

Minutes of the 273rd meeting of Expert Appraisal Committee held on 16th - 17th September, 2021 through Video Conferencing for the projects related to Infrastructure Development, all Ship breaking yards including ship breaking units 7(b); Industrial Estate/Parks/Complexes/Areas, Export Processing Zones, Special Economic Zones, Biotech Parks, Leather Complexes7(c); Ports, harbors, breakwaters, dredging7(e) and National Highways7(f)

The 273rd Meeting of Expert Appraisal Committee (EAC) of Infra-1 (IA-III) was held through Video Conferencing at the Ministry of Environment, Forest & Climate Change (MoEF&CC), Indira Paryavaran Bhavan, New Delhi on 16th – 17th September 2021 under the Chairmanship of Dr. Deepak ArunApte. A list of participants is annexed as **Annexure-A**.

1. OPENING REMARKS OF THE CHAIRMAN

At the outset, Dr. Deepak 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 under taken by the Ministry under Infra-1 Division.

2. CONFIRMATION OF THE MINUTES OF THE LAST MEETING

The Committee confirmed the Minutes of 271st EAC meeting held during 26th - 27th August 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 access controlled Ludhiana-Bhatinda Greenfield Highway starting from Delhi-Katra Expressway (chainage 251+800 of NE-5) near Ludhiana (village Ballawal) and terminating at (proposed chainage 94+500) Amritsar-Bhatinda Greenfield highway at Bhatinda near Rampura Phul as a part of Ludhiana-Ajmer Economic Corridor in the state of Punjab under Bharatmala Pariyojana (Total length 78 km) – Environmental Clearance.

[Proposal No IA/PB/NCP/224881/2021 and File No 10-63/2020-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 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.”

3.1.1. The project proponent along with the EIA consultant M/s Amaltas Enviro Industrial Consultants LLP, Gurugram, Haryana has made a presentation through Video Conferencing.

3.1.2. The proposed project is for development of access-controlled Ludhiana-Bathinda Greenfield Highway, starts at Delhi-Katra Expressway of NE 5 (at Ballawal village of Ludhiana West Tahsil) and ends at Amritsar-Bathinda Greenfield Highway (near Rampura Phul Tahsil) in the state of Punjab. Total length of Ludhiana-Bathinda Greenfield Highway is 75+543 Km. The proposed alignment is passing through 5 Tehsils (Ludhiana and Raikot Tehsils) of Ludhiana district, (Barnala and Tapa Tehsils) of Barnala district and (Rampura Phul Tehsil) of Bathinda district in the State of Punjab.

3.1.3. The Terms of Reference (ToR) of the proposal was considered in 246th Meeting and the ToR was granted by the EAC vide letter no. F. No. 10-63/2020-IA.III, dated 20.11.2020. The project falls under 7(f) - Highway, Category-A, as per EIA notification 2006. Total investment/cost of the project is Rs1622.05 Crore.

3.1.4. *During the deliberation EAC observed the following:*

- i. The minutes of Public Hearing was not conclusive in two districts i.e. Baranala and Bhatinda, Public Hearing was postponed at Bhatinda.*
- ii. EIA Chapters were not arranged and presented according to the EIA Notification 2006 as amended.*
- iii. The information provided by the proponent in Form-2, Annexure-II and EIA report was not consistent.*

3.1.5. The EAC, in its 273rd meeting during 16th - 17th September 2021 decided to return the proposal in its present inconsistent form. The EAC also suggested the proponent to submit Minutes of the PH in accordance with the EIA, 2006.

Agenda No. 3.2

Development of economic corridors, inter corridors, feeder routes and borders road to improve the efficiency of freight movement in India under Bharatmala Pariyojana (lot-7) for package-2 (Sasaram-Arrah) starts at village Gangauli and ends at village Dhanupara in Rohtas and Bhojpur district in the state of Bihar (Total Length – 130.8 Km) by M/s National Highways Authority of India (NHAI) – Terms of Reference [Proposal No. IA/BR/NCP/224996/2021 and File No. 10/38/2021-IA.III]

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

3.2.1 The project proponent along with the DPR Consultant M/s MSV International Inc. and EIA consultant P&M Solution made a presentation through Video Conferencing and provided the following information: -

3.2.2 The proposed Greenfield project is for development of economic corridors, inter corridors, feeder routes and borders road to improve the efficiency of freight movement in India under Bharatmala Pariyojana (lot-7) for package-2 (Sasaram- Arrah) in the State of Bihar. The proposed length is 84 Km with Spur road of 11.8 km and bypass road of 35 km. Total length of the proposed highway is 130.8 km. The Proposed Right of Way (RoW) is 45 m for proposed highway and 60 m for proposed by-pass road.

3.2.3 The proposed highway along with spur road starts from village Gangauli and ends at village Dhanupara in Rohtas and Bhojpur District in the state of Bihar. The proposed Bypass (Ara - Patna ring road) starts at village Madhopur and end at village Garha in Patna and Bhojpur district, respectively, in the state of Bihar. The proposed alignment is connected with Sasaram-Arrah-Patna- Patar-Kayamnagar.

3.2.4 The proposed project falls under 7(f) - Highway, Category-A, as per EIA notification 2006. Total investment/cost of the project is Rs 2973.43 Crores.

3.2.5 The geocoordinates of the proposed highway along with the spur road at start location is 24°55'13.21"N 84°8'23.72"E and at end location is 25°35'2.82"N 84°43'5.09"E. The geocoordinates of the bypass (Ara - Patna ring road) at start location is 25°33'1.80"N 84°55'34.53"E and at end location is 25°31'44.81"N 84°36'4.89"E.

3.2.6 Land use/ Land cover of the project site is as following:

S. No.	Land use/Landcover	Area (ha)	Area (%)	Remarks if any
1.	Private land	534.38	95.5	Agriculture/Barren Land
2.	Government land	10	1.78	Agriculture/Barren Land
3.	Forest land	16	2.89	Forest land
	Total	559.089	100	-

3.2.7 The alignment of this proposed Greenfield project is mainly passing through the agriculture land. The proposed project site has mainly plain and rolling terrain. The areas have an elevation ranging from 50 m to 158 m.

3.2.8 Details of water bodies: Seven Rivers, one Nala and five Canals are falling along the alignment. There shall be no major impact on the drainage system, since, about 311 structures such as 07 major bridges, 33 minor bridges, 07 Vehicular underpasses, 12 LVUP, 44 SVUP, 3 interchanges/ flyover and 205 Box culverts is proposed to be constructed along the proposed highway.

3.2.9 Water requirements: The total requirement of water for construction is estimated to 3500 KL/day. Water will be extracted from surface sources. The ground water will be abstracted for camp site after obtaining the permission from the competent authority.

3.2.10 Tree cutting: About 8448 trees are falling within the proposed ROW. However, bare

minimum no. of trees to be felled for construction of four-lane road. Detailed tree inventories will be provided after joint enumeration with the appropriate authority in EIA report.

3.2.11 The proposed alignment does not pass through any National Parks, Wildlife Sanctuary, and Tiger Reserve of any other notified eco-sensitive areas and does not fall in 10 Km radius of any protected areas.

3.2.12 Land acquisition and R&R issues: About 559.089 ha land is likely to be acquired as per NH Act 1956. A total number of 20 structures will be affected due to proposed Road. Compensation will be given as per NHAI Act, 1956 and Right to fair compensation and transparency in land acquisition, rehabilitation and Resettlement (RFCT LARR) Act, 2013.

3.2.13 Employment potential: During construction phase, about 1000 persons will be employed through contractor temporarily for a period of 2 years. During operation phase about 500 persons will be employed through the concerned contractor.

3.2.14 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 project will enhance economic development in the area through industrial areas (Patna, Bhojpur, and Muzaffarpur), Agriculture (Market access), commercial development and consequent employment. The junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic. It will enhance opportunities to locals, strengthen tourist development, ensure road safety, and provide better transportation facilities and other facilities such as wayside amenities. Vehicle operating cost will also be reduced due to improved road quality. The compensatory plantation and road side plantation shall further improve the air quality of the region.

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

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

- i. The present alignment (Bypass road) is crossing the major river bed of the Sone River.*
- ii. The shortest part of the Riverbed may be explored to pass the road to minimize the width crossing of the Riverbed with least number of Pillars.*
- iii. The existence of protected area/ eco-sensitive areas, along/nearby the alignment, if any, must be disclosed.*

3.2.17 The EAC, taking into account the submission made by the project proponent, had a detailed deliberation in its 273rd meeting during 16th - 17th September 2021 and **recommended** the proposal for grant of Term of reference with specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects.

- i. Number of tunnels should be increased in order to avoid the disturbance to existing forest cover as well as local inhabitation.
- ii. Number of pillars in the waterbodies/rivers should be kept minimum while constructing bridges or overpasses so as to keep the minimize damage to aquatic ecosystem.

- iii. Apart from land compensation, the loss for crop has also to be compensated. Details shall be presented in the EIA report.
- iv. Cumulative impact assessment study should be carried out for the entire stretch including the other packages of the project including current stretch under consideration.
- v. 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.
- vi. 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.
- vii. 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.
- viii. The alignment of road should be such that the cutting of trees is kept at bare minimum and for this the proponent shall obtain permission from the competent authorities. 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.
- ix. 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.
- x. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent, based on the commitments made during the public hearing, shall include all the activities required to be taken to 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.
- xi. In pursuance of Ministry's OM is required to state in an additional annexure in the EIA Report stating that all the commitments made by the PP to the public during public

hearing and the same be submitted to the Ministry and the EAC.

- xii. 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.
- xiii. Passage for animal movement has to be detailed in the report (irrespective of an alignment is passing through Forest/protected/ecologically important area).
- xiv. A comprehensive plan for plantation of three rows of native species, as per IRC guidelines, shall be provided in consultation with state forest department including the costs involved. Such plantation alongside of forest stretch will be over and above the compensatory afforestation. Tree species should be same as per the forest type.
- xv. Detailed Biodiversity assessment and conservation/mitigation plan be developed by a of nationally reputed institute such as SACON, Gujarat Institute of Desert Ecology (GUIDE) etc. The study should also highlight and mark with geo coordinates of the presence of nesting sites if any for riverine birds like Indian Skimmer etc.
- xvi. Rain water harvesting structures to be constructed at the either sides of the road with special precaution of oil filters and de-silting chambers.

