Minutes of the 278th meeting of Expert Appraisal Committee held on 27th - 28th October, 2021 through Video Conferencing for the projects related to Infrastructure Development, all Ship breaking yards including ship breaking units 7(b); Industrial Estate/Parks/Complexes/Areas, Export Processing Zones, Special Economic Zones, Biotech Parks, LeatherComplexes7(c); Ports, harbors, breakwaters, dredging7(e) and National Highways7(f)

The 278th Meeting of Expert Appraisal Committee (EAC) of Infra-1 (IA-III) was held through Video Conferencing at the Ministry of Environment, Forest & Climate Change (MoEF&CC), Indira Paryavaran Bhavan, New Delhi during 27th - 28th October, 2021 under the Chairmanship of Dr. Deepak Arun Apte. A list of participants is annexed as Annexure-A.

1. OPENING REMARKS OF THE CHAIRMAN

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

2. CONFIRMATION OF THE MINUTES OF THE LAST MEETING

The Committee confirmed the Minutes of 275th EAC meeting held on 29th September, 2021.

3. AGENDA WISE CONSIDERATION OF PROPOSALS:

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

Agenda No.3.1

Development of Greenfield Non-Major Port at Ramayapatnam in Prakasam District of Andhra Pradesh State by M/s Government of Andhra Pradesh – Environmental and CRZ Clearance.

[Proposal No. IA/AP/NCP/228803/2020; File No. 10-8/2020-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 /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."

- 3.1.1. The project proponent along with the EIA Consultant M/s Indomer Coastal Hydraulics (P) LTD, Chennai made a presentation through Video Conferencing and provided the following information: -
- 3.1.2. The proposed project is for the development of Greenfield Non-Major Port at Ramayapatnam in Prakasam District of Andhra Pradesh. It will be an all-weather port with

state of art terminal facilities to meet the present and future needs of trade. The port has been planned in two phases viz. Phase I handling 24.91 MTPA and Phase II handling additional cargo of 113.63 MTPA. On completion of Phase II, it will handle the total cargo of 138.54 MTPA.

- 3.1.3. TOR was granted on 19th February 2020 during the 48th EAC meeting held on 28th to 29th January, 2020. Amended TOR was granted on 19th February 2021 by the 253rd EAC meeting held on 18th to 19th January 2021.
- 3.1.4. The location of proposed Ramayapatnam port spreads centering around Latitude: 15°01'09" N and Longitude 80°03'09" E. Total land (ha): 1390.95 comprising of 324.85 ha in Phase I and another 1066.10 ha in Phase II.
- 3.1.5. The proposed project falls under 7 (e) Ports, Harbour, Cat −A (≥ 5 million TPA of cargo handling capacity, excluding fishing harbours) as per EIA notification 2006, and its subsequent amendments. Total Project Cost: ₹ 10640.00 Cr comprising of 3736.00 Cr for Phase I and 6904.00 Cr for Phase II.

3.1.6. Land use /Land cover of project site

Sl. No.	LU/LC	Area (in ha)	%	Remarks
1	Aquaculture	170.42	12.25	-
2	Bay of Bengal	123.10	8.85	-
3	Crop Land	721.23	51.85	-
4	Plantation	125.13	9.00	-
5	Rural Built-Up	56.64	4.07	-
6	Sandy Area	102.36	7.36	-
7	Scrubland	71.32	5.13	-
8	Tank/Pond/Lake	20.75	1.49	-
	Total	1390.95	100.00	-

3.1.7. Landuse/Landcover around 10 km radius of project site (1 km in case of Highway projects)

Sl. No.	LU/LC	Area (in ha)	%	Remarks
1	Rural Built-Up	524.42	1.67	-
2	Crop Land	6815.77	21.70	-
3	Plantation	1543.93	4.91	-
4	Forest	4182.49	13.31	-
5	Scrubland	630.48	2.01	-
6	Barren land	24.67	0.08	-
7	Gullied Land	126.94	0.40	-
8	Sandy Area	349.58	1.11	-
9	River/Creek/Canal	152.05	0.48	-
10	Tank/Pond/Lake	1595.67	5.08	-
11	Aquaculture	335.02	1.07	-
12	Bay of Bengal	15134.89	48.18	-
	Total	31415.92	100.00	-

construction activities are proposed over the barren land. Shorefront facilities needed for the port will also be constructed. The R&R plan for the proposed project is approved and undertaken by Government of Andhra Pradesh. Greenbelt is proposed in such a way that the existing trees are covered and thus protected.

- 3.1.9. Water Bodies & impact on Drainage: Seasonal water bodies like Ravuru and Chevuru ponds are located close to the project site. The only water body falling in the project site is Buckingham Canal. Detailed management plan has been provided in the EIA report to protect the Buckingham Canal. No obstruction on the Buckingham Canal is envisaged due to the proposed port.
- 3.1.10. Water supply to the proposed Ramayapatnam port has to be provided by Government of Andhra Pradesh. The source for water supply is met from Rallapadu reservoir. No Ground water will be extracted during both construction and operative phase. The estimated water requirement for Ramayapatnam port during operation period is computed and provided in table below.

Sl. No.	Description	Unit	Phase I	Phase II
1	Port personnel and port			
	Requirement	lpd/person	148	148
	No. of persons	Nos.	1,056	3,651
	Water Requirement per Day	litres	1,56,288	5,40,348
2	Fire water			
	Fire Water Storage Tank Proposed	m^3	275	1,105
	Fire water Requirement Per Day considering utilization every 6 months	litres	1,833	7,366
3	Ship supply			
	Average Requirement	litres per ship	40,000	50,000
	No. of Ships per annum	Nos.	484	1,513
	Water Requirement per annum	litres	48,40,000	1,89,12,500
	(assume only 25% of ships take water)			
	Water Requirement per Day	litres	13,829	54,036
	(assuming 350 days)			
4	Land scaping			
	Requirement	litre/m²/day	2.5	2.5
	Area for Landscaping	m^2	40,000	2,62,500
	Water Requirement per Day	litres	1,00,000	6,56,250
5	Dust suppression			
	Coal Throughput	MTPA	10	34
	Water Requirement for Dust Sup. (@1%)	m ³ /annum	1,00,000	3,40,000
	Water Requirement per Day (assuming	litres	2,85,714	9,71,429
	350 days)	nues	2,03,714	9,71,429
	Water requirement incremental	litres	5,57,664	22,29,428
	Total water requirement	MLD	0.56	2.25

3.1.11. In principle, the A.P. Government has agreed to provide present required capacity of water from Rallapadu Reservoir. The Rallapadu reservoir is located at Kandukur constituency, in Linguara Mandal, Rallapadu. With an area of 2202 km2, 31.30 million m3 of

storage capacity is under construction. The new spillway has been built with 5 gates in the 12.19×7.62 m evolution with 12 gates in the evolution of 12.19×4.57 m. Drinking water and irrigation is done by Kondapur in Nellore district, as a felicitation centre for Goodlaru and Gender Sea zones in Prakasam district. The water is suitable for agriculture and drinking. The Rallapadu reservoir is about 36 km from the proposed port location. From the Somasila Project, through GKN Canal, water will be released to Rallapadu Reservoir. From Rallapadu reservoir, a dedicated pipeline will be provided up to the Port premises. In the proposed port premises, a water storage reservoir of 168000 KL capacity is proposed to meet one year Phase I water demand of the Port. Similarly, it is also proposed to construct 6,75,000 KL additional storage reservoir to meet the water demand for Phase II.

- 3.1.12. The public hearing was conducted on 26.06.2021 at Cyclone Shelter Building, Salipet Panchayat, Ravur Revenue Village, Gudluru Mandal, Prakasam District, Andhra Pradesh. A count of 164 people attended the public hearing meeting.
- 3.1.13. Diversion of forest: The proposed rail and roadway corridor passes through small part of Reserve Forest land. Forest clearance is taken up separately.

Reserve Forest	Forest area (acres)
Ravuru	33.73
Chevuru	11.37
To	otal 45.10

3.1.14. Waste Management:

Type of waste	Quantity	Applicable Rule	Management method at	Mode of disposal to
			site	be followed
Domestic and	65 kg/day	Solid Waste	Source segregation of	Disposed to SWPC at
operational		Management	waste and storage at site	S.No. 37 of Salipeta
waste		Rules, 2016	using waste bins	Gram Panchayat.
			-	NoC from Panchayat
				is obtained.
Hazardous	Negligible	Hazardous	Shall be stored in HDPE	Through authorized
waste		Waste	drums in isolated place	vendors
		Management	_	
		Rules, 2016		
Discarded	1000	Hazardous	Shall be kept at isolated	Through authorized
containers/	nos./Annum	Waste	place under covered	vendors
barrels		Management	shed	
		Rules, 2016		

3.1.15. CETP details-

Sl. No.	Equipment	No. of ed	quipment
		Phase I	Phase II
1	Crawler cranes	1	3
2	Dumpers	30	50
3	Front End loaders	6	10

Total no. of equipment	37	63
Effluent Generated from washing and cleaning of equipment	9.25	15.75
@ 250 lpd/equipment (KLD)		
Capacity of ETP provided	10	20

3.1.16. STP Details- The treated water in STP will be used for non-potable purposes such as flushing, washing, greenbelt development/plantation.

Sl. No.	Berth Type	Mang	oower
		Phase I	Phase II
1	Bulk Terminal	60	180
2	Multipurpose Terminal	246	492
3	Containers	0	545
4	Common infrastructure	46	46
Tota	al Manpower for Manning the Terminal	352	1263
Sewage Generated @ 120 lpd/person (KLD)		42.24	151.56
Capacity of STP provided (KLD)		35	105.0
Capacity of	Septic Tank & soak Pit (KLD)	7.24	46.56

- 3.1.17. Tree Cutting and Green belt development- No tree cutting is involved for the proposed project. Total Area of Green Belt (in ha): 480.83 i.e., 107.24 ha. in Phase I and 373.59 ha. in Phase II, Percentage of Total Project Area: 34.57, No. of Plants to be Planted: 2500/ha.
- 3.1.18. There is no National Parks, Sanctuaries and Tiger Reserves, Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC within 10 km of proposed project site.
- 3.1.19. 150 nos. of solar panel with 0.5 KWH per day and 20 nos. of small wind energy plant has been proposed.
- 3.1.20. Rain water Harvesting- No of storage- 401, capacity- 1500 m^3 , no of recharge pits- 400, capacity- 4.5 m^3
- 3.1.21. Coastal Regulation Zone: Based on CRZ Notification 2011, the following facilities fall under CRZ areas

CRZ	Facilities Proposed
CRZ I A	No facilities
CRZ I B	Groynes, Greenbelt, Open Storage Yard and Container Yard
CRZ III A	Internal Roads, Covered Storage Sheds, Greenbelt, Truck Parking and Water
	Storage Reservoir for Phase-I
CRZ III B	Internal Roads, Covered Storage Sheds, Greenbelt, Truck Parking and Water
	Storage Reservoir for Phase-I
CRZ IV A	Berths, Groynes, Breakwaters, Substations, Open Storage Yard and Container Yard
CRZ IV B	Culvert/Bridge and Railway Bridge

3.1.22. The quantity of cargo to be handled is 138.54 MTPA through 19 berths. A conveyor system covered with steel sheeting and water sprinkling system is used as dust controlling

measure. The oil spill contingent management plan is given detailed in Section 7.4 of EIA Report and the dredging and disposal of dredged details is as follows.

Phase	Total Volume	
	Capital dredging Maintenance dredging	
	$(x 10^6 \text{ m}^3)$	$(x 10^6 \text{ m}^3/\text{year})$
Phase I	16	1.77
Phase II	32	3.30

3.1.23. The dredged material will be used for reclamation of port area during the construction of port. The quantity of dredged materials used for reclamation is given in the table below.

Phase	Volume	Total volume
	$(x 10^6 \text{ m}^3)$	$(x 10^6 \text{ m}^3)$
Phase I	5.5	11.5
Phase II	6	

Part of the remaining dredged materials, if found suitable will be used for raising the backup areas. Rest and unsuitable dredged materials will be disposed offshore at the designated location as identified by APMB.

- 3.1.24. Zero Liquid Discharge will be followed. The treated water from STP and ETP will be used for non-potable purposes such as flushing, washing, greenbelt development/plantation.
- 3.1.25. Land acquisition and R&R issues: As per the socio-economic survey conducted, there are 563 houses in the four habitations. But only 483 houses with 675 Project Displaced Families (PDFs) need to be shifted. About 60 acres of land required for construction of houses and other Infrastructure to these people. The abstract of R&R plan is given below

Sl. No.	Description	Cost in lakhs (Rs)
1	Cost of Land Acquisition for R&R colony	1220
2	R&R Cash benefits to the PDFs	6307
3	Provision for infrastructure facilities in Layout –I	2604
4	Provision for infrastructure facilities in Layout-II	1633
Total		11764

R&R plan has been prepared as per G.O.Ms.No.68, Irrig. & CAD Dept. dt. 08.04.2005 and third schedule of RCTLARR Act 2013, No. 30 of 2013 and submitted vide letter no Rc.LA.RMP/21/2021 dt. 16.09.2021.

