

Minutes of the 304th meeting of Expert Appraisal Committee held on 21st - 22nd July, 2022 through Video Conference for the projects related to Infrastructure Development, all Ship breaking yards including ship breaking units 7(b); Industrial Estate/Parks/Complexes/Areas, Export Processing Zones, Special Economic Zones, Biotech Parks, Leather Complexes7(c); Ports, harbors, breakwaters, dredging 7(e) and National Highways 7(f).

The 304th Meeting of Expert Appraisal Committee (EAC) of Infra-1 (IA-III) was held through Video Conference during **21st - 22nd July, 2022** under the Chairmanship of Dr. Deepak Arun Apte. A list of participants is annexed as **Annexure-A**.

1. OPENING REMARKS OF THE CHAIRMAN

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

2. CONFIRMATION OF THE MINUTES OF THE LAST MEETING

The Committee confirmed the Minutes of 302nd EAC Meeting held on 7th - 8th July, 2022.

AGENDA WISE CONSIDERATION OF PROPOSALS:

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

Agenda No. 3.1

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

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

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

3.1.2 The The proposed highway starts from village “Kalyanpur” located on NH-19 having co-ordinates 25.687068°N, 85.380546°E and ends at Tal-Dasraha with co-ordinates

25.879528°N, 85.732905°E. on District boundary of Vaishali and Samastipur the state of Bihar. Scope of present report is confined to the package 1 (Ch. 0+000 to Ch. 47+000). The total length is of 47.0 km.

3.1.3 The proposed project falls under 7(f), Highway, Category A. Total project cost is Rs, 116554 Lakhs. The Tor proposal was considered in EAC 260th meeting during 5th and 6th April, 2021 wherein the Committee recommended for grant of ToR. Ministry granted the on 20th May, 2021.

3.1.4 Land use/Land cover of project site:

S.No.	Land use/Landover	Area (ha)	Percentage %	Remarks if any
1.	Private land	294.03	97	Agriculture/Barren Land
2.	Government land	7.468	2	Agriculture/Barren Land
3.	Forest land	3.042	0.99	-
	Total	304.54	100	-

3.1.5 Right of Way (RoW): Proposed ROW shall be 60 meter The Proposed Right of Way is 60 m as per the requirement keeping in view the fully access controlled Highway with 4-lane dual carriage way configuration. At location of major & minor junction, bus bays, truck lay bye, toll plaza and interchange extra land has been considered in addition to above as per the actual design requirement.

3.1.6 Terrain: The proposed alignment is passes through plain terrain with elevation varies from about 51 m to 52 m above MSL.

3.1.7 Water Bodies: The alignment of the proposed project road passes two rivers (Baya Nadi and Num Nadi), local streams and nala at several locations as there are 02 nos. of rivers, falling along the alignment. There shall be no major impact on the drainage system. To minimize the impact drainage & hydrological flow 183 numbers of structures (such as 03 Major Bridge, 01 Major Bridge cum underpass, 03 Minor Bridge, 04 Minor Bridge cum Underpass, 03 VUP, 40 LVUP, 13 SVUP, 01 ROB, 115 culverts) are proposed to be constructed along the project road. It has been ensured that free flow of water shall be maintained wherever the alignment crosses river/local streams/nallah etc.

3.1.8 Water requirements: **Construction Phase:** The total water demand of the project is 13329 KLD. Water will be extracted from surface sources. The ground water will be abstracted for camp site after obtaining the permission from competent authority. The ground water will be abstracted for camp site after obtaining the permission from competent authority. **Operation Phase:** During the operations phase the water would be required primarily for domestic use at the toll plaza and landscaping. No ground water shall be extracted.

3.1.9 Waste Management: Disposal of Sewage and other wastes in the construction yard and labor camps will be done as per directions of the Environmental Specialist / Environmental Engineer of the Engineer and wayside amenities area within PROW may be generated. Bio degradable waste shall be disposed through bio composting and other waste through landfill site.

3.1.10 Public Hearing: Public Hearing was conducted at Assembly Room, Block Office Complex, Building No.3, Anchal-Patepur, District-Vaishali, Bihar on 28.03.2022 under the chairmanship of Additional District Magistrate, Vaishali and on 10.03.2022 at Rajkiyakrit upgraded highschool, Kothiya, Tajpur, District-Samastipur, Bihar under the chairmanship of Additional District Magistrate Samastipur.

3.1.11 Diversion of forest land: Proposed project site involve around 3.042 ha of forest land. There is Salim Ali Jubba Sahni Bird Sanctuary, is located at the distance of 5.31 km from the proposed project site. Proposed project site is not in CRZ area.

3.1.12 Details of Tree Cutting: A total of 2422 nos. of trees (1,083 Forest Trees and 1,349 Non Forest Trees) of varying girth are located within the corridor of impact and are likely to be felled due to the project. Greenbelt Development along the entire project length within ROW is proposed with 3 Rows of tree plantation following the guidelines as per IRC SP: 21:2009. Compensatory Plantation is proposed in the ratio of 1:2 (Total number of Tree to be planted = 26,818).

3.1.13 Green Belt Development: Avenue plantation shall be carried out as per IRC SP 21:2009. Total length of the proposed project road is 47.0 km, out of which effective area available for plantation is 2.166 ha. total 26818 trees are proposed to be planted (10 times) under greenbelt development plan. The proposed project is a four lane highway and no space available for median plantation. The capital cost provision of about Rs. 74,408,600 lakhs has been kept for greenbelt development.

3.1.14 Rain Water Harvesting: 188 Rain Water Harvesting Structures with provision of oil filters and de-silting chambers has been proposed along project road as per requirement of IRC SP: 42-2014 and IRC SP: 50-2013.

3.1.15 Land Acquisition/ R&R Issues: The land required for construction of proposed project road is tentatively 304.54 ha, out of which 294.03 ha is private land and 7.468 ha is government land and 3.042ha is forest land. Total number of affected household is 385 and Total number of structures to be affected is 385. Land will be acquired by the CALA (Competent Authority for Land Acquisition) as per National Highways Act, 1956 and relevant provisions of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RFCTLARR) Act, 2013 & amendment of State Government.

3.1.16 Employment potential: Total manpower requirement is 1050 out of which 1000 person will be required during construction phase and 50 during operation phase preference will be given for local people.

3.1.17 Benefits of the project: The proposed road would act as the prime artery for the economic flow to this region. It will enhance economic development, provide employment opportunities to locals, strengthen tourist development, ensure road safety, and provide better transportation facilities and other facilities such as way side amenities. Vehicle operating cost will also be reduced due to improved road quality. The compensatory plantation and road side plantation shall further improve the air quality of the region. The total manpower required for the project is 1050. About 1000 persons will be employed temporarily during the construction phase for a period of 3 years. During operation phase about 50 persons will be employed.

3.1.18 Studies carried out for the project as per the ToR:

- Cumulative impact assessment study to be carried out along the entire stretch including the other packages in the current stretch under consideration.
- Traffic Study: has been carried out and findings of the same have been included in the EIA Report.
- A comprehensive plan for plantation has been prepared and included in the EIA Report as greenbelt development plan.

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

3.1.20 During the deliberation, the EAC noted the following:

- i. M/S NHAI shall submit the justification for keeping 60 RoW for 4-lane road.