Agenda No. 3.3

Development of 4/6 Lane North - East side Gorakhpur bypass starting from NH-29E (Chainage 83+308) and end at NH-28 (Chainage 285+100) under NHDP Phase-VII in the State of Uttar Pradesh (total length - 26.616 km) by M/s National Highways Authority of India - Terms of Reference [Proposal No. IA/UP/NCP/227533/2021; File No. 10/41/2021-IA.III]

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

3.3.1 The project proponent along with the DPR consultant M/s SAI Consulting Engineers Pvt. Ltd made a presentation through Video Conferencing and provided the following information:

3.3.2 The proposed project is for Development of 4/6 Lane North-East side of Gorakhpur bypass starting (Start location: 26°51'04.87"N, 83°19'47.61"E) from NH-29E (existing chainage 83+308) near Village Maniram and ends (End location: 26°44'25.58"N, 83°31'39.97"E) at NH-28 (existing chainage 285+100) near village Koni / Jagdishpur, under NHDP Phase-VII in the state of Uttar Pradesh. The proposed highway will bypass the

Gorakhpur city to the commuters of Nepal Border and nearby areas from Kushinagar & Deoria districts. The total length of the project alignment is approx. 26.616 km.

3.3.3 The proposed Right of Way (RoW) of the project is 60 m. In Reserved Forest ROW is restricted to 45 m.

3.3.4 The proposed project falls under 7(f) - Highway, Category-A, as per EIA notification 2006. Total investment/cost of the project is Rs 1881.74 Crores.

3.3.5 Landuse/Landcover of the proposed project site is as following:

S. No.	Land use/Landcover	Area (ha)	Area (%)	Remarks if any
1.	Agricultural Land	143.4	87.01	Agriculture Land
2.	Forest land	4.66	2.83	RF & PF (Road/Railway line side Strip Plantation)
3.	Others	13.59	8.25	(Roads, Nali, Chakroad& Barren, etc.)
4.	Water Bodies	3.15	1.91	-
	Total	164.8	100	-

3.3.6 The existing land use around the project road primarily comprises of agricultural land followed by Built-up area, waterbodies and forest. The area is a part of the vast Indo-Gangetic alluvial tract. Terrain of the project road is plain. The altitude of the project road alignment varies from 72 meter to 82 meter above Mean Sea Level.

3.3.7 Details of water bodies: The proposed alignment is passing through seven Canals / Nala, three Ponds and some minor nala/drains used by locals. Construction of one Major Bridge, six Minor Bridges and 49 nos. of cross drainage structures / culverts are proposed.

3.3.8 Water requirements: Approx. 850 KLD of water will be extracted from suitable surface sources (river/canals) after obtaining necessary permissions from the competent authority. Ground water proposed to be used only for camp site for domestic use only, after obtaining the permissions from appropriate authority.

3.3.9 Tree cutting: – Approx. 1137 trees are likely to be affected due to the proposed highway. Out of which, approx. 557 trees are located in Reserved Forest (RF) and 20 trees on protected forest land along the Railway Line; remaining 560 trees are located on non-forest/ agricultural land. Girth and species wise details of actual no. of trees proposed to be cut will be provided in the EIA report after joint enumeration with appropriate authorities. Efforts will be made to minimise the trees loss by restricting trees cutting with in formation width / toe lane and by minimizing RoW requirement in forest area. Avenue plantation shall be carried out as IRC: SP: 21:2009 “Guidelines on Landscaping and Tree Plantation” on available RoW.

3.3.10 Diversion of forest land: The proposed project highway passes through reserved forest (RF) for about 935 meter length and protected forest (roadside/railway side plantation notified as PF) at two locations. Approx. 4.66 ha forest land is to be diverted for the project. Out of

which RF is approx. 4.21 ha & PF is 0.45 ha. Actual extent of forest land to be diverted will be provided in EIA report after joint survey with local forest department.

3.3.11 The proposed alignment is not located within 10 km of Protected Area (PA) including National Parks, Sanctuaries and tiger Reserves etc., and its eco sensitive zone. The proposed project does not pass through any CRZ locations. Bangai Reserved Forest located on the Proposed Alignment. Ramgargh Tal (wetland) is located at a distance of about 10 km.

3.3.12 Land acquisition and R&R issues: The Project requires approx. 164.8 ha land. Approx. 121 nos. of buildings/structures are coming in the proposed RoW. The land will be acquired and compensation shall be paid as per the procedures laid down in NH Act, 1956 and RFCTLARR Act, 2013.

3.3.13 Employment potential: During the construction phase, around 600 persons will be employed temporarily for a period of 2.5 years. During operation phase, about 50 persons will be employed for highway patrolling, highway management & maintenance activities, etc. Preference will be given to the local people for employment.

3.3.14 Benefits of the project: The Project will augment better connectivity leading to easy accessibility of the essential socio-economic services by the local people. Travel times will greatly reduce, and local communities will enjoy enhanced accessibility to socio-economic services (health centers, markets, employment opportunities), with reduction in travel time. Better road, free and fast movement of goods and traffic, direct link with the adjoining places of the district will bring social development.

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

3.3.16 The EAC, taking into account the submission made by the project proponent, had a detailed deliberation in its 273rd meeting on 16th- 17th September, 2021 and **recommended** the proposal for grant of Term of reference with specific conditions as mentioned below, in addition to all standard conditions applicable for such projects:

- i. Apart from land compensation, the loss for crop has also to be compensated.
- ii. Cumulative impact assessment study should be carried out along the entire stretch including the other packages and the current stretch under consideration.
- iii. The proponent shall carry out a detailed traffic flow study to assess inflow of traffic from adjoining areas like airport/urban cities. The detailed traffic planning studies shall include complete design, drawings and traffic circulation plans (taking into consideration integration with proposed alignment and other state roads etc.). Wherever required adequate connectivity in terms of VUP (vehicle underpass)/ PUP (Pedestrian underpass) needs to be included.
- iv. 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.
- v. 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.

- vi. 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.
- vii. The proponent shall carry out a comprehensive socio-economic assessment and also impact on biodiversity with emphasis on impact of ongoing land acquisition on the local people living around the proposed alignment. The Social Impact Assessment should have social indicators which can reflect on impact of acquisition on fertile land. The Social Impact Assessment shall take into consideration of key parameters like people's dependency on fertile agricultural land, socio-economic spectrum, impact of the project at local and regional levels.
- viii. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent, based on the commitments made during the public hearing, shall include all the activities required to be taken to fulfil these commitments in the Environment Management Plan along with cost estimates of these activities, in addition to the activities proposed as per recommendations of EIA Studies and the same shall be submitted to the ministry as part of the EIA Report. The EMP shall be implemented at the project cost or any other funding source available with the project proponent.
- ix. In pursuance of Ministry's OM F. No. 22-65/2017-IA.III dated 30th September, 2020 is required to state in an additional annexure in the EIA Report stating that all the commitments made by the PP to the public during public hearing and the same be submitted to the Ministry and the EAC.
- ix. The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25th October, 2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.
- x. Passage for animal movement has to be detailed in the report (if alignment is passing through Forest area).
- xi. A comprehensive plan for plantation of three rows of native species, as per IRC guidelines, shall be provided. Such plantation alongside of forest stretch will be over and above the compensatory afforestation. Tree species should be same as per the forest type.
- xii. The PP shall not use groundwater/surface water without obtaining approval from CGWA/SGWA as the case may be. The project proponent shall apply to the Central Ground Water Authority (CGWA)/State Ground Water Authority (SGWA)/Competent Authority, as the case may be, for obtaining No Objection Certificate (NOC), for withdrawal of ground water.
- xiii. Detailed Biodiversity assessment and conservation/mitigation plan be developed by a

nationally reputed institute such as SACON, Gujarat Institute of Desert Ecology (GUIDE) etc.

- xiv. Rain water harvesting structures to be constructed at the either sides of the road with special precaution of oil filters and de-silting chambers.

Agenda No. 3.4

Development of Six Lane Greenfield spur from Delhi-Vadodara Greenfield Expressway near Bandikui terminate at Chainage 0.000 of Jaipur Ring Road in Bharatmala Pariyojana Phase-1 in the state of Rajasthan (total length - 67 km) by M/s National Highways Authority of India - Terms of Reference

[Proposal No. IA/RJ/NCP/226198/2021; File No. 10/40/2021-IA.III]

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

3.4.1 The project proponent along with the DPR Consultants M/s SA Infrastructure Consultants Pvt. Ltd and EIA consultant M/s P & M solutions made a presentation through Video Conferencing and provided the following information:

3.4.2 The proposed project is for Development of 6-Lane Greenfield spur from Delhi-Vadodara Greenfield expressway near Bandikui from Chainage 168.550 (26°58'49.98"N, 76°32'0.28"E.) and terminate at Jaipur ring road near Bagrana village (26°52'41.41"N, 75°55'38.94"E), under Bharatmala Pariyojana Phase-I in the state of Rajasthan. Total length of the proposed alignment is approx. 67 Km. The Proposed Right of Way (RoW) is 60 m as per the requirement keeping in view the fully access controlled Highway with 6-lane dual carriage way configuration.

3.4.3 The proposed project falls under 7(f) - Highway, Category-A, as per EIA notification 2006. Total investment/cost of the project is Rs1370.00 Crore.

3.4.4 Landuse/Landcover of the proposed project site is as following:

S. No.	Land use/Landcover	Area (ha)	Area (%)	Remarks if any
1.	Private land	389	81	Agriculture/Barren Land
	Government land	86	19	Agriculture/Barren Land
3.	Forest land	0	0	-
	Total	475	100	-

3.4.5 The alignment is mainly passing through the agriculture land. The topography in the proposed project area is mainly plain and rolling area. The areas have an elevation ranging from 150 m to 350 m above the mean Sea level.

3.4.6 Water bodies: There are 02 nos. of rivers, 01 nos. of Canals falling along the alignment. There shall be no major impact on the drainage system. The Proposed road will have 181 nos. of structures such as 02 Major Bridges, 11 nos. of Minor Bridges, 10 nos. of Vehicular underpass, 17 nos. of SVUP, 5 nos. of Interchanges/Flyover, 01 no. of ROB and 135 nos. of Box Culverts.

3.4.7 Water requirements: Total water requirement during the construction phase is estimated about 19434 KL/day. Water will be extracted from the surface sources. The ground water will be abstracted for camp site after obtaining the permission from the competent authority.

3.4.8 Tree cutting: About 4000 trees falls in the proposed ROW, however, bare minimum number of trees will be felled. Detailed tree inventories will be provide after joint enumeration with the appropriate authority in EIA report. Avenue plantation shall be carried out as per IRC SP: 21:2009 on available ROW apart from statutory requirements.

3.4.9 The proposed alignment does not pass through any National Parks, Wildlife Sanctuary, and Tiger Reserve or any other notified eco-sensitive areas.

