the instant proposal.*

3.5.17. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 333rd meeting during 11th-12th July, 2023 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. Since the proposed road is passing through hilly terrain proper muck disposal plan shall be prepared and submitted as part of EIA/EMP report.
- ii. Several bridges need to be built which are passing through CRZ 1A areas which required to be built only on stilts. The clear picture of such areas, locations, chainage wise alignment, access to such alignment etc shall submit along with the EIA/EMP report.
- iii. While package 1 is with variable RoW of 30-40mts for 4 lane configurations having paved shoulder and median, while as remaining packages (i.e. package 2,3 and part of 4) are proposed with 30 m RoW and will be developed as two lane configuration with

- paved shoulder and without median. Committee could not understand logic of 30m RoW for both four as well as two lane configurations. Justification shall be submitted.
- iv. Large number of very old and large size ficus trees were noted all along the RoW of all four packages. Committee is of the opinion that these trees need to be geotagged and saved and accordingly require the change in alignment to avoid cutting these trees. Such details need to incorporate in to the EIA/EMP report as stated in sr. no xviii.
 - v. Committee is of the opinion that RoW of 15 m will be sufficient for package 2, 3 and 4 considering it is the expansion of existing alignment with green field as by-passes to avoid densely populated areas. Even with 15 m RoW, there are several areas with habitation. In package 1 & 2 there is presence of archaeological sites within proposed RoW. Thus, PP will need to revisit three packages such as 2,3 and 4 with 15-18 m RoW and Package 1 with 20-25m RoW.
 - vi. Committee also observed that all packages which are passing through CRZ 1A areas will only be on stilts and with min 6-10 m height from highest flood line. Thus, PP will need to revise configuration for all packages as stated in sr. no v. while designing the alignment.
 - vii. Detailed traffic studies need to done to justify to justify the necessity of further widening.
 - viii. Design should be such to have minimum number of pillars inside the river
 - ix. Widening is such (Eccentric or Concentric) to avoid minimum loss of trees and forest cover without compromising IRC Guidelines
 - x. Road safety Audit of the proposed design shall be carried out.
 - xi. Sufficient no's of Animal bypasses shall be provided with due consultation of the State forest Department.
 - xii. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scales as per latest approved CZMP.
 - xiii. Recommendation of the Maharashtra CZMA shall be obtained and submitted.
 - xiv. Submit a complete set of documents required as per para 4.2 (i) of CRZ Notification, 2011.
 - xv. Public hearing shall be conducted as per the EIA notification, 2006 after including the CRZ component and recommendations.
 - xvi. Apart from land compensation, the loss for crop has also to be compensated.
 - xvii. Cumulative impact assessment study should be carried out along the entire stretch including the other packages and the current stretch under consideration.
 - xviii. The detailed biodiversity studies including both terrestrial and marine studies will be undertaken by nationally and internationally reputed Deccan Education Society (DEC) of University of Pune. PP shall seek proposal in this regard from DEC for conducting the studies. Sufficient budget has to be earmarked by the PP exclusively for these studies considering large number of ecologically sensitive areas, both terrestrial and marine. The studies will also including geo-tagging of old and large ficus and other species. The studies will cover all four packages to understand the cumulative impact covering atleast two seasons especially monsoon (for plateau flora)

- and winter. The studies will also include developing marine and mangrove conservation plan as well as for other endangered plants from plateaus of Konkan.
- xix. 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.
 - xx. Road safety audit (along with accident/black spots analysis) by any third-party competent organization at all stages namely at detailed design stage, construction stage and pre-opening stage to ensure that the project road has been constructed considering all the elements of road safety.
 - xxi. 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.
 - xxii. 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 should be geo-tagged, photographed and details be submitted in the EIA –EMP report. PP should explore possibility of reducing RoW considering very large number of tree cutting involved as stated in sr. no xviii.
 - xxiii. 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.
 - xxiv. 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.

Agenda No. 3.6

Electronic Manufacturing Cluster (EMC) over an area of 309 Ha along with Deep Sea Discharge with Diffuser Outfall at Survey No. 180/P, Village Vandh & Tunda, Taluka Mundra, District Kutch by M/s Mundra Solar Technopark Private Limited set up in Mundra SEZ- Terms of References.

Proposal Number: Proposal No.: IA/GJ/INFRA1/434402/2023; File no: 10/41/2023-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/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 project proponent along with the EIA consultant M/s Kadam Environmental Consultants, Vadodara made a presentation in the Ministry and provided the following information:-

3.6.2. The project is for development of Electronic Manufacturing Cluster (EMC) over an area of 309 Ha along with Deep Sea Discharge with Diffuser Outfall at Survey No. 180/P, Village Vandh & Tunda, Taluka Mundra, District Kutch by M/s Mundra Solar Technopark Private Limited set up in Mundra SEZ.

3.6.3. Mundra Solar Technopark Private Limited (MSTPL) is a special purpose vehicle formed to develop infrastructure and utility support for Electronics Manufacturing Cluster at Mundra SEZ, Mundra, Gujarat. MSTPL will develop and maintain Vital, Essential & Desirable Services identified for the development of the Electronics Manufacturing Cluster; which in turn will manufacture Renewable energy related equipment's.

3.6.4. Part of land along the Intake pipeline of sea water utilized for cooling purpose and Outfall pipeline (for treated waste water plus return cooling waters) of the EMC industrial park project falls in CRZ zones and hence attracts CRZ clearance as per CRZ Notification, 2011. Sea water intake and treated waste water plus return cooling waters outfall pipeline system will fall in the CRZ area and the water / waste water pipeline laying activity is a permissible activity in the CRZ zones classification. CRZ Clearance is thus applicable for the intake structure and pipelines in CRZ area.

3.6.5. During the deliberation, the EAC observed and noted the following:

- i. PP is proposed development of Electronic Manufacturing Cluster (EMC) as an other industrial estate within the existing Mundra SEZ is which is having EC, however copy of the EC not submitted.*
- ii. The instant proposal PP has clubbed the proposal of modification in the existing EC and also addition of the other components, PP shall clarify the issue and revise the application, and submit the application as per the existing provisions of the EIA notification, 2006 for further consideration.*

3.6.6. The EAC return the proposal in present form.

Agenda No. 3.7

Development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana LOT-4/Package-2 (Kanpur Kabrai Project). The project road starts Near Magrasa on Kanpur ring road design Ch. 0+000 and ends at km 112+300 Kabrai, Cloverleaf at NH-76(NH-35) near Kabrai railway station in the state of Uttar Pradesh by M/s National Highway Authority of India.- Terms of References.

Proposal No.: IA/UP/INFRA1/434399/2023; File no: 10/42/2023-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/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 the EIA consultant M/s Ambiantal Global Private Limited, Ghaziabad, made a presentation in the Ministry and provided the following information: -

3.7.2. The proposed project is for Development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana LOT-4/Package-2 (Kanpur Kabrai Project). The project road starts Near Magrasa on Kanpur ring road design Ch. 0+000 and ends at km 112+300 Kabrai, Cloverleaf at NH-76(NH-35) near Kabrai railway station in the state of Uttar Pradesh. The Project corridor running North to South between latitude 26°20'56.98"N longitude 80°18'34.06"E and latitude 25°23'49.80"N longitude 80° 1'48.17"E.

3.7.3. The proposed project falls under Schedule 7(f), Ports, Category “A” of EIA Notification 2006. The overall estimate cost of the project will be around Rs. 3450.44 Crores.

3.7.4. The total land required for the proposed project is 658.18ha out of which 22ha is the forest land and 663.18ha is the non forest land.

3.7.5. Right of Way (RoW): Total length of the project is 113.100Km and proposed RoW is 45-60 m. Total land requirement will be approx.685.18 ha.

3.7.6. Terrain and topographical features: The terrain of the alignment is basically plain and hilly/undulating in nature.

3.7.7. Details of water bodies, impact on drainage: The proposed alignment is crossing Yamuna River. Will put affords to minimize the pears where river is crossing.

3.7.8. Water requirements: The average water requirement is anticipated at 7896.12 KLD (5764173.63 KL for two years) approx. during construction stage and will be extracted from

suitable surface sources (canals) or ground water after obtaining necessary permissions from the competent authority.

3.7.9. Tree cutting: The actual no. of trees proposed to be felled will be submitted in Final EIA after joint enumeration with appropriate authorities of respective State Government. Efforts will be made to minimize the trees loss by restricting trees cutting with in formation width. plantation cleared will be done according to Compensatory afforestation Policy under the Forest Conservation Act. Trees will be planted against every tree cut as per norms (1:10 ratio) and venue plantation shall be carried out as IRC: SP: 21:2009 on available RoW apart from statutory requirements.

3.7.10. Diversion of forest land: The proposed project highway will require diversion of 22ha. of forest land.

3.7.11. Land acquisition and R&R issues involved: The Project requires approx. 685.18 ha of land. About 99 Nos. of structures will be affected due to proposed highway. Compensation shall be paid as per NH Act, 1956 and RFCTLARR Act, 2013.

3.7.12. Employment potential: During the construction of the road project around 1500 persons would be employed temporarily for a period of 2 years. However due to construction of toll plazas approx. 200 persons will be employed on permanent basis. The total manpower requirement for the project is 2000. Preference will be given to local people for employment.

3.7.13. 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.

3.7.14. Details of Court cases: No court cases are involved in the proposed project.

3.7.15. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 333rd meeting held on 11th -12th July, 2023 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. A buffer of 40 m from the edge of the ROW of Canal shall be maintained wherever the alignment is coming in proximity of the canal.
- ii. The alignment is crossing the Yamuna River, where the river/canal are passing PP shall design the alignment such a passion that to keep the minimum pears for constructing the bridge.
- iii. The proponent, with the help of an independent institution/expert of national repute, 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.

- iv. The proponent, with the help of an independent institute/expert of national repute, shall carry out a detailed traffic 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.
- v. Road safety audit (along with accident/black spots analysis) by any third-party competent organization at all stages namely at detailed design stage, construction stage and pre-opening stage to ensure that the project road has been constructed considering all the elements of road safety.
- vi. Rain water harvesting structures to be constructed at the either sides of the road with special precaution of oil filters and de-silting chambers.
- vii. Provide compilation of road kill data on 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.
- viii. 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.
- ix. 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.
- x. PP will make provision for contribution for undertaking environmental sustainability programmes such as ground water rejuvenation, afforestation, solid waste management etc to Central Command HQ of the India Army as a part of EMP. Accordingly EMP will be prepared.
- xi. 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.
- xii. 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.
- xiii. The PP shall not use groundwater/surface water without obtaining approval from CGWA/SGWA as the case may be. The project proponent shall apply to the Central Ground Water Authority (CGWA)/State Ground Water Authority

(SGWA)/Competent Authority, as the case may be, for obtaining No Objection Certificate (NOC), for withdrawal of ground water.

- xiv. 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

Proposed Development of “Bhensola (PM Mitra Park) and Dotrya Industrial area including 15 MLD CETP” in Dhar, Madhya Pradesh by M. P. Industrial Development Co. Ltd. with an area of 924.397 Hac- Terms of References

Proposal No.: IA/MP/INFRA1/434136/2023; File no: 10/43/2023-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/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 PP did not attend the meeting. The proposal be considered only after a written submission by the PP.

Agenda No. 3.9

Development of 4 lane Highway from Madakalavaripalli Village (Ch: 630+960) in Y.S.R Kadapa district to Guruvindapudi village (Ch: 739+091) in Nellore district of Andhra Pradesh under Bharatmala Prayojana (Lot-5/Package-1)-Reconsideration of Terms of References.

Proposal no: IA/AP/NCP/293465/2022 File no: 10/45/2022-IA.II

“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/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.”

3.9.1. The project proponent along with the EIA consultant M/s SM Consultant Private Limited, made a presentation in the Ministry and provided the following information:-

3.9.2. The proposed project is development of 4 lane Highway from Madakalavaripalli Village in Y.S.R Kadapa district to Guruvindapudi village in Nellore district of Andhra Pradesh. Total length of the project is 108.131 Km. The proposed project starts at Ch:

630+960 (14°44'41.44"N 79°5'20.27"E) from Madakalavaripalli Village in Y.S.R Kadapa district and ends at Ch: 739+091 (14°16'50.57"N 79°54'27.92"E) in Guruvindapudi village in Nellore in the state of Andhra Pradesh.