The observation made by the EAC PP vide letter dated 21.07.2022 submitted the following justification-

- i. *Samastipur-Darbhanga project the average embankment height is 4 M is provided due to more number of structures like VUP, Flyover, with minimum clearance of 5m this require the rising of highway leading to wider embankment cross slope of approx 20m(10m+10m).*
- ii. *Two meter wide strip of land at the extreme edge of ROW shall be kept for accommodating utilities, both over as well as underground. Utility ducts in the form of 600 mm diameter NP-4 pipe across the highway along with inspection box/chamber at a spacing of 0.50 km shall be provided for crossing of underground utilities in built up areas.*
- iii. *Separator between main carriageway and service road of the road shall be provided to prevent the pedestrian, local vehicles and animal entering the highway and drain cum footpath shall be provided at the edge of the service road(ROW side).*

- iv. *In the sections where the width of median is less than 2.5m shrubs or flowery plants may be planted in between crash barriers or other means like metal/plastic strips shall be provided to cut off glare.*

3.1.21 The EAC, taking into account the submission made by the project proponent, had a detailed deliberation in its 304th meeting on 21-22 July, 2022 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. 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).
- ii. Green belt development (tree plantation) in lieu of the trees being felled in non forest land should be carried out by the State forest department as deposit work and not by the private contractor. Green belt must be developed using exclusively native species. No exotic species to be used for the same. No Ground water shall be extracted and used. Approval/permission of concerned authority shall be obtained before drawing surface water from canal or any other sources.
- iii. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iv. The proponent shall obtain permission from the competent authorities for tree felling along the proposed alignment.
- v. Rain water harvesting pit shall be at least 3 - 5 m above the highest ground water table.
- vi. In borrow pits, the depth of the pit shall be regulated such that the sides of the excavation will have a slope not steeper than 1:2, from the edge of the final section of bank. Soil erosion checking measures shall be carried out. Details for Borrow area operation and rehabilitation given in EIA report shall be followed.
- vii. Quarry areas shall be barricaded during mining operations. The abandoned quarry shall be developed as water reservoirs with proper fencing around quarry area. Details for Quarry area operation and rehabilitation given the EIA report shall be followed.
- viii. In all the construction sites within 150 m of the nearest habitation, noisy construction work such as crushing, concrete mixing will be stopped during the night time between 10.00 pm to 6.00 am. No noisy construction activities will be permitted around educational institutions/health centres (silence zones) up to a distance of 100 m from the sensitive receptors. All plants and equipment used in construction shall strictly

conform to the CPCB/SPCB noise standards.

- ix. Traffic Control Devices/Road Safety Devices/ Roadside Furniture including various types of cautionary, informatory, regulatory as mandatory signboards, road markers, studs, etc. shall be provided at appropriate locations all along the project stretch in accordance with the specifications laid down in Manual of Specifications and Standards for Expressways (IRC: SP:99-2013) and IRC:8, IRC:25, IRC:26, IRC:35, IRC:67, IRC:79, IRC:103 and Section 800 of MORTH Specifications.
- x. All the major, minor bridges and culverts should not affect the drainage systems. Flood plains of the rivers/ drainage systems are not to be disturbed.
- xi. Afforestation using compensatory plantation in the ratio of 1:10 shall be carried out. Native tree species shall be provided as per the IRC Guidelines on Landscaping and Tree Plantation (IRC:SP:21-2009). Effort should be made to plant native trees and large number of Ficus species on both sides of the alignment. Special attention shall be given for protecting giant trees, and locally important trees (having cultural importance).
- xii. Project alignment should be managed in such a way to save the Heritage/old trees supposed to be affected by the proposed alignment.
- xiii. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV, Compensatory afforestation etc., either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also become part of EMP and shall be implemented.
- xiv. Proponent shall keep the finish road level sufficiently elevated from ground level with provision of railing on both sides to restrict animal crossing in order to avoid the possibility of wildlife injury/death. Animal underpasses, watch tower, water holes and other mitigation measures proposed shall be constructed in supervision of forest department. While constructing the over bridges as proposed over major water bodies efforts should be made to avoid construction of pillars in beds of water bodies.

3.2 Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport (Length 31.060 km) under Bharatmala Pariyojana (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India – Environmental Clearance Proposal No. IA/HR/NCP/232701/2021 and File No. 10/46/2021-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.”

3.2.1 The aforementioned proposal was placed before the EAC during 304th meeting during 21st – 22nd July 2022. The project proponent along with the EIA consultant M/s P and M Solution has made a presentation through Video Conferencing and provided the following information:-

3.2.2 The proposed project is for construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh. The proposed highway starts from Junction with Ballabgarh Bypass near village Chandawali (District-Faridabad, Haryana) and terminating at Jewar International Airport near Ballabh Nagar Urf Karol Bangar village (District- Gautam Buddh Nagar, Uttar Pradesh). CH: 0+000 to 31+060. The alignment passes through approx.20 villages the major settlements along the alignment are Ballabgarh, Mohan, Palwal and Jewar.

3.2.3 The length of the proposed alignment is 31.060 km. This is a Greenfield project. The alignment is mainly passing through agriculture land. The Proposed Right of Way is 60 m as per the requirement keeping in view the fully access controlled Highway with 6-lane dual carriage way configuration. The Geo-coordinates of project site are: Starting Point: 28°19'2.57"N77°20'40.50"E and Ending Point: 28°10'25.74"N 77°34'30.45"E.

3.2.4 The proposed project falls under 7(f), Highway, Category A. Total project cost is Rs, 1906.00 Crore. ToR was considered during 278th Meeting of the EAC held on 27th and 28th October, 2021 and it was granted by MoEFCC vide its letter F. No. 10-46/2021-IA.III dated 30th November, 2021.

3.2.5 Land use/Land cover of project site:

S.No.	Land use/Landover	Area (ha)	Percentage %	Remarks if any
1	Private land	200	89.11	Agriculture/Barren Land
2	Government land	21.94	9.77	Agriculture/Barren Land
3	Forest land	2.5	1.12	-
	Total	224.435	100	-

3.2.6 The project area is located in the state of Haryana and Uttar Pradesh. The

topography in the proposed project area is mainly plain and rolling area. The areas have an elevation ranging from 182.88 m. to 198.12 m.

3.2.7 Water Bodies: There are 01 nos. of rivers, 01 Nos. of canal, Rampur Distributary-01 Nos, Nala-01 no falling along the alignment. There shall be no major impact on the drainage system as 84 no.s numbers of structures (such as culverts, minor bridges, major bridges etc.) will be constructed.

3.2.8 Water requirements: Total water requirement is 9717KL out of which during construction phase 9486 KLD water is required and operational phase for Domestic consumption and Utilities required 135 KLD, gardening/green belt development 93 KLD and Dust Suppression 3KLD water required respectively. The source will be a mixture of surface water and ground water and prior permission for its extraction shall be obtained from competent authorities. Ground water extraction is proposed during construction Stage after approval from CGWA/State Ground Water Department.

3.2.9 Public Hearing: Public Hearing was conducted in Faridabad, Palwal, Gautam Buddh Nagar, districts as following:

S. No.	Date	Location	Name of District	Presided by
1.	28.04.2022	Kisan Mandi in front of Mohna Tehsil Office, District	Faridabad, Haryana	Deputy Commissioner
2.	29.04.2022	Playing ground near bagpur Police Chowki, Tehsil and	Palwal, Haryana	Additional Deputy Commissioner
3.	22.04.2022	Tehsil Sabhaghar Jewar,	Gautam Buddh Nagar	Additional District Magistrate
Major issues raised	Land Compensation amount, Land Acquisition, Control Fugitive Emission, Environment Monitoring, Impact during crossing of Wild Animals, Tree Plantation, Reduce Pollution from Hot Mix Plant, Rain Water Harvesting, Dust Suppression			
Compliance by the PP	PP informed that For the trees which are being affected, road side avenue plantation on available RoW will be done as per IRC: SP: 21-2009. Also employment to the local people will be given for plantation work. The employment will be done through concerned contractor; where in local people are given preferences. It was informed that the compensation of the land will be given as per RFCTLARR Act, 2013. However, any concern related to land price can be raised with DRO/CALA.			

3.2.10 Diversion of forest land: The project alignment is passing through. RF land to be diverted for expressway is 2.5 Ha. The project online Forest proposal no. is FP/HR/ROAD/149539/2021 and FP/HR/ROAD/150741/2022.

