

**220<sup>th</sup> meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Industrial estate/parks/complexes/areas, Export Processing Zones, Special Economic Zones, Biotech Parks, Leather Complexes and National Highways projects to be held on 26<sup>th</sup> July, 2019**

1. Opening remarks of the Chairman
2. Confirmation of the minutes of the 217<sup>th</sup> meeting held on 27<sup>th</sup> June, 2019 at Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
3. Consideration of Proposals:

3.1	<b>Development of 8-lane SPUR Starting from Km 26.582 of Vadodara - Mumbai Expressway Main Alignment (Design Chainage km. 0+000 of SPUR) and terminating at proposed junction with the Multi-Modal Corridor of MMRDA (Design Chainage of SPUR km. 79.783) in the state of Maharashtra (Total Length is 79.783 km) by M/s National Highway Authority of India – Terms of Reference [Proposal No. IA/MH/MIS/110764/2019] [F. No. 10-29/2019-IA.III]</b>
3.1.1	<p>The project proponent along with the EIA consultant M/s International Consultant and Technocrats Private Limited, New Delhi, made a presentation and provided the following information before the Committee:</p> <ul style="list-style-type: none"> <li>(i) National Highways Development Project (NHDP) Phase-VI is for development of 1000 km of expressways and includes construction of about 379 km long Vadodara-Mumbai Expressway (VME) including SPUR. Expressway proposed to be implemented under Public Private Partnership mode and to be executed as Design, Build, Finance and Operate (DBFO) contracts.</li> <li>(ii) The proposed project is the development of 8 lane SPUR of Vadodara Mumbai Expressway (VME) Starting from Km 26.582 of VME main alignment and terminating at proposed junction with the Multi-Modal Corridor of MMRDA in the state of Maharashtra. It is a green field alignment and length of the SPUR alignment to be developed in the initial stage is 79.783 km.</li> <li>(iii) <b>Location:</b> The proposed SPUR starts at km 26.582 of main alignment of the Vadodara Mumbai Expressway at Koshimb village of Palghar district at Ch. 0+000 (19°29'19.45"N, 72°52'58.78"E) and terminate at the proposed junction with the Multi-Modal Corridor of Mumbai Metropolitan Region Development Authority (MMRDA) in Morbe village of Raigad district at Ch. 79+783 (19° 4'2.93"N, 73°10'50.07"E). Total length of the SPUR alignment is 79.783 km; out of which 18.864 km lies in Palghar district, 55.336 km lies in Thane district and remaining 5.583 km lies in Raigad district of Maharashtra. The proposed alignment is passing through 64 villages and 6 Tehsils (Vasai, Wada, Bhiwandi, Kalyan, Ambarnath and Panvel) in the State of Maharashtra.</li> <li>(iv) <b>Land use of the site and around the site up to 10 km radius:</b> Predominant land use pattern of the site and around the site up to 10 km radius is agricultural followed by forest, residential, commercial, barren land, water body etc.</li> <li>(v) <b>Justification for selection of the site:</b> A Comprehensive Transportation Study for the Mumbai Metropolitan Region has been done in 2008-2009 by the MMRDA. This network envisages construction of a link from NH4 to</li> </ul>

	<p>NH8 to freeway standards. The alignment options studied here generally follow the links identified in this study and have been modified to suit site conditions. Six alternative alignments for the connection to JNPT and Mumbai Pune Expressway have been studied and it was desired that the SPUR alignment should be synergized with the other developments being envisaged in the Mumbai Metropolitan Region by the Government of Maharashtra. A committee was formed in the year 2010 under the Chairmanship of Divisional Commissioner, Konkan Region for the selection of the greenfield alignment of VME including SPUR. The committee recommended the alignment of the main Vadodara Mumbai Expressway in Maharashtra and the SPUR to JNPT (Node No. 1-2-4-11-12-9-10-14). The Government of Maharashtra accepted the recommendations of the committee and the formal approval of the alignment was communicated by the Government of Maharashtra vide their letter NHP2010/CR81/NH1 dated 03/2/2011 addressed to Chairman NHAI.</p> <p>Government of Maharashtra approved SPUR alignment starts from the main Vadodara Mumbai Expressway near Koshimb village and ends at km 24.476 of NH-4B near Panvel (length was 94.390 km). In later stage, MMRDA planned to develop a Multi-Modal Corridor (MMC) which connects SPUR alignment at Morbe village. Thereafter, during the meeting between MMRDA &amp; NHAI, it was decided to have a common corridor of MMC &amp; SPUR beyond km 79+783. During the meeting held on 22nd March 2019 in the office of Regional Officer (NHAI) Mumbai, it is decided that:</p> <ul style="list-style-type: none"> <li>• Start point of SPUR will be at Km 26.582 of main alignment of Vadodara Mumbai Expressway;</li> <li>• SPUR will be initially developed up to km 79.783 i.e. the proposed junction with the Multi-Modal Corridor of MMRDA.</li> <li>• Development of the remaining section (up to JNPT) shall be clubbed with the development of Multi-Modal Corridor and shall be taken up later.</li> </ul> <p>Hence, length of the SPUR alignment to be developed in the initial stage is 79.783 km. The alignment of SPUR has already been included in the Mumbai Metropolitan Regional Plan 2016-36 of MMRDA.</p> <p>(vi) <b>Proposed development:</b></p> <ul style="list-style-type: none"> <li>• Carriage way: Dual carriageway 2 x 4 x 3.75 (8 lane)</li> <li>• Shoulder: Paved Shoulder: 3.0 m, Earthen shoulder: 2.0 m</li> <li>• No. of bridges: Major bridge: 8; Minor bridge: 19 no.</li> <li>• No. of culverts: 158 (123 box culverts and 35 pipe culverts)</li> <li>• Interchanges: 4 no.</li> <li>• ROBs: 2 no.</li> <li>• Flyovers: 4 no.</li> <li>• Vehicular overpasses: 8 no.</li> <li>• Vehicular underpasses: 15 no. (Size 12 m x 4.0 m)</li> <li>• Pedestrian underpasses: 30 no. (Size 12 m x 4.0 m)</li> <li>• Cattle underpasses: 30 no. (Size 12 m x 4.0 m)</li> <li>• Service roads: 9.990 km (on both sides)</li> <li>• Wayside amenities: 2 no.</li> <li>• Truck parking: 2 no.</li> </ul>
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	<ul style="list-style-type: none"> <li>• Toll Plaza including on interchanges: 5 no.</li> <li>• A tunnel of 4.390 km length is proposed which starts from Km 71.675 (left) and Km 71.741 (Right) and ends at Km 76.071 (Left) and Km 76.121 (Right). The length of tunnel in Matheran Eco-Sensitive Area is 3.88 Km.</li> </ul>
(vii)	<b>Land Acquisition and Proposed RoW:</b> The proposed land acquisition for SPUR is tentatively 1241.551 Ha out of which 1081.891 ha is private land and 222.66 ha is government land. Actual figure will be provided in the EIA Report after completion of Joint Measurement Survey. Width of proposed Right of way (PROW) is 100 m in general and 120 m width has been proposed at connecting road locations. At location of truck parking, toll plaza and interchanges, extra land has been proposed as per the actual design requirement.
(viii)	<b>Waste Management:</b> Waste water would be generated mainly from the workers camp for which septic tanks with soak pits will be provided at camp sites.
(ix)	<b>Municipal solid waste generated disposal facility:</b> <b>Construction Phase:</b> Domestic waste will be produced from labour camps which will be disposed as per Solid Waste Management Rules, 2016. <b>Operation Phase:</b> The domestic / commercial waste will be generated during operation phase from Toll Plazas, which will be handled as per Solid Waste Management Rules, 2016.
(x)	<b>CETP:</b> Not Applicable.
(xi)	<b>Total water requirement and its source:</b> Total water requirement for construction period of 4 years is 32,00,000 KL (2,666 KLD). It would be sourced from surface (60%) and ground water (40%). The required permission will be obtained by the Contractor prior to construction.
(xii)	<b>Water bodies, diversion if any:</b> The proposed alignment is crossing Tansa River (Km 3+400 & 18+850), Tributary of Tansa River (Km 13+545), Kamvadi river (Km 33+350), Bhatsal River (Km 45+400), Kalu River (Km 47+300), Barvi River (Km 57+600), Ulhas River (Km 67+200) and also crosses streams & local nala at several locations.
(xiii)	<b>Tree cutting, types, numbers, girth size etc.:</b> Approximately 49,497 trees are proposed to be felled in the non-forest area. Actual numbers of government and private trees are to be felled can be ascertained after completion of Joint Measurement Survey (JMS) with appropriate authorities. The details will be provided in the EIA Report.
(xiv)	<b>Terrain, level with respect to MSL, requirement of filling if any:</b> Mainly plain except 4 km is passing through hilly terrain with elevation ranges from 25m to 622m AMSL.
(xv)	<b>Utilization of Fly Ash:</b> Fly ash will be utilized for construction of embankment as per IRC Guidelines (IRC:SP:58-2001). Quantity of fly ash to be utilized for the project is 90,29,550 cum.
(xvi)	<b>Rehabilitation involved, if any:</b> Initial enumeration reveals an impact on approx. 237 properties will be affected, which includes 25 government properties, 2 religious and 13 community properties and remaining are private properties. Actual details will be provided in the EIA Report.
(xvii)	<b>Whether the project is in Critically Polluted area:</b> No.