3.9.3. The aforementioned proposal was considered 316th Meeting of Expert Appraisal Committee (EAC) of Infra-1(IA-III) was held through Video Conference during 15th-16th December, 2022 and deferred the proposal for want of following documents/information:

| S.no | Queries raised during EAC meeting held on 15th-16th December, 2022 | Reply submitted during 11 th -12 th July, 2023 |
|------|---|--|
| 1 | The proposed alignment is passing through the ESZ area of Penusila Narashima Sanctuary. About 4.238 km length of the proposed alignment is crossing within the periphery of ESZ. | PP mentioned that the proposed alignment chainage Ch:630+960 to Ch:739+091 is away from the notified ESZ notification S.No.2936(E) dated 28.08.2020. |
| 2 | The proposed alignment also crossing the Penna River and the alignment passes in between several Streams/Nallas and ponds. | PP submitted that the Penna River is crossing in between chainage from ch:677+135 to ch:678+935 and wherein a major bridge is proposed. Further minor bridges and cross drainage structures are also proposed to be designed as per the detailed geo-hydrological study. |
| 3 | The proposed alignment with its existing connectivity will completely fragment Sri Lankamalleswaram WLS and Sri Penusila Narasimha WLS from Gundla Brahmeswaram WLS and Nagarjunasagar-Srisailam WLS. | A site visit by the Sub-committee was conducted on 10th March, 2023 for the proposed project. The site visit report is placed as Annexure-B . |
| 4 | Considering extremely sensitive nature of the region in terms of its wildlife and forests, PP is advised to provide the entire connectivity details including future expansion plans of existing state and national highways so that Committee can review the full impact of various projects on the wildlife connectivity in the region. It will be detrimental to consider this as a stand-alone alignment and require to be seen | |

| | | |
|---|---|--|
| | cumulatively. | |
| 5 | After detailed deliberations, the committee observed that the alignment seems to be crossing within the periphery of Penusila Narashima Sanctuary ESZ and crossing the Penna River. Considering the sensitive nature of the alignment a sub-committee will make a site visit before considering the proposal further for ToR. | |

3.9.4. Apart from the above, PP also mentioned that the development of 4 lane carriageway from the existing 2 lane with paved shoulder from Ch: 639+960 to ch:654+400 widening works and 4 lane green field development from ch:654+400 ch: 739+091 is going on. It may be mentioned that existing ROW from chainage Ch: 639+960 to Ch:654+400. Average 20m. NHAI developing 4 lane road within restricted ROW of 30m in forest area including some realignment to improve the curve and accident area. The proposal also involved for diversion of forest area 27.575ha is under process.

3.9.5. PP also submitted that a site with the state forest department have been conducted as per the visit, the state forest department has suggested the following structures for wildlife movement for the Kadapa, Nellore District of Andhra Pradesh. The details are as following.

i. Structures suggested at Kadapa district by the Forest department

| Structures suggested by the Kadapa district | | | | | | |
|---|---------------|---------|----------|-------------------------|---------------|---------------|
| S.no | Chainage (km) | | Span (m) | Vertical Clearances (m) | Coordinates | |
| | From | To | | | Latitude | Longitude |
| 1 | 634.870 | 634.895 | 25 | 5.0 | 14°43'51.83"N | 79° 7'18.83"E |
| 2 | 636.300 | 636.325 | 25 | 5.0 | 14°43'27.24"N | 79° 8'0.02"E |
| 3 | 638.400 | 638.425 | 25 | 5.0 | 14°42'45.55"N | 79° 8'55.57"E |
| 4 | 641.190 | 641.215 | 25 | 5.0 | 14°41'49.95"N | 79°10'9.16"E |
| 5 | 642.505 | 642.530 | 25 | 5.0 | 14°41'38.85"N | 79°10'51.30"E |
| Total Span Length | | | 125 | | | |

ii. Structures suggested at Nellore district by the State forest department.

| Structures suggested by the Nellore district | | | | | | |
|--|---------------|---------|----------|------------------------|---------------|---------------|
| S.no | Chainage (km) | | Span (m) | Vertical Clearances(m) | Coordinates | |
| | From | To | | | Latitude | Longitude |
| 1 | 643.200 | 643.500 | 300 | 5.0 | 14°41'26.42"N | 79°11'10.12"E |
| 2 | 644.090 | 644.240 | 150 | 5.0 | 14°41'6.05"N | 79°11'31.22"E |
| 3 | 645.100 | 645.300 | 200 | 5.0 | 14°40'43.54"N | 79°11'55.81"E |
| 4 | 646.075 | 646.125 | 50 | 5.0 | 14°40'24.25"N | 79°12'21.41"E |
| 5 | 647.275 | 647.425 | 150 | 5.0 | 14°40'0.71"N | 79°12'53.22"E |
| 6 | 648.390 | 648.490 | 100 | 5.0 | 14°39'49.92"N | 79°13'28.71"E |
| 7 | 648.775 | 648.875 | 100 | 5.0 | 14°39'44.93"N | 79°13'40.81"E |
| Total Span Length | | | 1050 | | | |

iii. Structures suggested at ESZ Area of WLS.

| ESZ Area of WLS | | | | | | |
|-------------------|---------------|---------|----------|------------------------|---------------|---------------|
| S.no | Chainage (km) | | Span (m) | Vertical Clearances(m) | Coordinates | |
| | From | To | | | Latitude | Longitude |
| 1 | 701.985 | 702.035 | 50 | 5.0 | 14°26'34.76"N | 79°36'48.35"E |
| 2 | 702.580 | 702.630 | 50 | 5.0 | 14°26'5.23"N | 79°37'27.90"E |
| Total Span Length | | | 100 | | | |

3.9.6. During the deliberation, the EAC observed and noted the following:

- i. PP/consultant mentioned that the proposed alignment chainage Ch:630+960 to Ch:739+091 is away from the notified ESZ notification S.No.2936(E) dated 28.08.2020. However, the distance is not mentioned. The EAC noted that this is the vague statement and asked the PP to submit the actual distance from the Peninsula Narashima Sanctuary duly authenticated by the state forest department.
- ii. The EAC subcommittee also visited the site, the site visit report is annexed as

Annexure-B. The EAC noted that some of the recommendations made by the EAC-subcommittee regarding structures overlap with the recommendations of the State Forest Department at some chainages; therefore, wherever there is overlapping, the PP shall consider the EAC-Subcommittee recommendation as the length and width of the structure recommended is greater than the state forest department recommendation.

3.9.7. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 333rd meeting held on 11th -12th July, 2023 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. About 4.238 km length of the proposed alignment is passing through the ESZ area of Penusila Narashima Sanctuary. Connectivity of the Chittaluru RF (Ch: 689+000 to Ch: 699+000) and Yeturu RF (Ch: 701+500 to Ch: 702+500) to be ensured with the provision of Animal Under Passes of minimum length of 1km each.
- ii. The proposed widening of the existing intermediate lane to 4 lane National Highway from Ch: 640+500 to Ch 649+000 lead to fragmentation the connectivity between Gopavaram RF and Udayagiri Velikonda RF with Penusila Narashima Sanctuary. To ensure connectivity of the forest for ensuring animal movement between Chainage no 640.500 to 649.000 at least 3 nos animal underpasses of 800m to 1000m shall be constructed. Location of these underpasses to be decided in consultation with concerned DFO and Chief Wildlife Warden.
- iii. Sub-Committee also visit the also visit the Mydukur to Badvel exiting section of NH-67, where widening of exiting road is proposed by the NHAI. About 10 km of the existing highway is passing along the Lankamalla RF. Where, further widening will fragment the connectivity of Sri Lankamalleswaram WLS and Sri Penusila Narasimha WLS from Gundla Brahmeswaram WLS and Nagarjunasagar-Srisailam WLS.
- iv. The Forest stretch under the Mydukur-Badvel section of NH-67 falls from Km 606+500 to Km 609+770 (3.27 km) wherein the EAC subcommittee has visited the site and it was recommended the Animal underpass of a span between 800m to 1000m from Km 606+600 to 607+700 considering the technical and topographical aspects. In addition, to that an underpass with the span not less than 500m in between Km 609+770 to 614+500 in consultation with the DFO in the Non-Forest area since the committee has opined that there is a strong possibility of movement of wild animals.
- v. Also, without providing animal underpasses as suggested above, various alignments surrounding Lankamalla RF will become island without any effective animal movement passages.
- vi. Without expansion of Mydukur-Badvel section of NH 67, Badvel to Nellore Greenfield connectivity is not justified traffic point of view. Though the expansion of Mydukur-Badvel section of NH 67 doesn't come under preview of EAC, Committee is of the opinion that both these sections need to be examined in an integrated fashion. Thus, the animal underpasses as suggested under sr. no iv are absolutely essential to keep the wildlife connectivity of Lankamalla RF intact.

- vii. All animal passes proposed above shall be constructed with provision of guiding barriers of sufficient length and height along both side of the roads on both sides of underpasses.
- viii. All the structures suggested by the subcommittee for the wildlife movement are listed as following:
 - ix. PP to submit the actual distance of the distance from the Penusila Narashima Sanctuary to the proposed alignment at chainage Ch:630+960 to Ch:739+091 shall submit duly authenticated by the state forest department.
 - x. A buffer of 40 m from the edge of the ROW of P shall be maintained wherever the alignment is coming in proximity of the canal.
 - xi. The alignment is crossing the Penna River, shall be explored as a suspension bridge.
 - xii. The distance from the Shabarimala temple and other sensitive area shall be demarcated.
- xiii. The proponent, with the help of Zoological Survey of India shall carry out the impact of proposed alignment on avifauna, associated biodiversity and wetland ecology including ecological productivity of the important lakes/waterbodies situated within 10 km distance of proposed alignment and prepare a detailed Conservation Plan along with adequate mitigation measures. The plan shall be duly prepared in consultation with respective Forest/Wildlife Departments of the Governments of Andhra Pradesh.
- xiv. The proponent, with the help of an independent institution/expert of national repute, 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.
- xv. The proponent, with the help of an independent institute/expert of national repute, shall carry out a detailed traffic 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.
- xvi. Road safety audit (along with accident/black spots analysis) by any third-party competent organization at all stages namely at detailed design stage, construction stage and pre-opening stage to ensure that the project road has been constructed considering all the elements of road safety.
- xvii. Cumulative impact assessment study to be carried out along the entire stretch including the other packages in the same stretch.
- xviii. Rain water harvesting structures to be constructed at the either sides of the road with special precaution of oil filters and de-silting chambers.

- xix. Provide compilation of road kill data on 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.
- xx. 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.
- xxi. 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.
- xxii. PP will make provision for contribution for undertaking environmental sustainability programmes such as ground water rejuvenation, afforestation, solid waste management etc to Southern Command HQ of the India Army as a part of EMP. Accordingly EMP will be prepared.
- xxiii. 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.
- xxiv. 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.
- xxv. The PP shall not use groundwater/surface water without obtaining approval from CGWA/SGWA as the case may be. The project proponent shall apply to the Central Ground Water Authority (CGWA)/State Ground Water Authority (SGWA)/Competent Authority, as the case may be, for obtaining No Objection Certificate (NOC), for withdrawal of ground water.
- xxvi. 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. 3.10:

Proposed constriction of LPG Import Jetty with dispatch station, the proposed site of on-shore dispatch station is arid, dry and barren Govt. Land of 14.17 ha. at Survey No. 1504-A, Village Dahej, Taluka Vagra, District Bharuch, Gujarat by M/s Hindustan Petroleum Corporation Limited (HPCL)- Environmental Clearance.

Proposal No.: IA/GJ/INFRA1/425715/2023; File no: 10/26/2021-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/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.”

3.11.1. The project proponent along with the EIA consultant M/s ABC Techno labs India private limited, Chennai made a presentation in the Ministry and provided the following information:-

3.11.2. The proposal is for Proposed constriction of LPG Import Jetty with dispatch station, the proposed site of on-shore dispatch station is arid, dry and barren Govt. Land of 14.17 ha. at Survey No. 1504-A, Village Dahej, Taluka Vagra, District Bharuch, Gujarat by M/s Hindustan Petroleum Corporation Limited (HPCL).

3.11.3. The proposed project involves construction of LPG import Jetty of design capacity 5 MMTPA (Million Metric Tonnes per Annum) complete with loading arm facilities, firefighting facilities, electrical and mechanical equipment, piping and pipelines along with on-shore dispatch station, where-in, pumping station and allied facilities like heating & blending, mercaptan dosing, booster and mainline pumps, small mounded storage vessels (for process requirements), required piping along with associated civil, electrical, mechanical and instrumentation facilities will be located for pumping of LPG from on-shore dispatch station to Vadodara through the upcoming Kandla-Gorakhpur Pipeline.

3.11.4. The proposed project falls under 7(e) - Ports, Harbours, Dredging, and Reclamation, of the schedule to the EIA Notification, 2006 and its subsequent amendments. Total cost of the project is Rs. 1333 Crores.

3.11.5. The proposed site of on-shore dispatch station is arid, dry and barren Govt. Land of 14.17 ha. The proposed project consists of following elements:

- i. LPG Jetty having design capacity of 5.0 MMTPA (Million Metric Tonnes per Annum) with Unloading Platform of 50x35 Sq. meter area.
- ii. Approach Trestle-4000 meters length and 13 meters wide.
- iii. Unloading Platform with 12” Marine Unloading Arms
- iv. Mooring Dolphins with walkway
- v. Breasting Dolphins with walkway
- vi. Substation-cum Control Tower
- vii. Fire Water Pump House
- viii. Port Craft Jetty (34x9 m)

- ix. 2 nos. 24” LTCS pipelines on approach trestle from Jetty head to the onshore Dispatch Station.
- x. Dispatch Station with heating and blending facilities, pumping facilities, Admin Building, Fire Water Storage & Hydrants Facilities, Substation Building, Parking Bay, small capacity mounded bullet vessel storage (for process requirements) etc.

3.11.6. The proposed Dahej LPG Jetty consists of a central unloading platform with berthing dolphins and mooring dolphins provided symmetrically on either side and interconnecting walkways. The unloading platform is connected to shore by an approach trestle of adequate width to accommodate pipelines and a 4 m wide service roadway. Over all dimension of unloading platform is 50 m x 35 square meters with an extension of 18 m x 15 square meters for the pig launcher space. The unloading platform will have two (with 3 Nos for future expansion) marine loading arms and piping with launcher / receiver facilities, marine gangway, space for slop tanks, fire-fighting facilities etc. A turning space for vehicular movement shall also be provided at the platform.

3.11.7. ToR was granted vide letter No. 10/26/2021-IA-III. dated 12.07.2021 during the 265th EAC meeting held on 23rd-24th June, 2021. subsequently amended in ToR was obtained during 275th meeting of Expert Appraisal Committee held on 29th September, 2021.