3.2.11 Protected Area: 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.

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

3.2.13 Details of Tree Cutting & Green Belt Development: A total of 3472 nos. of trees (400 Forest Trees and 3,072 Non Forest Trees) of varying girth are located within the corridor of impact and are likely to be felled due to the project. Greenbelt Development along the entire project length within ROW is proposed with 3 Rows of tree plantation following the guidelines as per IRC SP: 21:2009. Compensatory Plantation is proposed in the ratio of 1:10.

3.2.14 Rain Water Harvesting: About 166 nos of Rain Water Harvesting Structures at every 500 meters of either side of the road are proposed.

3.2.15 Land Acquisition/ R&R Issues: The project alignment (ROW) involves acquisition of 224.435 ha of land which includes 200 ha of private land, 20.435 ha of Government land and 4 Ha of Forest Land. A total of 392 PAH, 392PAF and no PDFs are involved under project.

3.2.16 Employment potential: During the construction of the project around 1000 persons would be employed through contractor temporarily for a period of 2 years. During operation phase about 100 persons will be employed through the concerned contractor. Generally, locals are employed by the contractor.

3.2.17 Benefits of the project: The proposed access controlled project with new alignment has been envisaged through an area which shall have the advantage of simultaneous development as well as shall result in a shorter distance to travel. The proposed road would act as the connecting highway between Ballabgarh bypass, Delhi-Mumbai Expressway, EPE, Yamuna Expressway and Jewar Airport 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.

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

3.2.19 Studies carried out for the project as per the ToR:

- Traffic *Study*: has been carried out and findings of the same have been included in the EIA Report.
- A comprehensive plan for plantation has been prepared and included in the EIA Report as greenbelt development plan.

3.2.20 The EAC, taking into account the submission made by the project proponent, had a detailed deliberation in its 304th meeting on 21st - 22nd July, 2022 and **recommended** the proposal for the Environmental Clearance with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects.

- i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concern Authority. Old 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/trans planted with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut/ nonsurvival of any transplanted tree) shall be done and maintained. Plantations to be ensured species (cut) to species (planted).
- ii. Green belt development (tree plantation) in lieu of the trees being felled in non forest land should be carried out by the State forest department as deposit work and not by the private contractor. Green belt must be developed using exclusively native species. No exotic species to be used for the same. No Ground water shall be extracted and used. Approval/permission of concerned authority shall be obtained before drawing surface water from canal or any other sources.
- iii. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iv. Green belt development (tree plantation) in lieu of the trees being felled in non-forest land should be carried out by the State forest department as deposit work and not by the private contractor. Green belt must be developed using exclusively native species including significant number of Ficus trees. No exotic species to be used for the same. A comprehensive plan for plantation shall be prepared in consultation with state forest department (executing agency) including the costs involved. Such compensatory plantation will be over and above the compensatory afforestation to be carried in lieu of the diversion of forest land, if any.
- v. 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.
- vi. The proponent shall obtain permission from the competent authorities for tree felling along the proposed alignment.
- vii. Underpasses for the elephants as advised by state forest department should be constructed at specified chainage.
- viii. Also existing underpasses on the existing national highway that is abutting green field alignment has to be increased in the length and width for elephant movement so that seamless passage connectivity for the elephants is maintained.
- ix. Rain water harvesting pit shall be at least 3-5 m above the highest ground water table.
- x. 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.
- xi. Quarry areas shall be barricaded during mining operations. The abandoned quarry shall be developed as water reservoirs with proper fencing around quarry area.
- xii. 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 centers (silence zones) up to a distance of 100 m from the sensitive receptors. All plants and equipment used in construction shall strictly conform to the CPCB/SPCB noise standards.
- xiii. 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.
 - xiv. 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.
 - xv. Afforestation using compensatory plantation in the ratio of 1:10 shall be carried out. Native tree species shall be provided as per the IRC Guidelines on Landscaping and Tree Plantation (IRC: SP:21-2009). Effort should be made to plant native trees and Ficus species on both sides of the alignment. Special attention shall be given for protecting giant trees, and locally important trees (having cultural importance) and should be identified chain-age wise.
 - xvi. Project alignment should be managed in such a way to save the Heritage/old trees supposed to be affected by the proposed alignment.
 - xvii. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV, Compensatory afforestation etc., either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also become part of EMP and shall be implemented.
 - xviii. Proponent shall keep the finish road level sufficiently elevated from ground level with provision of railing on both sides to restrict animal crossing in order to avoid the possibility of wildlife injury/death. Animal underpasses, watch tower, water holes and other mitigation measures proposed shall be constructed in supervision of forest department.
 - xix. While constructing the over bridges as proposed over major water bodies efforts should be made to avoid construction of pillars in beds of water bodies.

3.3 Development of Kalpasar project (building a 60km dyke) across Gulf of Khambhat by M/s Narmada, Water Resources, Water Supply and Kalpasar Department, Government of Gujarat-Terms of reference Proposal No. IA/GJ/NCP/280454/2022 and File No. 10/33/2022-IA.III.

The above mentioned proposal was placed before the EAC in its 304th meeting during 21st – 22nd July, 2022. The EAC noted that the document submitted by the PP were received only two days before the EAC meeting and therefore members have sought some time to study the entire set of documents due to multiple components involved in the project. In view of this, the EAC **deferred** the proposal and informed to submit all relevant studies undertaken for the project.

3.4 Expansion of Regasification Capacity of Dahej Terminal from 20 MMTPA to 25 MMTPA at Plot No. 7–A, Dahej GIDC Estate, District Bharuch, Gujarat by M/s Petronet LNG Limited. The total plot area of existing premises is 132.27 ha.– Terms of Reference Proposal No. IA/GJ/NCP/281711/2022 and File No. 10/31/2022-IA.III.

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

3.4.1 The aforementioned proposal was placed before the EAC in its 304th meeting during 21st – 22nd July, 2022. The project proponent along with the EIA consultant M/s Kadam Environmental Consultants has made a presentation through Video Conferencing and provided the following information.

3.4.2 The project/activity is covered under category ‘A’ of item 7 (e) i.e. ‘Ports, harbors, break waters, dredging’ of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

3.4.3 The project is being executed in phased manner. M/s Petronet LNG Limited (PLL) currently owns and operates two LNG Regasification Terminal in India, one of them is located at Dahej, State of Gujarat, having a capacity of 17.5 MMTPA and another regasification terminal at Kochi, state of Kerala, having capacity of 5 MMTPA. The project was accorded Environmental Clearance for 10 MMTPA (Phase-I) and 10MMTPA to 20 MMTPA vide Ministry’s letter No. J-17011/11/2000-IA-III dated 27.12.2000 and letter No 11-63/2011-IA-III, dated 26th February, 2014, respectively. Expansion from 10 to 15MMTPA under project Phase-IIIA-comprising of addition of two LNG storage tanks (each of 180,000 cum gross capacity) and 5 MMTPA of LNG Regasification facilities and the project was completed in the year 2016. Expansion from 15 to 17.5MMTPA under project Phase-III B1-comprising of addition of 2.5 MMTPA of LNG regasification facilities and the project was completed in the year 2019. It was also appraised that the validity of current Consent to Establish (CTTE), CTE-104396, issued vide Gujarat Pollution Control Board letter no.GPCB/BRCH-B/CCA-611(4)/ID-15479/551243 dated 15/01/2020 is up to the Environment Clearance date i.e. 26/2/2021. Subsequently the validity of the EC vide letter no.11-63/2011-IA-III dated 26th February, 2014 has been extended for a period of three years i.e. up to 25th February, 2024.