3.4.10 Land acquisition and R&R issues: About 475 ha land likely to be acquired as per NH Act 1956. A total number of approx. 80 structures will be affected due to proposed Road. The NHAI shall compensate all the affected title holder as per NHAI Act, 1956 and Right to fair compensation and transparency in land acquisition, rehabilitation and Resettlement (RFCT LARR) Act, 2013. The project does not involve diversion of forest land.

3.4.11 Employment potential: During the construction, around 1000 persons would be employed through contractor temporarily for a period of 2 years. During operation phase, about 200 persons will be employed through the concerned contractor.

3.4.12 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 project will enhance economic development in the area through industrial areas (Delhi and Jaipur), Agriculture (Market access), commercial development and consequent employment. The junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic. The proposed road would act as the prime artery for the economic flow to this region. It will enhance opportunities to locals, strengthen tourist development, ensure road safety, and provide better transportation facilities and other facilities such as way side amenities. Vehicle operating cost will also be reduced due to improved road quality. The compensatory plantation and road side plantation shall further improve the air quality of the region.

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

3.4.14 The EAC, taking into account the submission made by the project proponent, had a detailed deliberation in its 273rd meeting on 16th - 17th September, 2021 and **recommended** the proposal for grant of Term of reference with specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

- i. Apart from land compensation, the loss for crop has also to be compensated.
- ii. Cumulative impact assessment study should be carried out along the entire stretch

including the other packages and the current stretch under consideration.

- iii. The proponent shall carry out a detailed traffic flow study to assess inflow of traffic from adjoining areas like airport/urban cities. The detailed traffic planning studies shall include complete design, drawings and traffic circulation plans (taking into consideration integration with proposed alignment and other state roads etc.). Wherever required adequate connectivity in terms of VUP (vehicle underpass)/ PUP (Pedestrian underpass) needs to be included.
- iv. 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.
- v. 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.
- vi. 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.
- vii. The proponent shall carry out a comprehensive socio-economic assessment and also impact on biodiversity with emphasis on impact of ongoing land acquisition on the local people living around the proposed alignment. The Social Impact Assessment should have social indicators which can reflect on impact of acquisition on fertile land. The Social Impact Assessment shall take into consideration of key parameters like people's dependency on fertile agricultural land, socio-economic spectrum, impact of the project at local and regional levels.
- viii. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent, based on the commitments made during the public hearing, shall include all the activities required to be taken to fulfil these commitments in the Environment Management Plan along with cost estimates of these activities, in addition to the activities proposed as per recommendations of EIA Studies and the same shall be submitted to the ministry as part of the EIA Report. The EMP shall be implemented at the project cost or any other funding source available with the project proponent.
- ix. In pursuance of Ministry's OM No. 22-65/2017-IA.III dated 30th September, 2020 it is required to state in an additional annexure in the EIA Report stating that all the commitments made by the PP to the public during public hearing and the same be submitted to the Ministry and the EAC.
- x. The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25th October, 2017 needs to be submitted

at the time of appraisal of the project and included in the EIA/EMP Report.

- xi. A comprehensive plan for plantation of three rows of native species, as per IRC guidelines, shall be provided. Such plantation alongside of forest stretch will be over and above the compensatory afforestation. Tree species should be same as per the forest type.
- xii. Detailed Biodiversity assessment and conservation/mitigation plan be developed by a nationally reputed institute such as Gujarat Institute of Desert Ecology (GUIDE).
- xiii. Rain water harvesting structures to be constructed at the either sides of the road with special precaution of oil filters and de-silting chambers.

Agenda No. 3.5

Development of Kuduthini Industrial Area Phase-1 in area of 261 Ha (645.18 acres) at Kuduthini Village, Bellary Taluk, Bellary District, Karnataka State by M/s Karnataka Industrial Areas Development Board (KIADB) - Terms of Reference Proposal No. IA/KA/NCP/225521/2021 and File No. 10/37/2021-IA.III

The proposed project is for Development of Kuduthini Industrial Area Phase-1 at Kuduthini Village, Bellary Taluk, Bellary District, Karnataka State in an area of 261 Ha (645.18 acres).

EAC observed that this is a case of violation and there is no mechanism to consider these type of proposal in the Ministry till the final directions from the Court. Hence, the aforementioned proposal was not considered by the EAC in its 273rd meeting during 16th - 17th September, 2021 and it was returned in its present form.

Agenda No. 3.6

Proposed project "National Investment & Manufacturing Zone (NIMZ)" at Prakasam District, Andhra Pradesh by M/s Andhra Pradesh Industrial - Further consideration for Terms of Reference [Proposal No. IA/AP/NCP/205047/2021; File No. 10/23/2021-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. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent”

3.6.1. The aforementioned proposal was earlier considered by EAC in its 262nd meeting held during 25th & 27th May 2021. The proposal was deferred for the want of some additional documents/ information for the Categorization of industries as per CPCB/SPCB norms, waste water treatment plant, alternate water source, detailed socio-economic study, impacts of pollution in the habitation zones, etc.

3.6.2. At this instance, the aforementioned proposal was further placed before the EAC during 273rd meeting during 16th - 17th September, 2021. The project proponent along with the EIA consultant M/s Voyants Solutions Private Limited has made a presentation through Video

Conferencing and provided the following revised information-

3.6.3. Andhra Pradesh Industrial Infrastructure Corporation Limited (the “APIIC”), a Government of Andhra Pradesh undertaking, is a progressive organization responsible for development of Industrial Infrastructure in the state of Andhra Pradesh. The Government of India initiative, Government of Andhra Pradesh proposed to develop NIMZs at Prakasam District for which Final Approval was accorded by DIPP, GoI on 6th October 2015. The area proposed for NIMZ at Prakasam district is to an extent of 14,378 acres (5,818 ha).

3.6.4. The proposed NIMZ Site of 14,378 acres (5,818 ha.) extends between Longitudes 79°32’59.15’’E & 79°37’56.96’’E and Latitudes 15°2’44.60’’N & 15°10’4.32’’N and is located in Pamuru and P.C. Palle mandals of Kandukur Revenue Division of Prakasam District. The villages which form part of the Prakasam NIMZ include Bodawada, Malakondapuram, Ayyannakota, Siddavaram, Renimadugu, Pedairlapadu at Prakasam district in state of Andhra Pradesh.

3.6.5. The proposed project falls under 7(c), Category-A, Industrial Estates/parks/complexes/areas export processing zones as per EIA notification 2006. Total investment/cost of the project is Rs 4,381.01 Crores.

3.6.6. Land use/land cover of the project site is as following-

S. No	Land-use/Landcover	Area (ha)	Area (%)
1.	Settlement	40.56	0.70
2.	Agriculture, Plantation	571.18	9.82
3.	Agriculture, Crop Land	2600.90	44.70
4.	Agriculture, Fallow	1140.29	19.60
5.	Green	58.71	1.00
6.	Waste Land	1105.07	18.99
7.	Water Bodies- River	123.52	2.12
8.	Water Bodies- Ponds	151.30	2.60
9.	Road	26.99	0.46
	Total	5818	100%

Areas	Proposed Land Use	Area (ha)	%	
Industrial	Manufacturing	2733.14	46.97	56.71
	MSME	245.99	4.23	
	Solar farm	320.64	5.51	
Amenities & Utilities	Admin Block, Amenities, Adult Education centre, Working Women hostel, Working Men hostel, Night Shelter, Health Care Facilities, Police Station, WTP, SWM, CETP, CSTP, Fire station, Electric sub-station(ESS), Underground Reservoir, Pumping station, Office	168.92	2.90	2.90

	Blocks, Community Hall, Utilities-2, Nursing home, Dispensary, Day Care Centre			
Commercial	Convention Centre, Engineering College, Other Graduate College, Business Centre, Trade Facilitation Centre, Petrol Pump, Hotel, Pumping station, Service & Repair Shop, Facility Centre, Commercial/Shopping Centre	203.56	3.50	3.50
Technical Infrastructure		46.61	0.80	0.80
Road & Transport	Road	452.04	7.77	7.77
	Terminal	61.94	1.06	1.06
Logistic Park		111.56		1.92
Green Area	Green Area	597.20	10.26	10.26
	Greenbelt (along river 9.0m)	70.98	1.22	1.22
	Greenbelt (along site 15.0m)	79.95	1.37	1.37
Existing Water body		126.90	2.18	2.18
Residential	Residential Township	385.89	6.63	6.63
	Existing settlement Buffer	166.96	2.87	2.87
	Existing Settlement	46.42	0.80	0.80
	Total	5818 ha	100%	100%

3.6.7. The project area has rolling and relatively plains with having strong and gentle slopes and somewhere nearly level plains. The area has maximum elevation of 208 meters towards Northern-Eastern boundary of the project; But in most of the areas elevation ranges between 123 m to 62 meters (maximum elevation found towards North and North-west part of the project area and lowest elevation is found at South and South-East part of the project area). The general slope of the project area is towards South and South of South East.

3.6.8. District has major land-use of Agricultural and Forest areas with 58.38 and 23.90 percent of land coverage. Prominent Land covers in 10 km impact area of the project are agricultural crop lands, non-agricultural barren lands, water reservoirs and Forest lands. The major water bodies available within 10 km impact are Rallapadu reservoir (8.5 km towards South-East) and Mopadu reservoir (8 km towards West). Major Forest areas situated within 10 km impact zone are as follows:

- Peddairlapadu RF: adjacent towards North
- Lakshmakapalli RF: 1.5 km towards North
- Malakonda RF: adjacent towards East
- Bodavada RF: adjacent towards East
- Mogilicherla North RF: adjacent towards East
- Mogilicherla West RF: 1 km towards SE
- Ayyannakota RF: adjacent towards NW
- Botlaguduru RF: 0.08 km towards West
- Ayyavaripalle RF: 2.4 km towards NW
- Chundi RF: 6.2 km towards NE
- Obulayyapalle RF: adjacent towards NE
- Veligandla RF: 2.4 km towards NE

3.6.9. List of industries to be housed with: Categorization of industries has been made in accordance the schedule of EIA Notification, 2006 and CPCB direction dated 07.03.2016. Detailed industrial categorization has been provided as following:

Type of Industries	Categorization as per EIA Notification, 2006		Categorization - CPCB, 2016 & APPCB Categorization
	Cat. A	Cat. B	
Pharmaceuticals			
<i>Bulk Drugs and intermediates (API)</i>	A	-	Red
<i>Formulations</i>	Exempted	Exempted	Orange-Formulation, R&D facility
Engineering Goods			
<i>Heavy Engineering/Capital goods</i>	A Considering use and processing of Primary Metallurgical items.	-	Red
<i>Consumer Durables</i>	Exempted	Exempted	White-Assembly of Air Cooler/conditioners, refrigerators etc.
<i>Light Engineering goods/Ancillary units</i>	Exempted	Exempted	White-Engineering & Fabrication, dry process within Metal surface finishing/painting
Renewable Energy, PV Cell Park			
<i>Solar PV Park-PV cell manufacturing units</i>	NA	NA	White