- 3.1.26. Employment Potential- Total employment to be generated out of the project is 25000. Moreover 75% of semiskilled and unskilled jobs will be provided to the local/affected people.
- 3.1.27. Project Benefits: Based on project particulars and the existing environmental conditions, potential positive impacts likely to result from the proposed port development, such as Better Sea transport facilities, Revenue Generation and Employment Opportunities,

Improvement in Physical Infrastructure like project infrastructure and ancillary industries, Improvement in social infrastructure like roads, railways, townships, housing, water supply, electrical power, drainage, educational institutions, hospitals, improved environmental conditions etc.

- 3.1.28. Details of Court cases: No court case is pending against the proposed project.
- 3.1.29. During deliberation, EAC observed that several key areas are under-represented in the EIA or completely lacking and noted the following:
 - i. According to EIA report on pg no 69, Turtle Nesting site includes Turtles Hatchery was observed in the project site during the Field survey, however there are no details of sea turtle nesting sites
 - ii. Beach Nourishment as proposed will certainly change the sand profile and will affect the Sea Turtle Nesting sites. However, EIA is lacking in detailing beach nourishment plan that is suitable to sea turtle nesting areas.
 - iii. EAC noted the capital cost of EMP is 31.90 Crore.
 - iv. EAC noted that the Green Belt development plans include exotic species and not the native species and thus require revision.
 - v. Marine Biodiversity data is not up to the mark and lacking various key components as listed in 3.1.30 i, ii and iii. It doesn't not provide any information on the impacts of port development and operations on marine species particularly sea turtles, whale sharks and marine mammals such as ship traffic, underwater noise, oil pollution, shore erosion/accretion, ballast etc.
- 3.1.30. The EAC, taking into account the revised submission made by the project proponent had a detailed deliberation in its 278th meeting during 27th 28th October, 2021 and **deferred** the proposal for want of following documents/information:
 - i. PP has to submit the data of Sea turtle movement and nesting sites with the help of Andhra Pradesh forest department and Wildlife institute of India. The data should be not only for the sea turtle nesting sites but also its movement in near shore areas including impact of proposed ship traffic on sea turtle movement.
 - ii. Similarly, occurrence, movement and known locations of Whale Sharks and marine mammals should be marked on the map. The impact on these species due to ship traffic, underwater noise needs to be evaluated along with mitigation plans.
 - iii. Greenbelt Development Plan needs to be developed in coordination with Forest Department of Andhra Pradesh. The plan must include only native species. Plan should also detail out sand dune protection and restoration measures.
 - iv. PP has to submit the details and proper plan of use of renewable energy and energy conservation plan for port operations.
 - v. PP has to revise the capital cost of EMP and submit the revised cost of EMP based on above observations.
 - vi. PP should elaborate the details of the shoreline protection measures and

- superimposed those details on the map. The impact of shoreline protection measures shall also be analyzed and submitted.
- vii. It was also decided that EAC sub-committee will make a site visit and evaluate cumulative impacts of several non-major ports proposed in the State along the coastal area including the proposed port at Ramayapatnam.

Development of Zaheerabad National Investment and Manufacturing Zone (NIMZ) in Sangareddy District of Telangana by M/s Telangana State Industrial Infrastructure Corporation Limited – Further consideration for Environmental and CRZ Clearance.

[Proposal No. IA/TG/NCP/71421/2017; File No. 21-237/2017-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 PFR/DPR/Form-1/Annexure-III. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
- 3.2.1. The abovementioned proposal was considered in the earlier 258th meeting of Expert Appraisal Committee held on 17th -18th March, 2021. The proposal was deferred for the want of some requisite information/documents.
- 3.2.2. At this instance, the aforementioned proposal was further placed before the EAC in its 278th meeting during 27th 28th October, 2021. The project proponent along with EIA Consultant M/s L&T Infrastructure Engineering Limited; Hyderabad has made a presentation through Video Conferencing and provided the information with respect to the quaries raised in the earlier meeting however, during deliberation, EAC observed the following:
 - i. EAC noted that the planning of socio-economic profile generated by the project activity including employment is very poorly presented in the EIA report and during the submission of reply to ADS.
 - ii. Planning of R&R issues involved and Land Acquisition details are also not presented in a holistic manner
 - iii. Most of the queries raised by the Committee in the earlier EAC meeting were not replied in a conclusive way.
- 3.2.3. The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 278th meeting on 27th 28th October, 2021 and **deferred** the proposal for grant of Environmental and CRZ Clearance for the want of following information:
 - i. The Proponent should submit a detailed report about direct and indirect type of employment opportunities during construction and operation phase including those are compatible with the existing skills of an agrarian community that is residing near the project area. Skill development programme should detailed out with other

- supplementary skills that may be necessary (No specific details submitted as per the earlier query)
- ii. An elaborate report on land acquired so far, pending land acquisition, R&R details if any and the period for settlement has to be sorted according in line with the State Government Policy. (no specific information submitted)
- iii. Proposed industrial estate would negatively impact on the life, livelihood and health of people staying in the few existing hamlets within the boundary of the proposed industrial area. PP need to address this issue and submit detailed plan regarding the same. If R&R is involved, then PP has to submit evidence showing that local population at select sites are in agreement for voluntary relocation. (no specific information submitted)
- iv. PP has to submit the details of land acquisition including (project affected families) how much land is acquired from the individuals/families. R&R & Livelihood of the affected families should be clearly mentioned.
- v. Several complaints are received in relation to land acquisition, public hearing, R&R, bio-diversity and employment for the local population, however, no proper justification has been provided in the document submitted by the PP. A detailed reply to the queries raised shall be submitted.

Proposed Kanagalla Industrial Area Development at Kanagala Village, Hukeri Taluk, Belagavi District (Karnataka) by M/s Karnataka Industrial Area Development Board – Further consideration for Environmental Clearance.

[Proposal No. IA/KA/NCP/177810/2017; File No. 21-141/2017-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 PFR/DPR/Form-1/Annexure-III. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent."

- 3.3.1 The aforementioned proposal was earlier considered in 247^{th} EAC meeting held during $23^{rd} 24^{th}$ November, 2020 and 262^{nd} meeting during 25^{th} and 27^{th} May, 2021 and it was deferred for the want of additional information/documents.
- 3.3.2 At this instance, the aforementioned proposal was further placed before the EAC during 278th meeting on 27th 28th October, 2021. The project proponent along with the EIA consultant M/s MECON Limited, Bengaluru has made a presentation through Video Conferencing and provided the following information-

i	The red category industries should be avoided/reduced and re-categorized due to the presence of several villages around the project site. Wind direction diagram should be used to analyze the probable impact of air from Red category industries on the villages and accordingly the location is finalized.	Response submitted and presented during 278 th EAC meeting. EAC observed that <i>red category</i> project has not been avoided as suggested during 262 nd EAC meeting
ii	Distance of Red category industries from the human settlement should be provided	Information submitted and presented during 278 th EAC meeting.
iii	Disposal of waste at long distance should be avoided, instead explore the planning of waste management facility along the project site or in a short distance	PP responded as below-" "Waste generated during development of industrial area will be reused for back filling/filling the low lying areas. Other category of waste viz. hazardous, solid waste generated during the operational of the individual industries, industries will be appraised to obtain and comply with the authorization issued by SPCB for different categories of waste in respective rules". The same was presented during 278th EAC meeting.
iv	The 33% of Green Belt should be implemented and the layout plan shall be prepared on the criteria of 33% green belt	Information submitted and presented during 278 th EAC meeting.
V	Every category of industry should be separated by green belt, especially Red Category industries	PP responded as below-" "As stated earlier, a buffer of about 6m will be kept between red and other category of industries. However, 15m buffer will be kept all along the boundary of the industrial area. The same is shown in general layout drawing". The same was presented during 278th EAC meeting
vi	Health care facilities for the villagers is not found in the Annexure of EIA & EMP	PP responded as below-" "The health care facilities for the villagers have been covered in Chapter-8, Clause no. 08.06.01, Page 184". The same was presented during 278th EAC meeting

3.3.3 During deliberation, EAC observed the following:

- i. The suggestion made by EAC in Earlier meeting has not been compiled and nothing has been changed.
- ii. In red category project has not been avoided as suggested by EAC.
- 3.3.4 The EAC had a detailed deliberation in its 278^{th} meeting during $27^{th} 28^{th}$ October, 2021 and noted with concern that projects proponent even after getting almost 6 months to address the concern raised by the EAC in its last meeting in May 2021 has not responded to the advices given by the EAC. Therefore the proposal is **deferred** for grant of Environmental Clearance for the want of following information
 - i. PP should mark the point/periphery at particular distances (500m, 1km, 1.5km, 2km etc) of the settlements from the core and buffer area of the proposed project site and mention the population in a particular marked periphery.
 - ii. PP should forecast and detailed out pollution foot print due to proposed red category projects on the health of the villagers of nearby areas.
 - iii. Avoid some red category projects and relocate some red category projects far from the populated area and villages as was advised in earlier EAC meeting.
 - iv. Green belt should be replanned properly by ensuring that greenbelt between habitation and industries and around waterbodies are wide enough.
 - v. Health care facilities for the villages should be proposed in unambiguous terms
 - vi. EMP provisions should be revised based on the above observations

Development of LNG storage and re-gasification terminal at village Chhara, Taluka Kodinar, District Gir Somnath, Gujarat by M/s HPCL Shapoorji Energy Ltd. – Amendment in Environmental and CRZ Clearance.

[Proposal No. IA/GJ/NCP/230102/2021; File No. 11-1/2014-IA.III]

3.4.1 The proposal was deferred, since, the project consultant vide e-mail dated 20th October, 2021requested for deferring the project appraisal due to non-availability of Director and Project Representative on the scheduled dates

Agenda No. 3.5

Transport of coal/cargo through road movement for 50% of terminal capacity through Mechanised Handling facilities at General-cum-Bulk cargo berth in the Outer Harbour of Viksakhapatnam Port Trust by M/s Visakhapatnam Port Trust – Further consideration for Amendment in Environmental and CRZ Clearance.

[Proposal No. IA/AP/NCP/220069/2021 File No. 10-9/2009-IA.III]

3.5.1. The proposal was deferred as the project proponent and the consultant could not able to connect for the meeting due to failure in the audio/video system.

Development of deep water jetty facility at existing Inland Water Jetty facilities on Kondalika River at village Korlai, District Raigad, Maharashtra by M/s Indo Energy International Ltd. – Amendment in Environmental and CRZ clearance-

[Proposal No. IA/PB/NCP/233342/2021 and File No. 10-34/2015-IA.III]

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

- 3.6.1. The aforementioned proposal was placed before the EAC during 278th meeting on 27th 28th October, 2021. The project proponent along with the EIA consultant M/s Terracon Ecotech PVT LTD (TEPL), Mumbai has made a presentation through Video Conferencing and provided the following information-
- 3.6.2. The proposed project falls under 7(e) Ports, Harbours Category: A. Environmental and CRZ clearance of the above project was issued vide EC letter No. 10-34/2015-IA.III dated 31st August, 2021.
- 3.6.3. The environmental and CRZ clearance was granted by the Ministry for the project of "Development of deep water jetty facility on Kundalika river at village Korlai, District Raigad, Maharashtra and augmenting existing Sanegaon facility by upgrading of equipment's, mechanization of storage and stacking, loading, unloading arrangements, for handling of barges up to 4500 MT by M/s Indo Energy International Ltd", however, in Para 21 of the EC/CRZ letter dated 31st August, 2021, "augmenting existing Sanegaon facility" had not been mentioned.
- 3.6.4. Further, the component of dredging and maintenance dredging was discussed in the EIA report chapter 2 at section 2.8 and sub point 2.8.2. However, the component of maintenance dredging of approach channel to deep water facility to the tune of about 1.5 million cubic meters annually, was missing in the minutes of the meeting and the EC/CRZ clearance letter.
- 3.6.5. The proponent *vide* a letter dated 04th October 2021 and online application No. IA/PB/NCP/233342/2021 dated 08th Oct 2021 has requested for the following amendment in the EC No. 10-34/2015-IA.III dated 31st August, 2021:

Reference of	Description as per	Amendment/corrigendum	Remarks if Any
Approved EC	Approved EC	required	

File No: 10-	"Development of Deep	"Development of deep	Addition of
34/2015-IA.III	Water Jetty Facility at	water jetty facility on	"augmenting existing
Para 21	existing Inland Water Jetty facilities on Kondalika River at Village Korlai, District Raigad, Maharashtra by M/s Indo Energy International Ltd."	Kundalika river at village Korlai, DIstrict Raigad, Maharashtra and augmenting existing Sanegaon facility by upgrading of equipment's, mechanization of storage and stacking, loading, unloading arrangements, for handling of barges up to 4500 MT by M/s Indo Energy International Ltd"	Sanegaon facility by upgrading of equipment's, mechanization of storage and stacking, loading, unloading arrangements, for handling of barges up to 4500 MT"
File No: 10-34/2015-IA.III	-	To carry out maintenance dredging of Approach channel to deep water facility to the tune of about 1.5 million cubic meters annually.	Reference: Presentation - Project Details. Item 3 - Capital Dredging Form 2, page 20, Section IV, Sl. No. 2h EIA report chapter 2 section 2.8 Dredging sub point 2.8.2 maintenance dredging

- 3.6.6. Details of Court cases: No court case is pending against the project.
- 3.6.7. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 278th meeting during 27th 28th October, 2021 and **recommended** the proposal for the Amendment/corrigendum in Environmental and CRZ Clearance as mentioned in para 3.6.5, in addition to all standard conditions applicable for such projects.