3.4.4 Details of the EC granted are as under:

- i. 10 MMTPA (Phase-i): EC letter NO.J-17011/11/2000-IA-III dated 27.12.2000
- ii. 1st Expansion from 10MMTPA to 20MMTPA: letter No.11-63/2011-IA-III, dated 26th February, 2014.
 - (i) Expansion from 10-15 MMTPA (Phase-IIIA)-Completed in year 2016.
 - (ii) Expansion from 15-17.5 MMTPA (Phase-IIIB1)-Completed in year 2019.
 - (iii) Expansion from 17.5 MMTPA to 20 MMTPA (Phase-IIIB2)-yet to be completed.

3.4.5 The proposed project is for development of ‘Expansion of Regasification Capacity of Dahej Terminal from 20 MMTPA to 25 MMTPA of existing facilities within the existing land at Plot No. 7–A, Dahej GIDC Estate, District Bharuch, Gujarat by M/s Petronet LNG Limited. The Details are as following:

S.No	Existing details	
	In Gas Turbine Generators (5 Nos.)	Capacity
1	Regasified LNG (RLNG)	4.5 MT/hr (each)
	In Submerged Combustion Vaporizer (4 Nos.)	
2	Regasified LNG (RLNG)	1.25 MT/hr (each)
	In Submerged Combustion Vaporizer (1 Nos.)	
3	Regasified LNG (RLNG)	2.5 MT/hr
	In submerged Combustion Vaporizer (2 Nos.)	
4	Regasified LNG (RLNG)	3 MT/hr/SCV (max)
	For Emergency DG Sets (2 no.)	
5	HSD	390 ltr/hr and 441 ltr/hr (max)

3.4.6 Proposed **expansion**:

1	Regasified LNG (RLNG)	3 MT/hr (max)
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3.4.7 Land use/ Land cover (approx. area) of the project site is as following:

S. No.	Landuse/Landcover	Area (ha.)	%	Remarks, if any
1	Process Area	9.7825	7	-
2	Storage Area	3.7875	2.9	-

3	Green Belt	19.6000	14.8	-
4	Road and Open area	99.1072	75.3	-
	Total	132.2772	100	

3.4.8 Terrain and Topographical Features: The project site is located in Dahej Industrial Area developed by GIDC. The area is well equipped with supporting infrastructure including approach roads, bypass roads, over bridge, drainage, parking facility, water pipeline, electricity etc. Surrounding areas of the site comprise villages, and agricultural land. There are various reserved forests and protected forest present within 10 km radius. Lakhigam Reserved Forest- is located at the distance of 0.437 km, N and Dahej Reserved Forest is located at the distance – 2.80 km, N from the project site.

3.4.9 Water bodies: Gulf of Khambhat is adjacent to the project site at 1.36 km, W direction. Narmada River is located at 5.53km in SE direction of the Project site, Ban Khadi is located at the distance of 5.53Km in North direction and Ghughar Khadi is located at the distance of the 6.53km in North direction of the project site.

3.4.10 Water requirements: PLL LNG terminal doesn't require industrial water for regasification. Existing water consumption for the terminal is 21.2 KLD and application has been submitted to GPCB for increase in water consumption from 21.2 to 170 KLD which is due to increase in phase wise expansion of terminal, increase in contractual manpower, for gardening and other CSR activities. However, for proposed expansion there is no additional water requirement. Water is generated from air heaters due to condensation of moisture present in atmosphere during regasification process in shell and tube vaporizers (STV). This water is being collected, filtered and used to fulfil water requirement of the site. Secondary Source: GIDC Water Supply System.

3.4.11 Tree cutting: Tree cutting will not be required and the Green belt of 1,96,000 m² has been developed which is 14.8% area of site.

3.4.12 Diversion of forest land: the proposed project site is not involved any forest land.

3.4.13 The project site does not fall within 10 km radius of national parks, sanctuaries and tiger reserves. Details of protected forest and reserved forest falling within 10 km is given below:

Forest Ares	<ul style="list-style-type: none"> i. Lakhigam Reserved Forest- 0.437 km, N ii. Dahej Reserved Forest – 2.80 km, N
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3.4.14 Waste Management: Solid waste generation will Collection, Storage, Transportation & Disposal at TSDF for incineration STP: Wastewater from domestic activity (82.8 KLD) shall be connected to sewerage network and shall be treated in common sewage treatment plant. The entire treated water shall be reused for flushing and landscaping purpose.

3.4.15 Land acquisition and R&R issues: No resettlement and rehabilitation is required as the project lies in a Notified Industrial Area, with land acquisition procedures completed by the GIDC.

3.4.16 Employment potential: During the peak construction phase approx.300 persons shall be employed temporarily. The existing manpower of the terminal is 265 number. No additional manpower is required.

3.4.17 Benefits of the project: Petronet LNG Limited helps the Country in enhancing its energy basket for natural gas consumption from existing 6% to 15%. Reduce the Carbon footprint by use of Natural Gas / LNG in the Country. Enhancing the reliable and clean energy security of the country. Also provide the Business opportunities during the construction phase to the local people.

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

3.4.19 During the deliberation, the EAC observed and requested to present and update the following:

- Revised *water balance diagram*.
- EAC also noted that a request has been made by PP to exempt the public hearing for the expansion project because of the following:
 - i. Gazette Notification published by the Government of Gujarat dated 09.05.2009 which clearly indicates that all survey nos. in Luvara Village (in which the subject project is located), are lying within the above mentioned PCPIR.
 - ii. MOEF&CC vide letter No. 21-49/2010-IA-III dated 14 September, 2017 issued Environmental Clearance to PCPIR at Dahej, Vagra, District: Bharuch.
 - iii. The expansion proposal also fulfil the criteria mention on the OM issued by the Ministry vide dated 11th April, 2022.

3.4.20 The EAC based on the information submitted and clarifications provided by the project proponent and detailed discussions held on all the issues during 304th meeting during 21st – 22nd July, 2022, **recommended** the project for grant of Terms of Reference (ToR) with exemption of public hearing under clause 7(III)(b) with stipulated specific conditions along with other Standard ToR Conditions.

- i. Fresh base line monitoring data should be collected for preparing EIA/EMP studies.
- ii. EIA/EMP study shall be conducted for the cumulative capacity of 23.50 MTPA
- iii. Solar energy be explored to augment the existing power demand instead of thermal power plant.
- iv. Water balance chart be prepared and submitted along with EIA/EMP report.

- v. Proponent shall ensure the conservation and development of nearby water bodies in the surrounding areas.
- vi. Detailed land use breakup of proposed Industrial area with green belt to be submitted.
- vii. The project area has undulating terrain and it is important to have detailed hydrological study and its impact need to be carried out on the catchment and drainage system in core and buffer zones.
- viii. Option to utilize solar power and wind energy should also be worked out.
- ix. The PP shall not use groundwater without obtaining approval from CGWA/SGWA as the case may be. The project proponent shall obtain necessary permission from Competent Authority to use surface water from Almatti reservoir.
- x. Proponent shall establish captive treatment, storage, and disposal facility (TSDF) to ensure the effective Solid Waste Management.
- xi. Submit a certificate from local DFO that no forest land is involved in the proposed Industrial Park.
- xii. A comprehensive plan for disaster management and mitigation be developed taking in to account the products, processes and hazardous waste management and disposal. The plan should also include financial provisions for the same and integrate these within EIA/EMP.
- xiii. 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.
- xiv. A detailed study on the impact of proposed activity on the mangroves and Mud flats in the proximity of the site be conducted and submitted.
- xv. A management plan for the area under which mangroves are or likely to be removed and compensatory mangrove plantation plan be submitted.
- xvi. The ecologically fragile area including CRZ-1A area etc be demarcated and superimposed on the layout plan and submitted.
- xvii. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
- xviii. Recommendation of the Gujarat CZMA shall be obtained and submitted.
- xix. Submit superimposing of latest CZMP as per CRZ Notification, 2011 on the CRZ map.