3.11.8. Details of Public Hearing:

| S.No | Date | Venue | District and State | Chaired by |
|------|------------|--|--------------------|-------------------------------|
| 1 | 13.12.2022 | Survey No. 1504-A, Dahej, Ta. Vagra, Dist. Bharuch (At Project Site) | Bharuch | Resident Additional Collector |

3.11.9. Land-use/Landcover of project site:

| S.No | Landuse / Landcover |
|------|---|
| 1 | Jetty –Water body |
| 2 | Approach Trestle & Dispatch Station falls under barren/ Unculturable/ Waste lands/ Scrub land |

3.11.10. Terrain and topographical features: The seashore in this area is generally flat. The existing ground level in the proposed area is around -1.0m to 2m CD.

3.11.11. Details of water bodies, impact on drainage: The study area is drained by Narmada (southern parts) & Dhadhar (Viswamitri) in northern parts. Narmada river confluences into Arabian Sea (Gulf of Khambhat) at 8.5 Kms. in the south. Vishwamitri river flows through the salt pans and confluences into Gulf of Khambhat at 8 Kms. in the north. There is no impact on existing surface water bodies due to this project.

3.11.12. Water requirements: The project requires 15 KLD during construction phase and 5 KLD during operation phase will be sourced from local water supply vendors or from local panchayath. There will not be any groundwater extraction in the CRZ area. There will not be any groundwater extraction in the CRZ area.

3.11.13. Diversion of Forest land: No forest land involved in proposed project site.

3.11.14. The proposed project is not located within 10 km of Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves etc. Impact of the proposed project on the migratory birds thru M/s Gujarat Institute of Desert Ecology (GUIDE). They have conducted detailed study of the impact on migratory birds and have submitted the report with the required mitigation measures. The impact as per the report is very minimal and we will follow the required mitigation measures as per the recommendations of GUIDE. In addition to this mudflat areas have also been studied and mitigation/conservation measures will be implemented as per EMP.

3.11.15. Waste Management: About 11 Kg/day of domestic solid waste is estimated to be generated from construction and operational activities. This will be collected from designated location and segregated into organic and inorganic waste. The inorganic non-biodegradable will be sold to GPCB authorized vendor for recycling. The biodegradable waste will be disposed-off according to SHW (Management and Handling) Rules, 2016. No commercial waste will be generated. The project does not generate any trade effluent. Domestic Sewage of 0.8 KLD will be biologically treated in septic tanks of adequate size followed by dispersion trench. STP details: Domestic Sewage of 0.8 KLD will be biologically treated in septic tanks of adequate size followed by Dispersion Trench.

3.11.16. Details of tree cutting and Green belt development: No tree cutting is envisaged. Greenbelt will be developed as per existing norms and guidelines.

3.11.17. Details of Rain Water Harvesting: During operational phase the necessary approach will be taken to implement the rainwater harvesting plan. Rainwater from the roofs of Buildings, storm water drains adjoining roads shall be collected in a rainwater collection tank.

3.11.18. CRZ details: The CRZ maps is by institute of remote Sensing, Anna University, Chennai, an authorised agency by the MoEF&CC, as per the CRZ map the details are as following:

| Project Description | Name | Area (Sq.m) |
|---------------------|-------------------------------------|----------------|
| Proposed Dahej | CRZ III (No Development Zone (NDZ)) | 62,613.5 |
| | CRZ-IB | 83.4 |
| | 50m Buffer from Mangroves | 3892.8 |

| Project Description | Name | Area (Sq.m) |
|--|-------------------------------------|----------------|
| Dispatch Station | Total | 66,589.7 |
| Proposed Permanent Approach to Trestle | CRZ III (No Development Zone (NDZ)) | 206.2 |
| | CRZ – IB | 228.6 |
| | 50m Buffer from Mangroves | 14,995.8 |
| | Total | 15,430.6 |
| Proposed LPG Import Jetty Alignment | CRZ III (No Development Zone (NDZ)) | 194 |
| | 50m Buffer from Mangroves | |
| | CRZ-IA | |
| | CRZ – IVB | |
| Proposed Jetty Head | CRZ – IVB | 194 |
| | CRZ – IVA | |

3.11.19. The proposal was discussed in the 64th meeting of Gujarat Coastal Zone Management Authority held on 05.01.2023 and recommended the proposal vide letter no. ENV-10-2022-93-T dated 8th June, 2023.

3.11.20. Foreshore facilities: The proposed project involves construction of LPG import Jetty of design capacity 5 MMTPA (Million Metric Tonnes per Annum) complete with loading arm facilities, firefighting facilities, electrical and mechanical equipment, piping and pipelines along with on-shore dispatch station, where-in pumping station and allied facilities like heating & blending, mercaptan dosing, booster and mainline pumps, small mounded storage vessels (for process requirements), required piping along with associated civil, electrical, mechanical and instrumentation facilities will be located for pumping of LPG from on-shore dispatch station to Vadodara through the upcoming Kandla-Gorakhpur Pipeline. Cargo handling of LPG for a design capacity of 5 MMTPA is proposed. It will be through closed loop system through loading arms and pipelines. Hence, no dust will be involved during cargo handling. All jetty operations will be in accordance with the MARPOL Convention. The system shall include Oil Spill Skimmer capable to recover oil @ 50 m³/hour boom of adequate length to cover 250 m LOA VLGCs for containment and deflecting oil spill, transfer pump and temporary storage of about 10 KL capacity along with the accessories.

3.11.21. Land acquisition and R&R issues involved: The proposed site is Govt. land and no R&R is applicable.

3.11.22. Employment potential: Construction stage, services of about 500 Nos. workers would be hired mostly from nearby areas. During the operations phase; about 20 Nos. of workmen shall be employed directly / indirectly.

3.11.23. Benefits of the project: Govt. of India is constantly promoting cleaner fuel especially in the rural areas through various schemes like Pradhan Mantri Ujjwala Yojana; under which till date more than 10 Crores LPG Cylinders have been given with majority of the connections being given in rural areas to promote the Government of India's vision of safer and greener fuel usage replacing the traditional fuels of wood, cow dung, coal etc. This effort is also directly linked with India's commitment towards reducing its carbon footprint. In India, 50% of annual LPG demand (approx. 26 MMTPA) is required to be imported thru various import facilities and the annual growth of LPG demand is in the range of 6%. LPG imported through the Proposed Jetty will be fed into Kandla-Gorakhpur Pipeline (KGPL) which passes through 22 bottling plants of the three OMCs namely HPCL, BPCL & IOCL. It will improve the distribution and supply of the LPG. Millions of rural households will benefit from the import of LPG. Further, with other initiatives like the National Infrastructure Pipeline, the Govt. of India is requiring the PSUs to substantially improve infrastructure investments to give boost for the economy and development of the country.

3.11.24. Details of Court cases: The proposal does not having any court cases/litigations.

3.7.1 The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 333rd meeting on 11th-12th July, 2023 and **recommended** the proposal for grant of Environmental Clearance with specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects.

- i. Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2011. No construction
- ii. work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- iii. All the recommendations and conditions specified by the Gujarat State Coastal Zone Management Authority (GCZMA) vide letter No ENV-10-2022-93-T dated 8th June, 2023 shall be complied with.
- iv. Migratory Bird Species study was conducted by the GUIDE and its recommendations will be implemented. The status report of the same shall be submitted along with the six Monthly compliance report to the concern regional office of the Ministry. GUIDE will monitor the movement and impacts on birds during and two years post construction and accordingly bird monitoring costs to be provided to GUIDE.

- v. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms. PESO certificate shall be obtained.
- vi. The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- vii. Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- viii. Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall undertake all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing.
- ix. During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- x. The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- xi. Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- xii. The project proponent shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self containing breathing apparatus.
- xiii. Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations
- xiv. 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.

- xv. The project proponent shall comply with the air pollution mitigation measures as submitted.
- xvi. 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.
- xvii. No underwater blasting is permitted.
- xviii. Necessary approvals be taken during implementation and commissioning from statutory bodies concerned.
- xix. 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 report.
- xx. A continuous monitoring programme covering all the seasons on various aspects of the coastal and marine environs need to be undertaken by Nationally reputed academic institutes such as MS University Baroda with rich experiences in marine science aspects. Monitoring should include sea weeds, sea grasses, mudflats, sand dunes, fisheries, mangroves and other marine biodiversity components as part of the management plan. Separate financial provision for the same should be made in the EMP.
- xxi. Continuous online monitoring of air and water covering the total area shall be carried out and the compliance report of the same shall be submitted along with the 6 monthly compliance reports to the regional office of MoEF&CC.
- xxii. Effective and efficient pollution control measures like covered conveyors/stacks (coal, iron ore and other bulk cargo) with fogging/back filters and water sprinkling commencing from ship unloading to stacking to evacuation shall be undertaken. Coal and iron ore stack yards shall be bounded by thick two tier green belt with proper drains and wind barriers wherever necessary.
- xxiii. Sediment concentration should be monitored fortnightly at source and disposal location of dredging while dredging.
- xxiv. Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life, particularly benthos. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage.
- xxv. Necessary arrangements for the treatment of the effluents and solid wastes/ facilitation of reception facilities under MARPOL 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. The provisions of Solid Waste Management Rules, 2016. E-

Waste Management Rules, 2016, and Plastic Waste Management Rules, 2016 shall be complied with.

- xxvi. All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.
- xxvii. 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.

Agenda No. 3.11:

Development of Captive Riverine Jetty of Material Handling Capacity of 4.5 MTPA on River Mahanadi located in Paradeep, District Jagatsinghpur, Odisha by M/s Arcelormittal Nippon Steel India Limited-Environmental Clearance Proposal No: IA/OR/INFRA1/429016/2023; File no: 10/42/2021-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/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 AECOM India private Limited, made a presentation in the Ministry and provided the following information:-

3.11.1. The proposed project is for development of captive riverine jetty of material handling capacity of 4.5 MTPA along the bank of Mahanadi River in Udayabata village, Paradeep, Kujang Tehsil, Jagatsinghpur District of Odisha, in a total land parcel allotted for the proposed project is 15.28 Ha (37.77 acres) land. The identified land is approximately 300 m from the boundary of the existing AMNS Pellet Plant. AMNS desires to explore the transportation of iron ore pellet, coal, limestone, bentonite and pyro, along with the coking coal for their operation through riverine transportation with transshipment at offshore anchorage point. The proposed site is bounded by 20°19'31.07"N to 20°19'31.57"N latitude and 86°39'18.58"E to 86°39'17.98"E longitude.

3.11.2. The proposed project is an interlinked project for the augmentation of 6 MTPA iron

ore pellet plant to 12.0 MTPA Pellet plant at Paradeep, Odisha. Environmental clearance for “Completion of balance work of 6 MTPA Pellet Plant (Unit-2) of approved 12 MTPA Pellet Plant” has been accorded to AMNS on 13th August, 2021 vide F. No J-11011/129/2007-IA-II (I).

3.11.3. The proposed project falls under 7(e) – Ports and Harbours, Category-A, as per EIA notification 2006. Total investment/cost of the project is Rs151.6 Crore.

3.11.4. ToR details: The ToR proposal was considered by the EAC In its 273rd meeting during 16th September 2021. TOR was granted on 11th October, 2021.

3.11.5. Public hearing details:

| S.No | Date | Venue | District and State | Chaired by |
|------|------------|--|------------------------|--|
| 1 | 29/09/2022 | At Kalyani Mandap, Paradeep, Jagatsinghpur | Jagatsinghapur, Odisha | Additional District Magistrate, Odisha |

3.11.6. The Land use/Landcover of the proposed project site is as following –

| Sl. No | Landuse/Landcover | Area (ha) | % | Remarks, if any |
|--------|-------------------|-----------|-------|-----------------|
| 1 | Fallow Land | 7.45 | 48.76 | - |
| 2 | River | 7.51 | 49.15 | - |
| 3 | Waterbodies | 0.32 | 2.09 | - |

3.11.7. Terrain and topographical features: The project site is mostly flat land with undulations in some places and slopes towards the river Mahanadi. Topographic survey reveals that the contour levels at the site ranges from +2.5 m to +2.8 m CD. The submerged part of the total land area had levels from -0.5m to -13.0m m below CD and matches that with the bathymetry of the river in the area.

3.11.8. Water bodies, impact on drainage: The main waterbody in the study area is river Mahanadi. The proposed site is proposed to be raised to 5.5m CD, which is about 0.5 m above the HFL of the area. The toposurvey indicates that there are some low-lying areas between built up areas of the existing Pellet Plant & the proposed Jetty site and a canal passes along the low-lying areas between the built-up area. The canal is provided with a culvert with the sluice gate and the water collected in the low-lying area is drained through the canal from culvert with sluice gate as per the natural slope of the area from western side of the proposed Jetty site. On the eastern side, the water collected due to the natural slope is drained through pipeline provided by local administration and the same would be undisturbed when the Jetty project comes up.

3.11.9. Water requirements: During the period of Jetty construction and operation, the total

water demand is envisaged as 50.0 cum/day & 32.0 cum/day respectively. Water requirement for the proposed Jetty would be met from the water source of the existing Pellet Plants. The water requirement of the existing pellet plants is met from dewatering of iron ore slurry obtained from Dabuna Beneficiation plant of AM/NS. Ground water extraction and usage is not envisaged for the project.

3.11.10. The project is in Paradeep location, which is a Severely Polluted Area (SPA) with a CEPI score of 60.61. As per the OM published by CPCB dated 25th October 2019, in case any project or activity specified as Category B1, would be appraised at the Central level when it is located in Critically Polluted Areas and Severely Polluted Areas.