	<p>(xviii) <b>Whether the project is in CRZ area:</b> The proposed SPUR alignment passes through the intertidal zone and crossed Tansa River (19°29'04.11" N 72°54'53.04" E), Bhatsal River (19°18'00.27" N 73°10'37.45" E) and Kalu River (19°17'14.17" N 73°11'20.01" E), which are regulated under CRZ Notification 2011. CRZ map has been prepared by the National Centre for Earth Science Studies, Thiruvananthapuram. CRZ application will be submitted later.</p> <p>(xix) <b>National Park/ Wild Life Sanctuary in 10 km radius area &amp; Eco-Sensitive Zone in 10 km radius area:</b></p> <ul style="list-style-type: none"> <li>• <b>Tungareshwar Wildlife Sanctuary</b> is located at a distance of approx. 0.698 km from the proposed alignment of SPUR.</li> <li>• Proposed alignment is passing through the <b>ESZ of Tungareshwar Wildlife Sanctuary</b>. Application for obtaining clearance from NBWL will be uploaded shortly.</li> <li>• <b>Tansa Wildlife Sanctuary</b> is located at a distance of approx. 13.6 km from the proposed alignment of SPUR.</li> <li>• The proposed SPUR alignment passes through <b>Matheran Eco-Sensitive Area</b> at 2 locations i.e. Km 71+640 to Km 75+524 and Km 77+200 to Km 77+782. The Monitoring Committee for Matheran ESA has approved the SPUR alignment inside the Matheran ESA vide letter dated April 16, 2013. The SPUR alignment has also been included in the Zonal Master Plan for Matheran Eco-Sensitive Area.</li> </ul> <p>(xx) <b>If the project involves diversion of forest land, extend of the forest land:</b> Proposal for diversion of 38.3195 ha forest land from Km 0+000 to Km 41+372 is submitted online dated 23/04/2018 (FC Proposal No. FP/MH/ROAD/33237/2018). Proposal for diversion of forest land in remaining stretch from Km 41+372 to Km 79+783 is under preparation and will be submitted online shortly. It is estimated that approx. 140 ha forest land is to be diverted for the proposed project.</p> <p>(xxi) <b>Investment/Cost of the project:</b> Rs. 11,175.45 Crore.</p> <p>(xxii) <b>Benefits of the project:</b> Currently the traffic bound for Gujarat and further north from JNPT and NH4 follows Thane-Ghodbandar road which is already congested. This traffic has to pass through congested road network of Mumbai Metropolis from southward destination and the goods earmarked for export and import also find difficulty in commuting to and from JNPT and Navi-Mumbai. Therefore, it would be prudent to connect the Vadodara – Mumbai Expressway (VME) to major traffic generators like JNPT and to Mumbai – Pune expressway. To ensure proper dispersal of traffic a proposal for providing a SPUR connection to the VME originating at about km 26.5 of the VME and connecting to Mumbai Pune expressway and JNPT port was mooted in the year 2009. The proposed SPUR of VME will not only connect to these major traffic generators but will also result in better dispersal of traffic in the Mumbai Metropolitan Region.</p> <p>(xxiii) <b>Employment potential:</b> Approx. 300 workers both skilled and unskilled during construction phase of 4 years and approx. 100 during operation phase.</p> <p>(xxiv) <b>If any court case, pending for violation of the environmental laws:</b> No.</p>
<b>3.1.2</b>	<p>The observations of EAC, after detailed deliberation during its 220<sup>th</sup> meeting held on 26<sup>th</sup> July, 2019, are as under:</p> <p>(i) The proposal requires CRZ clearance.</p>

	<ul style="list-style-type: none"> <li>(ii) The project also involves diversion of forest land and wildlife issues.</li> <li>(iii) There is a need to re look into the traffic engineering design of this project as the proposed project has been designed without considering environmental concerns as the proposed alignment passes through wildlife habitats and corridors and disturbs Tansa river catchment, which supports 5 lakes supplying drinking water to 80% area of Mumbai.</li> <li>(iv) The permission obtained from Matheran Eco-Sensitive Area Monitoring Committee is on 16<sup>th</sup> April, 2013 and outdated. A fresh view on the matter is essential related to existing ground realities.</li> <li>(v) Proponent presented three options of alignment before the EAC was biased since only one option shown as viable and rest as not viable. Committee desired to know if rest of the options are not viable then why they are included as viable in the first place?</li> <li>(vi) Proponent did not submit the Gazette notification issued regarding proposed alignment/spur. Instead, they have provided copy of the Minutes of Meeting of Chief Secretary, State Government of Maharashtra and circulars regarding the constitution of committee for finalisation of proposed Spur.</li> <li>(vii) The proposal involves construction of a tunnel. However, the proponent did not provide studies on likely impacts of blasting and related activities and subsidence impact for construction of proposed tunnel.</li> </ul>
<b>3.1.3</b>	<p>The considering the above mentioned observations, EAC, after detailed deliberation during its 220<sup>th</sup> meeting held on 26<sup>th</sup> July, 2019, <b>deferred</b> the proposal for want of following information/documents:</p> <ul style="list-style-type: none"> <li>(i) Details of applications submitted for CRZ, forest and wildlife clearances.</li> <li>(ii) A certificate from Chief Wildlife Warden of Maharashtra regarding distances of Protected Areas from proposed alignment/spur.</li> <li>(iii) Re-design the proposed alignment by considering environmental concerns including wildlife habitats/corridors, ecologically sensitive sites, Tansa river catchment and all other related social concerns.</li> <li>(iv) Proponent to submit micro-catchment/ micro-watershed map of the area to understand the interruption of drainage pattern due to proposed spur.</li> <li>(v) Any underground plan of spur should have detailed aquifer study and its impact on ambient ground water.</li> <li>(vi) Submit fresh permission from Matheran Eco-Sensitive Area (ESA) Monitoring Committee for construction of proposed alignment/spur.</li> <li>(vii) Committee advised proponent to explore the possibility to avoid Matheran ESA and come up with fresh alignment.</li> <li>(viii) Provide three viable alignments so that EAC can choose the suitable one for finalising the proposed alignment/spur.</li> <li>(ix) Submit a copy of Gazette notification issued by the Government regarding proposed alignment/spur.</li> <li>(x) Provide detail design of proposed tunnel.</li> </ul> <p>In addition to above, EAC suggested to <b>carry out site inspection</b> to ascertain the proposed alignment of spur and its impact on the environment. It was suggested to include a traffic engineering expert from Central Road Research Institute (CRRI) for the proposed site visit.</p>

3.2	<b>Development of Economic Corridor to improve the efficiency of freight movement in India under Bharatmala Pariyojana, Uрга Pathalgaon section (87.535 Km.) of NH-130A (Raipur–Dhanbad Economic Corridor) [Lot-3/Pkg-I] by M/s National Highway Authority of India – Terms of Reference. [Proposal No. IA/CG/MIS/110767/2019] [F. No. 10-33/2019-IA.III]</b>
3.2.1	<p>The project proponent along with the EIA consultant M/s Feedback Infra, Gurugram, made a presentation and provided the following information before the Committee:</p> <ul style="list-style-type: none"> <li>(i) <b>Location:</b> The project greenfield highway alignment starts from Chitapali village at ch. 8/150 of SH-04 and terminates near Turua Ama village, 10 km away from Pathalgaon along NH-43 towards Jharkhand border. Total length of the proposed alignment is 87.535 km.</li> <li>(ii) <b>Land use of the site and around the site up to 10 km radius:</b> The land use around the proposed stretch is mostly agricultural with patches of settlements and forest area.</li> <li>(iii) <b>Justification for selection of the site:</b> Three alternatives were considered for the project. The proposed alignment is finalized due to the following benefits:- <ul style="list-style-type: none"> <li>• Major part of the alignment Passing through the agricultural and barren land with patches of Forest</li> <li>• No ESZ areas in the RoW</li> <li>• Least forest area involved</li> <li>• Shortest Distance. Hence least time required for commuting</li> <li>• Least land to be acquired</li> <li>• Least number of settlements to be affected</li> <li>• Least number of Sensitive Features</li> </ul> </li> <li>(iv) <b>Proposed RoW:</b> Right of Way (RoW) for the project is 70 m and length of the alignment is 87.535 Km.</li> <li>(v) <b>Types of wastes, sources, collection, treatment, waste generation and disposal:</b> Only food and construction wastes shall be generated from the project which shall be segregated on site by using coloured bins and then shall be disposed in designated areas for disposal.</li> <li>(vi) <b>Habitation in and around:</b> The proposed stretch shall pass through 33 nos. of villages. About 8 numbers of habitations shall be marginally affected by the project and approx. 20 structures shall be demolished in the proposed RoW of the road.</li> <li>(vii) <b>Fly ash:</b> Fly Ash shall be used on high embankment areas.</li> <li>(viii) <b>CETP:</b> <ul style="list-style-type: none"> <li>I. <b>Type of effluent, Quantity, effluent conveyance system from the member units to CETP</b>– Not applicable as no effluent is envisaged to be generated,</li> <li>II. <b>Treatment and usage of treated sewage</b>–Sewage generated by the workers shall be treated in septic tanks provided near the construction sites.</li> </ul> </li> <li>(ix) <b>Total water requirement and its source:</b> 30,49,185 KL water shall be required which shall be arranged from Tanker supply or groundwater if required. The arrangement of the water shall be the responsibility of the project execution agency.</li> <li>(x) <b>Water bodies, diversion if any:</b> 14 water bodies shall be affected by the project 13 out of which are rivers and canals and 1 is pond.</li> </ul>