3.5. Development of Water Aerodrome at Swaraj Dweep (erstwhile Havelock Island), village Govind Nagar, Taluka Port Blair, District South Andaman, Andaman & Nicobar by M/s Directorate of Civil Aviation, Andaman & Nicobar Administration – Further consideration of Environmental and CRZ Clearance Proposal No. IA/AN/MIS/124243/2019 and File No. 10-53/2019-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. Global Management and Engineering Consultants International, Jaipur made a presentation through Video Conferencing and provided the following information: -

3.5.2 The EAC noted that the proposal was earlier considered in the 64th EAC (Infra-II) meeting held during 12th-13th April, 2021, and 78th Meeting of Expert Appraisal Committee (Infra-II) held during 14th - 15th December, 2021. The PP was asked to revise the EIA report and provide the following additional details: (i) Since the EIA consists of mostly secondary data on biodiversity without conducting actual site specific biodiversity studies w.r.t aquatic and natural environment in effect of tourism, PP needs to resubmit the revised EIA covering Biodiversity Conservation/ Management Plan including water and air quality data. The study on biodiversity should be conducted by any national lab. (ii). Submission of comprehensive risk analysis for sea-plane crashing/ catching fire at the sea-aerodrome with estimated HSD consumption. (iii). Status of CRZ clearance at state and central level. (iv). Reassessment of impact of noise level during landing & take-off on fauna in the area. (v). Proper Water conservation measures with wastewater treatment and reuse/reuse. Source of water for construction to be defined properly rather than saying taker supply. (vi). As per the EIA report, proposed project site for construction of terminal building (1568.9 sqm.) and associate infrastructure (453.3 sqm.) falls partly in Mangroves (CRZ-IA). Also, the speedboat pathway is dominated by mangrove vegetation on both sides. However, the management plan does not address the impact on the mangroves due to project activities. Detailed plan for mangrove protection due to proposed activities to be prepared for protection.

3.5.3 There after the above proposal was transferred from Infra-II division to infra-I division stating that *the aforesaid three proposals need to be considered in Infra-I (in place of Infra-II) and also appraised before the Infra and CRZ EAC Committee because of the issue in all proposals related to Jetty, Water Runway, Terminal Building, Floating Walkway, etc’.*

3.5.4 PP has submitted the information as desired by EAC (Infra-2) on Parivesh on 30th June 2022 accordingly the proposal was reconsidered in the EAC in its meeting held on 21st-22nd July, 2022

3.5.5 During *the deliberation, the EAC observed the following:*

- i. The EAC noted that, the project proposal was placed before the Andaman Nicobar Island Coastal Zone Management Authority (ANCZMA) on 17.02.2021 for consideration. The recommendation letter of ANCZMA dated 22nd October, 2021 mentions that the proposed terminal building is falling in CRZ-IV, CRZ-1A and CRZ-III (NDZ) areas.

- ii. EAC further noted that, ANZMA in its meeting held on 17.02.2021 deliberated and recommended the project to promote high end tourism and uplift the economy of the area since it is permissible and regulated activity, however the minutes also notes that the part of building and road in falling in CRZ 1A which is not a permissible activity under existing notification.
- iii. ANZMA in their letter dated 22nd October, 2021 requested to place the project proposal before the National Coastal Zone Management Authority (NCZMA) for its approval/clearance.

3.5.6 In view of the above, EAC made following observations:

- i. As per ANZMA letter dated 22nd October, 2021 either the matter needs deliberations in National Coastal Zone Management Authority (NCZMA) before it is further considered in the EAC or the PP need to explore the possibility of realigning the activities in the permissible areas of CRZ.
- ii. Explore the possibility of construction of terminal building on the existing jetty.
- iii. After finalization of the realigned activities the PP need to submit the revised application for the EC/CRZ clearance with fresh recommendations from ANZMA.

3.5.7 The EAC based on the information submitted and clarifications provided by the project proponent and detailed discussions held on all the issues during 304th meeting during 21st – 22nd July, 2022, **returned** the proposal in its present form and requested the PP to submit the revised application/information as observed by the EAC Infra-I

3.6 Development of proposed Green field Bhavanapadu Port in District Srikakulam, Andhra Pradesh by M/s Andhra Pradesh Maritime Board – Amendment in Terms of Reference Proposal No. IA/AP/MIS/173542/2020 and File No. 10-56/2020-IA.III.

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

3.6.1 The above mentioned proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure, CRZ and other miscellaneous projects in its 304th meeting during 21st – 22nd July, 2022, in the Ministry of Environment, Forest and Climate Change, New Delhi.

3.6.2 The project proponent along with the EIA consultant M/s Voyants Solutions Pvt Ltd made a presentation through video conferencing and provided the following information before the Committee.

3.6.3 The site is declared as non-major port. Govt. of Andhra Pradesh proposed to develop this port as an all-weather, deep water, Multipurpose Port and accorded administrative sanction vide notification GO MS No. 6 dated 25-08-2020 to develop the port. The port shall

be developed at the revised location falls under the Rajapuram Village, encompassing Mulapeta and Pathalingadu hamlets.

3.6.4 According to EIA Notification 2006 dated 14th September 2006, the cargo handling capacity more than 5 million TPA is appraised as category A. Since the Project is an 'A' category, its appraisal/approval comes under central level.

3.6.5 Ministry granted the TOR vide letter no. 10-56/2020-IA.III dated 1st September, 2021 for Development of proposed Green field Bhavanapadu Port with the Capacity for Phase I is 12.18 Million Tonnes Per Annum (MTPA) in District Srikakulam, Andhra Pradesh by M/s Andhra Pradesh Maritime Board.

3.6.6 Initially, Form I and PFR was filed based on initial studies for traffic assessment was done for the capacity of 12.18 MTPA. Subsequently, DPR Consultant has carried out a detailed traffic assessment for the south location of Bhavanapadu Port. The DPR study reveals that the traffic projection for the first year of operation would be 23.50 MTPA. Accordingly, the Govt of Andhra Pradesh has approved the increased capacity of traffic projection. The change in capacity of the traffic is due to a detailed O/D study and market assessment conducted during DPR studies and a corresponding increase in stakeholders associated with import and export traffic. There is no change in any components of the proposed facilities, such as berths, dredging/dredge disposal, land requirement and cargo handling operations etc.

3.6.7 Draft EIA/EMP has been prepared for the capacity of 23.50 MTPA capacity as per the DPR and Public hearing for the above proposed project was conducted on May 06, 2022 for the capacity of 23.50MTPA.

3.6.8 The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 304th meeting during 21st July, 2022 and **recommended** the proposal for amendment in ToR for increasing the capacity from 12.18 MTPA to 23.50 MTPA.

3.7. Development of Devakathikoppa Industrial Area in an area of 459.24 Acres(185.85ha) at Devakathikoppa and Siddalipura Villages, Shivamoga Taluk, Shivamogga, District, Karnataka by M/s Karnataka Industrial Areas Development Board – Terms of Reference Proposal No. IA/KA/NCP/281409/2022 and File No. 21-55/2017-IA.III.

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

3.7.1 The above mentioned proposal was considered by the Expert Appraisal Committee (EAC) - in its 304th meeting held during 21st -22nd July 2022, in the Ministry of Environment, Forest and Climate Change, New Delhi.

3.7.2 The project proponent made a presentation through Video Conferencing and submitted the following information.

3.7.3 Development of Devakathikoppa Industrial at Devakathikoppa and Siddalipura Villages, Shivamoga Taluk, Shivamogga, District, Karnataka by M/s Karnataka Industrial Areas Development Board over an area of 185.85 Ha.

3.7.4 The extant proposal falls under 7(c) under EIA Notification, 2006. Further, the project does not fall under the General/Specific Conditions as per EIA Notification, 2006 as the General conditions applicable. Total project cost is Rs. 25.6792Crore.