Construction of '8-lane of Bangalore-Chennai Expressway Phase-III from km 156.000 near 190 Village Ramapuram, Mandai Gudipal, District Chittoor (Andhra Pradesh) and ends at km 262.569 near Village Irungattukottai, Taluk Sriperambudur, District Kanchipuram (Tamil Nadu) by M/s National Highways Authority of India (Length of 106.100 km) - Environmental Clearance.

[Proposal No. IA/AP/MIS/73485/2018; File No 10-13/2018-IA.III]

"The EAC noted that the Project Proponent/consultant has 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 n has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent."

3.7.1 The project proponent along with the EIA consultant M/s Egis Consulting Engineers
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- Pvt. Ltd. in Association with M/s Vardan Environet, Gurugram has made a presentation through Video Conferencing and provided the following information-
- 3.7.2 The proposed project is for Construction of '8-lane of Bangalore-Chennai Expressway Phase-III from km 156.000 near 190 Village Ramapuram, Mandai Gudipal, District Chittoor (Andhra Pradesh) and ends at km 262.569 near Village Irungattukottai, Taluk Sriperambudur, District Kanchipuram (Tamil Nadu) by M/s National Highways Authority of India.
- 3.7.3 The project passes through the Chittoor district in the state of Andhra Pradesh (Km 156.000 to Km. 168.000) and Vellore, Ranipet, Kanchipuram and Tiruvallur districts of Tamil Nadu (Km. 168.000 to Km. 262.100). The total length of is 106.100 Km. The project stretch falls in the states of Andhra Pradesh and Tamil Nadu.
- 3.7.4 Bangalore-Chennai Expressway Phase-III is having 4-lane dual carriageway configuration with 21 m depressed median expandable to 8-lane. The Paved Dual Carriageway for main expressway shall be 22.50 meters for four lane sections and 21 m wide depressed median including the edge strips. The proposed right of way for the Greenfield alignment is considered as 90m.
- 3.7.5 The project alignment is in close vicinity to ASI site located at proposed Km 250.600 in Vadamangalam village, Sriperumbudur Taluk, Kanchipuram district. A detailed assessment was carried out and due NOC was obtained from National Monument Authority (ASI), Ministry of Culture, Government of India.
- 3.7.6 The Geo-coordinates of project site are Start Point: 13°7'15.65" N 79°6'13.35" E End Point: 12°59'32.01 N "79°59'8.30" E
- 3.7.7 The proposed project falls under 7(f), Highway, Category A. Total project cost is Rs.3,47,2.03 Crore. ToR was accorded vide letter No. 10-13/2018-IA.III dated 14th May, 2018.
- 3.7.8 Land use/Land cover of project site: Total area of 1085.152 ha has been proposed. Out of which Forest Land 5.42 ha, Private Land 833.913 ha, Surface Water Bodies 107.424 ha and Other Government Land 138.396 ha have been proposed.
- 3.7.9 Land use/ Land cover around 10 km radius of project site (1 km in case of Highway projects):

S.No	LULC (within 1Km)	% age of Total Area
1.	Urban	0.45
2.	Rural	3.66
3.	Industrial	1.28
4.	Agriculture Land	51.67
5.	Agriculture Plantation	5.18
6.	Forest	2.08
7.	River/Stream	1.25
8.	Lakes/Ponds/Reservoirs	11.08
9.	Waste Land	2.56
10.	Scrub Land	19.24

11.	Barren/Uncultivable land	1.54
12.	Grand Total	100

- 3.7.10 The proposed land acquisition for the alignment is approx. 1085.152 ha (Private-833.913 ha and Government- 245.819 ha). A total of 147 PAH, 144 PAF and 564 PAH are involved under project.
- 3.7.11 The project alignment is passing through Mahimandalam Reserved Forest Area, Arcot Range, Vellore Forest Division. The RF land under diversion for expressway is 5.42 Ha. Stage-I (In principle) clearance for the project has been obtained vide RO/Ministry File Number 4-TNC043/2019-CHN.
- 3.7.12 The proposed road will have 31 nos. of Major Bridges, 25 nos. of Minor Bridges, 137 nos. of Culverts, 13 nos. VUP, 5nos. VOP, 3 LVUP, 50 PUP, 7 nos. of Interchanges, 3 no. of ROB and 6 Toll Plaza. 1 no. Animal underpass bases on recommendation of forest department's assessment have been proposed. In addition, there is a provision of 3 nos. of truck lay byes, 4 nos. of rest areas and high mast light along the project.
- 3.7.13 The project is not passing through/located within the notified ecologically sensitive zone (ESZ) or around a notified National Park/Wildlife Sanctuary.
- 3.7.14 Safety measures shall be provided as per NHAI Safety Manual and IRC: SP:99-2013, IRC: SP: 93-2017 and MoRTH guidelines in this regard.
- 3.7.15 The Ponnai River is crossing BCE alignment at Km 179.500 in Vellore district and Kusas Thalai River is crossing the alignment at Km 215.650 in Ranipet district of Tamil Nadu. Apart from it, the proposed alignment passes across 26 no. (AP (6), TN (20)) of irrigation tank.
- 3.7.16 As per assessment, there are 16,954 numbers of Non-Forest trees and 2058 number of Forest trees located within proposed right of way of project road. Predominant species are Eucalyptus (Eucalyptus sps.), Teak (*Tectona grandis*), Neem (*Azadirachta indica*), Mango (*Mangifera indica*), Coconut (Cocos nucifera), etc. About 1,69,540 tree will be planted within the available space in ROW as per the tree plantation strategy. The balance will be planted in consultation with the forest department.
- 3.7.17 The public hearing was conducted in five district i.e Chittor, Vellore, Ranipet, Kanchipuram, Tiruvallur on 22.04.21, 10.08.21, 11.08.21, 28.07.21, 18.08.21, respectively.
- 3.7.18 PP committed that efforts will be made to minimize the trees loss by restricting tree cutting within formation width. A total no. of 1,69,540 trees shall be planted along road side avenue as per IRC SP: 21:2009 and Green Highway Policy, 2015 on available ROW apart from statutory requirements.
- 3.7.19 Fly ash will be used in the project depending upon its availability as per existing fly ash notification.
- 3.7.20 Water requirements: During Construction- 21,000 KLD and during Operation- 27 KLD water has been proposed. The source will be a mixture of surface water and ground Page 15 of 50

water and prior permission for its extraction shall be obtained from competent authorities.

- 3.7.21 The excavated material (C&D Waste) quantity is 10740 tonne and it will be reused in project for ground levelling within ROW.
- 3.7.22 Employment potential: Employment Potential: Permanent (approx.): 440 person Temporary (Approx.): 15,75,750 man days.
- 3.7.23 Benefits of the Project- *Environmental*: The proposed BCE project will ensure the smooth flow of traffic, which reduces the emissions. Apart from it, plantation will be done throughout the project road, which will increase the aesthetic, improve environment in the region, *Economic*: Provide better connectivity between Bangalore and Chennai and will act as a link between major commercial, industrial centres of Karnataka, Andhra Pradesh and Tamil Nadu. Lowering transportation cost for users and improving access to goods and services enables new and increased economic and social activities. Expressway would work through the dynamic developmental externalities generated through the forward and backward linkages, *Social*: Expressway project requires large number of local people during construction stage from nearby village. Thus there will be increase in employment opportunity for the project both directly and indirectly
- 3.7.24 Details of Court cases: No court case is pending against the proposed project.
- 3.7.25 During deliberation, EAC observed the following:
 - i. Status update for tree cutting/Plantation audit has not been initiated/submitted. Local project monitoring committee may be constituted to monitor the work and progress of EMP.
- 3.7.26 The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 278^{th} meeting on $27^{th} 28^{th}$ October, 2021 and **recommended** the proposal for grant of Environment Clearance with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:
 - 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. 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.
- ii. The proponent shall obtain permission from the competent authorities for tree felling along the proposed alignment.
- iii. Rain water harvesting pit shall be at least 3 5 m above the highest ground water table.
- iv. 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.
- v. 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.
- vi. 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.
- vii. 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.
- viii. 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.
- ix. 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.
- x. Afforestation using compensatory plantation in the ratio of 1:10 shall be carried out. Native tree species shall be provided as per the IRC Guidelines on Landscaping and Tree Plantation (IRC:SP:21-2009). Effort should be made to plant native trees and Ficus species on both sides of the alignment. Special attention shall be given for protecting giant trees, and locally important trees (having cultural importance) and should be identified chainage wise.
- xi. Project alignment should be managed in such a way to save the Heritage/old trees supposed to be affected by the proposed alignment.
- xii. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV, Compensatory afforestation etc., either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also become part of EMP and shall be implemented.
- xiii. Proponent shall keep the finish road level sufficiently elevated from ground level with provision of railing on both sides to restrict animal crossing in order to avoid the Page 17 of 50

possibility of wildlife injury/death. Animal underpasses, watch tower, water holes and other mitigation measures proposed shall be constructed in supervision of forest department.

xiv. While constructing the over bridges as proposed over major water bodies efforts should be made to avoid construction of pillars in beds of water bodies.

Agenda No. 3.8

Development of 8-lane SPUR Starting from Km 26.582 of Vadodara - Mumbai Expressway Main Alignment (Design Chainage 0+000) and terminating at proposed Junction with the Multi-Modal Corridor of MMRDA (Design Chainage 79+783) in the state of Maharashtra (Length 79.783) by M/s National Highways Authority of India – Environmental Clearance

[Proposal No. IA/MH/MIS/1107654/2019; File No 10-29/2019-IA.III]

"The EAC noted that the Project Proponent/consultant has 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 the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent."

- 3.8.1 The project proponent along with the EIA consultant Intercontinental Consultants and Technocrats Pvt. Ltd. New Delhi has made a presentation through Video Conferencing and provided the following information-
- 3.8.2 The proposed Vadodara Mumbai Expressway (VME) SPUR is a Greenfield alignment, which starts at km 26.582 of main alignment of the Vadodara Mumbai Expressway at Koshimb village of Palghar district at Ch. 0+000 and terminate at the proposed junction with the Multi-Modal Corridor of Mumbai Metropolitan Region Development Authority (MMRDA) in Morbe village of Raigad district at Ch. 79+783. Total length of the VME-SPUR alignment is 79.783 km; out of which 18.900 km lies in Palghar district, 55.260 km lies in Thane district and remaining 5.623 km lies in Raigad district of Maharashtra.
- 3.8.3 The proposed alignment is passing through 68 villages and 6 Talukas (Vasai, Wada, Bhiwandi, Kalyan, Ambarnath and Panvel) in the State of Maharashtra.
- 3.8.4 The proposal was considered by the Expert Appraisal Committee (EAC) in its 220th meeting held on 26 July, 2019 and 232nd meeting held on 27th February, 2020 for the ToR. ToR was issued vide F. No. 10-29/2019-IA.III dated 16th March 2020.
- 3.8.5 The geocordinates of project site are starting point 19°29'19.44"N, 72°52'58.86"E, 19° 3'59.65"N, 73°10'49.57"E. Length of the proposed expressway is 79.783 km. Virar Railway Station is located at a distance of approx.11.5 km from the start point of the expressway and

Pavel Junction Railway Station is located at a distance of approx.12.6 km from the end point of the expressway. Chatrapati Shivaji International Airport / Mumbai Airport is approx. 30 km from the start point of the proposed expressway.