3.11.11. Diversion of forest land: The instant proposal does not involved diversion of forest land. The nearest boundary of the project site is located 5.3 km southwest of the ESZ of Bhitarkanika Wildlife Sanctuary & Bhitarkanika National Park.

3.11.12. Waste Management: During the construction period, construction wastes comprising Bricks, Tiles, Ceramics, Wood, Glass, Plastic & Metallic Wastes, cardboard packaging, empty drums of paints, Varnishes, Adhesives & Sealants etc. would be generated. As per the existing practice in AMNS and in conformity to HSE policy, the construction waste would be stored in designated place within the project boundary and disposed as per the provisions of Construction and Demolition Waste Management Rule, 2016. About 43 kg/day of C & D waste is envisaged to be generated. Hazardous wastes like spent oil, oil drums, oil-soaked rags etc. which would be handled as per the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 and disposed to approved recyclers. During the operation phase generation of solid waste would be in form of hazardous waste, non-hazardous wastes, and municipal solid waste. Hazardous wastes like spent lube & oil, etc. would be handled as per the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016. There would be generation of fines of iron ore, coal during material handling, which would be recycled back to the Pellet plant. The sludge from the STP would be used as manure for greenbelt maintenance. Municipal solid waste is estimated to be in tune of 40 kg/day which would be handled as per existing practice which includes partial composting in the pit (in the Pellet plant of AM/NS). AM/NS has applied to Paradeep Municipality to set up Waste Processing & Disposal Facility for handling of about 120 kg/day of municipal solid waste and have received the nod from Paradeep Municipality. Hazardous waste would be stored in designated location with secondary containment to avoid incidents of spillage into unpaved ground. The designated area would have proper signage and handled by trained personnel. STP details: Water pollution during the construction phase would be from sewage generated by labourers, for which AM/NS would provide washroom facilities with modular STP for treatment of the sanitary water. Sewage would be generated in tune of 4.5 - 5 m³ per day during the operation phase. Main source of wastewater would be from toilet wash water, kitchen wastewater etc from where water would be collected in sewage collection tank via network of drains. A STP based on Moving Bed Biofilm Reactor (MBBR) of capacity 5 KLD is proposed for the treatment of the plant. The treated water from STP would have BOD and COD load lesser than 5 mg/l and 50 mg/l respectively and may be used for tertiary uses like tyre washing, maintenance of greenbelt, etc.

3.11.13. Details of tree cutting and Green belt development: Tree cutting is not envisaged for the proposed project. However, greenbelt development would be undertaken would help in establishing the harmony with the environment of the proposed mega power plant and surrounding environment. For the proposed project, a green belt covering 33% of the back-up area would be planted inside the facility premises. The Greenbelt area is considered as 27840 sq. m (6.88 acre) i.e 2.78 ha. In line with CPCB guidelines of developing greenbelt (2000), the number of plants per hectare has been considered as 1100 trees and total number of trees is estimated as 3060. Indigenous trees like mango, Indian Bae, Chatim, Jhau, Arjun, Siris, Gulmohar, etc would be preferred for greenbelt development. The plantation would be completed in the first three years.

3.11.14. Details of Rainwater Harvesting: AM/NS would carry out Rainwater harvesting system with storage pits and ponds to collect runoff water and reuse in their Pellet plant adjacent to the proposed Jetty.

3.11.15. CRZ area: The proposed site for setting up of the Jetty is adjacent to the right bank of River Mahanadi, which is a tidally influenced river and is under the ambit of CRZ notification 2019. National Centre for Sustainable Coastal Management (NCSCM), one of the approved agencies by Government of India, has carried out demarcation of High Tide Line (HTL), Low Tide Line (LTL) and CRZ mapping. The proposed site is classified under CRZ II (part of back-up area) and CRZ IVB (berths and foreshore structures) and the HTL, LTL and CRZ line (for River or creek) has been marked in the CRZ map prepared by NCSCM. Part of the proposed Flux Yard and Utilities falls within CRZ II category and other part falls outside the CRZ category. Part of the proposed Jetty for Export Facility and Jetty for Import Facility falls within CRZ II and CRZ IVB (Mahanadi River) categories. The Iron Ore Yard falls outside the CRZ Area. Proposed Approach Channel and proposed Turning Circle fall within CRZ IVB (Mahanadi River) categories as per approved CZMP based on CRZ Notification 2019. Ecologically sensitive ecosystems such as mangroves, corals, turtle nesting grounds, salt marshes, mudflats, sand dunes etc., classified as CRZ IA, are not present within the proposed project site. Odisha Coastal Zone Management Authority (OCZMA) has appraised the project and provided recommendations vide Letter No 75/OCZMA dated March 17, 2023.

3.11.16. Foreshore facilities: The project involves foreshore facilities, including three berths of total berth length 275 m and width 15 m. The depth requirement at the site is available, hence no dredging is required at the site and for navigational channel. However, 0.2 Million cum of dredging would be required at the river mouth to allow uninterrupted navigation of the vessels requiring 4.5 m water depth below CD. The dredged material is proposed to be used for raising the land up to 5.5 m above CD. During the operation phase, maintenance dredging in tune of 1,00, 000 cum. would be required at the mouth of the River, once every six months and the navigation channel to maintain the required draft for the movement of the barges. Though offshore disposal of the dredged material has been proposed during operation phase, AMNS would explore the possibilities of beach nourishment with the dredged material as per the recommendations of OCZMA in consultation with concerned local authority.

3.11.17. The project does not involve marine disposal of any kind of effluents for which

intake/outfall structures or outfall diffusers would be required.

3.11.18. Land acquisition and R&R issues involved: The land for the proposed project would be acquired directly from IDCO and there would be no land acquisition from private landowners for the proposed project, hence there are no R & R issues to this project.

3.11.19. Employment potential: The construction and operation activities of the project would be generating employment directly or indirectly. The total manpower requirement during construction activities would be 220 workforces on average comprising both skilled and unskilled manpower. Peak requirement may extend up to 500 personnel. During the operation phase, the manpower requirement is estimated to be about 110 for operations and maintenance consisting of 15 managerial staff and 95 supervisors/laborers. Local people would be given maximum opportunity and preference during the sourcing of personnel, based on skill. The employment of local people in primary and secondary sectors of the project shall upgrade the prosperity of the region. The proposed project and overall expansion activities of AMNS is likely to lead to the establishment & augmentation of local businesses like hotels, restaurants, transport services, medical facilities, supermarkets, etc that would benefit a considerable number of people.

3.11.20. Benefits of the project: The proposed project would cause socio-economic impact in and around the project site. The proposed project would generate employment potential directly as well as indirectly in the study area. The proposed project and overall expansion activities of AMNS is likely to lead to the establishment & augmentation of local businesses like hotels, restaurants, transport services, medical facilities, supermarkets, etc that would benefit a considerable number of people. AMNS is already implementing various initiatives in the sectors of education, community health, livelihood, sports and culture, infrastructure improvement and Environment. The proposed activity is envisaged to be augmented for the proposed project with requisite peripheral social development budget as presented in the EMP cost estimate.

3.11.21. The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 333rd meeting on 11th-12th July, 2023 and **the proposal is return in present form** as the PP is proposed the storage of hazardous material in the CRZ area which is non-permissible activity as per the CRZ notification 2011. The proposal shall be considered only after revising the project in accordance with the CRZ notification, 2011 and submitting to the Ministry.

- i. PP shall submit the declaration of the port notification issued by the competent authority for constructing the port.
- ii. The proposed Backup & storage facilities at flood prone area and also the approach and storage facility proposed at CRZ IA & CRZ III which is not allowed. PP shall revise the project layout in accordance with the CRZ notification, 2011.
- iii. The revised layout shall be super imposed on the approved CZMP 1:4000 map in line with the CRZ notification, 2011.

- iv. The details of the materials to be handled at port quantity wise Revised shall be submitted.
- v. Land use land cover (entity wise) of the proposed port w.r.t. CRZ notification.
- vi. PP shall carry out the cumulative assessment study considering handling capacities of existing plants, transportation of plant and port, e.t.c within 10 km radius of port.
- vii. Submit the protection measures taken for controlling the air pollution for the coal stick yard and other hazards materials like cement shall be submitted.
- viii. The protection and conservation studies carried out and measures taken for the biological environment (flora and fauna) shall be submitted if any.
- ix. Actual distance duly authenticated by the state forest department of from the proposed project to the Bhitarkanika Wildlife Sanctuary & Bhitarkanika National Park shall submit.
- x. Measures taken to prevent fire hazards, containing oil spill and soil remediation shall submit. At fixed installations or plants use of ground flare shall be explored.
- xi. The proposed area also covered under severe polluted area, hence PP shall submit the details measures/mitigations taken up in order to control and reduce the pollution.

Agenda No. 3.12

Proposed Haraginadoni Industrial Area (Kuduthini Phase-3), Kudithini Village, Ballari Taluk & District, Karnataka over an extent of 670.94 acres (271.52Ha) by Karnataka Industrial Areas Development Board (KIADB)- Terms of References.

Proposal No: IA/KA/INFRA1/433933/2023; File no: 10/44/2023-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/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.”

3.12.1. The project proponent along with the EIA consultant M/s Ecomen Laboratories Pvt. Ltd., made a presentation in the Ministry and provided the following information: -

3.12.2. The proposal is for development of Haraginadoni Industrial Area (Kuduthini Phase - 3), Kudithini Village, Ballari Taluk & District, Karnataka over an extent of 670.94 acres (271.52Ha) by Karnataka Industrial Areas Development Board (KIADB).

3.12.3. KIADB has been allotted land of 670.94 acres (271.52Ha) under the gazette notification 28(4) dated 5th February 2013 for a Development of Haraginadoni Industrial Area (Kuduthini Phase -3), Ballari Taluk & District, Karnataka. Geo-coordinates of project

site: 15° 08' 53.8930" N to 15° 09' 51.8887" N; 76° 45' 21.9363" E to 76° 47' 00.7366" E.

3.12.4. The proposed project falls under 7(c) – Industrial Estate, Category-A, as per EIA notification 2006 due to due to applicability of general conditions as the interstate boundary of Andhra-Karnataka boundary located at the distance of 6.6KM. Total investment/cost of the project is Rs 15487.74Lakh.

3.12.5. Landuse/Landcover of project site:

| S. No. | Description | Area in Acres | Area in Ha | Area in Percentage % |
|--------|-------------|---------------|------------|----------------------|
| 1 | Industrial | 293.15 | 118.64 | 43.69 |
| 2 | Commercial | 8 | 3.24 | 1.19 |
| 3 | Amenity | 19.86 | 8.04 | 2.96 |
| 4 | Utility | 14 | 5.67 | 2.09 |
| 5 | Park | 117.28 | 47.46 | 17.48 |
| 6 | Green Belt | 92.37 | 37.38 | 13.77 |
| 7 | Nala | 27.25 | 11.03 | 4.06 |
| 8 | Parking | 33.77 | 13.67 | 5.03 |
| 9 | Road | 65.26 | 26.41 | 9.73 |
| Total | | 670.94 | 271.5257 | 100 |

3.12.6. Proposed land use of the industrial area.

| S.no | Description of proposed land use | Area in ha | Percentage |
|------|----------------------------------|------------|------------|
| 1 | Industrial | 3.24 | 43.69 |
| 2 | Commercial | 8.04 | 1.19 |
| 3 | Amenity | 5.67 | 2.96 |
| 4 | Utility | 47.46 | 2.09 |
| 5 | Park | 37.38 | 17.48 |
| 6 | Green Belt | 11.03 | 13.77 |

| | | | |
|-------|---------|--------|------|
| 7 | Nallah | 13.67 | 4.06 |
| 8 | Parking | 26.41 | 5.03 |
| 9 | Road | 271.52 | 9.73 |
| Total | | 271.52 | 100 |

3.12.7. List to industries to be housed with the proposed project site:

- i. Metallurgy
- ii. Textiles
- iii. Food products
- iv. Cement Products Manufacturing
- v. Pharmaceutical
- vi. CETP

3.12.8. Terrain and topographical features: The proposed site is situated in mostly plain terrain with altitude ranging from 590m to 527m above mean sea level (MSL). Lakes and non-forest land. The soils of project site & surrounding area broadly classified into two categories viz Red loamy soil and lateritic soil.

3.12.9. Details of water bodies, impact on drainage: The proposed project is located at the distance of 6.23 Kms from the Allipura Reservoir, 7.55 KMS from Allipura Reservoir and 6.92 Kms from the Tungabadra High Level Canal.

3.12.10. Water requirement; the total water requirement for the project is 5 MLD. No ground water will be extracted.

3.12.11. Tree cutting and green belt development: The proposed project does not involve any tree cutting. Green belt will be created on both side of the Nalla and thus Nalla will be protected. Green belt over an area over 37.38 Ha (13.77%) will be developed by KIADB and balance 19.23% will be developed by the Individual Industries.

3.12.12. Diversion of forest land: The proposed project does not involve diversion of forest land.

3.12.13. The project is does not located within 10 km of Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves etc.: If yes, provide details of the PA, distance from project site and status of clearance from National Board for wild life, Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC.

3.12.14. Waste management: Individual industries will setup treatment systems to treat

wastewater to CETP inlet standards of IA. Received effluents will be treated at CETP and shall be used for industrial and greenbelt water requirement within IA. Sludge from CETP will be sent to TSDf and sludge from CSTP will be dried and used for green belt development. Municipal waste generated from industrial, residential and commercial areas will be collected, segregated, stored and treated or sold to authorized dealers. Separate area is earmarked for storage and processing of biodegradable waste.