3.7.5 The proposed project involves violation as 60% of the constructions have been completed without obtaining prior Environmental Clearance as per EIA Notification, 2006.

3.7.6 M/s. Karnataka Industrial Areas Development Board (KIADB), an undertaking of Government of Karnataka entrusted with the objective of providing industrial infrastructure through development of industrial areas to Development of Devakathikoppa Industrial Area in an area of 185.85 Ha at Devakathikoppa and Siddalipura Villages, Shivamoga Taluk, Shivamogga, District, Karnataka by M/s Karnataka Industrial Areas Development Board. The proposed project is an independent project that will be developed in an integrated manner with all required infrastructure and facilities like roads, electricity, water, developed plot area for setting small and medium scale industries, offices and commercial establishments without any administrative hassles associated with setting up of industries. The proposed project will enhance opportunities by transforming the region into a potential growth hub. The proposed Industrial area will be housed with Red, Orange, White and Green categories of industries.

3.7.7 KIADB is in possession of land to an extent of 459.24 Acres(185.85ha) at Devakathikoppa and Siddalipura Villages, Shivamoga Taluk, Shivamogga, District, Karnataka. The project site is mostly undulating plain terrain land. The tentative land breakup details of the proposed project site are such as Industrial (53.01 ha out of which Auto Complex sub layout 1.58ha), Commercial Area (0.49 ha), Amenities(3.54ha), lakes pond and open space (10.29ha), Buffer and parks (Green Belt) (13.25ha) Auto Complex Buffer(green belt (0.28 ha),Parking (2.02ha), Utilities (1.4ha), Storm water drain (0.28ha), Industry Roads (14.22ha), Auto complex roads(1.03ha), R.R Housing Corporation (32.38ha), KSSIDC & others (44.74ha), Railway area(5.81ha) and not acquired area (1.58ha). No alternative sites were considered for the proposed project as the land has been identified and developed by KIADB. However, the site qualifies major requirements complying with the guidelines set for development of industries. The proposed project does not involve any villages or habitation within the project site and hence does not envisage any disturbance to local community or the village.

3.7.8 Protected Area: The proposed project is located at the distance of 1.96Km from the Shettihalli Wild life Sanctuary ESZ zone.

3.7.9 Total water requirement for the proposed project during operational phase is estimated 2709 KLD out of which around 1681.5 MLD will be fresh water while the remaining will be met through treated water. Water for proposed project will be sourced from Tunga river, collection and conveyance of water will be done through Multi Village Water Supply

Scheme, executed by Rural Water supply and sanitation board from where the water is drawn to Industrial area which is ~9.71 km from project site. The water requirement for the project is proposed to be met with prior Permission/NOC/Clearance from CGWA/State ground Water Department.

3.7.10 The wastewater generated from the industries is expected to be around 798 KLD effluents and 243 KLD Sewage will be generated, which shall be treated in their respective Effluent Treatment Plants (ETPs) on the bases of zero liquid discharge (ZLD) concepts by the individual industries. The treated sewage will be recycled for green belt development and flushing. Wastewater generated by industrial workers, commercial units, amenities and facilities will be treated in Common Sewage Treatment Plant (CSTP). CSTP sludge shall be used as manure for gardening. During operation phase sewage generated will be treated in the CSTP planned. The treated water shall be reused in flushing, gardening and Utilities etc.

3.7.11 Waste Management: During the construction phase about 27kg/day organic waste and 18kg/day inorganic waste will be generated. Operational phase 1674kg/day organic waste and 1116kg/day inorganic waste will be generated.

3.7.12 The water bodies such as LB Irrigation Canal, Bare Halla, Tunga Anicut WBC, Tunga River, Puradalu Dam, SigeHalla Canal and Savalanga Canal are present at 4.51km S, 5.04 Km S, 6.43 Km SSE, 9.71Km SSW, 7.53Km SSW, 7.54 W, 9.65 N respectively, from the project site. There would not be any impact on these water bodies due to wastewater generated from the proposed industries. Moreover, local natural drainage shall be taken into consideration while planning, designing and construction. Storm water drainage system will be implemented and maintained during construction and development phases. All preventive measures and mitigation will be implemented as required. Accordingly no change to existing water bodies or no diversion of streams is envisaged and no drainage courses and water bodies will be affected. Sufficient green belt and development zone will be provided all along the natural streams.

3.7.13 The project area is agriculture land he land has been acquired by KIADB for development of Industrial Area. Most of the trees will be retained as block plantations and road plantation and in case the trees are cut, compensatory plantation will be done by planting three trees for cutting of every one tree. However, shrubs, thorny bushes and weeds shall be removed as required during the development of the project facilities. About 14.31ha (14.11%) by KIADB and individual industries will be provide 19.14ha (18.89%) will be provided all along the periphery of the industrial area and will be developed as green belt in the project site by KIADB and individual industrial sectors. The project does not fall under coastal areas and hence CRZ is not envisaged,

3.7.14 The proposed project is expected to create employment opportunities in the region. The proposed industries, trade pavilion, exhibition facilities, shopping, dispensary, etc. would create robust market linkages resulting in regional economic development. The proposed external infrastructure linkages are expected to provide excellent connectivity of the region with the urban centres and other economic growth centres. Overall, the proposed project is expected to enhance the economic development in the region. The goods and products

manufactured from the industries of proposed project would fulfill the demand-supply gap and hence will improve the domestic markets.

3.7.15. The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 304th meeting during 21st July, 2022 and recommended the proposal for grant of Terms of Reference (ToR) **under violation category** as per the Ministry's OM dated 07.07.2021 with the following specific conditions in addition to all standard ToR conditions applicable for such projects:

- i. The State Government/SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC.
- ii. The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.
- iii. Assessment of ecological damage with respect to air, water, land and other environmental attributes of all the units already in existence during their construction and as well as during operation. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
- iv. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
- v. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.
- vi. One season fresh base line data shall be collected for preparation of EIA/EMP reports.
- vii. The PP need to conduct Public Hearing. PP should address all the issues raised during the hearing along with commitments made with fund provision to address above issues in tabular form to be submitted along with EIA/EMP report.
- viii. Layout plan earmarking space for development of peripheral green belt.
- ix. Transportation details and their impact on road network to be submitted in the EIA/MEP report.
- x. The planning of Industrial Estate should be based on the criteria mentioned in this Ministry's Technical EIA Guidance Manual for Industrial Estate (2009) prepared by IL&FS as well as CPCB's Zoning Atlas Guidelines for siting industries.
- xi. Water balance chart be prepared and submitted along with EIA/EMP report.

- xii. Proponent shall ensure the conservation and development of nearby water bodies in the surrounding areas.
- xiii. Detailed land use breakup of proposed Industrial area with green belt to be submitted.
- xiv. The project area has undulating terrain and it is important to have detailed hydrological study and its impact need to be carried out on the catchment and drainage system in core and buffer zones.
- xv. The PP shall not use groundwater without obtaining approval from CGWA/SGWA as the case may be.
- xvi. Proponent shall establish captive treatment, storage, and disposal facility (TSDF) to ensure the effective Solid Waste Management.
- xvii. 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.
- xviii. Submit a certificate from local DFO that indicating the distance from the Shettihalli Wild life Sanctuary ESZ zone and no forest land is involved in the proposed Industrial Park. PP shall submit the Wild life Conservation plan for the Schedule-I species with due consultation with the State Forest/Wild life department.
- xix. Project proponent shall explore the possibility of Zero Liquid Discharge (ZLD).