- 3.8.6 About 7 major bridges, 6 major bridge cum viaduct, 23minor bridges, 7 interchange, 3 flyover, 2RoB,4.160 km tunnel, 5 vehicular underpasses, 8 vehicular overpass, 29 light vehicular / pedestrian underpasses, 2 animal overpass, 53 dedicated animal crossing (box culvert), 33 small vehicular / animal underpasses,185 culverts, toll plaza at 7 locations, truck parking at 2 locations, wayside amenity at 1 location, smaller parking with toilet facilities at 2 locations and connecting roads at the identified locations for a length of 2.389 km on left side and 5.170 km on right side have been proposed along the expressway.
- 3.8.7 The proposed project falls under 7(f), Category-A, Highway as per EIA notification 2006. Total Project Cost including Centage & Pre-construction Cost is Rs, 10,510 Cr.
- 3.8.8 The proposed Right of Way (RoW) in general is 100 m in non-forest area and 70 m forest area except at interchanges, highway amenities, truck parking, where additional land shall be required as per actual design.
- 3.8.9 The proposed alignment is passes through plain, rolling and hilly terrain with elevation varies from about 3 m to 639 m above MSL
- 3.8.10 Details of water bodies: The alignment of the proposed expressway crosses rivers, local streams and nalaat several locations mentioned below-

Sl. No.	Proposed Chainage	Name of River/ Canal	Village
1.	3+400	Tansa River	Chandip
2.	6+300	Local Stream	Bhatane
3.	10+264	Tansa Tributary	Ambode
4.	13+463	MurumlaNadi	Kalambhon
5.	15+150	Local Stream	Gorad
6.	18+000	Local Stream	Kelthan
7.	18+118	Local Stream	Kelthan
8.	18+850	Tansa River	Kelthan
9.	20+955	Local Stream	Mahalunge
10.	21+760	Local Stream	Ghotgaon
11.	22+572	Local Stream	Ghotgaon
12.	24+915	Local Stream	KasbeDugad
13.	26+760	Local Stream	MohiliBudrak
14.	31+080	Local Stream	Nandithane
15.	33+334	Kamvadi River	Nivali
16.	34+235	Local Stream	Pundas
17.	45+400	Bhatsa River	Sange
18.	47+300	Kalu River	Sangode
19.	51+340	Local Stream	Manivali
20.	55+600	Local Stream	VaholiTarfBahe
21.	57+619	Barvi River	AptiTarfeBahe

Sl. No.	Proposed Chainage	Name of River/ Canal	Village
22.	58+945	Local Stream	Dapivali
23.	67+300	Ulhas River	Chamtoli
24.	69+985	Local Stream	Bhoj
25.	70+540	Local Stream	Bendshil
26.	71+350	Local Stream	Bendshil

- 3.8.11 Public Hearing was conducted in three District Raigad on 15th March 2021, Thane on 16th March, 2021 and Palghar on 24th March, 2021.
- 3.8.12 The proposed project involves diversion of approx. 122.6133 ha Forest Land. Proposal has been uploaded on 6th November 2020 (FC Proposal No. FP/MH/ROAD/53857/2020) and it is under examination with the State Government
- 3.8.13 The proposed SPUR alignment is located at a distance of 0.619 km from the boundary of the Tungareshwar Wildlife Sanctuary and at a distance of 0.275 km from the notified ESZ boundary.
- 3.8.14 The proposed alignment passes through Matheran Eco-Sensitive Zone from km 71+532 to 75+426(both buffer and eco-sensitive zone) and from km 77+115 to km 77+691 (only buffer zone).

3.8.15 Land use pattern of project site: (within proposed RoW)

S. No.	Land-use / Land-cover	Area (ha)	%	Remarks
1	Agriculture Land	659.57	63.93	-
2	Forest	122.61	11.91	-
3	Mangroves	0.00	0.00	-
4	Mining	2.60	0.25	-
5	Rural Area	9.07	0.88	-
6	Urban Area	13.76	1.33	-
7	Industrial Area	44.51	4.31	-
8	Water Bodies	13.72	1.33	-
9	Barren Land	165.76	16.06	-
	Total	1031.9	100	

3.8.16 Water requirement: The total water demand of the project is 23,75,760 KL. In compliance to the Sub-Clause 111.8.3 of MoRTH Specifications, the Contractor will identify the nearest source of water body at plant and camp site and shall source the water preferably from surface water bodies, rivers, streams in the project area. Only at locations where surface water sources are not available, the Contractor shall contemplate extraction of ground water, after intimation and consent from the CGWB.As per the CGWB classification, all the Talukas, through which the proposed VME-SPUR is passing, fall under "safe" category. During the operations phase the water would be required primarily for domestic use at the toll

plaza and landscaping

- 3.8.17 Daily water requirement for drinking & domestic purposes in the 4 construction camps are 42,000 liters (10,500 liters in each construction camp) and generation of wastewater is 33,600 liters (8,400 liters in each construction camp). Therefore, Packaged Wastewater Treatment Plant has been recommended for each construction camp.
- 3.8.18 Refuse Containers will be provided at site for the management of domestic waste generated by the construction laborers and these containers shall be emptied at least once daily and will be disposed of as per SWM Rules, 2016 in consultation with the local authority.
- 3.8.19 The part of the cut material shall be used in fill and further possibility of using the cut material in other road works shall be examined based on its suitability during the construction phase. The balance cut material, if any, shall be disposed off according to the Construction and Demolition Waste Management Rules, 2016. The hazardous waste generated during construction period will be disposed off as per applicable rule
- 3.8.20 Tree cutting: Loss of flora will occur due to vegetation clearing within the proposed ROW. There are approximately 55,355 trees within the proposed RoW; out of which 13,839 trees in forest land and 41,516 trees in non-forest land. About 69,680 no. of trees and 40,098 no. of hedges have been proposed to be planted under greenbelt development plan. Preference to native species including fruit species shall be given. These species are valuable from the socio-economic point of view. Plantation will be maintained upto 5 years and protected from cattle, wildlife and illegal felling. Dead saplings will be replaced to maintain the survival percentage of 90%. A capital cost provision of about Rs. 14.46 Crore has been kept for greenbelt development
- 3.8.21 As per the CGWA classification, all the Talukas (Vasai, Wada, Bhiwandi, Kalyan, Ambarnath and Panvel) through which the proposed expressway is passing fall under safe category. However, as per MoRTH requirement rainwater harvesting structure has been proposed.75 numbers (1 structure in every km excluding tunnel area) of Rain water harvesting with provision of oil filters and de-silting chambers shall be provided along the expressway as per requirement of IRC SP: 42-2014 and IRC SP: 50-2013
- 3.8.22 The proposed VME-SPUR alignment crosses tidal influenced parts of a small nala (connected to Tansa River), the Bhatsa River and Kalu River. CRZ map and report has been prepared by the National Centre for Earth Science Studies (NCESS), Thiruvananthapuram. Length of the proposed expressway in CRZ area is 609 m and total area in CRZ is 6.972 ha.

Location	CRZ IA		CRZ IB	CRZ II	CRZ III	CRZ	CRZ IVB
Location	Mangrove	Mangrove Buffer	CKZ IB	CKZ II	CKZ III	IVA	CKZIVB
KashidKopar	-	-	141.19	-	1533.8	-	280.47
Sange	-	-	2161.09	-	9093.73	-	4810.18
Konderi	-	-	938.22	-	9355.1	-	1488.8
Sangode	-	-	3889.35	-	16573.49	-	10472.23
Balyani	-	-	0	8978.1	0	-	0

Location	CRZ IA		CD7 ID	CD7 II	CD7 III	CRZ	CRZ IVB
Location	Mangrove	Mangrove Buffer	CKZ ID	CKZ II	CKZ III	IVA	CKZIVB
Total (in sq. m.)			7129.85	8978.1	36556.12		17051.68
Total (in ha)			0.713	0.898	3.656		1.705
Grand Total = 69715.75 Sq. m / 6.972 ha							

The CRZ proposal was considered by the Environment and Climate Change Department, Government of Maharashtra on 21st September 2021 and recommended the proposal for grant of CRZ clearance to MoEF&CC, New Delhi vide letter dated 29.09.2021with certain conditions.

3.8.23 R&R Issues: The land required for construction of proposed expressway is tentatively 1031.91 ha, which includes 122.6133 ha forest land and 909.2967 ha non-forest land. 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.

3.8.24 Socio-Economic status: The survey of 2205 sampled households revealed that a total 10,894 persons will be affected due to land acquisition. The average size of household is found 5 and the sex ratio is 909 females per thousand males. Most (around 22%) of the affected person are found matric qualified and engaged in farm activities. Out of which, total sample household 9.25% are schedule tribe (ST). Around 67% households have average income Rs. 1-3 Lakh per annum. The health care facilities are found mostly at Tehsil level. Around 55 people were reported dead due to Covid-19 in project influence area. The households fully dependent on farming for their income are barely fulfil their household expenditure. The private land being acquired for VME – SPUR is mainly (90%) in agriculture use and around 52.06% of total affected households are experiencing loss less than 10% of their total landholdings. A total 222 structures were reported to be affected among sampled households, which include 66% residential structures and 13.5% commercial structures.

3.8.25 Total manpower requirement is 2200 out of which 1400 manpower will be required during construction phase and 800 during operation phase.

3.8.26 Benefits of the project: The spur connects the main expressway to JNPT, Maha Samrudhi Marg (Mumbai-Nagpur Expressway) and Mumbai Pune Expressway. Therefore the traffic bound for JNPT, Nagpur and Pune will ply on SPUR and will not enter the Mumbai city. This will reduce both traffic congestion and pollution in the city. The Vadodara Mumbai Expressway with Spur is linking already existing Ahmedabad- Vadodara Expressway, Delhi-Vadodara Expressway, Mumbai –Nagpur Expressway and Mumbai Pune expressway and thus will provide expressway connectivity between Delhi-Mumbai-Nagpur-Pune. The expressway along with SPUR will provide connectivity to Dahej Port and Jawahar Lal Nehru Port (JNPT) thus facilitating imports and exports from these two ports. The project will be beneficial to Local Trade and Economy and will provide employment opportunity.

- 3.8.27 Details of Court cases: No court case is pending against the proposed project.
- 3.8.28 During deliberation, EAC observed the following:
 - i. ESZ clearance letter dated 16th April 2013 from Matheran Monitoring Committee (MMC) has not been received on an authorized letter head and rather on the personal letterhead. The concerned Committee may look in to the same and requested to send official clarification to the Ministry. There appears to be significant difference in 2013 submissions made by NHAI to MMC than 2021 submission which has proposed tunnel. Validity of 2013 approvals thus needs to be clarified by the MMC and state government.
- *ii.* Letter of 16th April 2013 also have four maps showing alignment. However, these are only about few cattle underpass, box culvert, vehicular underpass and a flyover. There is no mention of tunnel in the proposal submitted by NHAI to MMC.
- iii. The provision of ESZ recommendation from Matheran Monitoring Committee need to be ascertained by the Ministry.
- iv. Culverts and animal crossing in the forest area are not of proper dimensions. Committee suggested to make them 10mx4m in the forest area.
- 3.8.29 The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 278th meeting on 27th 28th October, 2021 and **deferred** the proposal for grant of Environment Clearance for want for following information
 - i. There seems to be ambiguities in the proposals submitted to Matheran Monitoring Committee in 2013 and 2021. PP need to clarify whether tunnel under Matheran was part of proposal submitted to MMC in 2013?
 - ii. PP has to submit the ESZ clearance from Matheran Monitoring Committee on an authorized letter head.
 - iii. In Forest area between chainage 2 to 19 all culverts, animal underpasses shall be as per prescription made in the conservation plan. However, considering good population of wildlife in the area it is advised that width of underpass shall be kept 10 meter uniformly for all underpasses.

Development of 4/6 lane of Paniyala-Alwar-Barodameo Economic Corridors, Inter Corridors and feeder routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) by M/s National Highways Authority of India (Length – 86.10 km) – Terms of Reference.

[Proposal No. IA/RJ/NCP/229839/2021; File No. 10/48/2021-IA.III]

"The EAC noted that the Project Proponent and the consultant have given in the application

and enclosures are true to the best of their knowledge and belief and no information has been suppressed in PFR/DPR/Form-1/Annexure-III. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent."

- 3.9.1 The project proponent along with the EIA consultant M/s Chaitanya Projects Consultancy Pvt. Ltd., Uttar Pradesh made a presentation through Video Conferencing and provided the following information: -
- 3.9.2 The proposed highway starts (Start Location: 27°46'59.28"N76°13'54.38"E) from its junction with NH-48 (Old NH-8) near Paniyala village in Kotputli, Jaipur district Rajasthan and terminates (End Location: 27°29'7.87"N76°50'39.83"E) at its junction with NH-148N (Delhi-Vadodara expressway) near Barodameo village in Alwar district inthe State of Rajasthan. The length of the proposed alignment is approx. 86.10 km. The alignment will link two National highways NH-48 and NH-148N. Old Delhi-Mumbai highway and the New Delhi-Mumbai expressway.
- 3.9.3 The proposed project falls under 7(f), Category-A, Highway as per EIA notification 2006. Total investment/cost of the project is 195397 Lakhs for construction cost and 92245 lakhs for LA cost.