<i>Integrated unit for PV Cell and modules</i>	NA	NA	White
<i>BOS/ Ancillary</i>	NA	NA	White
Agro & Food Processing			
<i>Dairy Products</i>	Exempted	Exempted	Red
<i>Shrimp Processing</i>	Exempted	Exempted	Orange
Defence & Aero-space			
<i>Aerospace-Civil & Defence</i>	Exempted		Exempted
<i>Defence items-Land Based</i>	Exempted		Exempted
<i>Naval Defence</i>	Exempted		Exempted
<i>Strategic Electronics</i>	Exempted		Exempted
<i>Airport Equipment</i>	Exempted		Exempted
<i>Drones/UAV manufacturing</i>	Exempted		Exempted
Non-Metallic Minerals			
<i>Refractories</i>	NA - Manufacturing of refractory products; Mining of minerals or Mineral beneficiation process not envisaged.	-	Orange
<i>Glass</i>	NA	NA	Orange
<i>Ceramics</i>	NA	NA	Orange
<i>Granite/Quartz stones</i>	NA	NA	Orange-Stone Crushing
<i>Sanitary Wares</i>	NA	NA	Orange
EV Components			
<i>Lithium batteries</i>	Coming in HSM rules and HWM Rules, 2016. Exempted from EIA Notification, 2006	NA	Orange
<i>Motors and other EV parts</i>	A considering use and processing of Primary Metallurgical items.	NA	Red
<i>Charging Station</i>	NA	NA	Exempted under the provision of Electricity Act, 2003 as clarified by Ministry of Power, GOI.
Textiles			
<i>Spinning-Yarn</i>	NA	NA	NA
<i>Weaving-Fabrics</i>	NA	NA	NA

Apparels	NA	NA	NA
Wood Processing			
Plywood manufacturing	NA	NA	NA
MDF manufacturing	NA	NA	NA
Furnitures	NA	NA	NA

3.6.10. Details of water bodies: Major surface water body flowing within the site is Narela Vaagu which is flowing from North to South within the proposed project site. Manneru river is located towards south of the proposed project site having distance of 1.42 Km. The major water bodies available within 10 km impact are Rallapadu reservoir (8.5 km towards South-East) and Mopadu reservoir (8 km towards West). According to site survey and site drainage plan prepared, the surface water flows has been subdivided in 4 layers, Primary, secondary, Tertiary and Quaternary nalla or stream. The primary and secondary stream will be retained for natural drainage and surface water flow. The surface flow is not perennial but rain fed, tertiary and quaternary streams would be re-aligned as according the project area drainage requirement.

3.6.11. Water requirements: Total water requirement for the proposed project is about 98 MLD. The raw water shall be sourced from Pula Subbaiah Velugonda irrigation Project. Pula Subbaiah Veligonda Project comprises of Nallamala Sagar Reservoir which is being formed by constructing CC NOF Dams across the three gaps namely Sunkesula, Gottipadia and Kakarla. After exploring various alternatives, the source considered for supplying of raw water is Pula Subbaiah Veligonda Project near Gottipadia Gap as the available dead storage for the reservoir is 10.35 TMC, which may sufficiently fulfil the project water demand round the year. The Project proponent has initiated the communication with Irrigation department of Andhra Pradesh and NOC will be submitted immediately after receiving of the same. No Ground Water will be extracted at the project site during the construction and operation of the project.

3.6.12. Tree cutting: A total no of 2,437 nos. of trees identified within project area during Environmental Screening and survey. Master plan prepared such a manner to maintain the existing trees to the maximum possible extent. During detailed master plan and construction stage at least 3 times higher numbers of trees will be planted against the number of tree cutting. The 33% of area within the proposed project site proposed to be maintained as green cover to maintain the green coverage of the area. No forestland will be diverted due to the development of the Industrial park.

3.6.13. Waste management: The estimated Trade effluent quantity would be 36.86 MLD and domestic effluent will be 32.21 MLD. **CETP**: Each industry will have an individual in-plant ETP before dispose to waste water drain towards CETP of the industrial park. Discharge with lowered TDS will be processed in CETP whereas discharge with high TDS shall be treated with in-Plant ETP followed by treatment in multi-effect evaporator. **STP**: As per the primary study, the estimated domestic effluent generation quantity is 32.21 MLD. The Domestic effluent will be treated in STP facility within the industrial park and treated effluent shall be reused in Flushing and Gardening purpose.

3.6.14. The Hazardous waste generating from individual industries' shall be transferred to TSDF facility, Duindigal, Hyderabad, which is almost 400 km away from the project site or alternatively option for on-site treatment facility will be explored. The non-hazardous solid waste shall be collected from individual industries and different clusters of the park, segregated within the park and treated/ transferred/ disposed accordingly. The bio-degradable solid waste shall be treated by composter within the Solid Waste Management facility area of the park. The recyclable solid waste shall be segregated and transferred to designated recycler/scrapper facility. Non-recyclable, non-biodegradable solid waste shall be disposed off to landfill site. As the project identified at village area, and no nearest MSW facility identified thus, project would facilitate a landfill site for the requirement of treatment of non-hazardous landfill able waste. Overall estimated industrial waste quantity is 677 TPD. For collection, segregation and initial treatment there are 2 SWM area demarcated with 4.18 and 17.59 acres of land.

3.6.15. Land acquisition and R&R issues: If any private Land is required for the project access area and road connectivity development, that shall be acquired as according the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation & Resettlement Act, 2013, and Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation & Resettlement (Andhra Pradesh Amendment) Act, 2018.

3.6.16. Benefit of the Project: As per the Feasibility Assessment, the project is found to be viable from all aspects such as technical, economic, environmental and social aspects. The proposed project is estimated to generate 3.15 lakhs of Direct and indirect Employment.

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

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

- i. The green belt should be all around the village /settlement as well as adequate buffer near to red categories of industries.*
- ii. Approval/undertaking/order with regard to water allocation from concerned State Govt. for water supply be obtained.*
- iii. Provision of adequate water be made for the agriculture purpose. The proponent has to conserve the water bodies in the proposed site and provide adequate green buffer around the same.*

3.6.19. The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 273rd meeting on 16th-17th September, 2021 and **recommended** the proposal for grant of Terms of Reference (ToR) with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

- i. The breakup of Green belt should be elaborated with an allocation of 33 % and should be demarcated on the layout map and submitted.
- ii. All the mitigation measures to reduce pollution be mentioned in EIA/EMP report
- iii. The planning of Industrial Estate should be based on the criteria mentioned in this

Ministry's Technical EIA Guidance Manual for Industrial Estate (2009) prepared by IL&FS as well as CPCB's Zoning Atlas Guidelines for siting industries.

- iv. Water balance chart be prepared and submitted along with EIA/EMP report.
- v. Proponent shall ensure the conservation and development of nearby water bodies in the surrounding areas.
- vi. Detailed land use breakup of proposed Industrial area with green belt to be submitted.
- vii. The project area has undulating terrain and it is important to have detailed hydrological study and its impact need to be carried out on the catchment and drainage system in core and buffer zones.
- viii. Proponent shall develop plan to establish captive treatment, storage, and disposal facility (TSDF) to ensure the effective Solid Waste Management.
- ix. 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).
- x. Biodiversity Conservation Plan shall be prepared in consultation with a nationally reputed institute such as SACON etc and duly endorsed by the State Forest Department.
- xi. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent, based on the commitments made during the public hearing, shall include all the activities required to be taken to 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.
- xii. In pursuance of Ministry's OM no stated above the project proponent shall add one annexure in the EIA Report indicating all the commitments made by the PP to the public during public hearing and submit it to the Ministry and the EAC.
- xiii. The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M) dated 25th October, 2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.

Agenda No. 3.7

Development of All-weather, Multi cargo, Greenfield Captive Jetty(ies) for handling capacity 52 MTPA at Jatadhari Muhan River, Dist. Jagatsinghpur, Odisha by M/s JSW Utkal Steel Ltd.- Further consideration for Environmental and CRZ Clearance. [Proposal No. IA/OR/MIS/74417/2018; File No. 10-68/2018-IA.III]

"The EAC noted that the Project Proponent/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 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 aforementioned proposal was earlier considered in the 256th EAC meeting held during 3rd-4th March, 2021. The proposal was deferred for the want of additional information. PP submitted the information and the proposal was further considered in 265th EAC meeting during 23rd - 24th June, 2021. The proposal was again deferred as the information submitted by the PP were not found satisfactory by the Committee. The PP submitted the requisite information and the matter was placed before the Committee for further deliberation in the present meeting.

S. no	ADS raised (Observation by EAC)	Submissions by the PP
i.	<p>The Committee observed that the environmental parameters submitted in the EIA report are still mismatching with erroneous units in tables. Further, the concentration of heavy metals appears to be on the higher side. The sampling locations are also haphazardly selected with no scientific design in sample collection. In view of this, the Committee was of the view that, one season baseline data needs to be collected again and the analysis need to be resubmitted. The new sampling locations shall be based on grid-based sampling covering each grid. The bathometric aspects need to be covered during revised sampling and analysis. Special care must be taken while studying the parameters for the creek for proper collection and</p>	<p>The collection and analysis of the samples for heavy metals is carried out following internationally accepted technique with final measurement on ICP-OES and ICP-MS, in-house in CSIR-NIO and further authenticated by simultaneous analysis of International Certified Reference Materials (CRMs). The results of the heavy metals in water and sediment observed during the present study were compared with the published information/ literature for Odisha region. The comparison reveals the results of present study are comparable range with the past data. The sampling locations for the study were selected so as to obtain data for creek and coastal waters keeping in view the location of the jetty (ies) and other associated facilities. The selection of the sampling locations is based on distance from the shore and depth contours.</p>

	analysis of data. Pollution data has to be cross verified by the SPCB.	
ii	A detailed assessment and explanation be submitted on why jetties/other port facilities of Paradip Port, which is located at a distance of 12 km, cannot be used for the JSW project,	The location of the steel plant was decided based on various requirements, most important them was the land availability. Hence, the earlier acquired land for the POSCO proposal was handed over to the JSW for the Steel plant. The land available would be good for a 25 MTPA steel plant, in phases requiring upwards of 75 MT of raw materials, besides the products. In an exhaustive process of site selection that generally follows the establishment of any steel plant, it was decided based on the present and the projected connectivity for the Paradip area, sea route would be most reasonable and convenient. Hence, as a natural choice the existing Paradip port was evaluated for its various attributes. Though, JSW has 2 operating terminals one each of Coal and Iron Ore, they are assigned for handling only export cargos, while the steel plant required only inward raw material. Hence, the other facilities at the Paradip was examined and noted that, the land area in the port would severely restrict any additional development required by the Steel plant obviating the dependence of the steel plant for its raw material needs. Besides the unavailable capacity in the required time horizon, the other logistical challenges that would entail the cargo transfer from Paradip Port are; i. Multiple types of conveyors for a 12 km distance ii. The finished product of 10 MTPA in the initial and 25 MTPA in the final phase would have to use the road transport along with all associated pollutions and hazards. iii. Locating slurry pipeline extraction plant and decanted water storage iv. Inventory management and operational priority for the steel plant v. Required facility upgradation etc. Hence, though considered initially the Paradip Port option did not found favors.
iii	Several complaints were received in the Ministry and to the Members of EAC regarding the project. A detailed response to the objections raised in the representations along with the	Reply to the objections raised in the representations received by the Ministry has been submitted.