3.8. Development of Kakinada SEZ Multiproduct Industrial Park (KSEZ MIP) in an area of 1648.14 Ha at Ponnada and Ramankkapeta Villages in U. Kothapalli Mandal; and A. V. Nagaram and Thondangi Villages in Thondangi Mandal, Kakinada District, Andhra Pradesh by M/s Kakinada SEZ Limited – Terms of Reference Proposal No. IA/AP/NCP/281545/2022 and File No. 10/32/2022-IA.III.

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

3.8.1 The aforementioned proposal was considered by EAC in its 304th meeting during 21st – 22nd July 2022. The project proponent along with the EIA consultant M/s Team Labs and Consultants, Hyderabad has made a presentation through Video Conferencing and provided the following information:-

3.8.2 The proposed project is for Development of Kakinada SEZ Multiproduct Industrial Park (KSEZ MIP) in an area of 1648.14 Ha at Ponnada and Ramankkapeta Villages in U. Kothapalli Mandal; and A.V.Nagaram and Thondangi Villages in Thondangi Mandal, Kakinada District, Andhra Pradesh by M/s Kakinada SEZ Limited.

3.8.3 The proposed project falls under 7(C) Industrial Park, Cat - A as per EIA notification 2006, and its subsequent amendments. Total Project Cost is Rs. 2500 Cr.

3.8.4 The Geo-coordinates of project site is as following-latitude -17°07'N to 17°12'N and longitude 82°22'E to 82°27'E.

3.8.5 Land use/Landover of project site is as following:

S. No.	Landuse/Landcover	Area (ha)	Area (%)
1.	Industrial land use	986.24	59.84
2.	Utilities	55.44	3.36
3.	Amenities	111.25	6.75
4.	Parking and logistics	82.5	5.01
5.	Green Area and Green Belt	173.05	10.5
6.	Roads	209.02	12.68
7.	Commercial	10.59	0.64%
8.	Residential area	20.05	1.22
Total		1648.14	100

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

S. No.	Types of Industries/Sectors	Category as per EIA Notification, 2006	Category as per CPCB	Zoning as per ATLAS
1.	Metallurgical industries	3 (a)	B	W11,W2, A1C,A2F1, HW1
2.	Chlor-alkali	4 (d)	B	W11, W2, A1C, A2F1, HW3
3.	Chemical fertilizers	5 (a)	A & B	W11, W2, A1C, A2F1, HW, W-0, A-20, H-0, A1C.
4	Pesticides industry and pesticide specific intermediates.	5 (b)	A	W11,A1B,HW1
5.	Manmade fibers manufacturing	5 (d)	A & B	W11, W2, A1B,A2F1, HW3
6.	Petroleum products and petro-chemical based processing (Ethylene, Propylene, Butadiene, Benzene, Toulene and Xylene produced)	5 (e)	B	W11, W2, A1B,A2F1, HW1
7.	Synthetic organic chemicals industry (bulk drugs and intermediates; synthetic	5 (f)	A & B	W11, A1B, HW1, W13,

	rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates)			A1C, HW2
8	Inorganic chemical	Not Applicable	-	W11, HW4
9	Solar PV cell manufacturing	-		W113, A1C
10	Solar wafer manufacturing in got/slicing/etching	-		A1C, HW1
11	Lithium-ion battery manufacturing	-		A1C, HW1
12	Glass, ceramic and sanitary ware	-		
13.	Integrated paint industry	5 (h)	B	W11, A1B, HW2
14.	Glass and Ceramic Industry	-	-	-
15.	Lead/Lithium acid battery manufacturing Units	-	-	-
16.	Others	Drug Formulations Pesticide Formulation of active Pesticide Formulation of active ingredients	-	-
17	Fertiliser Formulation			
18	Research and Development facilities			
19	Assembly units			

3.8.7 Terrain and topographical features: Terrain of the project site is plain topography with gentle slope and Mean Sea level is ranging from 0.9 m to 4 m.

3.8.8 Water Bodies: The site is adjacent to Upputeru and Jammeru and Ramaraogari Cheruvu, UppuCheruvu, Seasonal Upputeru/Jammeru, Bay of Bengal, Nakkala Khandi is located at the distance of (1.4km NW), (1.0 km NW), (Adjoining), (0.51 km – SE), (5.6 km – SW) respectively.

3.8.9 Water Requirement: The estimated water demand during construction phase is 1MLD which will be sourced from the ground water/desalination Plant to be developed at KSEZ Port premises towards South of KSEZ MIP and the estimated water demand for the proposed KSEZ IP is 138.41 MLD (reused 3.44 MLD, and 135 MLD). The freshwater sourced from the Desalination Plant to be developed at KSEZ port premises i.e., south of KSEZ MIP and other sources are Samalkot canal and ground water.

3.8.10 Tree cutting: Site consists of trees and plants on the boundaries of land parcels and also Casuarina and Cashew plantations in some parcels. Trees along the bunds mainly consist of Palm trees / Borassus trees, Neem, Palm, Eucalyptus, While Mango and Cashew, Neem, Coconut trees are observed near the old homesteads. Acacia has grown extensively. The old land owners cut and took away the timber while clearing and grubbing the site No forest land is involved in the project.

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

3.8.12 CRZ area: the proposed project fall under CRZ area and attract provisions of CRZ notification 2011.

3.8.13 Waste Management: **CETP**: 63.50 MLD of effluent generated from the manufacturing area. In order to avoid multiple outfalls along the Kakinada coast, GoAP has nominated Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC) to develop the common treated water conveyance line and the marine outfall system., Common marine outfall is proposed to cater KSEZ industrial land parcels including Lyfius Pharma, Qule pharma and Divi's pharma industry located at 2 km from KSEZ MIP and it will cater nearly 135 MLD from all these industries. **STP**: Sewage of 4.30 MLD is estimated to be generated from domestic water consumption in the KSEZ MIP. At Park level, about 2.0 MLD of STPs in a modular manner development is proposed and sewage from individual industries in the order of 2.30 MLD will be treated in their premises and reused for greenbelt application. Thus, treated sewage from STPs in the order of 3.44 MLD will be reused for greenbelt/green areas application. Hazardous waste shall be disposed by individual industry and CETP operator to nearby TSDF located at Parawada, Visakhapatnam District located at 85 km from the project site.

3.8.14 Land acquisition and R&R issues: MIP falls in Ponnada, and Ramanakkapeta villages, U.Kothapalli Mandal; and A.V. Nagaram and Thondangi villages, Thondangi Mandal, Kakinada District, Andhra Pradesh in an area of 4072.63 acres. The land is in complete possession of KSEZ. Rehabilitation and Resettlement (R&R) was carried out by KSEZ with the help of District Administration and nearly 963 Project Displaced Families (PDF) have been moved to R&R Colony built at Kotha Mulapeta. Currently, one hamlet i.e., Ramaraghavapuram containing 18 PDFs in an area of 2 acres needs to be rehabilitated as per G.O.Ms. No. 12 dated 04.03.2021. R&R of this hamlet will be taken up as per prevailing GoAP R&R policy, 2005.

3.8.15 Employment potential: The proposed KSEZ MIP is likely to generate direct employment potential of 90,000 and indirect employment potential of 2,25,000 and preference will be given to local villagers based on their skills.

3.8.16 Benefits of the project: There are financial benefits like Revenue generation in central and government, Import and Export of finished Products, etc. and social benefits like Employment Generation in surrounding areas etc. will be done due to proposed project.

3.8.17 Details of Court Cases: No court cases are pending against the project.

3.8.18 The EAC, after examining the documents submitted by the project proponent and detailed deliberations in its 304th meeting during 21st – 22nd July 2022, **recommended** the project for grant of Terms of Reference (ToR), and for preparation of EIA/EMP report subject to compliance of all conditions as notified in the standard ToR applicable for such projects along with all specific and standard/general conditions applicable for such projects with conduct of Public Hearing. In addition to these conditions a few general guidelines are also to be adhered by the proponent.