3.9.4 Land use/ Land cover of the project site

S.No.	Land use/Land cover	Area (ha)	Percentage %	Remarks if any
1.	Private land	577.50	91.81	Mostly agriculture
2.	Government land	45.00	7.15	
3.	Forest land	6.50	1.03	
	Total	629.00	100.00	

3.9.5 Landuse/Landcover around 10 km radius of project site (1 km in case of Highway projects)

S.No.	Land use / Land cover	Area (ha)	Percentage %	Remarks if any
1.	Private land	15892.00	89.60	
2.	Government land	1171.00	6.60	
3.	Forest land	674.00	3.80	
	Total	17737	100.0	

- 3.9.6 The terrain of the alignment is basically flat to undulating in nature and some low lying areas.
- 3.9.7 Water bodies: There are as such no permanent water bodies/ rivers/ tributaries/ rivulets/ Lake crossing the proposed alignment. Only 2-3 rain fed nallah's are encountered. There shall be no major impact on the drainage system, however sufficient numbers of structures (such as culverts, Major and minor bridges etc.) will be constructed.
- 3.9.8 Water requirements: Total requirement of water for the construction is estimated at 1250 KLD which will be met through surface water sources and ground water proposed to be used only for camp site for transient period after obtaining the necessary from permissions

from competent authority. Ground water proposed to be used only for camp site for transient period after obtaining the permissions from appropriate authority.

- 3.9.9 Tree cutting: About 4300 trees are likely to be affected due to proposed RoW of 60 m.
- 3.9.10 Forest area of approx. 6.50 ha is involved, however if any area is identified during detailed survey, clearance from competent authority would be undertaken.
- 3.9.11 Proposed alignment is not passing through any Wild life sanctuary.
- 3.9.12 Land acquisition and R&R issues involved: The Project requires approx. 629 ha. approx. land. Total of around 190 no. of structures are coming in the proposed RoW. The land will be acquired as per procedure laid down in RFCTLARR Act, 2013.
- 3.9.13 Employment potential, No. of people to be employed:-During the construction of the road project around 200 persons would be employed temporarily for a period of 2 years. However due to construction of toll plazas approx. 20 persons will be employed on permanent basis. Preference will be given to local people for employment.
- 3.9.14 Benefits of the project -The proposed project passes through the districts of Jaipur and Alwar in Rajasthan state. The proposed highway 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.
- 3.9.15 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 road will also provide connectivity to the two National Highways. The compensatory plantation and road side plantation shall further improve the air quality of the region.
- 3.9.16 Details of Court cases- No court case is pending against the proposed project.
- 3.9.17 During deliberation, EAC observed the following:
 - i. Alignment of the proposed project was not satisfactory; PP has to explore the feasible alternate alignment and resubmit the KML file with revised alignment as discussed in the meeting.
- 3.9.18 The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 278th meeting during 27th 28th October, 2021. Committee noted that the proposed alignment will fragment the Sariska NP and nearby forest areas and thereby obstruct the movement of animal. The **proposal was thus not accepted in the present form** and advised PP to explore an alternate alignment and/or design of the section of highway such that there will be no fragmentation of the forest and resubmit the KML file with revised alignment as discussed in the meeting.

Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport (Length – 31.060 km) under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highways Authority of India (NHAI) – Terms of Reference.

[Proposal No. IA/HR/NCP/232701/2021; File No. 10/46/2021-IA.III]

- "The EAC noted that the Project Proponent and the consultant have given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in PFR/DPR/Form-1/Annexure-III. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent."
- 3.10.1 The project proponent along with the DPR consultant M/s SA Infrastructure Consultants Pvt. Ltd., Uttar Pradesh made a presentation through Video Conferencing and provided the following information: -
- 3.10.2 The proposed project is for construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabhgarh 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 Ballabhgarh 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.
- 3.10.3 The length of the proposed alignment is 31.060 km approx. This is a Greenfield project. The alignment is mainly passing through agriculture land.
- 3.10.4 The proposed highway starts from Junction with Ballabhgarh 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). This is a green field alignment, access control and is proposed for 6-Lane. The main objective of the proposed project is to provide connectivity between Delhi-Mumbai expressways to proposed Jewar Airport.
- 3.10.5 The Geo-coordinates of the proposed project are 28°19′2.06″N, 77°20′39.89″E (start location), 28°10′30.02″N, 77°34′31.51″E (end location). The project alignment passes through approx. 20 villages the major settlements along the alignment are Ballabhgarh, Mohna, Palwal and Jewar.
- 3.10.6 The proposed project falls under 7(f), Category-A, Highway as per EIA notification 2006. Total Project is 1906.00 Crore.
- 3.10.7 This is a Greenfield project. The alignment is mainly passing through agriculture land
- 3.10.8 Land use/ Land cover of the project site

S.No.	Land use/Land cover	Area (ha)	%	Remarks if any
1.	Private land	200	89.11	Agriculture/Barren Land

2.	Government land	20.435	9.11	Agriculture/Barren Land
3.	Forest land	4	1.78	-
	Total	224.435	100	-

- 3.10.9 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.
- 3.10.10 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.
- 3.10.11 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.
- 3.10.12 The total requirement of water for construction phase is estimated to 9,717 KL/day. Water will be extracted from surface sources. The ground water will be abstracted for camp site after obtaining the permission from competent authority.
- 3.10.13 The alignment will require cutting of approximately 3000 nos. of trees falls in proposed ROW. However, bare minimum no. of trees to be felled for construction of six lane road. Detailed tree inventories will be provided after joint enumeration with the appropriate authority in EIA.
- 3.10.14 There is no reserved and protected forest but there may be notified protected forest areas (Approx. 4 Ha) at some locations. The forest proposal shall be prepared after consultation with concerned forest officer if it attracts FC under section 2, 1980.
- 3.10.15 The proposed alignment does not pass through any National Parks, Wildlife Sanctuary, and Tiger Reserve of any other notified eco-sensitive areas.
- 3.10.16 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.
- 3.10.17 Land acquisition and R&R issues involved: About 224.435 ha land likely to be acquired as per NH Act 1956; compensation will be given as per RFCT LARR Act, 2013.
- 3.10.18 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.
- 3.10.19 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 Ballabhgarh 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.

- 3.10.20 Details of Court cases- No court case is pending against the proposed project.
- 3.10.21 The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 278th meeting during 27th 28th October, 2021 and **recommended** the proposal for grant of Terms of Reference with specific ToR conditions, as mentioned below, in addition to all standard ToR conditions applicable for such projects:
 - i. Cumulative impact assessment study should be carried out along the entire stretch including the other packages and the current stretch under consideration.
- 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 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. 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.
 - ix. Passage for animal movement has to be detailed in the report (if alignment is passing through Forest area).
 - x. 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.
 - xi. Detailed Biodiversity assessment and conservation/mitigation plan be developed by a reputed institute or by a team of expert of national repute.

Agenda No. 3.11

Development of 6 lane Access Controlled Greenfield Highway of Shamli – Ambala Sec. from Km Ch. 0+000 to Km Ch. 120+970 (Total length: 120.970 km) in the States of Uttar Pradesh and Haryana under Bharatmala Pariyojana Phase II (Lot-9/Package-1) by M/s National Highways Authority of India – Amendment in Terms of Reference.

[Proposal No. IA/HR/NCP/231468/2021; File No. 10/33/2021-IA.III]

- "The EAC noted that the Project Proponent and the consultant have given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in PFR/DPR/Form-1/Annexure-III. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent."
- 3.11.1 The project proponent along with the DPR consultant M/s. Egis India Consulting Engineers Pvt. Ltd in joint venture with K&J Projects Pvt. Ltd. made a presentation through Video Conferencing and provided the following information: -
- 3.11.2 The proposed project is for Design of 6-Lane Access Controlled Greenfield Highway of Shamli– Ambala Section from Km Ch. 0+000 to Km Ch. 120+970 in the States of Uttar Pradesh, Haryana and Punjab under Bharatmala Pariyojana Phase II (Lot-9/Package-1)". The total length of the project alignment is approx. 120.970 km and Row is 60 m.
- 3.11.3 The proposed highway starts from Village Gogwan Jalalpur near Thanabhawan in district Shamliof Uttar Pradesh State and terminates on Ambala-Chandigargh Highway near

village Sadopurnear Ambala Cityin State of Haryana. The alignment passing through seven districts namely Shamli and Saharanpur in the State of Uttar Pradesh, Yamunanagar, Karnal, Kurukshetra and Ambala in the State of Haryana and Sahibzada Ajit Singh Nagar district in the state of Punjab.

- 3.11.4 The proposed project falls under 7(f) Highway, Category-A, as per EIA notification 2006. Total investment/cost of the project is Rs 3963.80 Cr.
- 3.11.5 The proposal was earlier considered by EAC in its 271st meeting on 26th August 2021 and ToR was granted vide letter no. 10/33/2021-IA.III dated 22.09.2021 in favour of NHAI.
- 3.11.6 After detailed land acquisition it has been observed that in between a small patch of the proposed alignment from Ch. 108+450 to Ch. 111+800 (Total Length=3.35 km) falls in Sahibzada Ajit Singh Nagar District in the state of Punjab. Therefore, following amendments in the ToR dated 22.09.2021 has been requested-

Ref. No.	Approved ToR	Required Amendment
Subject	Greenfield Highway of Shamli- Ambala Sec. from Ch. 0+000 to km Ch. 120+970 (Total length: 120.970 km) in the states of Uttar	Development of 6 lane access controlled Greenfield Highway of Shamli - Ambala Sec. from Ch. 0+000 to km Ch. 120+970 (Total length: 120.970 km) in the states of Uttar Pradesh, Haryana and Punjab under Bharatmala Pariyojana Phase II (Lot-9/Package-1).
Point No. 3 sub Point (i)	6-lane Access Controlled Greenfield Highway of Shamli - Ambala Section from Ch. 0+000 to Ch. 120+970 in the states of Uttar Pradesh and Haryana under	The proposed project is for development of 6-lane Access Controlled Greenfield Highway of Shamli -Ambala Section from Ch. 0+000 to Ch. 120+970 in the states of Uttar Pradesh, Haryana and Punjab under Bharatmala Pariyojana Phase II (Lot-9/Package-1).
Point No. 3 sub Point (i)	namely Shamli and Sharanpur in the state of Uttar Pradesh and Yamunanagar, Karna,	The Alignment passing through seven districts namely Shamli and Sharanpur in the state of Uttar Pradesh and Yamunanagar, Karnal, Kurukshetra and Ambala in the state of Haryana and Sahibzada Ajit Singh Nagar in the State of Punjab.
Point No. 5	Greenfield Highway of Shamli- Ambala Sec. from Ch.0+000 to km Ch. 120+970 (Total	from Ch.0+000 to km Ch. 120+970 (Total length: 120.970 km) in the states of Uttar

- 3.11.7 Reason for Amendment: It is requested to consider and grant the amendment in title of the project and in relevant points as mentioned above because in between small patch of proposed alignment from Ch. 108+450 to Ch. 111+800 (Total length = 3.35 km) falls in the state of Punjab.
- 3.11.8 Details of Court cases- No court case is pending against the proposed project.

3.11.9 The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 278th meeting on 27th – 28th October, 2021 noted that it is merely the inclusion of name of state (Punjab) mistakenly not mentioned in the proposal and, therefore, **recommended** the proposal for Amendment in Terms of Reference as mentioned at Para 3.11.6 with previous conditions, as mentioned, in addition to all standard conditions applicable for such projects:

Agenda No. 3.12

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 – Amendment in Terms of Reference.