	<p>No diversion is required as bridges are proposed above them.</p> <p>(xi) <b>Tree cutting, types, numbers, girth size etc.:</b> Approximately, 25000 trees need to be felled for the project. The application of forest clearance is under process and the joint survey is yet to be done. Thus the details shall be provided in the EIA report.</p> <p>(xii) <b>Terrain, level with respect to MSL, requirement of filling if any:</b> The topography of the project stretch is undulating plain with varying elevations i.e. as low as 263.5 m AMSL to 582 m AMSL. Detailed topographic assessment shall be provided at EIA stage. There shall be requirement of backfilling which shall be done by the excavated soil.</p> <p>(xiii) <b>Rehabilitation involved, if any:</b> The identification of the private and government structures is in progress and the drafting of Rehabilitation and resettlement plan shall be commenced after the identification of structures and consultation with stakeholders. Land acquisition shall be undertaken as per the provision of LARR, 2013 and NH Act 1956 (with its amendments). Rehabilitation and resettlement plan will be prepared after detailed census survey during EIA Study and will be submitted in EIA Report.</p> <p>(xiv) <b>Whether the project is in Critically Polluted area:</b> No.</p> <p>(xv) <b>National Park/ Wild Life Sanctuary in 10 km radius area:</b> No National Park or Wildlife Sanctuary is located within 10 Km radius of the proposed alignment.</p> <p>(xvi) <b>Eco-Sensitive Zone in 10 km radius area:</b> No eco-sensitive area falls within 10 Kms of the project stretch.</p> <p>(xvii) <b>If the project involves diversion of forest land, extend of the forest land:</b> Yes, the project passes through forest area and thus requires diversion of land. Approximately, ~168.54 Ha of forest land is proposed for diversion (May be reduced to 90 ha after reducing the proposed ROW to 70m in general and 30 m in forest areas). The actual affected forest area shall be given in EIA after joint verification with the forest department. The application of forest diversion is under process.</p> <p>(xviii) <b>Investment/Cost of the project:</b> INR 2128.35 Crores.</p> <p>(xix) <b>Benefits of the project:</b></p> <ul style="list-style-type: none"> <li>• Better connectivity to economic, social and political hubs of Chhattisgarh, Odisha and Jharkhand.</li> <li>• Faster growth and outreach to better and improved facilities.</li> <li>• Fast and safe connectivity resulting in savings in fuel, travel time and total transportation cost.</li> <li>• Reduction in accidents.</li> <li>• Better approach to medical &amp; educational services.</li> <li>• Faster transportation of perishable goods like fruits, vegetables, and dairy products.</li> <li>• Better opportunities for transporting, processing and marketing of agricultural products.</li> <li>• Development of local agriculture and handicrafts.</li> <li>• Development of tourism and pilgrimage.</li> <li>• Opening up of opportunities for new occupations and trade on the route</li> </ul>
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	<ul style="list-style-type: none"> <li>• Indirect and direct employment opportunity to people from all skilled, semi-skilled and unskilled streams</li> <li>• Improved quality of life for people and so on</li> <li>• Development of backward areas through rapid industrialization and access to distant markets</li> <li>• Creation of ancillary ecosystem through highway amenities, support services and industrial / manufacturing areas</li> </ul> <p>(xx) <b>Employment potential:</b> 1500.</p> <p>(xxi) <b>If any court case, pending for violation of the environmental laws:</b> No.</p>
<b>3.2.2</b>	<p>The EAC, after detailed deliberation during its 220<sup>th</sup> meeting held on 26<sup>th</sup> July, 2019, <b>recommended</b> the project for grant of <b>Terms of Reference (ToR)</b>, and for preparation of EIA/EMP report with public consultations subject to compliance of all conditions as notified in the standard ToR applicable for such projects and specific conditions, as mentioned below:</p> <ol style="list-style-type: none"> <li>Proposed alignment passes through the Elephant corridor area. It was advised to map wildlife crossing accurately through the thorough consultation with forest department and Project Elephant at MoEF&amp;CC, New Delhi. Wildlife Conservation Plan (including construction of underpasses of adequate length for elephant movement) and other appropriate mitigation measures shall be prepared in consultation with the Chief Wildlife Warden of the State along with implementation schedule and appropriate monitoring mechanism.</li> <li>Since, the proposed alignment passes through snake infested area, proponents shall conduct study on impact of project on snakes and its consequences on human beings.</li> <li>Study to be carried out on Acoustic and Light Proofing measures considering the Wildlife Institute of India manual and other studies by the reputed institutes on the matter. The study shall be carried by the qualified professionals, scientists from any national institute/universities of repute having requisite experience to conduct such study.</li> <li>RoW of the proposed alignment shall be restricted to 60 m in general and 30 m in forest areas. Standardization of ROW for non-forest land and forest land to be defined and to be remain constant for all the projects of NHAI.</li> <li>The proposal for diversion of forest land shall be revised as per reduced RoW, i.e., 60 m in general and 30 m in forest areas.</li> <li>Since the proposed alignment will pass from forest land and the traffic shall be predominantly Coal transportation, pollution impact studies are essential. Also the proponent to carry out detailed traffic study to assess inflow of traffic from adjoining areas.</li> <li>Rain water harvesting structures to be constructed at the either sides of the road with special precaution of oil filters and de-silting chambers.</li> <li>Provide compilation of road kill data on existing roads (national and state highways) in the vicinity of the proposed project.</li> <li>Provide measures to avoid road kills of wildlife by the way of road kill management plan.</li> <li>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.</li> </ol>



	<p>(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.</p> <p>(xii) The activities and budget earmarked for Corporate Environmental Responsibility (CER) shall be as per ministry's O.M No 22-65/2017-IA.II (M) dated 1<sup>st</sup> May, 2018 and the action plan on the activities proposed under CER shall be submitted at the time of appraisal of the project included in the EIA/EMP Report.</p> <p>(xiii) The PP shall not use groundwater/surface water without obtaining approval from CGWA/SGWA as the case may be. The project proponent shall apply to the Central Ground Water Authority (CGWA)/State Ground Water Authority (SGWA)/Competent Authority, as the case may be, for obtaining No Objection Certificate (NOC), for withdrawal of ground water.</p> <p>(xiv) The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25<sup>th</sup> October, 2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.</p>
<b>3.3</b>	<p><b>Development of Industrial Estate Phase-III (Industrial Model Township)' in Tehsil Sampla, District Rohtak (Haryana) by Haryana State Industrial &amp; Infrastructure Development Corporation (HSIIDC) Limited - Validity Extension of Terms of Reference (ToR)</b>  <b>[Proposal No. IA/HR/NCP/111204/2019] [F. No. 21-138/2015-IA.III]</b></p>
<b>3.3.1</b>	<p>The project proponent along with the EIA consultant M/s Grass Roots Research and Creation India (P) Limited, made a presentation and provided the following information before the Committee:</p> <p>(i) The project involves development of Industrial Model Township Project, Phase- III, Rohtak, Haryana. <b>Location:</b> At Village Baliyana, Kherisadh, Kharwar, Nonand, Tehsil-Sampla, District - Rohtak, Haryana.</p> <p>(ii) <b>Land use pattern/ Total plot area/ built up area:</b> The Land has been allocated for Industrial Purpose. Total area of the project (Phase-III) measures 923.82 acre (373.85 ha).</p> <p>(iii) <b>Justification for selection of the site:</b> The proposed Site has been acquired on the basis of its connectivity to the major cities through the National Highway-10 and the State Highway. The Site does not fall under any biological sensitive areas such as forest, wild life sanctuaries, ecologically sensitive areas, water reserves etc. The land has been declared for Industrial land use and the same has been demarcated in the proposed master plan being developed for this region.</p> <p>(iv) <b>Water requirement and its sources:</b> Total water requirement will be 21.74 MLD.  Source: Jawaharlal Lal Nehru Canal and Bahlaut Sub Branch.</p> <p>(v) <b>Waste water generation, treatment and disposal:</b> It is expected that the project will generate approx.16MLD of wastewater. The wastewater will be treated in CETP of 16MLD capacity. The treated effluent will be reused for flushing &amp; horticulture.  <b>Construction Phase:</b>  During the construction phase, soak pits/septic tanks will be provided for disposal of waste water. Temporary sanitary toilets are proposed for labourer by the individual industries.</p>

	<p>(vi) <b>Municipal solid waste generated disposal facility:</b> Approx. 25.2 MT/day of waste will be generated from the project.  <b>Treatment &amp; Disposal:</b>  For waste recycling industries, separate area earmarked in industrial estate. In this area, facilities such as a composting plant for organic waste, a handmade paper plant for recycling of waste paper, etc. would be encouraged which will help convert waste to product as well as provide employment.</p> <p>(vii) <b>Whether the project is in Critically Polluted area:</b> No.</p> <p>(viii) <b>If the project involves diversion of forest land, extend of the forest land:</b> No.</p> <p>(ix) <b>National Park/ Wild Life Sanctuary in 10 km radius area:</b> No.</p> <p>(x) <b>If the project falls within 10 km of eco- sensitive area, Name of eco-sensitive area and distance from the project site:</b> No.</p> <p>(xi) <b>CETP:</b>  I. Type of effluent, Quantity, effluent conveyance system from the member units to CETP- Wastes from the industries, Residential Complex &amp; from the commercial area.  II. Treatment and usage of treated sewage – Waste water generated will be treated in CETP and treated water will be used for the horticulture purpose etc.</p> <p>(xii) <b>Terrain, level with respect to MSL, requirement of filling if any:</b> No.</p> <p>(xiii) <b>Tree cutting, types, numbers, girth size etc.:</b> No.</p> <p>(xiv) <b>Rehabilitation involved if any:</b> There are 4 Nos. villages namely Kherisadh, Baliyana, Kharawar, Nonand which are to be affected by way of development of the area of IMT, Rohtak (Phase-III). An approximately 3000–persons are likely to be affected on account of acquisition of land in IMT, Rohtak (Phase-III). Govt., of Haryana has formulated a policy for rehabilitation and resettlement of land owners –land acquisition oustees.</p> <p>(xv) <b>Water bodies, diversion, if any:</b> No.</p> <p>(xvi) <b>Investment/Cost:</b> Rs. 764.59 Crore.</p> <p>(xvii) <b>Court cases if any:</b> No.</p> <p>(xviii) <b>Employment potential:</b> 4,749.</p> <p>(xix) <b>Benefits of the project:</b> The project aims at development of area, which would help in creation state-of-the-art industrial infrastructure in the district. The project will facilitate in creation of employment opportunities both direct &amp; indirect for local population. The project will help in the urban development by creating all essential amenities and hence the projects will hence immense benefits for social upliftment. The project also aims at development of better landscaping in the vicinity as well as creation of green belt in the area which would eventually help in the improvement of visual and aesthetic quality of the area. With the implementation of the project, other utilities would also be created like development of road network, sewerage network, augmentation of water supply system &amp; waste water treatment, solid waste collection facility, educational and health facilities etc. in nutshell, project aims at amelioration of the socio-economy of the areas as well as providing basic amenities to people.</p> <p>(xx) <b>ToR Details:</b> Earlier ToR was granted by MoEFCC vide F.No.21-138/2015-IA.III dated 12<sup>th</sup> January, 2016.</p>
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	(xxi) <b>Details of Public Hearing and main issues raised/response of the PP:</b> Public Hearing was conducted on 14 <sup>th</sup> June, 2017 at HSIIDC office Rohtak, Haryana.
<b>3.3.2</b>	<p>EAC, after detailed deliberations during 220<sup>th</sup> meeting of EAC held on 26<sup>th</sup> July, 2019, observed that proponent has planned to establish one category 'A' industry, i.e., Soda Ash Industry, within the proposed Industrial Model Township. However, there is no mention of Soda Ash Industry in the TOR issued on 12<sup>th</sup> January, 2016. Also, the proponent has informed that they are not getting proposals for establishing Soda Ash industries within the proposed Industrial Model Township.</p> <p>If the Soda Ash industry is not a part of the proposal, the proposed Industrial Model Township project will become Category 'B' project. In that case, Proponent has to approach the SEIAA, Haryana for grant of Environmental Clearance as per EIA Notification, 2006 as amended from time to time. Further, as Ministry's O.M. No. J-11013/41/2006-IA-11 (I) (Part) dated 29<sup>th</sup> August, 2017, the above validity period can be extended by the concerned Regulatory Authority for a maximum period of one year without referring the proposal to the EAC. However, after the lapse of validity, such extension will need EAC/SEAC consideration. In the instant case, application for TOR validity extension was submitted after lapse of TOR validity period. The application was submitted on 15<sup>th</sup> July, 2019, i.e., after the expiry of TOR. In view of this and above mentioned rule position, the proposal was placed before the EAC during its 220<sup>th</sup> meeting held on 26<sup>th</sup> July, 2019 wherein the proposal was <b>recommended for grant of extension of TOR validity</b> for further one year w.e.f. 12<sup>th</sup> January, 2019 to 11<sup>th</sup> January, 2020.</p>
<b>3.4</b>	<p><b>Construction of Eight lane road (newly declared NH 148N) from KherKhunta village in Ratlam district in the state of Madhya Pradesh to Dodka village in Vadodara district in the state of Gujarat from CH: 181+000 to 392+492 (Sub Package- 3) under Bharatmala Pariyojana (Lot-4/Package-5)– Further Consideration for Environmental Clearance.</b>  <b>[Proposal No. IA/GJ/NCP/94616/2018] [F. No. 10-50/2018-IA.III]</b></p>
<b>3.4.1</b>	<p>The project proponent along with the EIA consultant M/s Enviro Infra Solutions Private Limited, Ghaziabad, made a presentation and provided the following information before the Committee:</p> <p>(i) The proposed proposal is for development of new Eight lane road (newly declared NH 148N) from Kajaliya village in Ratlam district in the state of Madhya Pradesh to Dodka village in Vadodara district in the state of Gujarat from CH: 181+000 to 392+492 under Bharatmala Pariyojana (Lot-4/Package-5). The length of the proposed alignment is 211.492 km approx.</p> <p>(ii) Delhi Mumbai Expressway starts at Sohna, Haryana and ends at Mumbai. The Vadodara - Mumbai expressway is a part of Delhi Mumbai expressway. The NHAI implement the Sohna to Vadodara expressway under Bharatmala Pariyojana through engaging no. of DPR consultants. The total length of Sohna to Vadodara is approx. 843 km consisting of 08 packages.</p>