- i. One season fresh base line data shall be collected for preparation of EIA/EMP reports.
- ii. Considering that most of the proposed units are red category, minimum 500 m distance from nearest habitation should be maintained along with thick green belt provisions. A detailed plan for the same should be provided
- iii. Transportation details and their impact on road network to be submitted in the EIA/MEP report.
- iv. The planning of Industrial Estate should be based on the criteria mentioned in this Ministry's Technical EIA Guidance Manual for Industrial Estate (2009) prepared by IL&FS as well as CPCB's Zoning Atlas Guidelines for siting industries.
- v. Water balance chart be prepared and submitted along with EIA/EMP report.
- vi. Proponent shall ensure the conservation and development of nearby water bodies in the surrounding areas.
- vii. Detailed land use breakup of proposed Industrial area with green belt to be submitted.
- viii. The project area has undulating terrain and it is important to have detailed hydrological study and its impact need to be carried out on the catchment and drainage system in core and buffer zones.
- ix. The PP shall not use groundwater without obtaining approval from CGWA/SGWA as the case may be. The project proponent shall obtain necessary permission from Competent Authority to use surface water from Almatti reservoir.
- x. Proponent shall establish captive treatment, storage, and disposal facility (TSDF) to ensure the effective Solid Waste Management.
- xi. The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M) dated 25th October, 2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.
- xii. PP shall submit the Wild life Conservation plan for the Schedule-I species with due consultation with the State Forest/Wild life department. The focus of the study is also to understand and impact assessment on the marine flora and fauna including presence of large cetaceans and species like whale shark, sea turtle offshore congregation in

context of effluents discharge point and should be studied in detailed from nationally reputed institute.

- xiii. Project Proponent shall explore the possibility of Zero Liquid Discharge (ZLD) Further, the entire 63.5 MLD of waste water generated from the industrial area cannot discharged into the sea as proposed. Therefore, comprehensive plan for discharging least amount shall be submitted along with EIA/EMP report.
- xiv. A detailed study on the impact of proposed activity on the mangroves and Mud flats in the proximity of the site be conducted and submitted.
- xv. A management plan for the area under which mangroves are or likely to be removed and compensatory mangrove plantation plan be submitted.
- xvi. The ecologically fragile area including CRZ-1A area etc be demarcated and superimposed on the layout plan and submitted.
- xvii. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
- xviii. Recommendation of the Andhra Pradesh CZMA shall be obtained and submitted.
- xix. Submit superimposing of latest CZMP as per CRZ Notification, 2011 on the CRZ map.

Any Other Item

3.9 Environmental Clearance for Development of Water Aerodrome at Shaheed Island, Andaman & Nicobar by M/s. Andaman and Nicobar Administration – EC and CRZ Clearance (IA/AN/MIS/124311/2019; F. No. 21-37/2021-IA-III)

The EAC had a deliberation in its 304th meeting on 21st-22nd July, 2022. It was noted that the proposal was placed for consideration and appraisal by the Expert Appraisal Committee (Infra-2) in its 65th meeting held during 27th-28th May 2021. In the meeting the EAC recommended the proposal for grant of EC clearance. However, Ministry has requested for certain additional information from the PP, while examining the proposal in the Ministry.

The EAC noted that, the project proposal was placed before the Andaman Nicobar Island Coastal Zone Management Authority (ANCZMA) on 17.02.2021 for consideration. The recommendation letter of ANCZMA dated 22nd October, 2021 mentions that the proposed terminal building is falling in CRZ-IV, CRZ-1A and CRZ-III (NDZ) areas.

EAC further noted that, ANCZMA in its meeting held on 17.02.2021 deliberated and recommended the project to promote high end tourism and uplift the economy of the area since it is permissible and regulated activity.

ANCZMA in their letter dated 22nd October, 2021 requested to place the project proposal before the National Coastal Zone Management Authority (NCZMA) for its approval/clearance.

Based on the observations of CRZ sector, Ministry requested to PP to submit the following:

- i. *“to realign their layout to avoid the areas where some of the activities like terminal building, roads, etc. are not permissible as per IPZ Notification 2011”.*
- ii. It was also requested to the PP to submit Form-1 for seeking clearance for projects attracting CRZ Notification, 2011/IPZ Notification, 2011 (Annexure - IV of the CRZ Notification, 2011)

In reply of the Ministry's ADS PP has submitted the following information:

- I Design basis report on Neil Island Aerodrome Structure
- II Structural Drawings of Shaheed Island approved by IITM on 16.06.2022.

In view of the above, the EAC noted that due diligence from CRZ point of view has not been completed in all respects for the project and PP need to submit the requisite information as directed by the Ministry. EAC further advised PP to explore shifting embarkation/disembarkation to the proposed new ferry terminal that is under construction. This will avoid new construction in the CRZ areas.

EAC further suggested the Ministry to take necessary action in this regard as appropriate.

3.10 A Site visit report of EAC (Infra-1 & CRZ) sub-committee, Ministry of Environment, Forest & Climate Change, New Delhi-India for a proposed project “Development of economic corridors, inter corridors, feeder routes and borders road to improve the direct connectivity in Indian Cities (Lot-8/ Package-1) Surat – Nashik-Ahmednagar Greenfield Stretch (Length 289.00 km) in the States of Gujarat and Maharashtra by M/s National Highways Authority of India.

The report submitted by the sub-committee has been presented before the Committee. The Committee accepted the report in the 302nd meeting. On the request of the PP and approval of Chairman, EAC, the report was discussed in the EAC.

As advised by EAC, the PP has presented comparative analysis of the work to be executed for the existing alignment and the new alignment. The major issue with the existing alignment is approx. 50 numbers of bends in the road, which is causing delay in the overall travel time and reducing the design speed of the road. EAC observed that the PP has made several design interventions and realigned the existing alignment and reduced the total no of bends to 8. EAC opined that the balance 8 bends can also be maneuvered by engineering interventions.

The EAC opined that the total travel length of the existing road (NH-848) is 136 Kms and the proposed greenfield is 107 Kms and likely travel time after improvement on existing road is 3.00 hrs. Whereas, on the proposed road/alignment, it will only be 1 hr 10 min. This marginal reduction of travel length and time in the new proposed alignment, is expected to outweigh the cost of environmental damages to the Western Ghat in the existing alignment.

EAC further observed that developmental activities in virgin and ecologically sensitive new parts of Western Ghat areas around the proposed alignment will outweigh the damages caused by the option of retrofitting/improving/upgrading the existing road/alignment.

In view of the above, EAC recommended the PP to finalize the existing alignment in all respect and submit to the Ministry so that matter can be further appraised for grant of ToR.

Annexure-A

Following members were present during the 304th EAC(Infra-1) meeting held on 21st – 22nd July, 2022

S. No.	Name	Designation	Remarks	
			21 st July 2022	22 nd July 2022
1.	Dr. Deepak ArunApte	Chairman	Present	Present
2.	Sh. S. Jeyakrishnan	Member	Present	Present
3.	Sh. Manmohan Singh Negi	Member	Present	Present
4.	Sh. Sham Wagh	Member	Present	Present
5.	Dr. Mukesh Khare	Member	Absent	Absent
6.	Dr. Ashok Kumar Pachauri	Member	Absent	Absent
7.	Dr. V. K Jain	Member	Present	Present
8.	Dr. Manoranjan Hota	Member	Present	Present
9.	Representative of CPCB	Member	Absent	Absent
10.	Representative of CGWA	Member	Absent	Absent
11.	Dr. M. V Ramana Murthy	Member	Present	Present
12.	Dr. Nirmalendu Kumar	Member	Absent	Absent
13.	Dr. Niraj Sharma	Member	Present	Present
15.	Sh. Amardeep Raju	Scientist 'E' & MS, MoEF&CC	Present	Present
16.	Dr. Ramesh. A	RO, MoEF&CC	Present	Present