[Proposal No. IA/MH/NCP/227375/2021; File No. 10-77/2018-IA.III]

- "The EAC noted that the Project Proponent and the consultant have given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in PFR/DPR/Form-1/Annexure-III. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent."
- 3.12.1 The project proponent along with the EIA consultant M/s. Indomer Coastal Hydraulics (P) Ltd. Chennai made a presentation through Video Conferencing and provided the following information: -
- 3.12.2 Adani Cementation Limited (ACL) proposes to set up Berthing Jetty, Conveyor Corridor and Approach Road to cater traffic load of 5 Million MTPA capacity proposed along Amba River at village Shahbaj and Shahpur, Taluka Alibag, District Raigad, Maharashtra. The proposed project site is a part of Survey of India Toposheet No. E43H2.
- 3.12.3 TOR was issued vide File No. 10-77/2018-IA-III, Proposal no. IA/MH/MIS/81470/2018 on 13.12.2018 and further amended on 09.10.2019 for proposed "Berthing Jetty, Conveyor Corridor with Backup Storage Facilities and Approach Road for Cement Bulk Terminal" along Amba River, Village Shahbaj & Shahpur, Taluka- Alibag, District- Raigad (Maharashtra) proposed by Adani Cementation Limited (ACL).
- 3.12.4 The proposed project falls under 7(e), Category-A, Ports & harbours as per EIA notification 2006. The estimated capital cost of the project is around Rs.172 Crores.
- 3.12.5 The proposal of linked project outside CRZ area has changed from 'Cement Bulk Terminal' to 'Cement Grinding Plant & Flyash/Slag Processing Unit'.
- 3.12.6 There is no change in 'Berthing Jetty, Conveyor Corridor with Backup Storage Facility and Approach Road', proposed within CRZ area, for which TOR was issued under category 'A' of Item 7(E) of schedule.

- 3.12.7 Maharashtra Coastal Zone Management Authority (MCZMA) has recommended the proposal as per the required Specific Condition No. iii under Para 5 of TOR under Item No. 11 of Minutes of the 145th meeting
- 3.12.8 Stage-1 Forest Clearance (FC) for diversion of 0.6497Ha Mangrove RF falling under Conveyor Corridor and Approach Road is under process and pending at Regional Office, MOEFCC, Nagpur.
- 3.12.9 Draft EIA is prepared based on data collected during 2018. Public Hearing scheduled on 26.03.2021 but it was adjourned due to Covid 19.
- 3.12.10 ACL approached MOEFCC for TOR of 'Cement Grinding Plant & Flyash/Slag Processing Unit'. MOEFCC issued TOR for Cement Grinding Plant & Flyash/Slag Processing Unit vide F. No. IA-J-11011/261/2021-IA-II(I) dated 25.08.2021 with conduct of Public Hearing.
- 3.12.11 ACL requested for the following amendment in the project title as "Berthing Jetty, Conveyor Corridor with Backup Storage Facilities and Approach Road" of existing TOR due to change in its interlinked project from 'Cement Bulk Terminal' to 'Cement Grinding Plant & Flyash/Slag Processing Unit'

S.No	Reference as Approved TOR	Description as per approved TOR	Description as per proposal	Remarks
1	Point no. 2: Line 2 and 3	'for Raigad Cement Bulk Terminal of ACL'	'of ACL'	Change in Project Title in TOR dated 13.12.2018
2	Subject: Line no. 2	'for Raigad Cement Bulk Terminal of ACL'	'of ACL'	Change in Project Title in TOR dated 13.12.2018
3	Point no. 3(i): Line no. 3	'for Raigad Cement Bulk Terminal (RCBT)'	Remove	Statement not required
4	Point no. 3(i): Line no. 6 to 8	'shall meet the requirementtrading purpose'	Remove	Statement not required
5	Point no.6: Line 2 and 3	'for Raigad Cement Bulk Terminal of ACL'	'of ACL'	Statement not required
6	Point no. 3(iii): Line no. 2	'for its proposed Cement Bulk Terminal'	Remove	Statement not required
7	Point no. 5: Line 7	'for Raigad Cement Bulk Terminal of ACL'	'of ACL'	Statement not required

3.12.12 Reason for Amendment: The proposal of linked project has changed from 'Cement Bulk Terminal' to 'Cement Grinding Plant with Fly Ash/Slag Processing Unit' located outside CRZ area. There is no change in the Jetty proposal for which TOR was

issued. The infrastructure and the CRZ involvement remain unchanged. There is no change in scope of the Jetty Project including its infrastructure (dry bulk cargo handling), capacity (5MMTPA) and area (6 ha.). Hence ACL requested for the amendment in the project title as "Berthing Jetty, Conveyor Corridor with Backup Storage Facilities and Approach Road" of existing TOR issued by MoEFCC.

- 3.12.13 Details of Court cases- No court case is pending against the proposed project.
- 3.12.14 The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 278^{th} meeting on $27^{th} 28^{th}$ October, 2021 and **recommended** the proposal for Amendment in Terms of Reference as mentioned at Para 3.12.12 along with the following specific conditions, in addition to all standard conditions applicable for such projects:
 - i) Comprehensive studies of impact of runoff in the mangrove area should be carried out.
 - ii) Mangrove conservation plan to be prepared by a nationally reputed institute and duly endorsed by Mangrove Cell of Maharashtra Government

Agenda No. 3.13

Development of 1576.81 ha Industrial Park/SEZ at Mundra, Gujarat by Adani Port & Special Economic Zone Limited (APSEZ) – Further consideration for Terms of Reference.

[Proposal No. IA/GJ/NCP/216793/2021; File No. 10-138/2008-IA.III]

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

- 3.13.1 The aforementioned proposal was earlier considered in 268th meeting of Expert Appraisal Committee (EAC) held during 26th -27th July, 2021. *EAC*, in its meeting deferred the proposal with a view that a sub-committee of the EAC will visit the proposed site and submit its report to the EAC for further deliberation.
- 3.13.2 Accordingly, *vide* an Office Order dated 12th August, 2021, a sub-committee of EAC (Infra & CRZ), Ministry of Environment, Forests & Climate Change, was constituted and conducted a site visit at Mundra, Gujarat during 19th 20th August 2021 to ascertain the interventions and impacts for "Development of 1576.81 ha Industrial Park/SEZ" at Mundra, Gujarat by M/s Adani Port & Special Economic Zone Limited (APSEZ)". The site visit report is enclosed as *Annexure-B*. In the course of site visit, the sub-committee observed and recommended the following:
 - i. The forest area was barren land in some place and in other it was mainly occupied by *Prosopis* sp and *Acacia* sp.

- ii. There was lack of Master plan for CETP/STP. A clear-cut Master plan should be laid out for proposed CETP/STP.
- iii. Petroleum and coal jetty should be far from each other complying to safety distances / norms and shown accordingly in the Master Plan.
- iv. Industries type (existing and proposed) and its category should be detailed out.
- v. Public Hearing can't be exempted for the proposed expansion of 1576.81 ha Industrial/ SEZ Park considering the earlier PH conducted on October 05, 2010.
- vi. Total 33 % Green belt should be developed in the proposed SEZ area.
- vii. Details should be provided regarding the number, location, and facilities for intake & outfall of cooling water for desalination plants and its associated facilities.
- viii. The Proposed 1576.81 ha area falls over the stretch of ~35 km. Considering the future needs and requirement, water demand of 66 MLD will be met through desalination plant which will be developed on modular basis inline to the business needs, within APSEZ area. Desalination plant will be developed on modular basis within the land allotted for utilities in Master plan layout. Inline to the above, 3 intake locations and 4 outfall locations are being considered (out of which 1 intake and 1 outfall are existing). Since, the locations of the desalination plant are not provided at the ToR stage, PP needs to take CRZ clearance for the desalination plant separately. Also PP need to explore reducing the units otherwise there will be seven pipelines passing through CRZ areas causing more damage.
 - ix. Committee also noted that most of the road side plantation is of exotic species such as Eucalyptus and Australian acacia. It is necessary that green belt should be developed exclusively of native species.
 - x. At the time of Environmental Clearance, the recommendation of the SCZMA shall be obtained and submitted along with a complete set of documents required as per Para 4.2 (i) of CRZ Notification, 2011.
- 3.13.3 At this instance, the aforementioned proposal was further placed before the EAC during 278th meeting during 27th 28th October, 2021. The project proponent along with the EIA consultant M/s L&T Infrastructure Engineering Limited made presentation through Video Conferencing and committed to comply with the observations of the Committee in the site visit report, however made a request for exemption of Public Hearing for the expansion project. EAC however mentioned that Public Hearing cannot be exempted for the proposed expansion of 1576.81 ha Industrial/ SEZ Park on the basis of earlier PH conducted on October 05, 2010.
- 3.13.4 The EAC, taking into account the submission made by the project proponent, had a detailed deliberation in its 278^{th} meeting during $27^{th} 28^{th}$ October, 2021 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 PP to submit the detailed EIA/EMP report as per the ToR and along with the Public Hearing.
 - ii. A clear-cut Master plan should be laid out for proposed CETP/STP.

- iii. Petroleum and coal jetty should be far from each other complying to safety distances / norms and shown accordingly in the Master Plan.
- iv. Industries type (existing and proposed) and its category should be detailed out in the EIA report.
- v. Total 33 % Green belt should be developed in the proposed SEZ area and a layout plan shall be submitted.
- vi. Details should be provided regarding the number, location, and facilities for intake & outfall of cooling water for desalination plants and its associated facilities.
- vii. Since, the locations of the desalination plant are not provided at the ToR stage, PP needs to take CRZ clearance for the desalination plant separately. Also, PP need to explore reducing the units otherwise there will be seven pipelines passing through CRZ areas causing more damage.
- viii. Committee also noted that most of the road side plantation is of exotic species such as Eucalyptus and Australian acacia. It is necessary that green belt should be developed exclusively of native species.
- ix. At the time of Environmental Clearance, the recommendation of the SCZMA shall be obtained and submitted along with a complete set of documents required as per Para 4.2 (i) of CRZ Notification, 2011.
- 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. Proponent shall not do any coal-based operation. Instead, possibilities to be explored for gas/electricity-based operations. Option to utilise solar power and wind energy should also be worked out and submitted.
- xvi. 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.
- xvii. Proponent shall establish captive treatment, storage, and disposal facility (TSDF) to ensure the effective Solid Waste Management.
- xviii. The activities and budget earmarked for Corporate Environmental Responsibility (CER) shall be as per ministry's O.M No 22-65/2017-IA.III dated 1st May, 2018 and the action plan on the activities proposed under CER shall be submitted at the time of appraisal of the project included in the EIA/EMP Report.

- xix. 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.
- xx. Biodiversity Conservation Plan shall be prepared by competent agencies like Gujarat Institute of Desert Ecology (GUIDE), Bhuj or SACON in consultation with the State Forest Department.
- xxi. Cumulative Impact studies and conservation plan on the migratory birds and mudflats should be carried out by competent agencies like Gujarat Institute of Desert Ecology (GUIDE), Bhuj or SACON.

Development of Payal Industrial Park at Villages Pakhajan, Pipaliya & Vahiyal, Taluka Vagra, District Bharuch, Gujarat by M/s Payal Properties Pvt. Ltd. – Further consideration for Terms of Reference.

[Proposal No. IA/GJ/NCP/225979/2021; File No. 10/39/2021-IA.III]

- "The EAC noted that the Project Proponent and the consultant have given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in PFR/DPR/Form-1/Annexure-III. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent."
- 3.14.1 The abovementioned proposal was earlier considered in 273rd meeting during 16th-17th September, 2021 and was deferred. It was observed that certain sectors proposed in the industrial estates are not part of EC which is granted to PCPIR and project proponent need to submit revised proposal by removing those industries that are not stated in the EC of PCPIR. For this the PP need to thoroughly scrutinize the EIA/EMP submitted to the project of PCPIR. Further the PP need to provide full scheme of green belt for 33% at the ToR stage.
- 3.14.2 At this instance, the aforementioned proposal was further placed before the EAC during 278^{th} meeting during $27^{th} 28^{th}$ October, 2021. The project proponent along with the EIA consultant M/s Aqua-Air Environmental Engineers P. Ltd. has made a presentation through Video Conferencing and provided the following information-
- 3.14.3 The proposed project is for Development of Payal Industrial Park at Villages Pakhajan, Pipaliya & Vahiyal, Taluka Vagra, District Bharuch, Gujarat in a total area of 3514 Acres (1422.10 Ha). The proposed project falls within PCPIR, Dahej. PCPIR Dahej has already obtained Environment Clearance vide letter No 21-49/2010-IA-III dated 14th September, 2017.
- 3.14.4 The proposed project falls under 7(c) Industrial Park, Category-A, as per EIA notification 2006. Total investment/cost of the project is Rs 1044.92 Crore.
- 3.14.5 Land use/ Land cover (approx. area) of the project site is as following:

S. No.	Particulars	Area (ha)	Area (%)	Remarks
1	Industrial plots area	1001.96	70.46	
2	Common facilities			
	CETP	25.32	1.78	
	Common TSDF	15.18	1.07	
	Common MEE	1.94	0.14	
3	Utility Plots	53.48	3.76	
4	Utility Corridor	25.81	1.81	
5	Roads	169.99	11.95	
6	Day Care Centre	2.40	0.17	
7	Green belt	99.86	7.02	Member industries of proposed park shall develop 33% green belt individually.
8	Others (ONGC Well)	3.16	0.22	
9	Others (Water body)	22.95	1.61	
	Total	1422.06	100.00	

3.14.6 The land use pattern on 10 km either side of the project are as follows:

S. No.	Land use Class	Area (ha)	Area (%)	Remarks, if any
1	Agriculture	27364.69	87.1	
2	Scrubland	2388.44	7.6	
3	Settlements	746.17	2.4	
4	Waterbody	926.77	2.9	
	Total	31426.07	100	

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

S. No.	Nature of Industry	Sector No. as per EIA Notification
1	Chlor-Alkali Industry	4(d)
2	Fertilizer Industry	5(a)
3	Agro-Chemicals & Agro-chemical Intermediates Industry,	5(b)
4	Petrochemicals Industry	5(c) & 5(e)
5	Textile Industry	5(d)
6	Dyes & Dyes Intermediate	5(f)
7	Pigment & Pigment Intermediates	5(f)
8	Synthetic Organic Chemicals Industry	5(f)
9	Speciality Chemical Industry	5(f)
10	Polymer Industry	5(f)
11	Inorganic Chemical Industry	-

12	Other downstream petrochemical industries as	
12	per Permissible Industries in Dahej PCPIR.	-

^{&#}x27;Zoning Atlas for Sitting of Industries' published by CPCB shall be followed.