	verification/authentication by the SPCB be submitted.	
iv	The base line marine ecological study performed by CSIR-NIO Mumbai should be re-assessed for its completeness, and resubmit detailed base line data and impact mitigation plan. The current document doesn't state any mitigation measures or strategies that are specific to the proposed impact	The detailed environmental baseline data collected during the present study (2019) and its comparison with the earlier data available with CSIR-NIO for the period (2006-2012), and the published information of the surrounding region has been submitted.
v	Detailed plan for mitigating impacts of cyclone, since the region is affected frequently by cyclones and that too with increasing intensity	The upper air circulation in the northern hemi-sphere are from east to west and hence the Bay of Bengal is primarily gets affected by Cyclone. The cyclone affects the shoreline in three distinct ways, one with higher wave heights the vessels at the berth strain their moorings and undergo various motions that could potentially damage the berth and/or the Ship, secondly due to the increased water depth due to storm surge. Thirdly, the increased wind speed would affect the foreshore structures and Jetty top side equipment. Since, prediction of the cyclonic events and tracks is not possible, historical data is often times used for ascertaining the cyclonic effect on the vessels and the foreshore. MIKE 21 SW was used in the present case which computed a maximum wave height of 4.3 m at the round head of the southern breakwater and a storm surge of 3.4 m both having a return period of 200 years. All the protection berthing structures are designed for this. The foreshore was designed for the maximum cyclonic winds that has a return period of 200 years. The following are the details plan for the cyclonic mitigation; i. Shore side plantations would be carried out to reduce the wind velocity ii. The estate levels would be made sufficiently high for preventing water ingress iii. All flotillas would be removed from the berth and asked to move offshore. iv. The breakwater/Jetty and other associated structures to withstand the additional pressure due to cyclonic effects v. The plan of the National Disaster Management Plans (2019) for minimising the impact of disasters: 'Preparedness and Response', and 'Recovery' and Build

		back better (BBB)' would be implemented. vi. The local government cyclone mitigation protocol would be followed.
vi	Clarification be resubmitted on how deep dredging for the proposed port will not impact the ParadipPort as well as the interior part of JatadhariMuhan River? With deepening of the channel what will be the change in the salinity gradient of the riverover time and its impact on the local and substance fisheries by local community?	<p>Three nearshore coastal models were simulated for the existing as well as the proposed development conditions. The model took care of the sand, mud and the littoral movements along the coast and in the considered domain. Based on the siltation rate calculated using transport models simulations, the annual maintenance dredging quantities are estimated at different sections of the Paradip port with and without proposed Jetty development. It was noted that after introducing proposed JSW port the siltation quantity of Paradip port channel is reduced by 33.6 %, on account of trapping of northward sand movement.</p> <ul style="list-style-type: none"> • The maximum maintenance dredging quantity for Paradip port area consisting of approach channel, and berthing area in layout condition is 0.6 million m³ /year, with JSW development, which has reduced from around 1 million m³ /year at present. • There is no other impact of the proposed development is seen except for the 2 km north of the Proposed development at Jatadharmuhan, which is likely to get eroded if sand bypassing is not taken up. • It is recommended and proposed to undertake sand bypassing from the start of the construction of the breakwater so that the down drift (northern) shoreline is not affect during or after the construction of the breakwater. With embedded bypassing technique below the channel the shoreline north of the development would be kept stabilized. • Hence, with these measures, the Paradip port and the adjoining shoreline would remain unaffected by the proposed development. The Jatadaharmuhan River is short 35.2 km long river is mostly tidal barring the monsoon period when the creek receives freshwater ingress due to the storm water flow from its 422 km² catchment. The freshwater flow based on the concentration of a 9-hour storm is about 3500 m³ /hour, which would be crossing the flanks and therefore the effective flow of 90 m³ /s, which is the bank full condition would mostly govern. It is also ascertained that the existing tidal prism of 1571 ha, would entail a supporting creek area of 1194 m². Any widening or deepening of the creek would ensue siltation of the creek, which is worked out to be 150,000 m³ (maximum)

		and 100,000 m ³ (Average). The salinity in the creek for the existing as well as the developed condition was worked out using MIKE 3- dimensional flow model and it was ascertained that there is no appreciable change in the salinity gradient because of the development, as the deepening and widening is still around the 1200 m ² mark. Hence, the existing species of marine organisms would not be appreciably affected by the development.
vii	Detailed impact mitigation plan for Jatadhari Muhan River Creek against the backflow and transport activities be resubmitted.	<p>The dredged material obtained from the dredging of the approach channel to the Jetty basin area would be dumped at a sufficiently deep depth so that the material does not return to the shoreline and/or significantly affect the marine flora and fauna. To explain the above, the concept of ‘depth of closure’ has been introduced, which is an imaginary depth based on the wave height, beyond which no cross-shore sand movement takes place. For the Jatadhari coast, the depth of closure is about 10 m and hence, the material dumped at 23 m water depth would not find its way to the shoreline.</p> <p>The dredging soil disposal was tested in the MIKE 21 AD, which is an advection/dispersion model on the MIKE 21 HD, which also indicated the dispersion as a fast phenomenon limited to about 8-10 km from the channel. The depth at the end of the affected area is hardly 1 cm. The Paradip channel is about 15-17 km from the proposed channel for the new jetty would therefore be unaffected by the disposal. The approach would be protected by a breakwater and hence the wakes created by the ship movement would not affect the entrance to the Jetty inside the creek.</p>
viii	Provide allocation of adequate amount for Fishery Management Plan.	Financial allocation of Rs 8.5 crore has been earmarked for the fishery management and livelihood development of the fishing community during the project construction phase and about Rs. 1.0 crore is proposed to spent during the operation phase. The allocation budget is given in the CSIR-NIO Addendum Report as a separate Annexure.
ix	The training activity should not be under CER, it should be the part of EMP. The specific changes may be done in the EIA report and submitted.	Yearly budget of Rs. 2.0 crore towards the vocational training for self-employment of the local people has been earmarked, and included suitably in the EMP.

3.7.2 At this instance, the aforementioned proposal was further placed before the EAC during 273rd meeting on 16th -17th September, 2021. The project proponent along with the EIA consultant M/s WAPCOS Limited has made a presentation through Video conferencing and provided the following revised information:

3.7.3 JSW Utkal Steel Ltd. (JUSL) has proposed to set up a Greenfield ISP to produce 13.2 MTPA crude steel along with captive power plant (CPP) of 900 MW capacity, and cement grinding & mixing unit of 10.0 MTPA in Jagatsinghpur District, near Paradip in Odisha. The ISP would be served by Captive Jetty(ies) of handling capacity of 51.93 MTPA (~52.0 MTPA) (Import Cargo: 24.93 MTPA + Export Cargo: 27.00 MTPA), to be located adjacent to the steel plant near the mouth of Jatadhari Muhan River Creek. The captive jetty would cater to the import and export requirements of the ISP helping it reduce the infrastructure cost for the production of steel. The location of the proposed project is lying between, Lat. 20° 11' 26.20" - 20° 12' 53.99" N and Long. 86° 31' 38.54" - 86° 34' 4.39" E.

3.7.4 The proposed project falls under 7(e) - Ports, Harbours, Dredging, and Reclamation, of the schedule to the EIA Notification, 2006 and its subsequent amendments. Total cost of the project is Rs. 2104 Crore.

3.7.5 ToR for the EIA studies was considered in the 34th EAC (Infra-2) meeting held during 24th -26th September, 2018. ToR was granted *vide* letter dated 9th October, 2018.

3.7.6 Land area of about 170 acres (68.83 Ha) would be required for the development captive jetty(ies) facility. The facility which included captive jetty(ies) and its backup area is proposed partially over forest and revenue land. Total 10 berths are proposed with a continuous quay length of about 3400 m. The captive jetty(ies) facility land would be developed partially by reclamation/grade improvement on the intertidal and areas beyond tide line. The jetty(ies) would be protected by two breakwaters for maintaining tranquility in the basin and to facilitate direct berthing of capsized vessels.

3.7.7 A navigation channel of about 13 km long and about 310 m wide would be created through dredging, to a reduced depth up to 20 m CD and maintained. About 30 million m³ of bed material would be dredged for creation of the navigation channel and jetty basin. About 27 million m³ dredged material shall be used for land reclamation/grade improvement of the ISP land and the remaining would be disposed at the offshore dumping ground identified in the model report.

3.7.8 Landuse/Land cover of project site is as following:

S. No.	LU/LC	Area (ha)	Area (%)
01	Diverted forest land	14.40	21
02	Barren coastal land	54.43	79
	Total	68.83	100

3.7.9 Landuse/Land cover around 10 km radius of project site is as following:

S. No.	LU/LC	Area (ha)	Area (%)
01	Agricultural land	8550	19.0

02	Waste/Barren land	4908	10.9
03	Grass/Shrubs	3499	7.78
04	Vegetation	4999	11.1
05	Built-up area/ Settlements	1298	2.89
06	Sand	345	0.77
07	Water body	21356	47.5
	Total	44955	100

3.7.10 The project area is mainly barren coastal land with flat terrain and chiefly covers bushy vegetation, bereft of any dense vegetation. The project is proposed along the waterfront of the Jatadhari Muhan River and in the coastal waters of Bay of Bengal, east coast of India. No likely impact is envisaged in the flow regime of the Jatadhari Muhan River as per the hydrodynamic model study.

3.7.11 Water requirements: Total 2100 m³/day of fresh water is required for full operation of the Captive Jetty(ies) facility, that will be sourced from Jobra Barrage and River Mahanadi. NOC has been obtained from the Water Resources Department, Govt. of Odisha (GoO). No Groundwater extraction has been proposed.