3.12.15. Land acquisition and R&R issues: the proposed project does not involve any R&R issues.

3.12.16. Employment potential: The proposed project will generate 60 no of employment during construction phase and during operational phase 6500 people will get employment.

3.12.17. Benefits of the project: Social upliftment of the area through CSR activities Employment generation in direct and indirect way. The families will depend on this project in direct and indirect ways, and Employment Opportunities will be Increased.

3.12.18. Details of Court cases: No court case are pending against the project.

3.12.19. The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 333rd meeting on 11th-12th July, 2023 and **recommended** the proposal for grant of Terms of Reference with specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

- i. Proper water drainage system should be intended to set aside the impervious roads, lined drains, routing surface drainage to settlement tanks/pits etc.
- ii. Water treatment plant of effluent, recycle/ reuse and disposal should be well planned.
- iii. In the project area adjacent to villages boundaries width of the green belt should be minimum 50 meters
- iv. The project area should not encircle the villages completely. To ensure this the land of the project area falling within geo coordinate points number 20, 21, 22 ,23 and 24(as mentioned in slide no 7 of the presentation) shall be excluded from project area. If felt necessary PP may consider adding any other area in lieu of this exclusion. A revised outlay with revised area be submitted
- v. 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.
- vi. 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.
- vii. Provide detailed water balance statement a scheme to achieve ZLD by each industrial

unit as well as for utilization of treated sewage.

- viii. 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.
- ix. Detailed biodiversity study of the project area.
- x. 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
- xi. 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.
- xii. 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.

Agenda No. 3.13

Proposed for Kuduthini Industrial Area, Phase-2, Kuduthini Village, Ballari Taluk & District, Karnataka, over an extent of 538.43 acres (217.899 Ha) by M/s Karnataka Industrial Areas Development Board (KIADB)- Terms of References

Proposal no: IA/KA/INFRA1/433864/2023; File no: 10/45/2023-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/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.”

3.13.1. The project proponent along with the EIA consultant M/s Ecomen Laboratories Pvt. Ltd., made a presentation in the Ministry and provided the following information: -

3.13.2. The proposal is for development of Kuduthini Industrial Area, Phase-2, Kuduthini Village, Ballari Taluk & District, Karnataka, over an extent of 538.43 acres (217.899 Ha) by M/s Karnataka Industrial Areas Development Board (KIADB).

KIADB has been allotted land of 538.43 acres (217.899 Ha) under the gazette notification 28(4) dated 5 th February 2013 for a development of Kuduthini industrial area, phase-2, Ballari Taluk & District, Karnataka over an extent of 538.43 acres by KIADB. Geo-coordinates of project site:15° 09' 38.3549" N to 15° 11' 09.0136" N 76° 44' 48.5985" E to 76° 45'39.8887" E.

3.13.3. The proposed project falls under 7(c) – Industrial Estate, Category-A, as per EIA notification 2006 due to due to applicability of general conditions as the interstate boundary of Andhra-Karnataka boundary located at the distance of 8.72 Km. Total investment/cost of the project is Rs 7110.0Lakh.

3.13.4. Landuse/Landcover of project site:

| Description of activity / facility /plant/others | Land requirement in Ha |
|--|------------------------|
| Industrial area | 190627 |
| Green belt | 27.27 |
| total | 217.899 Ha |

3.13.5. Terrain and topographical features: The proposed site is situated in mostly plain terrain with altitude ranging from 590m to 527m above mean sea level (MSL). Lakes and non-forests land. The soils of project site & surrounding area broadly classified into two categories viz Red loamy soil and lateritic soil.

3.13.6. Details of water bodies, impact on drainage: The proposed project is located at the distance of 9.1 Kms from the Allipura Reservoir, 9.3Kms from Allipura Reservoir and 3.33 Kms from the Tungabhadra High Level Canal.

3.13.7. Water requirements: The total water requirement for the project is 5.0MLD which will be obtained from the Tungabhadra Reservoir. Ground water will not extract.

3.13.8. Diversion of Forest involved: project will not involve any diversion of forest land.

3.13.9. The project is not located within 10 km of Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves, Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC.

3.13.10. Waste Management: Individual industries will setup treatment systems to treat wastewater to CETP inlet standards of IA. Received effluents will be treated at CETP and shall be used for industrial and greenbelt water requirement within IA. Sludge from CETP will be sent to TSDF and sludge from CSTP will be dried and used for green belt development. Municipal waste generated from industrial, residential and commercial areas will be collected, segregated, stored and treated or sold to authorize dealers. Separate area is earmarked for storage and processing of biodegradable waste.

3.13.11. Land acquisition and R&R issues involved: KIADB has been allotted land of 538.43 acres (217.899 Ha) under the gazette notification 28(4) dated 5th February 2013 for a

Development of Kuduthini Industrial Area, Phase-2, Ballari Taluk & District, Karnataka and do not involve any R&R implementation.

3.13.12. Employment potential, No. of people to be employed: the proposed project will generate the employment of 50 people during construction phase and during operational phase it will generate the 6000 people.

3.13.13. Benefits of the project: the project will help in Social upliftment of the area through CSR activities and also will generate the employment in direct and indirect way.

3.13.14. Details of Court cases: The project does not involve any court cases and litigations.

3.13.15. The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 333rd meeting on 11th-12th July, 2023 and **recommended** the proposal for grant of **Terms of Reference** with specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

- i. Proper water drainage system should be intended to set aside the impervious roads, lined drains, routing surface drainage to settlement tanks/pits etc.
- ii. Water treatment plant of effluent, recycle/ reuse and disposal should be well planned.
- iii. In the project area adjacent to villages boundaries width of the green belt should be minimum 50 meters
- iv. The project area should not encircle the villages completely. To ensure this the land of the project area falling within geo coordinate points number 20, 21, 22 ,23 and 24 (as mentioned in slide no 7 of the presentation) shall be excluded from project area. If felt necessary PP may consider adding any other area in lieu of this exclusion. A revised outlay with revised area be submitted
- v. 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.
- vi. 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.
- vii. Provide detailed water balance statement a scheme to achieve ZLD by each industrial unit as well as for utilization of treated sewage.
- viii. 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.
- ix. Detailed biodiversity study of the project area.

- x. 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
- xi. 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.
- xii. 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.

Agenda No. 3.14

Development of Expressways, Economic and Inter Corridors under Bharatmala Pariyojana Phase-II (Lot-11), Package –I, ‘Lakhnadon to Raipur’ Proposed Greenfield in the State of Madhya Pradesh & Chhattisgarh. The proposed highway starts near Lakhnadon of Seoni District) and ends near Raipur in Raipur District, in the state of Madhya Pradesh and Chhattisgarh. The total length of the proposed alignment is 310.000 Km by the M/s National Highway Authority of India”- Terms of References.

Proposal No.: IA/MP/INFRA1/433218/2023; File no: 10/46/2023-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/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 and M Solution., made a presentation in the Ministry and provided the following information: -

3.14.1. Development of Expressways, Economic and Inter Corridors under Bharatmala Pariyojana Phase-II (Lot-11), Package –I, ‘Lakhnadon to Raipur’ Proposed Greenfield in the State of Madhya Pradesh & Chhattisgarh. The proposed highway starts near Lakhnadon of Seoni District) and ends near Raipur in Raipur District, in the state of Madhya Pradesh and Chhattisgarh. CH No. 0+000 to CH No. 0+310. Geo Coordinates of project site. Start Location: 22°30'55.56"N 79°34'46.08"E End Location: 21°17'0.01"N 81°33'48.72"E.

3.14.2. The proposed project falls under Schedule 7(f), Highways, Category “A” of EIA Notification 2006. Total estimated civil cost of the project is about Rs. 1950000 Lakhs.

3.14.3. Land use/ Land cover of the project site.

| S.No. | Land use/Land cover | Area (ha) | Percentage % | Remarks if any |
|-------|----------------------------------|-----------|--------------|----------------------------|
| 1. | Private land/ Government land | 2023 | 94.13 | Agriculture/Barren Land |
| 2. | Forest land | 126 | 5.86 | - |
| | Total | 2149 | 100 | - |

3.14.4. Right of Way (RoW): The Proposed Right of Way is 70 m in non-forest area and 60 m in forest area as per the requirement keeping in view the fully access controlled Highway with 4 lane dual carriage way configuration.

3.14.5. Terrain and topographical features: The project area is located in the state of Madhya Pradesh and Chhattisgarh. The topography in the proposed project area is mainly plain and rolling area.

3.14.6. Details of water bodies, impact on drainage: There are Rivers /Nalals/ Canals–Total –26 Nos. falling along the alignment. There shall be no major impact on the drainage system as 426 nos. numbers of structures (such as culverts, minor bridges, major bridges etc.) will be constructed.

3.14.7. Water requirements: The total requirement of water for construction is estimated to 2,507,471 KL. Water will be extracted from surface sources. The ground water will be abstracted for camp site after obtaining the permission from appropriate authority. The ground water will be abstracted for camp site after obtaining the permission from ground water board.

3.14.8. Tree cutting: The alignment will require cutting of approximately 285400 of trees (95000 Forest trees and 190400 Non Forest trees) falls in proposed ROW. However, bare minimum no. of trees to be felled for construction of four lane road. Detailed tree inventories will be provided after joint enumeration with the appropriate authority in EIA.

3.14.9. Diversion of forest land: Approx. 126 ha land under RF & PF forest along the roads and canals. The forest proposal shall be prepared after consultation with concerned forest officer if it attracts FC under section 2, 1980.

3.14.10. The proposed alignment does not pass through any National Parks, Wildlife Sanctuary, and Tiger Reserve of any other notified eco-sensitive areas and does not fall in 10 Km radius of any protected areas, Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC.

3.14.11. Land acquisition and R&R issues involved: About 2149 ha land likely to be acquired

as per NH Act 1956; compensation will be given as per RFCT LARR Act, 2013.

3.14.12. Employment potential: During the construction of the road project around 1500 persons would be employed temporarily for a period of 3 years. However due to construction of toll plazas approx. 500 persons will be employed on permanent basis. The total manpower requirement for the project is 2000. Preference will be given to local people for employment. The Project will enhance economic development in the area through industrial growth, agricultural, and commercial development and consequent employment generation, savings in travel time & shall provide easy access to social infrastructure.

3.14.13. Benefits of the project: This highway starts at Lakhnadon, (Madhya Pradesh) Seoni district and terminates at Raipur, (Chhattisgarh), and district. From CH: 0+000 in the state of Madhya Pradesh to 310+000 in the state of Chhattisgarh. The approx. length of proposed alignment is 310 Km under Bharatmala Pariyojana Phase-II (Lot-11), Package –I by the Government of India. The proposed highway 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 junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic.

3.14.14. 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 and road side plantation shall further improve the air quality of the region.

3.14.15. Details of Court cases- The proposed project does not involve the any court case and litigation.

3.14.16. The EAC, taking into account the submission made by the project proponent, had a detailed deliberation in its 333rd EAC meeting on 11th – 12th July, 2023 and deferred the proposal for grant of Terms of Reference (ToR) for the want of following documents/information:

- i. After detailed deliberations, the committee observed that the alignment is bisecting the tiger corridor between Kanha and Pench and Navegaon National Park. Considering the sensitive nature of the alignment a sub-committee will make a site visit before considering the proposal further for ToR.

Agenda No. 3.15

Expansion of Existing Jetty [Lightrage Jetty & Deep Water Jetty] to increase Capacity from 0.56 million tonnes per annum to 9.00 million tonnes per annum by Shree Digvijay Cement Company Limited- Terms of References.

Proposal No: IA/GJ/INFRA/428737/2023. File no: 10/47/2023-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/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.”

3.15.1. The project proponent along with the EIA consultant M/s Aqua Air Environmental Engineers Pvt. Ltd. made a presentation in the Ministry and provided the following information: -

3.15.2. The proposal is for Expansion of Existing Jetty [Lighterage Jetty & Deep-Water Jetty] to increase Capacity from 0.56 million tonnes per annum to 9.00 million tonnes per annum.

3.15.3. The proposed project falls under Schedule 7(e), Ports, harbours, Category “A” of EIA Notification 2006. Total estimated civil cost of the project is about Rs. 58377 Lakh.

3.15.4. Handling Capacity of Jetties.

| S. No. | Handling Material | Quantity (Million Tonnes Per Annum) | | |
|--------|--|-------------------------------------|----------|----------------|
| | | Existing | Proposed | Total Proposed |
| 1 | Lighterage Jetty [(Sand Jetty + “L” Shape Jetty)] Solid Material * | 0.564 (Cement, Clinker, & Coal) | 4.436 | 5.00 |
| 2 | Deep Sea Water Jetty Solid Material * Liquid Material ** Gas Material *** | 0.00 | 4.00 | 4.00 |
| Total | | 0.564 | 8.436 | 9.00 |

3.15.5. Material to be handled: Solid material: Cement, Clinker, Coal, Gypsum, Limestone, Pet coke, Fly ash, Bauxite, Sandstone, Iron Ore, Sulphur, Fertilizer, Soda ash, Containers, Refractory Bricks, Bentonite, Alternate Fuels & Raw materials (AFR) and Other bulk materials. Liquid material: Carbon disulphide, Wax, Thionyl Chloride, Sulphuric acid, Acetic Acid, Denatured Ethyl Alcohol, Methanol, Caustic Soda Lye. Gas material: Ammonia, Propylene, Isobutylene, CO₂, Ethylene, Liquid Nitrogen, liquid Nitrous Oxide.