	NHAI will go for rehabilitation as per the agreement with the owner with due concurrence/approval of the local authorities.		
(xi)	There are 15 Rivers, 28 Canals, 06 check Dams, 51 Drains and 11 Ponds that are falling within the proposed RoW of alignment. The details of the ponds present within the RoW are as under:		
	<b>Sr. No.</b>	<b>Type of Water Body</b>	<b>Chainage</b>
			<b>Mitigation measures</b>
	1.	Pond	204.200
			Bridge has been proposed
	2.	Pond	216.600
			Bridge has been proposed
	3.	Pond	224.400
			Bridge has been proposed
	4.	Pond	224.600
			Embankment protection with boulder pitching is provided
	5.	Pond	237.650
			Bridge has been proposed
	6.	Pond	241.800
			Bridge has been proposed
	7.	Pond	319+200
			Bridge has been proposed
	8.	Pond	328.800
			Embankment protection with boulder pitching is provided
	9.	Pond	372.800
			Embankment protection with boulder pitching is provided
	10.	Pond	383.700
			Bridge has been proposed
	11.	Pond	384.500
			Embankment protection with boulder pitching is provided
(xii)	<b>Total water requirement and its source:</b> The peak water requirement is 19,300KLD during construction stage and will be extracted from local surface water resources i.e. from nearby canals after getting necessary permission from concerned authority.		
(xiii)	<b>Waste water quantity, treatment capacity, detail:</b> 75 KLD Waste water shall be generated and shall be disposed through primary, secondary settling tanks and soak pits.		
(xiv)	<b>Recycling / reuse of treated water and disposal:</b> Waste water shall be disposed through primary, secondary settling tanks and soak pits.		
(xv)	<b>Solid Waste Management:</b> 500 kg/day (approx.) during construction phase and 50 kg/day (approx.) during operation phase at tolls and wayside amenities area within PROW may be generated. Bio degradable waste shall be disposed through bio composting and other waste through landfill site.		
(xvi)	<b>Hazardous Waste Management:</b> The hazardous waste generated during construction period will be disposed off as per applicable rule.		
(xvii)	<b>Water bodies, diversion if any:</b> 15 Rivers, 28 Canals, 06 Check Dams, 51 Drains and 11 Ponds will be impacted due to the proposed highway.		
(xviii)	<b>Rain water harvesting:</b> Rainwater harvesting shall be proposed as per IRC-SP-58. the budget provision of Rs. 2.21 Crores has been provided.		
(xix)	<b>Tree cutting, types, numbers, girth size etc.:</b> Total 35,409 no. of trees are likely to be cut (Revised after issue of TOR). Some of major species are Babul, Khajdi, Kan, Neem, Sagwan, Liptis, Khakhra, Mango etc. The		

	<p>proposed project does not involve the cutting of any endangered tree species.</p> <p>(xx) <b>Green belt development (20 % of construction projects and 33 % for others):</b> Avenue plantation shall be carried out as per IRC SP 21:2009 Guidelines and Green Highway policy 2015 based on availability of land. The work of green belt development should be taken up by the project proponents with guidance from the Forest Department of the Government of Madhya Pradesh and Gujarat. Minimum 3 nos. of row, (@10 m distance) of trees on either side of the proposed highway shall be planted and approx. 1,26,600 nos. of tree will be proposed. Total fund provision for maintaining green belt is of Rs. 19.69 Cr.</p> <p>(xxi) <b>Rehabilitation involved, if any:</b> The Project requires approx. 2365 Ha. approx. land. Total 405 no. of structures are coming in the proposed RoW. Adequate compensation would be paid as per the measurement and prevailing state government norms. Further the compensation towards the acquisition of land will be made as per the provisions of the NH Act 1956 and applicable clauses and procedures as laid down in the RFCT LARR Act, 2013.</p> <p>(xxii) <b>Whether the project is in Critically Polluted area:</b> No.</p> <p>(xxiii) <b>National Park/ Wild Life Sanctuary in 10 km radius area &amp; Eco-Sensitive Zone in 10 km radius area:</b> The proposed alignment does not pass through Wildlife Sanctuary/National Park and its eco sensitive zone. Provided NOC from Chief Wildlife Wardens of MP and Gujarat states.</p> <p>(xxiv) <b>If the project is in CRZ area:</b> The proposed highway does not pass through CRZ areas.</p> <p>(xxv) <b>If the project involves diversion of forest land, extend of the forest land:</b>  <b>Extend of the forest land</b> – 302.7514 ha.  <b>Status of forest clearance</b> - Proposal for diversion of 302.7514 Ha forest land has been submitted online vide proposal no. FP/MP/Road/37399/2018 dated 4<sup>th</sup> December, 2018 for Madhya Pradesh and FP/GJ/ROAD/38899/2019 dated 28<sup>th</sup> February, 2019 for Panchmahal district, Gujarat, FP/GJ/ROAD/39818/2019 dated 7<sup>th</sup> May, 2019 for Dahod district, Gujarat and FP/GJ/ROAD/38900/2019 dated 16<sup>th</sup> March, 2019, for Vadodara District, Gujarat.</p> <p>(xxvi) <b>Investment/Cost of the project:</b> INR 12,800 Crores (Revised after issue of TOR).</p> <p>(xxvii) <b>Benefits of the project:</b></p> <ul style="list-style-type: none"> <li>• The proposed project would act as the prime artery for the economic flow to this region.</li> <li>• Enhanced connectivity between rural &amp; urban population which will benefit the all sections of the society like general population, small-medium-large scale industries, farmers, businessmen etc.</li> <li>• Improved access to higher education facilities &amp; modern health facilities.</li> <li>• Strengthening of both rural &amp; urban economies which in turn will improve economic scenario of the state and country.</li> <li>• Faster transportation will strengthen tourist development in the area.</li> <li>• Improved road connectivity helps in better implementation and management of government schemes.</li> </ul>
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- With improvement in economy, more generation of employment opportunities.

(xxviii) **Employment potential:** During the construction of the road project around 1100 persons would be employed temporarily for a period of 2 years. However due to construction of toll plazas approx. 120 persons will be employed on permanent basis.

(xxix) **Date of ToR:** The ToR for the project was granted vide letter No.10-50/2018-IA.III dated 12<sup>th</sup> September, 2018.

(xxx) **Date of Public Hearing, location:**

- 9<sup>th</sup> January 2019 at Panchayat Bhawan, Village: Timarwani, Tehsil: Thandla, Dist: Jhabua
- 14<sup>th</sup> January 2019 at Tehsil Office Ravti, District: Ratlam.
- 29<sup>th</sup> January 2019 at Mamlatdar Office, Tehsil: Salvi, Dist: Vadodara
- 2<sup>nd</sup> February 2019 at Sardar Khand, Civil Lines Road, Godhra, Distict: Panchmahal
- 3<sup>rd</sup> July 2019 at Arts College, village Mota Hathidhara, Tehsil Limkheda, Distict: Dahod.