3.7.12 Public hearing (PH) for the proposal was completed successfully by State Pollution Control Board, Odisha (OSPCB) on 20.12.2019, as per the EIA Notification 2006 (amended). The proposal also granted CRZ recommendation by the Odisha Coastal Zone Management Authority (OCZMA), under the provision of CRZ Notification 2011 (amended) vide letter No. OCZMA/56/2020/41/OCZMA. dated 01.02.2021.

3.7.13 Forest diversion: The project involves use of diverted forest land about 14.4 ha adjacent to the ISP land. Stage II forest clearance (FC) has been duly transferred to JSW by MoEFCC vide letter dated 16.10.2019, and further, vide Forest & Environment (F&E) Dept., Govt. of Odisha (GoO), Reasoned Order dated 30.10.2019.

3.7.14 The project is not located within 10 km of Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves etc. However, nearest thick mangroves exist at a distance of about 13 km in the river mouth of Mahanadi. A small patch exists at the opposite river bank of the proposed jetty location.

3.7.15 Waste management: Sewage generated from the domestic consumption shall be treated in a sewage treatment plant (STP). Treated water after disinfection shall be used for gardening and for dust suppression. Facility for collection, conveyance and disposal of municipal solid waste shall be developed. Solid waste of municipal origin shall be segregated into biodegradable and non-biodegradable waste. Non-biodegradable waste shall be disposed-off through authorized vendors. Biodegradable waste shall be composted onsite and shall be used as manure in horticulture.

3.7.16 Tree cutting: No tree cutting is envisaged for the proposed project. A 15 m wide green belt would be developed around the periphery of the jetty/jetty back up facility in the 33% of the project area. About 35,000 native species of various categories would be planted as part of

the greenbelt development.

3.7.17 Energy conservation measures: Energy conservation measures would be implemented to ensure that the use of nonrenewable resources is minimized.

3.7.18 Details of Rain Water Harvesting: In the present proposal, rain water harvesting (RWH) for groundwater recharging has not been considered due to its location and higher ground water table in the area. However, rain water collected from roof-tops and storm water drains would be used for storage for further use in various secondary purposes within the plant. Possibility of locating a RWH structure outside the plant premises would be explored, as per last 10 years' peak and average rainfall data of the region. The possibility of converting the numerous Borough pits found in the study area to RWH structures would be explored in consultation with local administration.

3.7.19 The proposed development lies partly in CRZ IA (diverted forest), and CRZ IB, CRZ III, CRZ IVA & IVB areas. The CRZ demarcation study was carried out through National Centre for Sustainable Coastal management (NCSCM), Chennai, an institute under MoEFCC, Govt. of India. The layout is superimposed on the 1:4000 scale CRZ map.

3.7.20 Details of shoreline study: National Centre prepares the shoreline erosion and accretion study for Sustainable Coastal management (NCSCM), Chennai. The shoreline is combination of low and medium erosion, low and medium accretion and stable coast. The model study on Littoral drift and shoreline changes has been carried through DHI India. Model study suggests that the shoreline changes are envisaged due to the jetty(ies) development. Suitable sand bypassing mechanism would be adopted to stabilize and protect the adjacent shoreline.

3.7.21 Dredging details, disposal and reclamation: About 30 million m³ of bed material would be dredged for creation of the navigation channel and jetty basin. About 27 million m³ dredged material shall be used for land reclamation/grade improvement of the ISP land and the remaining would be disposed at the offshore dumping ground at a distance of 14 km from the coast and about 23 m water depth as identified in the model study report. The land area behind the jetty and ISP would be grade improved and raised to about +6.5 m on average using spoils from the proposed dredging.

3.7.22 Handling of each cargo, storage, transport along with spillage control, dust preventive measures: 1. **Dry Bulk Cargo:** MHC/Unloading Cranes/Surge Bins. Storage: Stackyard, covered shed. Transport & Spillage Control: Closed conveyor system, Stackyard will be GI barricaded to avoid any spillage. Dust suppression systems with water sprinklers/dry-fog system shall be provided to prevent the fugitive dust emissions during handling, transportation and storage of bulk cargo. Cargo would be transported through closed conveyor belt attached with dust suppression systems at its transfer points. All bulk cargo storage shall be carried out in the longitudinal covered shed. Further, the development of Greenbelt/ Wind shields would prevent/arrest/control the fugitive dust emissions. 2. **Break Bulk Cargo:** Wagons/ Cranes. Storage: Special purpose covered shed. Transport & Spillage Control: Transport in bulk in closed and controlled manner to avoid any spillage during the transportation.

3.7.23 Land acquisition and R&R issues: No R&R and land acquisition is involved as part of this project development.

3.7.24 Employment potential: About 3450 people would be employed during the project construction and operation phase. The project would also open both secondary and tertiary employment opportunity in the area.

3.7.25 Benefits of the project: The proposed project will improve socio-economic condition of the people. Under the CER program, strengthening of social infrastructure such as healthcare, education and physical infrastructure will be developed. Livelihood improvement through various CSR activities such as women empowerment, aids to fisherman community, improvement in health, education sector, and overall socio-economic development of the local community. Direct and indirect revenue for State and Centre in the form of various taxes and duties. The project is expected to generate employment opportunity.

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

3.7.27 The southeast part of the proposed project falls within CRZ-IA (sand dunes) and is proposed for green belt development. It is noted that the green belt on sand dunes that fall in CRZ-1A is a prohibited activity as per extant norms of the CRZ Notification, 2011. Thus no plantation should be done on sand dunes except those species of grasses and creepers which naturally occur and are native to the area.

3.7.28 *During the deliberation, EAC observed and noted the following:*

- i. Bunkering at the Port may be permitted.*
- ii. Provisions of Green belt provided in the port site are not sufficient. It needs thicker/dense green belt of more than three layers to mitigate the storm surge.*
- iii. Casuarina plantation would not useful for wind barrier and should not be used. Instead, native species that can grow well in the coastal areas and can withstand strong winds be used to develop green belt.*
- iv. The South-east part of the proposed project falls within CRZ-IA (sand dunes) and is proposed for green belt development, which is a prohibited activity as per extant norms of the CRZ Notification, 2011.*
- v. No plantation should be done on sand dunes except those species of grasses and creepers which naturally occur and are native to the area. Institute of national repute such as Gujarat Institute of Desert Ecology (GUIDE) should be used to help sand dune monitoring and restoration during and post construction with adequate budget allocation.*
- vi. Monitoring of impact if any on offshore congregation and movement of sea turtles will be important and must be undertaken during construction and post construction operations atleast for five years by a nationally reputed institute having experience on sea turtle research and conservation such as NIO or WII or SACON.*

3.7.29 Impact on benthic flora and fauna will be monitored during construction and atleast for 5 years post construction by Institute of national repute like NIO etc.

3.7.30 The Committee further noted that the proposed project of Greenfield Captive Jetty(ies)

is a part of interlinked project with 13.2 MTPA Integrated Steel Plant (ISP) along with captive power plant (CPP) of 900 MW capacity, and cement grinding & mixing unit of 10.0 MTPA. These projects are submitted to the Industry I committee of MoEFCC on 05.05.2021 after completion of public hearing (PH). The proposals were considered by the EAC (Industry I) during 36th and 44th EAC meeting held on 19.05.2021 and 14.09.2021, respectively, wherein EAC – (Industry-1) has sought responses on several issues from the PP to further consider the proposal including issues related to Captive Jetty project.

3.7.31 The EAC (Infra1) had a detailed deliberation in its 273rd meeting held on 16th September, 2021 on the CRZ related issues so also the responses to its earlier queries and satisfied with the submissions made by PP.

However, regarding issues raised by EAC (Indus-I) are concerned, the Committee mentioned that the issues raised by EAC (Indus-I) need to be addressed by the PP before final recommendations of the Infra-1 Committee on the proposal of Greenfield Captive Jetty(ies) since the proposed project of Greenfield Captive Jetty(ies) is a part of interlinked project with the integrated steel plant (ISP) along with captive power plant (CPP) which is under active consideration of the EAC (Industries-1). In view of the OM dated 24th December, 2010, and since the Industry-1 sector has raised queries related to Captive Jetty Project, it has been decided that two members of EAC (Infra-1) Committee may be co-opted by Industry-1 Sector during the appraisal of the industrial projects under consideration. The final recommendations of Infra-1 sector on Greenfield Captive Jetty(ies) shall be provided after receiving the recommendations for the Industrial proposals from EAC (Indus-I). Further, the PP need to submit the combined EIA/EMP which has been submitted to Industry-1 Sector to Infra-1 sector for appraisal. The proposal stands **deferred** until recommendations received from Industry-1 sector.

Agenda No. 3.8

Development of Payal Industrial Park at Villages Pakhajan, Pipaliya&Vahiya, Taluka Vagra, District Bharuch, Gujarat by M/s Payal Properties Pvt. Ltd. – Terms of Reference Proposal No. IA/GJ/NCP/225979/2021 and File No. 10/39/2021-IA.III

“The EAC noted that the Project Proponent/consultant has 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. 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 EIA consultant Aqua-Air Environmental Engineers P. Ltd., Surat made a presentation before EAC through Video Conferencing and provided the following information:

3.8.2 The proposed project is for Development of Payal Industrial Park at Villages Pakhajan, Pipaliya&Vahiya, 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

3.8.3 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.

3.8.4 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	

3.8.5 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	

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

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

3.8.7 Water bodies: There is one natural pond within proposed industrial park premises. It shall be used as reservoir. 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.

3.8.8 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. From 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.

3.8.9 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.

3.8.10 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.

3.8.11 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.

3.8.12 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.

3.8.13 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.

3.8.14 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.

3.8.15 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.

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

3.8.17 During the deliberation, EAC observed and noted the following

- i. 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%.
- ii. 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.
- iii. PP has to follow the 'Zoning Atlas for Siting of Industries published by CPCB.
- iv. The proposed Payal Industrial Park (by Payal Properties Pvt. Ltd) falls within industrial earmarked area (144 sq. km) within PCPIR, Dahej
- v. 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.

3.8.18 The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 273rd meeting during 16th-17th September, 2021 and **deferred** the proposal. 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.

Agenda No. 3.9

Development of captive riverine jetty of material handling capacity of 4.5 MTPA on the bank of river Mahanadi located in Paradeep, Distriuct Jagatsinghpur, Odisha by M/s Arcelor Mittal Nippon Steel India Limited (AM/NS India Ltd.) - Terms of Reference Proposal No. IA/OR/NCP/227076/2021 and File No. 10/42/2021-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”

3.9.1 The project proponent along with EIA consultant AECOM India Private Limited made the presentation before EAC through Video Conferencing and provided the following

information-

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

3.9.3 The proposed project is an interlinked project for the augmentation of 6 MTPA iron ore pellet plant to 12.0 MTPA Pellet plant at Paradeep, Odisha. Environmental clearance for "Completion of balance work of 6 MTPA Pellet Plant (Unit-2) of approved 12 MTPA Pellet Plant" has been accorded to AMNS on 13th August, 2021 vide F. No J-11011/129/2007-IA-II (I).