3.15.6. Configuration of the project: Total area: 57.20 hectare/Length: Deep Sea Berth =

0.250 Km, Shallow Water Berth = 0.207 Km

3.15.7. Land use/Landcover of project site:

| Sr. No. | Land use/Land Cover | Area Existing (In Hectare) | Area Proposed (In Hectare) | Area Total (In Hectare) | % |
|---------|---|----------------------------|----------------------------|-------------------------|-------|
| 1. | Lighterage Jetty (Sand Jetty + “L” Shape Jetty) | 22.71 | 0.00 | 22.71 | 39.70 |
| 2. | Deep sea water Jetty | 0.00 | 21.00 | 21.00 | 36.72 |
| 3. | Storage Area-1 including Greenbelt Area | 0.00 | 10.60 | 10.60 | 18.53 |
| 4. | Storage Area-2 including Greenbelt Area | 0.00 | 2.89 | 2.89 | 5.05 |
| TOTAL | | 22.71 | 34.49 | 57.20 | 100 |

3.15.8. Terrain and topographical features: Key infrastructure features have been extracted from Survey of India (SoI) topographical maps of 1:50,000 scale. The Survey of India Topo Sheet No: F42J15;J11.

3.15.9. Details of water bodies, impact on drainage: There are very few seasonal rivers present within they study area. There are no any perennial river present. The drainage network is shown in above map with primary and secondary drainage. All the natural drainage are seasonal. Apart from drainage there are creeks also present within the study limits. The Flow direction of the Rivers are South (True) to North (True) in the Study area which is East to West in actual.

3.15.10. The drainage of the area is controlled by Sasoi River in eastern part of study area and by Phuljar River in south western part of the study area, both flowing from south to north direction. Gulf of Kachchh is present in the north western and northern part of study area. Mangroves, salt pans and mud flats are scattered in the Gulf of Kachchh. Network of aqueducts are present in south eastern part of study area.

3.15.11. Water requirements: Water requirement will be 200 KLD, Source- Ground Water and Company will applied the NOC to CGWA. NOC to CGWA to extract ground water for additional water requirement after getting TOR.

3.15.12. Tree cutting, types, numbers, girth size etc.: No trees cutting. Total Greenbelt Area (near Storage Area-1: 1.06 ha + near Storage Area-2 :0.1965 ha) = 1.26 ha.

3.15.13. Diversion of forest land: the project does not involve diversion of forest land. Marine National Park & Sanctuary (MNPS) Jamnagar- is approx. 3 km in West & Reserve Forest: near Sarmat (approx. 8.1 Km ENE). Company will obtain the clearance form National Board for Wild Life. The proposed project is not located within the Eco sensitive zone or Eco-Sensitive Area (ESA) notified by the MoEF&CC. Marine National Park & Sanctuary (MNPS) Jamnagar- is approx. 3 km away from the project site.

3.15.14. CRZ details: The proposed project involves the CRZ area, CRZ Map will submit during the application of Environment Clearance as well as CRZ Clearance.

3.15.15. Shoreline Change: Details of shore line change will be incorporated in EIA report. CRZ Map will submit during the application of Environment Clearance as well as CRZ Clearance.

3.15.16. Details of dredging: In the proposed development, at the Lighterage Jetty, the bed levels are ranging around ± 0.0 m CD. The lowest tide level is around at 0.6 m and required water depth for safe maneuvering & berthing of 3000 barge is 3.63 m. The dredging in front of berth turning circle area and in 1.7km approach channel to the Lighterage Jetty is proposed up to - 4.0m CD which will ensure smooth handling of vessel in all tide. At the deep-sea jetty, the bed levels are ranging between (-)8 to (-)9 m CD. A minor capital dredging may be required to accommodate the anticipated design vessel and accordingly to maintained the bed level of (-) 9.0 m CD. For the dredging at the deep-sea jetty, the concept for development is required to be finalized first. The proposed development, the cargo will be handled by barge lighterage operation from the Lighterage Jetty and direct berthing form the Deep Sea Jetty. In lighterage operation, the mother vessel will be anchored at the anchorage point. At Sikka, the anchorage point is located around 7.0 km from deep sea jetty and 10.0 km from the Lighterage Jetty. Channel Depth: In the barge lighterage operation, the required water depth for safe navigation in channel is 3.7 m. Channel Width: At this stage, for the 3000 DWT barge maneuvering, the required safe width of the channel for single lane traffic to the project site is considered 4.0 times the width of vessel i.e. $13.5 \times 4.0 = 54$ say 55m. There will be no disposal from the proposed project. Domestic wastewater will be treated existing STP (300 KL/Day) of SDCCL Plant and treated sewage waste water will be reuse for water sprinkling. There will be no reclamation. There will be no breakwater.

3.15.17. Employment details: Company has given employment to local people.

3.15.18. Land acquisition and R&R issues involved: This is expansion project, So R & R is not applicable.

3.15.19. Employment potential, No. of people to be employed: 25 nos. (10 Nos.- Existing + 15 Nos. -Proposed)

3.15.20. Benefits of the project: In the vicinity of the project region, there is a presence of the industries viz. Reliance Industries Limited, Gujarat State Fertilizer Corporation (GSFC), Gujarat State Electricity Corporation Limited, Nayara Energy Limited & Shree Digvijay Cement Company Limited. Moreover, due to presence of these industries, the surrounding

area of the project region have very sound establishments with all supporting infrastructures for development of any project. SDCCL can create logistics advantage to increase its Jetty's potential.

3.15.21. Details of Court cases: There is no any court cases against project.

3.15.22. During the deliberation, the EAC observed and noted the following.

It involves two proposals i.e.

- i. The proposal involves expansion of the Existing Jetty [Lighterage Jetty & Deep Water Jetty], to Increase Capacity From 0.56 Million Tonnes Per Annum To 9.00 Million Tonnes Per Annum] and construction of deep sea water Jetty in 21.00 hector area. However, PP has submitted the proposal as an expansion proposal.

3.15.23. The EAC, taking into account the submission made by the project proponent, had a detailed deliberation in its 333rd EAC meeting on 11th-12th July, 2023 and return the proposal in present form advise the PP to submit either separate applications for two different proposals for further considerations or modify the proposal such that it can be appraised as single proposal.

Agenda No. 3.16

Widening of Existing Container Berth at Jawaharlal Nehru Port, Navi Mumbai, Maharashtra (Cargo Handling Capacity-22.1 MTPA) by M/s Jawaharlal Nehru Port Trust- Terms of References

Proposal No.: IA/MH/INFRA1/426533/2023; File no: 10/48/2023-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/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 Mantec Consultants Pvt. Ltd. made a presentation in the Ministry and provided the following information: -

3.16.1. Widening of Existing Container Berth at Jawaharlal Nehru Port Authority, Navi Mumbai, Maharashtra (Cargo Handling Capacity= 22.1 MTPA) by M/s Jawaharlal Nehru Port Authority.

3.16.2. The following will be Concessionaire scope of work the details are as following:

- i. Increase of crane Rail span from 20 m to 30.50 m for 680 m berth length.
- ii. Increase of deck width of the berth by 15m on land side for smooth vehicle manoeuvring & for keeping vessels hatch covers.

- iii. Up-gradation and strengthening of existing 530m berth and 150m wharf to accommodate design vessels of size 12200 TEU for which the facility was originally designed & commissioned.
- iv. Up gradation of Fenders and Bollards may be necessary.
- v. Repairs and strengthening of existing damaged portion of the berth structures as may be necessary.
- vi. Under-deck repairs of the existing structure wherever necessary.

3.16.3. The proposed project falls under Schedule 7(e), Ports, harbours, Category “A” of EIA Notification 2006. Total estimated civil cost of the project is about Rs. 87216 Lakh.

3.16.4. Land use/ Land cover of project site in tabular form:

| S. No. | Land use/Land cover | Area (ha) | % | Remarks, if any |
|--------|---------------------|-----------|---|-----------------|
| 1. | Non Forest Land | 54 | - | - |

3.16.5. Terrain and topographical features: The district has three physiographic divisions i.e. (i) Coastal zone in west covers about 20% percent of the district (ii) Central zone covers about 1/3rd of the district, consisting of fertile land in low lying area (iii) Hilly zone in the eastern part highly uneven in altitude and covered with forest. This hill range is characterized by ruggedness and uneven topography, with crestline of peaks and saddles forming the eastern horizon. Ulhas, Panvel and Patalganga are the three main rivers in northern part. Kundalika River is the main river in central part whereas in the southern part Savitri River is the main river.

3.16.6. Details of water bodies, impact on drainage: There will be no adverse impact on drainage system due to widening of existing berth terminals at JNPA.

3.16.7. Water requirement: water will be required for Existing – 50 KLD and for Expansion-30 KLD. During operation Phase Existing – 50 KLD and for Expansion-30 KLD. Water supply from JNPA’s existing own source. No ground water extraction is there.

3.16.8. Diversion of forest land: The project does not involve any diversion of forest land.

3.16.9. The project is not located within 10 km of Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves, Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC:

3.16.10. Details of CRZ: The project falls under CRZ-IVA, MCZMA recommendations is required.

3.16.11. No shoreline changes No additional changes to the existing Channel, breakwaters no dredging required, marginal land reclamation.

3.16.12. Land acquisition and R&R issues involved: No R&R issues involved in the instant proposal.

3.16.13. Employment potential: during construction phase the project will generate 370 employments and during operational phase the project will generate employment of 375.

3.16.14. Benefits of the project: The execution of the project brings overall improvement in the locality, neighborhood and the State by bringing industry, roads, employment and hence improving living standard and economic growth.

3.16.15. Details of Court cases: No court case is involved in the proposed project.

3.16.16. The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 333rd meeting on 11th-12th July, 2023 and recommended the proposal for grant of **Terms of Reference** with specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

- i. PP shall submit the latest Certified EC compliance report by the concern IRO of the Ministry.
- ii. Importance and benefits of the project.
- iii. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
- iv. Recommendation of the Maharashtra CZMA shall be obtained and submitted.
- v. Submit superimposing of latest CZMP as per CRZ (2011) on the CRZ map.
- vi. Submit a complete set of documents required as per para 4.2 (i) of CRZ Notification, 2011.
- vii. Hydrodynamics study on impact of dredging on flow characteristics shall be carried out.
- viii. Study the impact of dredging and dumping on marine ecology and draw up a management plan through the NIO or any other institute specializing in marine ecology.
- ix. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- x. A certificate 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.

- xi. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- xii. 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.
- 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. 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.
- xiv. Disaster Management Plan for the project shall be prepared and submitted.
- xv. Details and status of court case pending against the project, if any.
- xvi. 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.
- xvii. A tabular chart with index for point-wise compliance of above ToRs. The specific ToRs as recommended above are in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.
- xviii. 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.
- xix. 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.

Agenda No. 3.17

Construction of new 6-Lane (Expandable upto 8 Lane) Access Controlled Greenfield Expressway starting from Design Ch. 201.100 (near Bammanala village) and to Design Ch. 697.566 (near Muttagadahalli village), [part of Pune – Bangalore Expressway], (Total design length-496.366 km) in the state of Karnataka under Bharatmala

**Pariyojana Phase II by M/s National Highway Authority of India.- Terms of References
Proposal No.: IA/KA/INFRA1/434545/2023; File no: 10/49/2023-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/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.”

3.17.1. The project proponent along with the EIA consultant M/s Centre for Envotech and Management Consultancy Private Limited. made a presentation in the Ministry and provided the following information: -

3.17.2. The proposal is for Construction of new 6-Lane (Expandable upto 8 Lane) Access Controlled Greenfield Expressway starting from Design Ch. 201.100 (near Bammanala village) and to Design Ch. 697.566 (near Muttagadahalli village), [part of Pune – Bangalore Expressway], (Total design length = 496.366 km) in the state of Karnataka under Bharatmala Pariyojana Phase II by M/s National Highway Authority of India.

3.17.3. The proposed project starts from village Bammanala, Design Ch. 201.200(Start Location: 16°51'50.36" N 74°54'40.82" E) and terminates near village Muttagadahalli, Design Ch. 697.566(End Location: 13°16'34.50" N, 77°21'55.76" E) in the state of Karnataka. The alignment falls in 09 districts i.e. Belagavi, Bagalkot, Gadag, Koppal, Bellary, Davangare, Chitradurga, Tumkur and Bengaluru in the state of Karnataka.

3.17.4. The proposed project falls under Schedule 7(f), Highways, Category “A” of EIA Notification 2006. Total estimated civil cost of the project is about Rs. 38,724.04 Cr.

3.17.5. Land use/ Land cover of the project site:

| S. No. | Land use / Land cover | Area (ha) | Percentage % | Remarks if any |
|--------|-----------------------|-----------|--------------|------------------------------------|
| 1. | Private land | 3750 | 75 | Agriculture Land |
| 2. | Government land | 1210 | 24.20 | Agriculture / Barren / other Land |
| 3. | Forest land | 40 | 0.80 | Reserved and Protected Forest land |
| Total | | 5000 | 100 | - |

3.17.6. Right of Way (RoW): The proposed alignment will have the ROW 100 m

3.17.7. Terrain and topographical features: The terrain of the alignment is basically plain with minor undulating in nature.