Major issues raised during PH and response of PP

S. No.	Issues raised	Response of PP
1	Village land rate as per “Jantri” is less as compared with the land of the nearby villages.	Compensation rate shall be given as per prevailing government Rule and as per NH act 1956.
2	Air quality will deteriorate like that of Delhi because of increase in transportation owing to proposed project and plantation will not serve the project purpose.	Since the proposed project is 8 lane access control expressway designed as per IRC guidelines with better geometrics and lesser distance to travel between Delhi to Mumbai hence overall fuel consumption and vehicle emissions will be less. It was also added that because of lesser interruption in traffic flow, resultant air pollution will also reduce.
3	Land rate has not been revised since 2011 which otherwise ought to be revised every three years. While quoting few of the cases of land transactions of an area as well as that of land acquisition by GIDC for development of Alindra GIDC; it was demanded that while fixing the compensation, market rate shall be considered and not the “Jantri” as market rate is higher. Also requested to consider the various judgement of Hon’ble High Court on the subject matter and also to get the valuation fixed through Land Evaluation Committee of Collector Office	Rules and Notification with regard to the compensation will be followed.
4	It was opined that effect of pollution will be deterrent on younger generation than the elders.	Sh. Sharad Verma, Environmental Division informed that NHAI has a separate division-National Green Highway Mission (NGHM) dedicated to greening of the highway and making them environmentally sustainable and will carry out the work accordingly.
5	While referring to issue of global warming, requested that farmer should	Sh. Sharad Verma replied that there is provision with Agriculture dept. and

		be granted subsidy to carry out various environmental projects like green house in the part of land that is left out after the land acquisition.	NABARD to construct Polyhouse and necessary application may be applied as per norms.
	<p>(xxxi) <b>If any court case</b>, pending for violation of the environmental laws: No.</p> <p>(xxxii) Revised CER as per the total project cost with slab wise details: The total cost of the project is Rs 12800 Crores (including construction cost (civil), Land Acquisition and other Compensation Costs). Land acquisition shall be done as per NH act 1956 and applicable clauses of RFCTLARR act 2013 there after the land shall be under the ownership of MoRTH. NHA is implementing agency of MoRTH and title/ownership of land is with MoRTH.</p> <p>Revised breakup of CER considering 0.25 % of the total capital cost of the project works out to Rs. 32.0 crore. Some of the items included in this budget as suggested by the EAC members.</p> <p>(xxxiii) <b>Details of various alternatives considered, procedures and criteria adopted for selection of the final alternative with reasons:</b>  Alternative alignments have been considered during design stage. MoEF&amp;CC granted TOR vide letter no. F.No. 10-50/2018-IA.III for "Construction of Eight lane expressway (newly declared NH 148N) from Kajaliya village in Ratlam district in the state of Madhya Pradesh to Dodka village in Vadodara district in the state of Gujarat from CH: 181+000 to 392+492". Keeping in view of having less/minor effect on environmental and social components, above mentioned alignment has been fixed and it seems more feasible as compared to the other two options. It also provides quicker alternative to traffic coming from Delhi, Haryana, Rajasthan &amp; Madhya Pradesh and going towards Gujarat &amp; Mumbai (Maharashtra). The proposed alignment has been designed considering the following major issues/parameters:</p> <ul style="list-style-type: none"> <li>• Environmental parameters</li> <li>• Avoiding of forest to the maximum possible extent.</li> <li>• Better connectivity.</li> <li>• Overall economic development of the areas.</li> <li>• Reduction in fuel consumption due to better geometrics and straight alignment leading to lesser pollution.</li> <li>• Minimum disturbance to the habitations area</li> </ul> <p>(xxxiv) The Isopleth developed for PM<sub>10</sub> and PM<sub>2.5</sub> along the road alignment where monitored values are highest in receptor villages. The maximum GLC due to excavation, loading &amp; unloading activities for PM<sub>10</sub> and PM<sub>2.5</sub> were found to be 3.7 µg/m<sup>3</sup> and 2.2 µg/m<sup>3</sup> respectively.</p> <p>(xxxv) <b>Details about the protection to existing habitations from dust, noise, odour etc. during construction stage:</b></p>		
	<ul style="list-style-type: none"> <li>• Generation of Dust</li> </ul>	<ul style="list-style-type: none"> <li>• Sprinkling of water</li> <li>• Earth handling site</li> <li>• Borrow area</li> <li>• Road construction site</li> <li>• Air pollution control at stone crusher</li> <li>• PPE for workers</li> <li>• Stone crushing units environment compliance</li> </ul>	



		<ul style="list-style-type: none"> <li>• Regulation of construction timings near sensitive receptors and settlements</li> </ul>
	<ul style="list-style-type: none"> <li>• Gaseous Pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Vehicles and machineries will be regularly maintained to conform to the emission standards.</li> <li>• Asphalt mixing sites should be 1 km away from residential area and 10 km away from Wildlife Sanctuary.</li> <li>• Asphalt plant will be equipped with pollution control equipment</li> <li>• Use of PPE by workers engaged in construction and application of asphalt mix on road surface.</li> <li>• Responsibility of contractors and supervising officers to ensure that the workers use the PPE</li> </ul>
	<ul style="list-style-type: none"> <li>• Noise level may likely to increase during construction phase</li> </ul>	<ul style="list-style-type: none"> <li>• Properly maintained equipment's to be used</li> <li>• Noise levels of machineries used shall conform to relevant standard prescribed in Environment (Protection) Rules, 1986.</li> <li>• Ear plugs and muffs will be used by workers as per requirement during construction activities.</li> <li>• Regulation of timing of construction work generating noise pollution near the residential areas</li> </ul>
<p align="center"><b>Provisions for funds to comply public hearing issues.</b></p>		
S. No.	Issues raise during Public Hearing	Compliance
1.	For dust control and Air Pollution Control	The budget of Rs. 3,28,50,000 has been incorporated for the dust Suppression all along the project site.
2.	Safety of animals for passing the proposed alignment	There is no wild life sanctuary located within the 10 km radius of the alignment however, adequate no of underpasses, minor bridge and culverts have been provided along the proposed alignment for the passage and safe movement of the animals, cattle and pedestrians. These have already been incorporated in the DPR of the alignment.
3.	Local/ Native tree species should be planted along the proposed expressway.	The plantation of trees will be done as per IRC SP 21:2009 in consultation with the adjoining forest department and preference will be given to the local tree species. The budget of Rs 18,99,00,000 for compensatory plantation has been made.
4.	Proper Compensation and benefits to be given to Schedule Tribes peoples.	<p>The compensation and benefits will be given to all the Schedule Tribe dwellers whose land is being acquired as per the applicable provisions of FRA Act 2006, PESA Act 1996, RFCTLARR Act, 2013, applicable Schemes, Acts and Rules and Policy of the Ministry of Tribal Affairs, respective state Government policies and the NH Act 1956.</p> <p>Benefits under the Ministry of Tribal Welfare schemes like The Vanbandhu Kalyan Yojana, that mainly</p>

			<p>focusses on the integrated, holistic and inclusive development of tribal communities in core areas of education, health, livelihood, housing, drinking water, irrigation, access to basic facilities, institutions, cultural heritage, security and sports would be implemented along with the relevant state government departments as per provisions of the proposed CER budget as applicable.</p>
			<p>(xxxvi) The Social Impact Assessment study of the project expressway has been carried out as per terms of reference of NHAI and guidelines given by the Govt. of India. The study methodology employs a simplistic approach in which the important receptors were identified. Based on the identification, secondary baseline data were collected and then analysed to predict the impacts and quantify them. A detailed Social Assessment has been carried out to identify nature and characteristics of losses to individuals and local communities because of the proposed project interventions.</p> <p>(xxxvii) <b>Additional measures at those locations where air quality levels are higher:</b> The air quality levels at Vasti at Ch. 260+300, Sant road at Ch. 304+000, Chabbanpur at Ch. 322+700, Vavadi khurd at Ch. 330+100, Derol at Ch. 351+600 &amp; Man Ankaliya at Ch. 364+600 location are slightly high as compared with other monitoring locations, however, concentration of PM10 and PM2.5 well below the permissible limit. Water spraying will be carried out during earthwork and raw material loading and unloading area and also same will be transport with covered tranpulin during construction phase. There is a provision for the green belt development as per IRC SP 21 2009 wherever land is available.</p> <p>(xxxviii) <b>Mechanism for Environmental clearance compliances by NHAI:</b> There is a provision for appointment of supervision consultant for each project who ensures compliance of the provisions of the contract agreement including statutory, local law/local permit as well as provision of EMP. The project Director PIU is officer of NHAI responsible for compliance of all statutory provisions during implementation as well as operation phase. The supervision consultant has Environment Expert for monitoring and compliance of EMP and also the conditions stipulated in the statutory clearances. Non-compliance of any parameter as per scope, there is a provision for imposing penalty on the contractor/supervision consultant as per contract.</p> <p>In addition, monitoring of Air, water, Noise, solid waste, soil erosion, control of surface water run off etc., will be done as per the prescribed EMP.</p> <p>Six monthly compliance reports will be submitted to concerned regional office of MoEFCC as well as SPCB for the project life cycle as per EIA Notification, 2006 and its subsequent amendments thereafter and also for the compliance of the condition of "Consent to Establish" granted by Pollution Control Board under Air Act 1981 and Water Act 1972.</p>
3.4.2			<p>The EAC, during 208<sup>th</sup> meeting held on 19-20 February, 2019, observed Public Hearing has been conducted for only four out of five districts. Therefore, the EAC did not consider the proposal and advised the PP to submit the revised EIA/EMP</p>

	after incorporating all the Public Hearing reports of all the districts involved in this project. Hence the proposal was <i>deferred</i> by the EAC.
<b>3.4.3</b>	<p>The EAC, after detailed deliberations during 220<sup>th</sup> meeting of EC(Infra-1) on 26<sup>th</sup> July, 2019, observed following points:</p> <ul style="list-style-type: none"> <li>(i) Proponent committed to provide details of all the packages of the proposed alignment along with the application of final package.</li> <li>(ii) Proposed ROW is 100m.</li> <li>(iii) Fly ash is available nearby proposed project and 216.11 Mcm fly ash will be used for the construction of the proposed project.</li> <li>(iv) Carried out Predictive Modelling for PM<sub>2.5</sub> and PM<sub>10</sub> and proposed the mitigation measures.</li> <li>(v) Provided details of the alternates of proposed alignment.</li> <li>(vi) Budget of Rs. 32 crores was proposed for CER as per MoEF&amp;CC's OM dated 1<sup>st</sup> May, 2019.</li> <li>(vii) The Social Impact Assessment study of the project expressway has been carried out as per guidelines given by the Govt. of India.</li> <li>(viii) Furnished certificates from the Chief Wildlife Wardens of Madhya Pradesh and Gujarat stating that no Protected Area or Wildlife Corridor falls within the 10 km radius of the proposed alignment.</li> </ul>
<b>3.4.4</b>	<p>The EAC, after detailed deliberations during 220<sup>th</sup> meeting held on 26<sup>th</sup> July, 2019, <b>recommended</b> the project for grant of <b>Environmental Clearance</b>, with the following specific conditions in addition to all standard conditions applicable for such projects:</p> <ul style="list-style-type: none"> <li>(i) This Environmental Clearance is subject to outcome of court cases pending against the project proponent at Hon'ble Supreme Court of India / High Court / other courts, if any.</li> <li>(ii) The recommendations of Cumulative Impact Assessment studies for all the packages shall be provided along with application for last package of proposed Highway along with the monitoring reports submitted time to time.</li> <li>(iii) As proposed, at least 216.11 Mcm of Fly ash from nearby Power Stations shall be used for the construction of the proposed project. Report shall be submitted along with the six-monthly compliance reports.</li> <li>(iv) Detailed plan of expenditure with implementation schedule to address issues raised during Public Hearing shall be prepared and submitted to this Ministry and its Regional Office concerned within three months. The proponent shall adhere the strict compliance of plan to utilize funds in appropriate manner.</li> <li>(v) No Ground water shall be used. Approval/permission of concerned authority shall be obtained before drawing surface water from canal or any other sources. State Pollution Control Board (SPCB) concerned shall not issue Consent to operate (CTO) till the project proponent obtains such permission.</li> <li>(vi) The proponent shall obtain permission from the competent authorities for tree felling along the proposed alignment.</li> <li>(vii) Proponent shall plant 1,27,600 trees on either side along with the shrub plantation and grass carpeting in median of the proposed alignment. A comprehensive plan for afforestation using native species shall be provided as per the IRC Guidelines on Landscaping and Tree Plantation (2009).</li> </ul>