3.14.8 Types of industries to be established in Payal Industrial Park with their area break up are as following:

S.	Nature of Industry	Sector No. as per	No. of		Area		
No.		EIA Notification	units	Acre	m ²	Ha	
1	Chlor-Alkali Industry	4(d)	7	141	570627	57	
2	Fertilizer Industry	5 (a)	7	141	570627	57	
3	Agro-Chemicals & Agro-chemical Intermediates Industry,	5 (b)	11	212	857964	86	
4	Petrochemicals Industry	5 (c) & 5(e)	7	141	570627	57	
5	Textile Industry	5(d)	18	495	2003265	200	
6	Dyes & Dyes Intermediate	5(f)	11	212	857964	86	
7	Pigment & Pigment Intermediates	5(f)	7	141	570627	57	
8	Synthetic Organic Chemical Industry	5(f)	7	141	570627	57	
9	Speciality Chemical Industry	5(f)	29	570	2306790	231	
10	Polymer Industry	5(f)	7	141	570627	57	
11	Inorganic Chemical	-	7	141	570228	57	
	Total		118	2476	10019973	1002	

- 3.14.9 Water bodies: There are 11 natural ponds within proposed industrial park premises. The source of water in the pond is only rain water. Villagers are not using water from these natural ponds. It shall be used as park reservoir and shall be maintained by project proponent. Thick green belt around these natural ponds shall be developed. The source of water supply shall be GIDC Water Supply, Bharuch only. There shall not be any use of surface water and ground water during operation of the park. There shall not be any impact on drainage. *Canal*: Canal is passing through later phases of 4 and 6 in the park, however canal area is not considered in our planning, but 18-meter space shall be kept for thick green belt development on both the sides of canal. This green buffer is over and above 7.02% of the green area earmarked. A cost of INR 14-15 lakhs shall be incurred to develop a thick green belt along both sides of the canal.
- 3.14.10 For the treatment of industrial effluent from member industries, CETP of 50 MLD capacity shall be provided. The proposed CETP shall be expanded in a phased manner in accordance with the development in the park to treat industrial wastewater. Above ground wastewater collection network for conveyance of wastewater from each individual member industry shall be provided. The treated effluent confirming GPCB discharge norms shall be discharged into Dahej-3 pumping station. Form Dahej-3 pumping station the treated effluent shall be further sent to final pumping station through GIDC drainage pipeline and finally disposed to Bay of Cambay through pipeline. Individual member industry shall dispose the sewage in Septic tank/soak pit or STP as per requirement. The treated water from STP shall

be used either in the plant for cooling, washing, etc. or will be used for gardening within premises of member industry.

- 3.14.11 Water requirements: Approx. 92 MLD raw water shall be required. The water source is GIDC water supply. In future whenever water demand increases, the additional water shall be provided by GIDC (Nodal agency) as and when required. NOC from GIDC, Bharuch is obtained vide letter No. GIDC/SE/CG/BRH/887, dated 07.10.2019.
- 3.14.12 Tree cutting: There shall not be any tree cutting for the proposed park. However, if any tree to be cut during establishment of member industry, member industry will follow the Forest Dept. procedure for tree cutting.
- 3.14.13 Green Belt development: The Proponent will develop about 99.86 ha i.e. 7.02 % of the total area as green belt across the boundary of the industrial park and periphery of the road within Industrial park. Project Proponent will spend approximately 2-3% of the project cost in developing green belt in the proposed industrial park. Majority of the vacant land shall be planted with thick trees. In addition to this, the member industries of the proposed industrial park shall develop 26 % green belt within their factory premises and on periphery of the factory. Green belt undertaking from the potential industries coming in the park will be taken. As a park developer along with the Member industries jointly, 33% green belt requirement in each phase of development of the park shall be accomplished. The green belt development plan shall be as under.

Phase	Area			Cost, Rs.	No. of
No.	Acres	m ²	Hectare	Cr.	Plantations
1	41.11	166368	16.64	3.5	3000
2	41.11	166368	16.64	3.5	3000
3	41.11	166368	16.64	3.5	3000
4	41.11	166368	16.64	3.5	3000
5	41.11	166368	16.64	3.5	3000
6	41.11	166368	16.64	3.5	3000
Total	246.65	998210	99.86	21	18000

- 3.14.14 Diversion of forest land: There is no involvement of diversion of forest land. The proposed project is within PCPIR, Dahej. PCPIR Dahej has already obtained Environment Clearance as well as Forest clearance.
- 3.14.15 There is no National Parks, Sanctuaries and Tiger Reserves, Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC within 10 km of proposed project site.
- 3.14.16 Land acquisition and R&R issues: PCPIR, Dahej (Total area of 453 sq. km) has allotted 144 sq. km land for Petroleum & Petrochemical industries, 116 sq. km land for GIDC & 126 sq. km land for residence. The proposed Payal Industrial Park (by Payal Properties Pvt. Ltd) falls in industrial earmarked area (144 sq. km) within PCPIR, Dahej. There are no R&R issues.

- 3.14.17 Employment potential: Approximately 150000 skilled & unskilled man power shall be employed during operation of the proposed project. After fully development of the proposed industrial park, there shall be 32000 no. of people shall be employed in member industries of park. There will be 200-250 manpower for management of park, which shall be mostly hired locally.
- 3.14.18 Benefits of the project: Socio-economic benefit to the locals as it would provide both indirect employment and direct employment during construction and operation of the Industrial Area. There will be positive impact on social conditions in and around the site due to the proposed project.
- 3.14.19 Details of Court cases: No court case is pending against the proposed project.
- 3.14.20 During deliberation in the earlier meeting of EAC and the present meeting, EAC observed the following:
 - i. There is involvement of Exotic species in the Greenbelt development.
 - ii. PCPIR should be followed for industry establishment in proposed industrial park. Those industries which are not in PCPIR will not be considered.
 - iii. The proponent will develop 7.02 % Green belt of the total area and Member industries of the proposed park shall develop remaining green belt individually to make the overall greenbelt of 33%.
 - iv. There is one natural pond/canal within the proposed industrial park premises. A thick green belt (about 15 m width) may be developed along both side of the canal.
 - v. PP has to follow the 'Zoning Atlas for Siting of Industries published by CPCB.
 - vi. EAC noted that the proposed Payal Industrial Park (by Payal Properties Pvt. Ltd) falls within industrial earmarked area (144 sq. km) within PCPIR, Dahej
 - vii. The Committee noted that as per the existing regulatory provisions, Public Hearing is exempted for "all projects or activities located within industrial estates or parks (item 7(c) of the Schedule) approved by the concerned authorities, and which are not disallowed in such approvals". Therefore, PH is exempted for M/s Payal Properties Pvt. Ltd, however, the PP need to study in detail about the category of projects/activities which are permissible within PCPIR as per the EC granted to PCPIR as whole. Further, Ministry vide OM no. J-11011/321/2016-IA.II(I), dated 27.04.2018 has made it mandatory for certain type of industries to conduct public hearing irrespective of their location within Industrial Area or outside the industrial area.
- 3.14.21 The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 273^{rd} meeting during 16^{th} - 17^{th} September, 2021 and 278^{th} meeting held during $27^{th} 28^{th}$ October, 2021 and **recommended** the proposal for grant of Terms of

Reference (ToR) with exemption of Public Hearing; with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

- i. 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.
- ii. Water balance chart be prepared and submitted along with EIA/EMP report.
- iii. Proponent shall ensure the conservation and development of nearby water bodies in the surrounding areas.
- iv. Detailed land use breakup of proposed Industrial area with green belt to be submitted.
- v. 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.
- vi. The PP shall not use groundwater without obtaining approval from CGWA/SGWA as the case may be.
- vii. Proponent shall establish captive treatment, storage, and disposal facility (TSDF) to ensure the effective Solid Waste Management.
- viii. Submit a certificate from local DFO that no forest land is involved in the proposed Industrial Park (in case of no forest land is claimed).
 - ix. Biodiversity Conservation Plan shall be prepared in consultation with the State Forest Department.
 - 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. Greenbelt plantation should be done using only native species in consultation with the Gujarat Institute of Desert Ecology (GUIDE), Bhuj. All exotic plant spp. may be removed.
- xii. PCPIR EC should be followed for industry development in proposed industrial park. Those industry, which are not mentioned/allowed in PCPIR, should not be considered.

Agenda No. 3.15

Proposed Construction of Third Chemical Birth at Pir Pau Jetty by M/s Mumbai Port Trust – Environmental and CRZ Clearance.

[Proposal No. IA/MH/NCP/210987/2006 and File No. 10-50/2019-IA.III]

"The EAC noted that the Project Proponent/consultant have given under taking 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 the EIA/EMP report. If any

part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent."

- 3.15.1 The abovementioned proposal was earlier considered in 262^{nd} EAC meeting during 25^{th} and 27^{th} May, 2021 and 269^{th} EAC meeting on 10^{th} August, 2021.
- 3.15.2 During the deliberation EAC has observed that "The PP is required to submit a project specific Risk Assessment and Management Plan rather than a generic plan as submitted in the EIA report. However, EAC has recommended the proposal with one of the specific condition that "A comprehensive cumulative Chemical Hazard Management plan through authorized agency/institute covering proposed and existing chemical berths should be made and compliance in accordance with the plan should be submitted to the regional office along with the 6 monthly compliance report."
- 3.15.3 That matter was examined in the Ministry and it is noted from the above obseration of EAC that, the Chemical Hazard Management plan has not been addressed to the satisfaction of EAC. Considering the involvement of cumulative Chemical Hazard, it would be appropriate that PP may submit the desired management plan at the earliest and same is duly considered by EAC before proceeding further.
- 3.15.4 At this instance, the aforementioned proposal was further placed before the EAC during 278th meeting during 27th 28th October, 2021. The project proponent along with the EIA consultant M/s Ultra Tech, Environment Consultancy & Laboratory, Maharashtra made a presentation through Video Conferencing and provided the following information: -

Q.	Query raised	Response by Proponent
no.		
i	A comprehensive cumulative Chemical Hazard Management plan through authorized agency/institute covering proposed and existing chemical berths should be made and compliance in accordance with the plan should be submitted to the regional office along with the 6 monthly compliance report	The proponent has submitted a comprehensive cumulative chemical hazard management plan stating that Hazards were identified and assessed the risk involved in the cumulative operation of First, Second and proposed new Berth. It was observed from the Iso-Risk Contour that the acceptable limit of individual risk of 1.0×10^{-6} per year remains mainly confined around Pirpau Jetty premises. Firefighting facilities including Fire water pumps, ESD system, and Gas Monitoring system have been installed on the FCB and SCB. The same shall be installed on proposed new (Third) Berth. Hence, it was concluded that Pirpau Berth Jetty may be considered safe from environmental risk point of view. The detailed report regarding the same was presented during 278 th EAC meeting.

- 3.15.5 The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 278th meeting during 27th 28th October, 2021 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 work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- (ii) All the recommendations and conditions specified by the Maharashtra State Coastal Zone Management Authority (MCZMA) vide letter No CRZ 2020/CR 65/TC 4 dated 1st December 2020 shall be complied with.
- (iii) 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.
- (iv) The project proponent shall comply with the air pollution mitigation measures as submitted.
- (v) 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.
- (vi) No underwater blasting is permitted.
- (vii) Necessary approvals to be taken during implementation and commissioning from statutory bodies concerned.
- (viii) 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.
 - (ix) A continuous monitoring programme covering all the seasons on various aspects of the coastal and marine environs needs to be undertaken by a competent organization available in the State or by entrusting to the National Institutes/renowned Universities such as SACON or University of Mumbai 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.
 - (x) 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.
 - (xi) Sediment concentration should be monitored fortnightly at source and disposal location of dredging while dredging.