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

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

S. No.	Land use/Landcover	Area (Ha)	Area (%)	Remarks, if any
1	Waterbodies	7.48	48.9%	-
2	Scrub Land	7.80	51.1%	-
	Total	15.28	100%	-

3.9.6 The Land use/Landcover around 10 km radius of project site is as following:

S. No.	Land use/Landcover	Area (Ha)	Area (%)	Remarks, if any
1	Built-Up	3619.25	10.81	-
2	Forest	2164.43	6.46	-
3	Industrial Belt	1921.18	5.74	-
4	Ocean	3976.54	11.87	-
5	Waterbodies	4805.81	14.35	-
6	Vacant Land	262.93	0.79	-
7	Agricultural Land	16742.36	49.99	-
	Total	33492.50	100	-

3.9.7 Terrain and topographical features: The topography of the proposed site is mainly characterized by plain land. The landform is nearly flat with a contour variation up to 1 m from the mean sea level. The topographical design of the site is considered as the flood plain of Mahanadi River. The natural slope of the site is towards east and north east, at the direction of the river Mahanadi. The site is situated at the right bank of Mahanadi River. The proposed site is mainly a low land, uncultivated and sparsely vegetation. There are few waterbodies and

scattered vegetation, comprising mostly shrubs and few trees. Most of the land is inundated during high spring tides and floods during monsoon. Depths in the close proximity of the site ranges between 3 m towards the eastern boundary and 6 m to the western boundary.

3.9.8 Details of water bodies & impact on drainage: The proposed site has few waterbodies as shown below. During the construction phase, natural drainage may be impacted due to unplanned storage of construction materials & waste. During construction of the berths, normal drainage pattern may be altered, but the extent of the impact would be envisaged to be limited to construction period. Due to improper storage of hazardous material like lube oil, paint and other chemicals might be washed out to the natural water body and impact the surface water quality.

Water Bodies	Distance and direction
Mahanadi	The project site is located on the bank of River Mahanadi
Kharinasi Nadi	3.1 km North East
Athrabanki River	2.7 km East
Nuna River	4.0 km North west
Bay of Bengal	7.2 km East & South East

3.9.9 Water requirements & sources: Water requirement would be about 400 m³ per day for drinking, services and dust suppression. Additional 200 m³ of water would be required for firefighting. The Pellet Plant withdraws water from Taldanda Canal, from where withdrawal permission of 5000 m³/day of water available with AMNS. This is adequate to cater to the requirements of both their Pellet plant and the Jetty. AMNS has constructed one intake well at Taldanda Canal for withdrawal of surface water, which is directly sent to the pellet plant through the pipeline. The proposed Jetty would source water from the Pellet plant through pipeline. No groundwater extraction is envisaged for the proposed project.

3.9.10 Power requirement: During the construction phase a total of 175 KW power would be required during construction phase, including power requirement for welding and sight lighting during the construction. In the operation phase a 1200 KW power would be needed. Power is proposed to be sourced from the captive coal-based power plant of AMNS and TP Central Odisha Distribution Limited (TPCODL). As a backup power source, DG set would be present.

3.9.11 The proposed project is not located in any Critically polluted area; but severely polluted area (Paradeep) as per the latest CPCB notification.

3.9.12 Tree cutting: The proposed site location is low lying, uncultivated, flatland devoid of significant vegetation, except for sparsely spread common shrubs and grasses. Therefore, tree cutting is not envisaged for the proposed project. No forest land diversion is included in the proposed project.

3.9.13 Provision will be made for accommodating greenbelt in about 33% of the total land area. The approximate area under greenbelt would be about 12.4 acres. However, the project is situated in Paradeep, which is a severely polluted area as per CPCB, effort would be made to develop green belt in about 40% of the total land area, if feasible.

3.9.14 The proposed project is 5.6 km North-East from the eco-sensitive zone boundary of the protected areas of Bhitarkanika Wildlife sanctuary, Bhitarkanika National Park and Gahirmatha (Marine) Wildlife Sanctuary situated in the Kendrapara district of Odisha. As the project is located outside the ESZ, approval from NBWL is not applicable as per MoEF&CC circular vide F. No 6-60/2020WL (Part I) dated 16.07.2020. The proposed project is not located within any ESZ, notified by the MoEF&CC.

3.9.15 The site is categorized under CRZ II and CRZ IVB as per draft Coastal Zone Management Plan of Odisha (March 2021), based on CRZ Notification 2019. CRZ Clearance for the proposed project shall be obtained from OCZMA and MoEF&CC.

3.9.16 Waste Management: **CETP** -The proposed project would be set up to ease the import and export of the raw material for the proposed pellet plant. The project is not involved in any kind of manufacturing. Therefore, CETP establishment for the proposed project is not envisaged. **STP**- Approximately 4.5 - 5 m³ of sewerage would be generated per day from the jetty operation, which would include wastewater mainly from toilet facility, kitchen wastewater etc. The sewerage would be treated in a 5 KLD STP, which would be functional in the operation stage.

3.9.17 The proposed project would generate hazardous and non-hazardous wastes and appropriate storage facilities for all these categories of waste would be built. During the construction period, construction wastes comprising Bricks, Tiles, Ceramics, Wood, Glass, Plastic & Metallic Wastes, cardboard packaging, empty drums of paints, Varnishes, Adhesives & Sealants etc. would be generated, which would be stored in designated place within the project boundary and disposed as per the provisions of Construction and Demolition Waste Management Rule, 2016. During the operation phase generation of solid waste would be in form of hazardous waste, nonhazardous wastes and municipal solid waste. Municipal solid waste, like kitchen waste, leftover food packet etc. would be disposed of as per the MSW rules, 2016. Hazardous wastes like spent lube & oil, etc. would be stored in designated places with concrete floor & secondary containment and handled as per the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016. There would be generation of fines of iron ore, coal during material handling, which would be recycled back to the Pellet plant.

3.9.18 Details of shoreline change: Channel width is recommended to be 3.6 to 5 times the beam of the ship. For a barge with 16 m beam, the proposed channel width works out to 80m. The channel depth required for the design barge size would be -5 m CD. The diameter of turning circle is assessed as 2.1 times of the LoA to ensure safe manoeuvring of the vessels within the harbour and the required diameter of the turning circle is proposed as ~170 m for a barge of LoA 80 m.

3.9.19 Considering the depth availability in Mahanadi, dredging needs to be carried out in the navigation channel and berth pocket for handling of 3,000 DWT barges. The capital dredging volume is envisaged to around 1 Million Cum and the dredged material is proposed to be used to raising the back-up area higher than the high Flood Level (HFL) of the area.

3.9.20 Iron ore pellets shall be tapped from the discharge of reversible shuttle conveyors at existing junction house by making suitable chute modifications. The new conveyor route would

feed to an additional buffer storage of 3000 Ton capacity which is planned in the barge loading facility via traveling tripper arrangement. Material would be reclaimed from the intermediate stockyard by means of pay loaders and transferred to the reclaiming conveyor with reclaim hoppers. At the barge loading facility, material is discharged from Covered conveyor to two buffer storage hoppers from which material is extracted in a controlled manner with a belt weigh feeder (550 TPH) for further conveying to barge loading. Below the hoppers, two reversible conveyors shall be planned to feed barge loading conveyors. Four conveyors for export berths equipped with telescopic chute at loading end for export cargo is envisaged in barge handling facility. Provision for handling the cargo at the facility (such as pay loaders/dumpers) in case of conveyor breakdown etc., would be proposed, to ensure continuity of operations and to prevent the ships waiting at anchorage and associated repercussions.

3.9.21 The import berth is envisaged with 1 barge unloader, with a design capacity of 800 TPH and effective handling rate of ~500 TPH. For the incoming bulk cargo, the cargo would be unloaded from the barges using barge unloader (with grab) and would be loaded into trucks, which will carry it to the plant / intermediate storage. The intermediate storage is equipped with 3 nos. of mobile unloaders radial telescopic stacker and mobile link conveyor of 300 TPH rated design which stack the material in the designated stockpiles. Reclaiming of material would be done by means of pay loaders / dumpers for further transfer to pellet plant.

3.9.22 Fugitive emission would be mitigated through regular water sprinkling and dust suppression system. Dust extraction system would be provided for the junction houses to arrest fugitive dust emissions at transfer points during pellet conveying.

3.9.23 Fishing activity in the vicinity: Small scale fishing activity is observed in the vicinity of the proposed site.

3.9.24 Land acquisition and R&R issues: The propose project land of 37.7 acre (15.28 Ha), free from any encumbrances, is proposed to be handed over to AMNS by Infrastructure Development Corporation (IDCO). Hence aspects related to rehabilitation and resettlement is not envisaged for this project.

3.9.25 Employment potential: Total employment generation during construction phase would be about 500 considering peak requirement, of which requirement of skilled manpower would be about 150 while about 350 unskilled manpower would be required. During the operation phase, the manpower requirement is estimated to be about 50 for operations and maintenance. Local people would be given maximum opportunity and preference during sourcing of personnel, based on skill.

3.9.26 Benefits of the project: Setting up of the project would assist AMNS reduce dependency of material transport through EBTPL in Paradeep Port and cater to increasing requirement of material transportation. This would also benefit the state due to earning from taxes and duties from the Plant. The project would generate direct and indirect employment opportunities and may lead to peripheral economic development in terms of growth in ancillary & auxiliary businesses.