	<p>(viii) Rain water harvesting pit shall be at least 3 - 5 m above the highest ground water table. Provisions shall be made for oil and grease removal from surface runoff. Rainwater harvesting structures shall be provided near the disposal point of the side drains as prescribed by CGWB guidelines.</p> <p>(ix) The RoW shall not exceed 70m at any point of the proposed 8-lane alignment, except for the junction improvement at the intersections of the other roads. Standardisation of ROW for plain land and forest land to be defined and to remain constant for all the packages.</p> <p>(x) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May, 2018, and proposed by the project proponent, an amount of Rs. 65 Crore (computed on slab basis) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as support to Panchayats/local government, schools w.r.t. sanitation, health and hygiene, construction of public toilets in the surrounding villages, medical camps, rainwater harvesting, Installation of street lights in nearby villages as per requirement, Rejuvenation and creation of water ponds, augmentation of drinking water facilities and provision of solid waste facilities viz. vermicompost and safe drainage of waste water in consultation with concerned Panchayats. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the concerned authorities including District Collector. It should be posted on the website of the project proponent.</p> <p>(xi) The proposal involves diversion of 302.7514 ha of forest land, for which the proponent shall obtain the Forest Clearance as required under the forest (Conservation) Act, 1980. Project proponent shall submit an undertaking that work on non-forestry land may only be executed upto such point (to be selected by the user agency) on either side of forest land if it is explicitly certified by the user agency that in case approval under the Forest (Conservation) Act, 1980, for diversion of forest land is declined, it is technically feasible to execute the project along an alternate alignment without involving diversion of forest land. Details of all such stretches along with alternate alignment identified to bypass the forest land should be explicitly provided in the proposal seeking approval under the Forest (Conservation) Act, 1980 and the EIA Notification, 2006.</p> <p>(xii) Commencement of work in non-forest land will not confer any right on the user agency with regard to grant of approval under the Forest (Conservation) Act, 1980.</p>
<b>3.5</b>	<b>Development of Industrial Estate at Growth Centre, Bawal, District Rewari, Haryana by M/s Haryana State Industrial &amp; Development Corporation Ltd. - Further Consideration for Environmental Clearance [Proposal No. IA/HR/NCP/1536/2012] [F. No.21-57/2012-IA.III]</b>
<b>3.5.1</b>	<p>The project proponent along with the EIA consultant M/s Grass Roots Research and Creation India (P) Limited, made a presentation and provided the following information before the Committee:</p> <p>(i) The project involves development of Industrial Estate Growth Centre, Bawal located at Tehsil- Bawal, District- Rewari, Haryana.</p>

	<p>(ii) <b>Location:</b> Project site is located at Village-Suthana, Karnawas, Pathuhera, Banipur, Chirhara, Asalwas, Suthani, Jaliawas, Rudh, Deodhai, Bagthala, Tehsil – Bawal, District – Rewari, Haryana.</p> <p>(iii) <b>Land use of the site and around the site up to 10 km radius:</b></p> <p>(iv) <b>Water requirement and its sources:</b> 58.31 MLD (The scheme of water supply has been designed @ 0.01816 ML of water consumption per acre/day out of which there is a provision of recirculation of treated wastewater @ 0.00908 ML per acre which will be used for non potable purposes like flushing, horticulture &amp; DG cooling, HVAC cooling etc. Total water requirement is 27.5 MLD in phase-II &amp; 30.81 MLD in phase-III &amp; IV.) Water supply source: JawaharLal Nehru Canal.</p> <p>(v) <b>Waste water quantity, treatment capacity, detail:</b> 38.96 MLD of waste water will be treated in the CETP. Further, HSIIDC has proposed to set up CETP of suitable capacity in different modules and development stages.</p> <p>(vi) <b>Recycling / reuse of treated water and disposal:</b> 19.49 MLD of water will be recycled which will be used in recirculation network, horticulture, DG set cooling, flushing etc. in the area.</p> <p>(vii) <b>Solid Waste Management:</b> Biodegradable wastes will be composted at site. Recyclable wastes will be sold to recyclers, and authorized recyclers, where applicable. Buy back arrangement will be made for used batteries. Domestic solid waste will be managed as per Municipal Solid waste (Management &amp; Handling Rule), 2000 &amp; bio-medical wastes will be disposed as per the provisions of the Bio-medical Waste (Management &amp; Handling) Rules, 2011. After completion of all the phases, HSIIDC will explore the possibility of biogas plant to cater need of electricity for street lightening etc.</p> <p>(viii) <b>Hazardous Waste Management:</b> Hazardous wastes will be handled as per Hazardous Wastes (Management, Handling and Trans-boundary Movement) rules 2008 and the same will be handled by Govt. approved agency.</p> <p>(ix) <b>Rain Water Harvesting:</b> Rain Water Harvesting will be provided by individual industry.</p> <p>(x) <b>Whether the project is in Critically Polluted area:</b> No.</p> <p>(xi) <b>If the project involves diversion of forest land, extend of the forest land:</b> No.</p> <p>(xii) <b>If the project is in CRZ area:</b> No.</p> <p>(xiii) <b>If the project falls within 10 km of eco- sensitive area, Name of eco-sensitive area and distance from the project site:</b> No.</p> <p>(xiv) <b>Tree cutting, types, numbers, girth size etc.:</b> Not applicable.</p> <p>(xv) <b>Green belt development (21 % of construction projects and 33 % for others):</b> 663.31 acres which is 34.78 % of the net planned area will be developed as green area.</p> <p>(xvi) <b>Water bodies, diversion, if any:</b> Not applicable.</p> <p>(xvii) <b>Investment/Cost:</b> INR 1,012.57 Crores (inclusive of Land cost &amp; Development cost).</p> <p>(xviii) <b>Court cases if any:</b> No.</p> <p>(xix) <b>Employment potential:</b> 40,000 Person.</p> <p>(xx) <b>Benefits of the project:</b></p> <ul style="list-style-type: none"> <li>• To promote more rapid industrialization of the country</li> <li>• Infrastructural development in the State of Haryana.</li> </ul>
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	<ul style="list-style-type: none"> <li>• To increase national and local employment</li> <li>• To attract private investment both national and foreign</li> <li>• To promote the development of small industries</li> <li>• To encourage more effective use of resources through the development of industrial complexes, including diversified industries of all sizes.</li> <li>• To bring industries and industrial employments to rural areas</li> <li>• To train labors and increase its productivity</li> </ul> <p>(xxi) <b>Date of ToR:</b> ToR was Granted by Ministry vide F. No. 21-57/2012 dated 7th May, 2013.</p> <p>(xxii) <b>Date of Public Hearing, location:</b> 12<sup>th</sup> June 2015 at Bawal. Major Issues: Employment, royalty &amp; Environment were the major issue raised during public hearing.</p>
<b>3.5.2</b>	<p>During 149<sup>th</sup> meeting held on 24 -26 June, 2015, the PP made a presentation before the EAC and informed that:</p> <p>(i) The project was accorded ToR vide letter no. F.No. 21-57/2012-IA.III dated 7<sup>th</sup> May 2013.</p> <p>(ii) It is a new Industrial Estate project of Phase-II, III &amp; IV, "Industrial Model Township" located at Tehsil- Bawal, District- Rewari, Haryana.</p> <p>(iii) The geographical coordinates of one side of the project are 2805'56.84'&amp;76035'31.38"E. Project site is located at Village- Suthana, Karnawas, Puthuhera, Banipur, Tehsil- Bawal, District – Rewari, Haryana.</p> <p>(iv) The total area of the project is 868.569 Ha</p> <p>(v) The total water requirement is 58.31MLD and will be drawn from Jawaharlal Nehru Canal.</p> <p>(vi) Total solid waste generation is 8.5 MT/day.</p> <p>(vii) 38.96 MLD of waste water will be treated in of CEPTof which 19.49 MLD of wastewater will be recycled for use in horticulture, DG set cooling, flushing etc.</p> <p>(viii) 663.31 acres which is 34.78% of the net planned area will be developed as green area.</p> <p>(ix) Parking will be provided within the dedicated plots.</p> <p>(x) Total Power required is 248.59 MVA. Power supply shall be sourced from State Electricity Distribution Company.</p> <p>(xi) No Eco- sensitive areas in the study area. However Sahibi-River approximately 1.0km on the eastern side of the project site is flowing from south to north.</p> <p>(xii) Investment/Cost: The land cost is Rs. 437.16 Crore and Development cost is Rs. 575.41 Crore.</p> <p>(xiii) Public Hearing was held on 12th June 2015 at Bawal.</p> <p>(xiv) The Employment potential is 40,000 persons.</p> <p>(xv) <b>Benefits of the project:</b></p> <ul style="list-style-type: none"> <li>• To promote rapid industrialization of the country.</li> <li>• Infrastructure development in the State of Haryana.</li> <li>• To increase national and local employment.</li> <li>• To attract private investment both national and foreign</li> <li>• To promote the development of small industries.</li> </ul>