- (xii) 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.
- (xiii) 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.
- (xiv) Dredging, etc will be carried out in the confined manner to reduce the impacts on marine environment. Dredged material shall be disposed safely in the designated areas as per CWPRS recommendations, and in no case shall be disposed in the marine environment,
- (xv) Dredging shall not be carried out during the fish breeding season.
- (xvi) While carrying out dredging, an independent monitoring shall be carried out by Government Agency/Institute to check the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.
- (xvii) 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.
- (xviii) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.
- (xix) Necessary arrangement for general safety and occupational health of people should be done in letter and spirit.
- 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.

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Following members were present during the $278^{th}\,EAC$ (Infra-1) meeting held on $27^{th}-28^{th}\,October\,2021$

S. No.	Name	Designation	Remarks	
			27 th October 21	28 th October 21
1.	Dr. Deepak Arun Apte	Chairman	Present	Present
2.	Sh. S. Jeyakrishnan	Member	Requested Leave	Requested Leave
			of Absence	of Absence
3.	Sh. Manmohan Singh Negi	Member	Present	Present
4.	Sh. ShamWagh	Member	Present	Present
5.	Dr. Mukesh Khare	Member	Requested Leave	Requested Leave
			of Absence	of Absence
6.	Dr. Ashok Kumar Pachauri	Member	Present	Present
7.	Dr. V. K Jain	Member	Present	Present
8.	Dr. Manoranjan Hota	Member	Present	Present
9.	Sh. R Debroy	Member	Absent	Absent
10.	Dr. Rajesh Chandra	Member	Absent	Absent
11.	Dr. M. V Ramana Murthy	Member	Present	Present
12.	Smt. Bindu Manghat	Member	Absent	Absent
13.	Dr. Niraj Sharma	Member	Requested Leave	Present
			of Absece	
14.	Sh. Amardeep Raju,	Scientist'E'&	Present	Present
		MS,		
1.5		MoEF&CC	D ·	D .
15.	Dr. Rajesh Prasad Rastogi	Scientist'C', MoEF&CC	Present	Present
17.	Ms. Harshulika	Consultant	Present	Present
17.	1,15, 11dibildilid	Constituit	11000110	Tiobolit

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 1576.81 ha Industrial Park/SEZ" at Mundra, Gujarat by M/s Adani Port & Special Economic Zone Limited (APSEZ)

Adani Port & Special Economic Zone Limited (APSEZ) has conceptualized a Port based Special Economic Zone (SEZ) & developed a master plan over an area of approximately 18000 Ha land near Mundra, Kutch region, to be executed in a phased manner for future expansion of SEZ /Industrial Parks/ Port backup activities. Out of overall area of 18000 Ha, about 8481.2784 ha area has been notified as Port based Multiproduct SEZ vide Ministry of Commerce and Industry (MoCI) gazette notification no. S. O. 3029 (E) dated September 21, 2016. Environment Clearance for 8481.27 Ha was received in 2 parts; first vide F.No.10-138/2008-IA.III dated July 15, 2014 for 6641.2784 Ha., followed by environmental clearance vide F. No. 10-138/2008-IA.III dated 12th February, 2020 adding 1840 Ha notified SEZ with existing approved area of 6641.2784 Ha to make it 8481.2784 Ha.

- Aligning to the original vision of 18000 Ha, APSEZ now proposes to develop 1576.81 Ha as Industrial Park/SEZ.
- 3. Application for Terms of Reference (ToR) for the aforementioned proposal was submitted in the Ministry on 12th July, 2021. Proposal was considered in 268th meeting of Expert Appraisal Committee (EAC) held during 26th -27th July, 2021. EAC, in its meeting deferred the proposal with a view that a sub-committee of the EAC will visit the proposed site and submit its report to the EAC for further deliberation.
- Accordingly, vide an Office Order dated 12th August, 2021, a sub-committee of EAC (Infra & CRZ), Ministry of Environment, Forests & Climate Change, was constituted.
- 5. The EAC (Infra & CRZ) sub-committee conducted a site visit at Mundra, Gujarat during 19th 20th August 2021 to ascertain the interventions and impacts for "Development of 1576.81 ha Industrial Park/SEZ" at Mundra, Gujarat by M/s Adani Port & Special Economic Zone Limited (APSEZ)". The list of participants attended during the meeting / site visit is given at *Annexure-I*.
- 6. M/s Adani Port & Special Economic Zone Limited (PP) has given a power-point presentation before Sub-Committee on 19th August 2021 about the proposed project and interalia presented a brief on the project to the sub-Committee as following:
 - Project Proponent (PP) mentioned that the entire 1576.81 ha (3896.38 acres) of land has been divided in 12 different sizes of parcels and each land parcel is well connected with the exiting road/rail network of the existing SEZ.
 - The conceptualized master plan over an area of 18000 ha, which was required to be progressively converted in a phased manner for future expansion of SEZ /Industrial Parks/Port backup activities.
- iii. The proposed forest land of 1576.81 ha for which Stage I Forest Clearance has been received vide F. No. 8-04/2016-FC dated 16th Nov., 2018 and same is proposed as a support and extension of existing industrial units within overall APSEZ area.
- iv. Environment Clearance inline to procedure given in EIA Notification 2006 for Greenfield Copper Refinery Plant (1.0 MTPA) project has been accorded on 08th

- May 2020 with 256.58 ha area, out of which 102.39 ha was forest area. The Public Hearing for the project was conducted on 29th April, 2017.
- v. PP explained in detail that M/s Mundra International Airport Ltd. has been accorded Environment Clearance inline to procedure given in EIA Notification 2006 vide F.No.10-22/2016-1A-Ill dated 17th Sept., 2019 for commercial Airport in total area of 522 ha of land (185 ha of forest land, which is proposed as a part of 1576.81 ha Environment Clearance). The Public Hearing for the project was conducted on 24th July, 2018.
- vi. APSEZ as a part of master plan shall develop greenbelt/buffer in the order of 33% in a phased wise manner which includes greenbelt/buffer by APSEZ as well as greenbelt/buffer which will be planned as a part of member industries in line to the statutory requirements.
- vii. The proposed 1576.81 ha falls over the stretch of ~35 km and considering the future needs & requirement, desalination plant and associated facilities including intake & outfall locations have been proposed on modular basis in line to the business needs.
- viii. The proposed development of 1576.81 ha is located at crucial intermittent parcels which provide interlinking to 8481.28 ha for which EC has been accorded. As on date, as a part of 8481.28 Ha, total land use developed is ~41% which includes Industrial area, Port backup area, Social infra, Utilities, Green/open space & transportation & Utilities corridor.
 - ix. During presentation, APSEZ sought Public Hearing exemption for the proposed expansion of 1576.81 ha Industrial/ SEZ Park considering the earlier PH conducted on October 05, 2010.
- 7. After detailed presentation on 19th August 2021, EAC-Sub-Committee visited the following areas during site visit on dated 20th August 2021:

Location I: Near Project parcel no. 12, Bhadreshwar village:

- i. Sub-committee observed that Forest area of this location was mainly occupied by *Prosopis* sp and *Acacia* sp. The PP informed that CRZ area falling in this parcel is classified as CRZ IA, in line to draft CZMP as per CRZ Notification 2011, since the land falls under Reserve Forest category. PP represented that with the diversion of forest land for non-forest purpose, the category will be considered as Diverted Forest categorization as per draft CZMP map and accordingly permissible activities under the same category are being proposed in this region.
- ii. EAC sub-committee was of the opinion that since the land use of Reserved Forest, remains Reserved forest, even after the diversion, hence only permissible activities as per CRZ Notification 2011 to be considered for development or this area can be proposed as greenbelt/buffer area to meet up 33% overall greenbelt/buffer requirements. EAC sub-committee, after due consideration, suggested to PP to submit the details of change of CRZ categorization after forest land diversion as approved by CZMP based on the CRZ Notification 2011.

Location II: Near Project parcel no. 10, Gorasama village (East site of Commercial Airport)

i. This location was a part of expansion of Commercial airport for M/s Mundra International Airport Ltd. The EAC sub-committee was of the opinion that since

Environment Clearance for the commercial airport is already been accorded and Stage 1 forest clearance is received, hence why PP want the EC for the area of 185 ha of forest land of commercial airport which is a part of 1576.81 ha.

Location III: Near Project parcel no. 4, Navinal village:

i. This location was Parcel 4 of 1576.81 ha with dense vegetation of *Prosopis juliflora*. This Parcel is proposed for coal to poly generation development

Location IV: Near Project parcel no. 1&2, Siracha village:

- ii. It was informed regarding the possibility of expansion of thermal power plant and copper smelter project in this area.
- 8. In the course of site visit, the sub-committee observed and recommended the following:
 - i. The forest area was barren land in some place and in other it was mainly occupied by *Prosopis* sp and *Acacia* sp.
 - There was lack of Master plan for CETP/STP. A clear-cut Master plan should be laid out for proposed CETP/STP.
 - iii. Petroleum and coal jetty should be far from each other complying to safety distances / norms and shown accordingly in the Master Plan.
 - iv. Industries type (existing and proposed) and its category should be detailed out.
 - v. Public Hearing can't be exempted for the proposed expansion of 1576.81 ha Industrial/ SEZ Park considering the earlier PH conducted on October 05, 2010.
 - vi. Total 33 % Green belt should be developed in the proposed SEZ area.
 - vii. Details should be provided regarding the number, location, and facilities for intake & outfall of cooling water for desalination plants and its associated facilities.
 - viii. The Proposed 1576.81 ha area falls over the stretch of ~35 km. Considering the future needs and requirement, water demand of 66 MLD will be met through desalination plant which will be developed on modular basis inline to the business needs, within APSEZ area. Desalination plant will be developed on modular basis within the land allotted for utilities in Master plan layout. Inline to the above, 3 intake locations and 4 outfall locations are being considered (out of which 1 intake and 1 outfall are existing). Since, the locations of the desalination plant are not provided at the ToR stage, PP needs to take CRZ clearance for the desalination plant separately. Also PP need to explore reducing the units otherwise there will be seven pipelines passing through CRZ areas causing more damage.
 - ix. Committee also noted that most of the road side plantation is of exotic species such as Eucalyptus and Australian acacia. It is necessary that green belt should be developed exclusively of native species.
 - x. At the time of Environmental Clearance, the recommendation of the SCZMA shall be obtained and submitted along with a complete set of documents required as per Para 4.2 (i) of CRZ Notification, 2011.

Annexure-I

A sub-committee of the following members participated in the visit of Industrial Park/SEZ at Mundra, Gujarat.

S. No.	Name	Designation
01.	Dr. Deepak Apte	Chairman of the EAC (Infra-1)
02.	Dr. V.K. Jain	EAC (Infra-1) member
03.	Shri Sham Wagh	EAC (Infra-1) member
04.	Shri S Jeyakrishnan	EAC (Infra-1) member
05.	Sh. Manmohan Singh Negi	EAC (Infra-1) member
06.	Dr. M. V Ramana Murthy	EAC (Infra-1) member
07.	Dr. H. Kharkwal	MS (CRZ), MoEFCC
08.	Dr. Rajesh Prasad Rastogi	Sci 'C', MoEFCC (Infra-1)

Following representatives and consultants from PP side were present during the visit

S. No.	Name	Designation
01.	Mr. Rakshit Shah	Executive Director
02.	Mr. Nitin Jaiswal	Associate General Manager, Land & Estate
03.	Dr. Amol Sawale	Vice President Horticulture
04.	Mr. Shalin Shah	Head Sustainability & Environment
05.	Mr. Azharuddin Kazi	Sr. Manager, Environment
06.	Mr. Snehal Jariwala	Sr. Manager Environment
07.	Mr. Bhagwat Swaroop Sharma	Sr. Manager Environment
08.	Mr. Sanjeev Munjal	General Manager, Corporate Affairs
09.	Mr. Vivek Shukla	Associate General Manager, Corporate Affairs
10.	Mr. Anshul Sanduja	Manager, Environment
11.	Mr. Chiragsing Rajput	Dy. Manager Environment
12.	Mr. Mahendra Kumar Ghritlahre	Dy. Manager Environment
	L&TIEL (NABET Ac	credited EIA Consultant):
13.	Mrs. Susruta Mamidanna,	Project Consultant
14.	Mr. Hanumantha Rao.V,	Senior Engineering Consultant



Discussion of Sub-Committee members with PP during PPT presentation on 19th August, 2021 and proposed Site visit at Mundra