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

3.9.28 *During the deliberation, EAC observed and noted the following*

- i. *The proponent was asked to explore how many such kind of jetties are available around 10-15km of the proposed site.*

3.9.29 The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 273rd meeting on 16th-17th September, 2021 and **recommended** the proposal for grant of Terms of Reference (ToR) with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

- i. *To explore and submit that how many such kind of jetties are present around 10-15km of the proposed site.*
- ii. The ecologically fragile area including CRZ 1A area etc. shall be demarcated and superimposed on the layout plan and submitted.
 - i. Risk analysis and its management plan for handling different types of liquid cargos (if handling) shall be conducted and submitted.
 - ii. Detailed modelling studies to understand whether the selected site can withstand severe cyclones and develop design in accordance to due safety measures.
 - iii. A cumulative environmental impact assessment and risk assessment of all the jetties to be carried out in the EIA/EMP report.
 - iv. Erosion and accretion study at the mouth of the creek which is adjacent to the proposed site be carried out and submitted
 - v. Importance and benefits of the project.
 - vi. Submit superimposing of latest CZMP as per CRZ Notification (2011) on the CRZ map. And also submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scales.
 - vii. Recommendation of the Odisha CZMA shall be obtained and submitted.
 - viii. Submit a complete set of documents required as per para 4.2 (i) of CRZ Notification, 2011.
 - ix. Hydrodynamics study on impact of dredging on flow characteristics shall be carried out.
 - x. A detailed study on the impact of proposed activity on marine ecology and marine biodiversity with specific focus on the corals, mangroves and Mud flats in the proximity of the site should be conducted and required mitigation plan be submitted.
 - xi. A management plan for the area under which mangroves are or likely to be removed and compensatory mangrove plantation plan be submitted.
 - xii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
 - xiii. A certificate from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the

quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

- xiv. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- xv. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- xvi. An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA.
- xvii. Disaster Management Plan for the project shall be prepared and submitted.
- xviii. Details and status of court case pending against the project, if any.
- xix. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- xx. A tabular chart with index for point-wise compliance of above ToRs. The specific ToRs as recommended above are in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.
- xxi. 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, specific studies as stated in xiv and xv shall include all the activities required to be taken to fulfill these commitments in the Environment Management Plan along with cost estimates of these activities, in addition to the activities proposed as per recommendations of EIA Studies and the same shall be submitted to the ministry as part of the EIA Report. The EMP shall be implemented at the project cost or any other funding source available with the project proponent.
- xxii. In pursuance of Ministry's OM F. No. 22-65/2017-IA.III dated 30th September, 2020 the project proponent shall add one more annexure in the EIA Report indicating all the commitments made by the PP to the public during public hearing and submit it to the Ministry and the EAC.

Agenda No. 3.10

Changing Caustic Pipeline diameter from 6" to 8" at village Vanjore, T.R. Pattinam Commune Panchayat, Taluk Karaikal, UT of Puducherry by M/s Chemplast Sanmar Ltd. - Amendment in Environmental and CRZ Clearance [Proposal No. IA/PY/NCP/226584/2021; File No. 10-57/2007-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. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent”

3.10.1 The project proponent along with the EIA consultant M/s Kadam Environmental Consultants made a presentation through Video Conferencing and provided the following information: -

3.10.2 The proposed proposal “Changing Caustic Pipeline diameter from 6" to 8" at village Vanjore, T.R. Pattinam Commune Panchayat, Taluk Karaikal, UT of Puducherry by M/s. Chemplast Sanmar Ltd.” is for amendment in EC & CRZ.

3.10.3 The proposed project falls under 7(e) - Ports, Harbours, Category-A, as per EIA notification 2006. Total investment/cost of the project is Rs 3.60 Crore.

3.10.4 The proposed pipeline is falling in CRZ areas: CRZ-IB, CRZ-III(NDZ), CRZ-III(200 to 500m), CRZ-IV-A, CRZ-IV-B. CRZ clearance for replacement of existing Caustic Soda Pipeline from 6" to 8" was granted by PCZMA on 19th August 2021.

3.10.5 Environmental Clearance for laying pipeline, Karaikal by M/s. Chemplast Sanmar Limited was granted vide MoEF& File No. 10-57/2007-IA-III, dated 13/08/2007.

3.10.6 The length of existing Caustic Pipeline is 3100 m (1700 m on land + 1400 m above sea) and the length of Proposed Caustic Pipeline is 3000 m (1600 m on land + 1400 m above sea) pipe route inside the plant was straightened.

3.10.7 Total Water requirement for construction phase is 1.35 KLD @ 45 LPCD. Source of water will be from existing desalination plant within Chemplast Premises. NOC (Valid Consent to Operate vide letter no. PPCC/CTOR/WTR/TRP/KKL/JE/2019/852, dated 29.11.2019 valid up to 31.03.2024) was obtained which indicates that water to the tune of 1200 KLD is available.

3.10.8 The PP vide on-line application dated 27th August, 2021 has requested for the following amendment in the Environmental and CRZ Clearance No. 10-57/2007-IA-III, dated 13/08/2007:

S. No	Description	As per Impact Assessment Document - 6 inch	Proposed for 8 inch pipeline	Remark
1	Caustic storage Tank	4000 KL	4000 KL	No change
2	Caustic transfer pump	1 working + 1 stand by	1 working + 1 stand by	No Change
a	Designed Flow rate	200 m ³ /hr	200 m ³ /hr	No Change
b	Head	100 m	100 m	
3	Operating			

	conditions			
a	Flow rate in pipe line	200 m ³ /hr	200 m ³ /hr	
b	Operating back pressure	10 barg Max	10 barg Max	
4	Pipe line length	3100 m (1700 m on land + 1400 m above sea)	3000 m (1600 m on land + 1400 m above sea) pipe route inside the plant was straightened. The pipe line is free from flanges.	100 m reduction in pipeline length by reducing number of bends, thereby reducing friction and increasing throughput without sacrificing safety and achieving the original plant throughput.
5	Flow control	NRV at the pump	NRV at the pump Valve at the delivery end. Recirculation line control valve connected back to the tank will open when the pressure (10 bar g) or flow (200 m ³ /hr) increases the limits indicated.	
6	Hold up volume		94 cum; We are introducing a pigging mechanism thereby all the residual Caustic will be pushed to the ship by foam ball using compressed air as motive force in reasonable time.	
7	Corrosion protection		External painting of 600 micron (250 micron X 2 coat and 100 micron PU finish OMEGA KOAT 6000) Pigging of pipe lines and push the remaining caustic to the ship. Keep the pipe filled with Nitrogen during the idle period.	

3.10.9 The PP has given the following reason for amendment: Diameter of Caustic line changed from 6 inch to 8 inch required as maintenance activity due to ageing of pipeline and pipe structural support, which is now in corroded condition because of saline atmosphere.

3.10.10 No Court case is pending against proposed project.

3.10.11 The EAC, taking into account the submission made by the project proponent had a detailed deliberation during its 273rd meeting on 16th - 17th September, 2021 and **recommended**

the proposal for Amendment in Environmental and CRZ Clearance as mentioned at point 3.10.8 above.

Agenda No. 3.11

Proposed Construction of four lane TBM Tunnel approaches under River Brahmaputra between Gohpur on NH-52 North Bank and Numaligarh on NH-37 South Bank, Assam (Length: 34.664 km) on EPC Mode under SARDP-NE Phase-A by M/s National Highways & Infrastructure Development Corporation Ltd. (NHIDCL) – Amendment in Terms of Reference

[Proposal No. IA/AS/MIS/222832/2021; File No. 10/27/2021-IA.III] –

3.11.1 The proposed proposal “Construction of four lane TBM Tunnel approaches under River Brahmaputra between Gohpur on NH-52 North Bank and Numaligarh on NH-37 South Bank, Assam (Length: 34.664 km) on EPC Mode under SARDP-NE Phase-A by M/s National Highways & Infrastructure Development Corporation Ltd. (NHIDCL)” is for Amendment in Terms of Reference.

3.11.2 The proponent vide a letter dated 24.7.2021 and an online application No. IA/AS/MIS/222832/2021, dated 27th August 2021 has requested for the following amendment in Terms of Reference (ToR) letter No. 10/27/2021-IA.III, 12/07/2021.

Ref. of Approved ToR	Description as per Approved ToR No. 10/27/2021-IA.III Dated 12th July 2021.	Amendment requested
1	The project proponent M/s National Highways Authority of India along with ETA consultant M/s Enviro Resources made a presentation through Video Conferencing and submitted the following information	<i>“The project proponent M/s National Highways & Infrastructure Development Corporation along with Principal DPR Consultant M/s Louis Berger Consulting Pvt. Ltd. and Environmental Sub-Consultant M/s Enviro Resources made a detailed presentation through Video Conferencing and provided the following information”</i>
2	The application is for Environmental Clearance and Numaligarh Refinery NDZ clearance	The PP need to apply for separate clearance for Numaligarh Refinery NDZ clearance to the concerned division of the Ministry. The mandate of EAC is limited to appraisal of applications for EC/CRZ clearance.

3.11.3 Reason for Amendment: The proponent has given the following reason for the above amendment:

- i. Project proponent is National Highways & Infrastructure Development Corporation Ltd.

(NHIDCL) and not National Highways Authority of India (NHAI) as mentioned in Point No. 2 of ToR Letter.

- ii. Principal DPR Consultant is M/s Louis Berger Consulting Pvt. Ltd. with Enviro Resources as Environmental Sub-Consultant of M/s Louis Berger Consulting Pvt. Ltd.
- iii. Numaligarh approach road (Package 1) of PRow Alignment will be passing through the No Development Zone (NDZ) of Numaligarh Refinery & as per MoEF Notification - S.O.481(E) dtd. 5th July 1996.

3.11.4 The EAC, taking into account the submission made by the project proponent had a detailed deliberation during its 273rd meeting on 16th - 17th September, 2021 and **recommended** the proposal for amendment in Terms of Reference as mentioned at point 3.11.2 above. As far as matter related to Numaligarh Refinery NDZ clearance is concerned, the PP need to apply for separate clearance for Numaligarh Refinery NDZ clearance to the concerned division of the Ministry. The mandate of EAC is limited to appraisal of applications for EC/CRZ clearance.

Annexure-A

Following members were present during the 273rd EAC (Infra-1) meeting held on 16th - 17th September, 2021

S. No.	Name	Designation	Remarks	
			16 th September 2021	17 th September 2021
1.	Dr. Deepak Arun Apte	Chairman	Present	Present
2.	Sh. S. Jeyakrishnan	Member	Present	Present
3.	Sh. Manmohan Singh Negi	Member	Present	Present
4.	Sh. Sham Wagh	Member	Present	Present
5.	Dr. Mukesh Khare	Member	requested for leave of absence	requested for leave of absence
6.	Dr. Ashok Kumar Pachauri	Member	Present	Present
7.	Dr. V. K Jain	Member	requested for leave of absence	requested for leave of absence
8.	Dr. Manoranjan Hota	Member	Present	Present
9.	Sh. R Debroy	Member	Absent	Absent
10.	Dr. Rajesh Chandra	Member	Absent	Absent
11.	Dr. M. V Ramana Murthy	Member	Present	Present
12.	Smt. Bindu Manghat	Member	Absent	Absent
13.	Dr. Niraj Sharma	Member	Present	Present
14.	Sh. Amardeep Raju,	Scientist 'E' & MS, MoEF&CC	Present	Present
15.	Dr. Rajesh Prasad Rastogi	Scientist 'C', MoEF&CC	Present	Present
16.	Smt. Harshulika	Consultant	Present	Present