	<ul style="list-style-type: none"> <li>• To encourage more effective use of resources through the development of industrial complexes, including diversified industries of all sizes.</li> <li>• To bring industries and industrial employment to rural areas.</li> <li>• To train labour and increase its productivity.</li> </ul> <p>(xvi) <b>Wildlife issues:</b> There are no National Parks, Wildlife sanctuary, biosphere reserves found in the 10km buffer zone.</p> <p>(xvii) <b>Forest Land:</b> No forest land is involved in the project.</p> <p>(xviii) There are no court cases/violations pending with the project proponent.</p>
<b>3.5.3</b>	<p>During 149<sup>th</sup> meeting held on 24 -26 June, 2015, the EAC sought additional information from the PP for further consideration:</p> <p>(i) Submit revised layout plan demarcating area for green belt around periphery of project.</p> <p>(ii) Energy conservation plan showing 20 % energy conservation strategy.</p> <p>(iii) Commitment from concerned authority regarding confirmed supply of water. NOC to be submitted from the Irrigation Department.</p> <p>(iv) Details regarding public consultation conducted on 12.06.2015 for the project as the minutes are awaited.</p> <p>(v) Clear indication of status / permission/prohibition of ground water extraction.</p>
<b>3.5.3</b>	<p>During the appraisal of this proposal during 220<sup>th</sup> meeting on 26<sup>th</sup> July, 2019, the EAC observed that construction has already been done at the proposed project site without prior Environmental Clearance.</p> <p>Also, the same was verified through superimposition of latest google images with the boundaries (as seen through KML file submitted by proponent) of project site wherein, it was revealed that major portion of the proposed project site had been developed with infrastructure. The project proponent and consultant also admitted that at present, several industrial units have already been operating within the premises of proposed project site.</p> <p>Further, the proponent has already obtained permission for use of JNL canal water and also applied for ground water to CGWB, which is violation as two permissions cannot be obtained.</p>
<b>3.5.4</b>	<p>In view of above, EAC, <b>recommended that this proposal may be transferred to EAC (Violation)</b> for further appraisal as per Ministry's Notification S.O. 804(E) dated 14<sup>th</sup> March, 2017.</p>
<b>3.6</b>	<p><b>Development of Mega Industrial Park' at Kopporthy, Tadigotal, Yadavapuram, Tholaganganapalli, Ambavaram &amp; Rampathadu Villages of Chintakomma Dinne, Vallur &amp; Pendlimarr in YSR Kadapa, Andhra Pradesh by M/s Andhra Pradesh Industrial Infrastructure Corporation Ltd – Further Consideration for Environmental Clearance [Proposal No. IA/AP/NCP/40091/2016] [F. No. 21-1/2016-IA.III]</b></p>
<b>3.6.1</b>	<p>The proposal was considered in the 206<sup>th</sup> EAC meeting held on 24-25 January, 2019. The proponent did not attend the meeting and requested to defer the proposal through email.</p>

3.6.2	During 211 <sup>th</sup> meeting on 27 <sup>th</sup> March, 2019, the proponent attended the meeting, but, desired to withdraw the proposal.																																																							
3.6.3	Proponent, vide letter no. 159/GM(EMP)/APIIC/EIA-MIP-Kopparthy/2012-13 dated 1 <sup>st</sup> July, 2019, informed that they do not wish to withdraw the proposal and requested to consider in the next EAC meeting.																																																							
3.6.4	<p>The proposal was considered by EAC in its 220<sup>th</sup> meeting held on 26<sup>th</sup> July, 2019 wherein the Proponent has mentioned that the said letter dated 1<sup>st</sup> July, 2019 was written by their Chief Engineer by over sight. They requested to consider it as null and void. In this regard, M/s APIIC Limited, vide letter no. 159/GM(EMP)/APIIC/EIA-MIP-Kopparthy/2012-13 dated 24<sup>th</sup> July, 2019, has also submitted a written submission duly signed by their Chairman and Managing Director.</p> <p>M/s APIIC Limited has also desired to <b>withdraw</b> their proposals: (i) for seeking extension of validity of TOR submitted vide letter dated 29<sup>th</sup> April, 2019; and (ii) grant of Environmental Clearance for the same project (Proposal no. IA/NCP/40091/2016 &amp; File No. 21-1/2016-IA.III). In this regard, proponent has also submitted two submissions vide letters no. 159/GM(EMP)/APIIC/EIA-MIP-Kopparthy/ 2012-13 dated 24<sup>th</sup> July, 2019.</p>																																																							
3.7	<b>Development of Krishnapatnam North Industrial Node (Area 4,984.1 ha) in Sri Potti Sriramulu (SPSR) Nellore District, Andhra Pradesh by M/s NICDIT Krishnapatnam Industrial City Development Limited -Terms of Reference [Proposal No. IA/AP/NCP/110654/2019] [F. No. 21-57/2019-IA-III]</b>																																																							
3.7.1	<p>The project proponent along with the EIA consultant M/s L&amp;T Infra Engineering, made a presentation and provided the following information before the Committee:</p> <p>(i) The project involves development of Krishnapatnam North Industrial Node in Sri Potti Sriramulu (SPSR) Nellore District, Andhra Pradesh</p> <p>(ii) <b>Location:</b> Project site is located in Thamminapatnam, Ballavolu, Vellapalem, and Momidi villages in ChillakurMandal and Karlapudi, East Kanupur, Kothapatanam, and Siddavaram in Kota Mandal of SPSR Nellore District, Andhra Pradesh.</p> <p>(iii) <b>Land use of the project:</b></p> <table><tr><th>S. No.</th><th>Class</th><th>Area (ha)</th><th>Area (ac)</th><th>% of Area</th></tr><tr><td>1.</td><td>Agriculture-Rain fed Crop Land</td><td>1505.66</td><td>3720.57</td><td>30.21%</td></tr><tr><td>2.</td><td>Water bodies- Canals</td><td>803.91</td><td>1986.51</td><td>16.13%</td></tr><tr><td>3.</td><td>Sandy area</td><td>760.61</td><td>1879.52</td><td>15.26%</td></tr><tr><td>4.</td><td>Scrubland</td><td>747.95</td><td>1848.23</td><td>15.01%</td></tr><tr><td>5.</td><td>Water bodies-Lakes Ponds, Aquaculture</td><td>691.46</td><td>1708.63</td><td>13.87%</td></tr><tr><td>6.</td><td>Mixed Plantation</td><td>395.96</td><td>978.44</td><td>7.94%</td></tr><tr><td>7.</td><td>Builtup-Rural</td><td>36.7</td><td>90.7</td><td>0.74%</td></tr><tr><td>8.</td><td>Agriculture-Plantation</td><td>34.72</td><td>85.79</td><td>0.70%</td></tr><tr><td>9.</td><td>Builtup-Mining</td><td>7.08</td><td>17.5</td><td>0.14%</td></tr><tr><td colspan="2"><b>Total</b></td><td><b>4984.1</b></td><td><b>12315.9</b></td><td><b>100.00%</b></td></tr></table> <p>(iv) <b>Land use of the site and around the site up to 10 km radius</b></p>	S. No.	Class	Area (ha)	Area (ac)	% of Area	1.	Agriculture-Rain fed Crop Land	1505.66	3720.57	30.21%	2.	Water bodies- Canals	803.91	1986.51	16.13%	3.	Sandy area	760.61	1879.52	15.26%	4.	Scrubland	747.95	1848.23	15.01%	5.	Water bodies-Lakes Ponds, Aquaculture	691.46	1708.63	13.87%	6.	Mixed Plantation	395.96	978.44	7.94%	7.	Builtup-Rural	36.7	90.7	0.74%	8.	Agriculture-Plantation	34.72	85.79	0.70%	9.	Builtup-Mining	7.08	17.5	0.14%	<b>Total</b>		<b>4984.1</b>	<b>12315.9</b>	<b>100.00%</b>
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The surrounding area up to 10.0 km radius land use comprises mostly Agriculture-Crop Land Waterbodies- Canals, Scrubland, Plantation, Forest-Dense, Scrub land Open, Sandy areas, Lakes/Ponds, Reservoir/Tanks, River/Stream/Drain, Canal and Sea (Bay of Bengal)

The existing land use of study area i.e., 10 km radius from project site is given below:

S. No.	Class	Area (ha)	Area (ac)	% of Area
1	Sea-Bay of Bengal	27300	67460	27.45%
2	Agriculture-Crop Land	23523	58125	23.65%
3	Waterbodies-Rivers Canals	13990	34571	14.07%
4	Waterbodies-Lakes Ponds	11146	27542	11.21%
5	Scrubland	10308	25472	10.37%
6	Agriculture-Plantation	3690	9117	3.71%
7	Sandyarea	3559	8795	3.58%
8	Forest-Plantation	2183	5395	2.20%
9	Builtup-Rural	1533	3788	1.54%
10	Forest-Deciduous	1370	3386	1.38%
11	Builtup-Mining	614	1518	0.62%
12	Forest-Dense	228	563	0.23%
	<b>Total</b>	<b>99444</b>	<b>245733</b>	<b>100.00%</b>

(Statistics as generated from LU/LC data of NRSC-Bhuvan: Cycle-2 [2011-12])

The existing landuse of study area i.e., 10 km radius from project site is shown below:

**Major Classes:** The major land use classes in the 10 km buffer of the Study Area constituting the 86.74% are Sea (Bay of Bengal) - 27.45%, Agriculture-Crop Land- 23.65%, Water bodies-Rivers Canals- 14.07%, Water bodies-Lakes Ponds – 11.21% and Scrubland 10.37.%

**Minor Classes:** The other minor land uses classes in the 10 km buffer of the Project Area constituting the 13.26% are Agriculture-Plantation- 3.71%; Wasteland-Sandy area- 3.58%; Forest-Plantation- 2.20%; Built-up-Rural-1.54%; Forest-Deciduous- 1.38%; Built-up-Mining- 0.62%& Forest-dense-0.23%

- (v) **Justification for selection of the site:** Government of India (GoI) has recently come up with a national programme, “Make-In-India” to promote manufacturing sector in a comprehensive manner. The strategy to develop the CBIC is part of the plan to achieve accelerated development and regional industry agglomeration. With its influence area spread across three states Tamil Nadu, Karnataka, and Andhra Pradesh. Three industrial nodes are proposed along this corridor, namely Krishnapatnam Node in Andhra Pradesh, Ponneri in Tamil Nadu, and Tumakuru in Karnataka. Krishnapatnam Node will be the central hub for various sunrise sectors in an endeavour to attract investments from National and International Players across the globe.