3.17.8. Details of water bodies, impact on drainage: The proposed alignment is crossing through Ponds at 10 locations, Canals at 64 locations, Nallahs at 138 locations and Rivers at 16 locations. Details of number of Streams (seasonal & perennial) are being worked out by detailed topographic surveys. There shall be no major impact on the drainage system as sufficient numbers of structures (such as culverts, minor bridges and major bridges) will be constructed. The balancing culverts shall be provided to ensure no water logging in the area and all storm water shall be channelized systematically to the nearest natural stream.

3.17.9. Water requirements: Approx. 50000 KLD Water will be extracted from suitable surface sources (river/canals) or ground water after obtaining necessary permissions from the competent authority. Ground water proposed to be used only for camp site for transient period after obtaining the permissions from appropriate authority.

3.17.10. Tree cutting: About 15000 trees are likely to be affected due to proposed RoW of 100 m out of which approx. 3000 nos. of trees fall in forest land and remaining 12000 falls in the private agriculture field. The actual no. of trees proposed to be cut will be provided in the EIA after joint enumeration with appropriate authorities of respective State Government. Efforts will be made to minimize the trees loss by restricting trees cutting within formation width/toe lane. Avenue plantation shall be carried out as IRC: SP: 21:2009 "Guidelines on Landscaping and Tree Plantation" on available RoW apart from statutory requirements.

3.17.11. Diversion of forest land: The proposed project expressway will require diversion of approx. 40 ha. of forest land (Reserved and Protected). Thimlapura Wildlife Sanctuary sanctuary is located at the distance of 1.3 KM away from the proposed alignment.

3.17.12. Land acquisition and R&R issues: The Project requires approx. 5000 ha of land. About 600 nos. of structures (Pucca Building, temporary sheds, huts etc.) will be affected due to proposed expressway. Compensation shall be paid as per NH Act, 1956 and RFCTLARR Act, 2013.

3.17.13. Employment potential: During the construction of the road project around 3000 persons would be employed temporarily for a period of 2 years. However due to construction of toll plazas approx. 1000 persons will be employed on permanent basis. The total manpower requirement for the project is 4000. Preference will be given to local people for employment.

3.17.14. Benefits of the project - The proposed project is for the Construction of new 6-Lane (Expandable upto 8 Lane) Access Controlled Greenfield Expressway starting from Design Ch. 201.200 (near Bammanala village) and to Design Ch. 697.566 (near Muttagadahalli village), [part of Pune – Bangalore Expressway], (Total design length = 496.366 km) in the state of Karnataka. The proposed access controlled expressway 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 junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic. The sufficient numbers of underpasses are being planned for all metaled roads being intersected. 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.

3.17.15. Details of Court cases- No court cases and litigation involved in the proposed project.

3.17.16. The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 333rd meeting on 11th-12th July, 2023 and **recommended** the proposal for grant of Terms of Reference with specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

- i. The proposed alignment is crossing through Thungabhadra River. NHAI shall explore the design of the alignment avoiding any piers in the river bed.
- 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. Road safety audit (along with accident/black spots analysis) by any third-party competent organization need to be carried out at all stages namely at detailed design stage, construction stage and pre-opening stage to ensure that the project road has been constructed considering all the elements of road safety.
- 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 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 should be geo-tagged, photographed and details be submitted in the EIA –EMP report.
- vi. 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.
- vii. 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.

- viii. PP will make provision for contribution for undertaking environmental sustainability programmes such as ground water rejuvenation, afforestation, solid waste management etc to Southern Command HQ of the India Army as a part of EMP. Accordingly EMP will be prepared.
- 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 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.
- xi. Passage for animal movement has to be detailed in the report
- xii. 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.

Agenda No. 3.18

Development of 4 lane Highway from Madakalavaripalli Village (Ch: 630+960) in Y.S.R Kadapa district to Guruvindapudi village (Ch: 739+091) in Nellore district of Andhra Pradesh under Bharatmala Prayojana (Lot-5/Package-1)-Reconsideration of Terms of References. Proposal no: IA/AP/NCP/293465/2022 File no: 10/45/2022-IA.III.

The instant proposal is duplicate proposal the same is omitted from the agenda.

Agenda No. 3.19

Expansion and Modernization of Pipava Port, Pipavav port is located on the western bank of Gulf of Khambhat in Saurashtra region, taluka Rajula, District-Amreli Gujarat by M/s Gujarat Pipava Port Ltd.

Proposal no: IA/GJ/INFRA1/429815/2023 File no: 11-91/2009-IA.III(Pt.)

“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/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. made a presentation in the Ministry and provided the following information: -

3.19.1. The proposal is for Expansion and Modernization of Pipava Port, Pipavav port is located on the western bank of Gulf of Khambhat in Saurashtra region, taluka Rajula, District-Amreli Gujarat by M/s Gujarat Pipava Port Ltd. It is situated at a latitude of 20°54'N and a longitude of 71°30' E.

3.19.2. The port primarily handles containers, bulk/ break bulk, LPG/ liquid bulk as well as Ro Ro cargo. The port area leased from Gujarat Maritime Board (GMB) as per the Concession Agreement is 423 ha. The total area of the port is 592 ha, with reclamation land. Currently, the port can handle up to 1.35 MTEU of containers, 5 Mtpa of dry bulk cargo, 2 Mtpa of liquid cargo, and about 250,000 CEUs per year.

3.19.3. Details of the Existing Berths: The Port has five Berths to handle Containers, Bulk, Break bulk, Project Cargo, Liquid and RoRo Cargo. The details are as under: -

| Berth No. | Cargo Type | Length (m) | Depth (wrt CD) |
|-----------|----------------------------------|------------|----------------|
| 1 | Bulk, General Cargo & RoRo | 330 | -14.5 |
| 2 | Container, RoRo & General Cargo, | 187 | -14.5 |
| 3 | Container, RoRo & General Cargo | 172 | -14.5 |
| 4 | Container | 387 | -15.5 |
| 5 | Liquid | 260 | -13 |

3.19.4. Back-up and storage: The summary of area-wise land use at the port is as follows:

| S.No | Description | Area (Ha) |
|------|-------------------------|-----------|
| 1 | Container Yard | 34.92 |
| 2 | Coal Yard | 14.54 |
| 3 | Other Bulk Storage Yard | 34.82 |
| 4 | Warehousing /CFS Area | 10.16 |
| 5 | Tank Farm Area | 55.26 |
| 6 | RoRo Yard | 8.5 |
| 7 | Railway Area | 28.27 |
| 8 | Office/Residential Area | 25.38 |

| | | |
|----|-----------------------------|--------|
| 9 | Mangroves | 35 |
| 10 | Road and other service area | 73.12 |
| 11 | Utilities area | 3.44 |
| 12 | Water Reservoir | 10.03 |
| 11 | Open Area | 116.12 |

3.19.5. Cargo Handled: The cargo handled by the port in last two financial years is as follows: -

| Cargo Volume handled | FY 23 | FY 22 |
|-----------------------|--------|--------|
| | Mar-23 | Mar-22 |
| Containers (000 TEUs) | 764 | 628 |
| Dry Bulk (Mn MT) | 3.91 | 4.19 |
| Liquid (Mn MT) | 1.03 | 0.81 |
| Ro Ro (000 Units) | 40 | 23 |

3.19.6. Details of Past Expansion and its Environmental Clearances: CRZ & Environmental Clearance (EC) for Expansion and modernization of Port Pipavav and envisaged addition of 2450 mt. berth length, which included 3 Container Berths, extension of 110 m Bulk berth and 2 liquid berths, for handling 26 MMTPA of Bulk Cargo, 4 m TEUs of Container and LPG/POL of 6 MMTPA, Capital dredging of 18 MCBM and maintenance dredging of 2 MCUM obtained on 5th June, 2012. Extension of validity of CRZ & Environmental Clearance was extended up to 4th June 2022 by MoEF&CC on 2019. Further, EC&CRZ Clearance. Validity has been extended for 1 year i.e., up to 3rd June-2023 as per MoEF &CC gazette Notification 18-Jan-2021.

3.19.7. The current status of the Project: The Project/activities have been at various stages of development and the progress of the Project is as follows:.

| Sr. No. | Description | Status | Remarks |
|---------|--|-------------|--|
| 1 | Construction of berth number 5 and approach bridge (joining berth no:- 4 and LPG | Not Started | Could not be taken due to adverse macro-economic conditions. |

| | | | |
|---|--|-------------|--|
| | berth)-Phase 1 | | |
| 2 | Filling of guide bund of existing LPG berth for container yard-Phase 1 | Not Started | |
| 3 | Extension of berth no 1 towards southwest by 110meters-Phase 1 | Not Started | Could not be taken up as the TPP in the hinterland of Pipavav did not materialize |
| 4 | Relocation of LPG berth and construction of guide bund-Phase 1 | Not Started | Could not be taken up due to reduced demand and unfavorable macroeconomic conditions |
| 5 | Construction of liquid berth and guide bund-Phase 1 | Not Started | |
| 6 | Joining of Berth number 5 with LPG and Liquid berth for creating container berth (Phase 2) | Not Started | Could not be taken up due to reduced demand and unfavorable macroeconomic conditions |
| 7 | Filling of guide bund behind LPG and liquid berth (phase 2) | Not Started | |
| 8 | Relocation of LPG berth and construction of guide bund-Phase 2 | Not Started | |
| 9 | Construction of liquid berth and guide bund-Phase 2 | Not Started | |

| | | | |
|----|---|------------------------------|---|
| 10 | Construction of coal yard and other bulk storage yard | 50% | Partly completed and proposed. for completion of development |
| 11 | Construction of container yard | 20% | Could not be taken up due to unfavorable macroeconomic conditions |
| 12 | Construction of warehouses | Approx 10,0000 sqm Completed | |
| 13 | Construction of rail siding | 50% | |
| 14 | Construction of closed conveyer for transport of coal | Not Started | Could not be taken up as the TPP in the vicinity of Pipavav didnot materialize |
| 15 | Construction of first aid station and employees rest room | Completed | |
| 16 | Construction of road | Partly completed | Subject to Business trigger |
| 17 | Construction of residential colony for employees. | Partly completed | Partly completed and proposed. for completion of development |
| 18 | Dredging (capital and maintenance) | Partly completed | Capital Dredging – 1,11,941 CUM done. Maintenance Dredging undertaken every 1.5 to 2 years (740948.75 CBM of Maintenance dredging carried out since 2012. Expected to be carried out every 1.5 years |

3.19.8. The Project has not been completed due to macroeconomic conditions, business scenario and trade related factors impacting volumes growth and the major expansion of waterfront facilities could not be undertaken as mentioned above.

3.19.9. Proposed Project Facilities: Based on the traffic forecast and business requirement GPPL proposes to develop following infrastructure.

- a) Construction of LPG/Liquid Berth (350 m long) Berth 6
- b) Construction of Guide Bund for Berth 6 (600m long)
- c) Construction of Container Berth No.5 (400 m long) and approach Bridge (Conversion of existing liquid Berth -5 and joining berth no.4)
- d) Filling of Guide Bund of existing liquid jetty for Container Yard
- e) Reclamation of area behind existing liquid jetty guide bund for Container Yard
- f) Construction of Liquid/LPG Berth 7 (350m long)
- g) Construction of Guide Bund for Berth 7 (475 m long)
- h) Construction of Tug Berth
- i) Extension of Berth No.1 towards southwest by 110 m
- j) Construction of Container Yard (within and outside CRZ)
- k) Construction & Maintenance Bulk Storage Yard & RoRo Yard
- l) Construction of Warehouse (outside CRZ)
- m) Construction of Railway siding (outside CRZ)
- n) Capital & Maintenance Dredging, deepening of channel, turning basin and new berths
- o) Construction of Canteen Facility (Outside CRZ)
- p) Construction of Road
- q) Construction of Residential Colony (outside CRZ)
- r) Construction of Storage facility for POL Gaseous, Chemical and Non-Hazardous Cargo
- s) Widening of existing guide Bund (Pipeline corridor) by 8m
- t) Widening of Jetty No.1 towards Landside

3.19.10. The Port Capacity after undertaking the above Project would be as follows: -

- i. Containers: 2.15 MTEUs
- ii. Bulk: 6 MMTPA
- iii. Liquid: 6.4 MMTPA
- iv. RoRo: 300,000 CEUs (Car equivalent Unit)

3.19.11. The proposed project falls under Schedule 7(f), Highways, Category “A” of EIA Notification 2006. Total estimated civil cost of the project is about Rs. **3310.8Cr.**

3.19.12. Landuse Land cover of the project site:

| Sl.NO | Landuse/Landcover | Area (ha) | % |
|-------|------------------------|-----------|-------|
| 1 | Villages | 0.2 | 0.03 |
| 2 | Fallow | 12.2 | 1.7 |
| 3 | Marshy / Swampy Land | 15.6 | 2.1 |
| 4 | Land with scrub | 27.7 | 3.7 |
| 5 | Lake/Reservoirs/ Tanks | 7.4 | 1.0 |
| 6 | Seas | 150.4 | 20.2 |
| 7 | Industrial Area | 529.7 | 71.3 |
| Total | | 743.2 | 100.0 |

3.19.13. Terrain and topographical features: The topography of the study area is generally plain with minor undulation. The land is barren; the elevation is ranging between 3 to 5 m above MSL. Pipavav is located at the edge of the Saurashtra coast, which is generally even with few indentations that permit minor port development and fisheries.

3.19.14. Details of water bodies, impact on drainage: Proposed expansion will come on the shore of Arabian sea. No impact on drainage is envisaged due to the proposed expansion.

3.19.15. Water requirement: The total water requirement of the project is existing water requirement is 1500 KLD and for expansion capacity is 1537.5. during operation existing capacity is 1500 KLD and will not require additional water capacity for proposed expansion. No Groundwater will be extracted.

3.19.16. Tree cutting: The proposed project will not involve any tree cutting.

3.19.17. Diversion of forest land: Does not involve any forest land, however mangroves are present within the project site region.

3.19.18. Waste Management: STP details:

| Description | Existing in KLD | Proposed in KLD | After Expansion in KLD |
|-------------|---|-----------------------------|---------------------------|
| STP | 440 KLD for Township and Offices – MBBR | 25 KLD for Jetty area – MBR | 465 KLD (Both MBBR & MBR) |

3.19.19. CRZ details: The proposed project falls in the CRZ region. CRZ IA, IB, III and IVA are the CRZ region covered by project activity.

3.19.20. Details of shoreline change: There will be no significant impact to the shoreline abetting the project and on the ecologically sensitive areas along the stretch. The estimated annual mud deposition in the new channel and berth pockets are found to be 1.2 million cum per annum. The deposition in the existing channel is found to be negligible viz, 0.03 million cum per annum. The annual deposition behind the existing piled 142 berths is estimated to be 0.7 million cum.

3.19.21. Dredging:

- i. Construction of New Liquid Berth 6 & 7 (350 m Long) towards northeast of existing Liquid Jetty (berth 5)
- ii. Widening of Jetty No.1 towards Landside.
- iii. Extension of berth 1 towards southwest by 110 meters
- iv. Capital dredging = $8.0 \times 10^6 \text{ m}^3$ per year
- v. Maintenance dredging = $1.1 \times 10^6 \text{ m}^3$ per year
- vi. Suitable dredge material will be used for land reclamation in container backup area

3.19.22. Land acquisition and R&R issues involved: No land acquisition and R&R issues involved.

3.19.23. Employment potential: The proposed existing project is generating the employment of 1985 people. Expansion of the proposed project will generate employment of 300 people and the total employment will be 2285 people.

3.19.24. Benefits of the project: The proposed project will support maritime trade and enhance export competitiveness. Revenue generation and employment opportunity due to the port development will improve the regional development and enhance the economic status of the nation.

3.19.25. Details of Court case: No court cases involved in this project.

3.19.26. The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 333rd meeting on 11th-12th July, 2023 and **recommended** the proposal for grant of Terms of Reference with specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

- i. PP shall submit the latest Certified EC compliance report by the concern IRO of the Ministry.
- ii. Importance and benefits of the project.
- iii. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
- iv. Recommendation of the Gujarat CZMA shall be obtained and submitted.
- v. Submit superimposing of latest CZMP as per CRZ (2011) on the CRZ map.
- vi. Submit a complete set of documents required as per para 4.2 (i) of CRZ Notification, 2011.
- vii. Hydrodynamics study on impact of dredging on flow characteristics shall be carried out.
- viii. Study the impact of dredging and dumping on marine ecology and draw up a management plan through the NIO or any other institute specializing in marine ecology.
- ix. Detailed studies on Coastal and terrestrial biodiversity including migratory birds will be undertaken by Nationally reputed academic institutes such as MS University, Baroda with rich experiences in marine science and other biodiversity.
- x. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- xi. A certificate 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.
- xii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- xiii. 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.
- xiv. 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.

- xv. Disaster Management Plan for the project shall be prepared and submitted.
- xvi. Details and status of court case pending against the project, if any.
- xvii. 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.
- xviii. A tabular chart with index for point-wise compliance of above ToRs. The specific ToRs as recommended above are in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.
- xix. 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.
- xx. 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.

Annexure-A

Following members were present during the 333rd EAC (Infra-1) meeting held on 11th - 12th July, 2023.

| S.No. | Name | Designation | 19.06.2023 (Teesta) | 20.06.2023 (Narmada) |
|-------|--------------------------|---------------------|------------------------|-------------------------|
| 1. | Dr. Deepak Arun Apte | Chairman | Present | Present |
| 2. | Shri S. Jeyakrishnan | Member | Joined through VC | Joined through VC |
| 3. | Shri Manmohan Singh Negi | Member | Joined through VC | Joined through VC |
| 4. | Shri Sham Wagh | Member | Joined through VC | Joined through VC |
| 5. | Dr. Mukesh Khare | Member | Joined through VC | Joined through VC |
| 6. | Dr. Ashok Kumar Pachauri | Member | Joined through VC | Joined through VC |
| 7. | Dr. V. K Jain | Member | Present | Present |
| 8. | Dr. Manoranjan Hota | Member | Joined through VC | Joined through VC |
| 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 | Joined through VC | Joined through VC |
| 14. | Shri Amardeep Raju | Member Secretary | Present | Present |

A Site visit report of EAC (Infra-1 & CRZ) sub-committee, Ministry of Environment, Forest & Climate Change, New Delhi-India for a proposed project of “Development of 4-laning of Badvel to Nellore Section of NH-67 form Madakalavaripalli Village (Ch. 630.960 km) in Y.S.R. Kadapa district to Guruvindapudi village (Ch. 739.091 km) in Nellore District, Total length of the project is 108.131 Km in the state of Andhra Pradesh under Bharatmala Pariyojana (Lot5/Package-1) by M/s National Highways Authority of India". Proposal No. IA/AP/NCP/293465/2022 and File No. 10/45/2022-IA.III.

1.0 Background of the Proposal

The proposed project is development of 4-laning of Badvel to Nellore Section of NH-67 form Madakalavaripalli Village (Ch. 630.960 km) in Y.S.R. Kadapa district to Guruvindapudi village (Ch. 739.091 km) in Nellore District, under Bharatmala Pariyojana (Lot5/Package-1) by M/s National Highways Authority of India. The proposed project starts at Ch: 630+960 (14°44'41.44"N 79°5'20.27"E) from Madakalavaripalli Village in Y.S.R Kadapa district and ends at Ch: 739+091 (14°16'50.57"N 79°54'27.92"E). The total length of the project is 108.131 Km and Proposed Right of Way (RoW) is 45m for open area and 30m for forest area. The project is 4 lanes carriageway with paved shoulders.

The above-mentioned proposal was earlier placed before the EAC during its 316th meeting on 15th -16th December, 2022 and deferred the proposal for grant of Terms of Reference for the want of following documents/ information:

- i. The proposed alignment is passing through the ESZ area of Penusila Natrashima Sanctuary. About 4.238 km length of the proposed alignment is crossing within the periphery of ESZ.
- ii. The proposed alignment also crossing the Penna River and the alignment passes in between several Streams/Nallas and ponds.
- iii. The proposed alignment with its existing connectivity will completely fragment Sri Lankamalleswaram WLS and Sri Penusila Narasimha WLS from Gundla Brahmeswaram WLS and Nagarjunasagar-Srisailam WLS.
- iv. Considering extremely sensitive nature of the region in terms of its wildlife and forests, PP is advised to provide the entire connectivity details including future expansion plans of existing state and national highways so that Committee can review the full impact of various projects on the wildlife connectivity in the region. It will be detrimental to consider this as a stand-alone alignment and require to be seen cumulatively.
- v. After detailed deliberations, the committee observed that the alignment seems to be crossing within the periphery of Penusila Natrashima Sanctuary ESZ and crossing the Penna River. Considering the sensitive nature of the alignment a sub-committee will make a site visit before considering the proposal further for ToR.

2.0 Site Visit and Brief of Project.

Accordingly, a site visit by the Sub-committee was conducted on 10th March, 2023 for the proposed project. NHAI inter-alia presented a brief on the project to the sub-Committee as following.

- i. The proposed project falls under Schedule 7(f), Highway, Category “A” of EIA Notification 2006. Total estimated civil cost of the project is about Rs. 3551.59 Crores.
- ii. The total length of the project is 108.131 Km and Proposed Right of Way (RoW) is 45m for open area and 30m for forest area.
- iii. The proposed alignment is required 27.575 ha of Forest land and the proposed alignment is passing through the ESZ area of Penusila Narashima Sanctuary.
- iv. About 4.238 km length of the proposed alignment is passing through the ESZ area of Penusila Natrashima Sanctuary. The proposed alignment crossing the Penna River.
- v. Approx. 467.748 ha. land shall be required for the proposed project.

3.0 Observations and Recommendations of the Sub-Committee.

- i. About 4.238 km length of the proposed alignment is passing through the ESZ area of Penusila Natrashima Sanctuary. Connectivity of the Chittaluru RF (Ch: 689+000 to Ch: 699+000) and Yeturu RF (Ch: 701+500 to Ch: 702+500) to be ensured with the provision of Animal Under Passes of minimum length of 1km each.
- ii. The proposed widening of the existing intermediate lane to 4 lane National Highway from Ch: 640+500 to Ch 649+000 lead to fragmentation the connectivity between Gopavaram RF and Udayagiri Velikonda RF with Penusila Natrashima Sanctuary. To ensure connectivity of the forest for ensuring animal movement between Chainage no 640.500 to 649.000 at least 3 nos animal underpasses of 800m to 1000m shall be constructed. Location of these underpasses to be decided in consultation with concerned DFO and Chief Wildlife Warden.
- iii. Sub-Committee also visit the also visit the Mydukur to Badvel exiting section of NH-67, where widening of exiting road is proposed by the NHAI. About 10 km of the existing highway is passing along the Lankamalla RF. Where, further widening will fragment the connectivity of Sri Lankamalleswaram WLS and Sri Penusila Narasimha WLS from Gundla Brahmeswaram WLS and Nagarjunasagar-Srisailam WLS.
- iv. The Forest stretch under the Mydukur-Badvel section of NH-67 falls from Km 606+500 to Km 609+770 (3.27 km) wherein the EAC subcommittee has visited the site and it was recommended the Animal underpass of a span between 800m to 1000m from Km 606+600 to 607+700 considering the technical and topographical aspects. In addition, to that an underpass with the span not less than 500m in between Km 609+770 to 614+500 in consultation with the DFO in the Non-Forest area since the committee has opined that there is a strong possibility of movement of wild animals.
- v. Also, without providing animal underpasses as suggested above, various alignments surrounding Lankamalla RF will become island without any effective animal movement passages.

- vi. Without expansion of Mydukur-Badvel section of NH 67, Badvel to Nellore Greenfield connectivity is not justified traffic point of view. Though the expansion of Mydukur-Badvel section of NH 67 doesn't come under preview of EAC, Committee is of the opinion that both these sections needs to be examined in an integrated fashion. Thus, the animal underpasses as suggested under sr. no iv are absolutely essential to keep the wildlife connectivity of Lankamalla RF intact.
- vii. All animal passes proposed above shall be constructed with provision of guiding barriers of sufficient length and height along both side of the roads on both sides of underpasses.
- viii. All the structures suggested by the subcommittee for the wildlife movement are listed as following:

| S.No | Location details | In between Chainages | Suggested Structure by the Sub Committee |
|------|---|------------------------------------|---|
| 1 | ESZ area of Penusila Natrashima Sanctuary. Connectivity of the Chittaluru RF (Ch: 689+000 to Ch: 699+000) and Yeturu RF (Ch: 701+500 to Ch: 702+500). | (Ch: 689+000 to Ch: 699+000) | Animal Under Passes of minimum length of 1km |
| | | (Ch: 701+500 to Ch: 702+500) | Animal Under Passes of minimum length of 1km |
| 2 | The existing intermediate lane to 4 lane National Highway from Ch: 640+500 to Ch 649+000 lead to fragmentation the connectivity between Gopavaram RF and Udayagiri Velikonda RF with Penusila Natrashima Sanctuary Mydukur-Badvel section of NH-67 falls from Km 606+500 to Km 609+770 (3.27 km) | Ch 640+500 to Ch 649+000 | At least 3 nos animal underpasses of with the length of 800m to 1000m |
| | | Ch 606+500 to Ch 609+770 (3.27 km) | Animal underpasses of with the length of 800m to 1000m |
| 3 | An underpass with the span not less than 500m in between Km 609+770 to 614+500 in consultation with the DFO in the Non-Forest area, since the committee has opined that there is a strong possibility of movement of wild animals. | Ch 609+770 to Ch 614+500 | Animal underpasses of with the length of 500m |

Annexure -A:

An EAC sub-committee of MoEF&CC, New Delhi members participated in the site visit of Badvel to Nellore Section of NH-67, Andhra Pradesh.

| S. No. | Name | Designation |
|---------------|---------------------------|-------------------------|
| 1. | Dr. Deepak Arun Apte | Chairman, EAC (Infra 1) |
| 2. | Shri. Manmohan Singh Negi | Member, EAC (Infra 1) |
| 3. | Dr. Ramesh, A. | RO, MoEF&CC |

The following are the members from Forest Department, Government of Andhra Pradesh side were present:

| S. No. | Name | Designation |
|---------------|------------------|------------------------------------|
| 1. | A.Chandrasekhar | Divisional Forest Officer, Nellore |
| 2. | Rama konda Reddy | Range Forest Officer,Atmakur |

The following are the members from M/s NHAI-PIU, Nellore, Andhra Pradesh and consultants side were present:

| S. No. | Name | Designation |
|---------------|-------------------------|---|
| 1. | T. Govardhan | Project Director, PIU-Nellore |
| 2. | GVT Balarama Krishna | Project Director, PIU-Kadapa |
| 3. | Shri M Suryaprakash | Forest Advisor, RO-NHAI, Vijayawada |
| 4. | Navneet Kumar | Environment Consultant of M/s SM Consultant |
| 5. | Prashant Singh | Associate engineer Highway of M/s SM Consultant |

Annexure B: Project Map & Site Photographs