Krishnapatanm North node site (are 12315.9 acres) was identified at Thammipatnam, Ballavolu, Vellapalem, and Momidivillages from

ChillakurMandal, and Karlapudi, East Kanupur, Kotapatnam, and Siddavaram villages from Kota Mandal which are under the possession of APIIC and Govt. of Andhra Pradesh.

Some of the important features of the Site making it suitable for Industrial area are presented:

- The Krishnapatnam North Node is uniquely positioned among all other industrial nodes being conceived under the industrial corridors program in the Country. Its location provides an advantage of being on not just the CBIC but also the VCIC (Vishakhapatnam Chennai Industrial Corridor).
- Strategically located near to two major ports namely Krishnapatnam (existing) and Dugarajapatnam (under development), located close to it enabling water connectivity.
- Buckingham Canal passing through the North Node helps in improving its connectivity to Vijayawada on the northern side and Chennai on the southern side of Krishnapatnam. Buckingham canal is also recognized as National Waterway (NW4) which is under development for cargo transportation among various parts on eastern coast of India.
- Developments under various infra projects like Sagarmala, Bharathmala, VCIC and CBIC gives a major advantage to both North and South Nodes of Proposed site.
- Proximity to east Asian markets.
- The site is located around ~28 km from City of SPSR Nellore with well-endowed Social and educational infrastructure.
- The site has good access to logistic facilities. The site is well connected to the Road network in the region from Chennai - Kolkata National Highway 16 which is at a distance of ~14.5 km on west side of the site.
- The nearest Railway station to the project site is at Krishnapatnam Road located at ~7 km from the site towards NW.
- The nearest airport is in Tirupati International Airport, Renigunta is at a distance of ~72 km and Anna International Airport, Chennai is at a distance of ~120 km.
- Water and Power supply will be met from the Kandeleru Dam located at a distance of ~48 km to west of the site.
- APSPDCL is responsible for undertaking distribution of Power in SPSR Nellore District.

(vi) The site meets the requirement of all critical factors that are important for success of development of Industrial area in the state and could be a pre-eminent location. This offers the Node a distinct potential thereby being positioned as an attractive investment destination.

(vii) Industries proposed with various zones from settlement:

Industries proposed within 50-250m from settlement (orange, green and white category)	Industries proposed within 250m-500m from settlement (red category)	Industries proposed Beyond 500m from settlement (red category)
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	<p>Electronics industries Auto components MSME (Leather Products such as Sports goods excluding tanning and hide processing Plastic products for Packaging, consumer durables, healthcare, etc by Injection, Blow Moulding, Extrusion etc., Timber/ Wood Products such as Furniture, Sports goods, Wood Flooring etc.)</p>	<p>Engineering (light and heavy engineering) Building Materials Industry/ Non-Metallic minerals (processed minerals, Clay building products, bricks, AAC Blocks, Kerb Stones etc) Food and Agro Processing Industry Automobile manufacturing</p>	<p>1. Pharmaceuticals 2. Tiles, Ceramics and refractories, glass and glassware, graphite, marbles,</p>
	<p>(viii) <b>Water requirement and its sources:</b>  <b>Gross potable water demand:</b> 111.2 MLD</p> <ul style="list-style-type: none"> <li>• Net potable water demand: 94.5 MLD (considering 15% loss in distribution).</li> <li>• Source: Khandaleru Dam, 48km from project site.</li> </ul> <p><b>Gross non-potable water demand:</b> 44.57 MLD</p> <ul style="list-style-type: none"> <li>• Net non-potable water demand: 37.9 MLD (considering 15% loss in distribution)</li> <li>• Source: 4.42 MLD from CETP treated wastewater and 40.15 MLD from STP treated wastewater.</li> </ul> <p>(ix) <b>Waterbodies and their diversion, if any:</b></p> <ul style="list-style-type: none"> <li>• In order to have approach to the project site, crossing on Buckingham canal will be constructed by duly following the guidelines of Inland water ways.</li> <li>• Revenue water bodies will be retained by providing adequate green buffers. Natural drains of lower order are observed in the proposed site. Site needs to be levelled as per the development requirements and shall be limited to project site. Adequate Storm water drainage system along with Rainwater Harvesting structures will be provided to ensure that drainage pattern of the area is maintained</li> <li>• There is a backwater/stream flowing within the site and a buffer of 100 m or width of the creek as per CRZ regulation is proposed and will not disturbed and green areas will be developed in the buffer area.</li> <li>• Adequate landscaped green spaces/buffers were proposed near water bodies.</li> </ul> <p>(x) <b>Waste water generation, treatment and disposal:</b> The effluent and sewage generated in the project area will be treated with STP of 44.6 MLD and CETP of 60.3 MLD will be developed on modular basis</p> <ul style="list-style-type: none"> <li>• Estimated effluent generation: ~60.3 MLD</li> <li>• Estimated sewage generation: ~44.6 MLD</li> </ul> <p>Reuse of treated sewage of 40.15 MLD from STP and about 4.42 MLD from CETP is proposed for non-potable water demand. Treated wastewater of 53.97 MLD will be discharged into nearby water bodies. It is also proposed</p>		








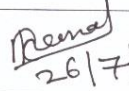
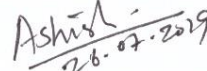
	<p>to adopt that large scale and medium scale industries to maintain own ZLD facility in their premises. Small scale industries will be using CETP and treated water will be discharged to nearby water bodies.</p> <p>(xi) <b>Municipal solid waste generated disposal facility:</b> Total municipal solid waste generation is estimated as 379.3 TPD which includes MSW generation from the existing settlements. Industrial solid waste is estimated as 665.8 TPD which includes 99.8 TPD of hazardous waste and 566 TPD of non-hazardous waste. It has been estimated that about 12.6 tonnes of sludge will be generated daily (@ 300kg/MLD) from the planned STPs and about 19.2 tonnes/ day of sludge from the CETPs from North Node of Krishnapatnam site. Hazardous waste shall be disposed by individual industry to nearby TSDF located at Raviguntapalli, SPSR Nellore District located at a distance 47.96 km from project site. Industries shall follow Hazardous and Other Waste (Management and Transboundary Movement) and amendment thereof, 2016.</p> <p>(xii) <b>Whether the project is in Critically Polluted area:</b> No.</p> <p>(xiii) <b>Whether the project is in CRZ area:</b> Some part of project area attracts CRZ notification, 2011 and applied for CRZ clearance also. CRZ demarcation shall be carried out by NCSCM, Chennai. In present proposal, no marine structures are proposed, in case if any industry proposes the same, they shall take CRZ clearance.</p> <p>(xiv) <b>If the project involves diversion of forest land, extend of the forest land:</b> No.</p> <p>(xv) <b>National Park/ Wild Life Sanctuary in 10 km radius area:</b> Pulicat Bird Sanctuary' is located at distance of 6.2 Km South. None of the proposed project activities are falling within the Pulicat Bird Sanctuary or Eco Sensitive Zone of Pulicat sanctuary as notified vide MoEF&amp;CC's gazette notification no. S.O.1736 (E) dated 26.06.2015.</p> <p>(xvi) <b>If the project falls within 10 km of eco- sensitive area, Name of eco-sensitive area and distance from the project site:</b> Pulicat Bird Sanctuary is located at distance of 6.2 Km South.</p> <p>(xvii) <b>Terrain, level with respect to MSL, requirement of filling if any:</b> The existing terrain of the entire project site is relatively flat and gentle. Heights points on site are at elevation of 11m to 16m where as low points are at elevation 0 to 3.5 m. Mostly Cut and fill quantities will be managed within in the site. However, excess fill materials if any will be sourced from approved quarry and details will be provided in the EIA report.</p> <p>(xviii) <b>Tree cutting, types, numbers, girth size etc.:</b> Approximately, 1.85 lakh individuals of <i>Casuarina equisetifolia</i> followed by 5000 individuals of <i>Anacardium occidentale</i> and 10000 other tree species are in project area with GBH varying from 15 cm to 30 cm. Cutting of these trees will be carried out based on development plan, trees falling in greenbelt/open areas will be retained.</p> <p>(xix) <b>Rehabilitation involved if any:</b> Project site consists of few hamlets of project villages, it is proposed to retain these hamlets and integrate with the new planned development rehabilitation and resettlement efforts will not be required for Krishnapatnam North Node. An adequate green buffer and access roads to road network will be provided to the existing settlements which are falling in the project site.</p>
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	<p>(xx) <b>Water bodies, diversion, if any:</b></p> <ul style="list-style-type: none"> <li>• In order to have approach to the project site, crossing on Buckingham canal will be constructed by duly following the guidelines of Inland water ways.</li> <li>• Revenue water bodies will be retained by providing adequate green buffers. Natural drains of lower order are observed in the proposed site. Site needs to be levelled as per the development requirements and shall be limited to project site. Adequate Storm water drainage system along with Rainwater Harvesting structures will be provided to ensure that drainage pattern of the area is maintained</li> <li>• There is a backwater/stream flowing within the site and a buffer of 100 m or width of the creek as per CRZ regulation is proposed and green areas will be developed in the buffer area.</li> <li>• Adequate landscaped green spaces/buffers were proposed near water bodies.</li> </ul> <p>(xxi) <b>Investment/Cost:</b> Rs. 7,428.8 Crores</p> <p>(xxii) <b>Court cases if any:</b> No.</p> <p>(xxiii) <b>Employment potential:</b> The Proposed Krishnapatnam Node is likely to generate employment close to 3,25,400 (Direct employment) and 1,90,500 (Indirect employment) thereby opening up employment opportunities for the youth in the catchment region.</p> <p>(xxiv) <b>Benefits of the project:</b></p> <ul style="list-style-type: none"> <li>• Proposed Krishnapatnam Node is likely to generate employment close to 3,25,400 (Direct employment) and 1,90,500 (Indirect employment) thereby opening up employment opportunities for the youth in the catchment region.</li> <li>• The proposed project is estimated to bring investment of Rs.37,500 Crores. Employment opportunities to the local people for skilled, semi-skilled and unskilled work force during the construction and operation phases</li> <li>• As a part of the Corporate Environment Responsibility (CER) initiatives, it is envisaged to create better and quality Education, Health, Hygiene and Sanitation, Empowerment and Livelihoods and Community Development Initiatives.</li> <li>• The proposed project shall further act as a catalyst to industrialization and urbanization of the region.</li> <li>• Overall economic growth of Nellore District, in particular and State of Andhra Pradesh and Nation in general.</li> <li>• The proposed project is in Chennai Bangalore Industrial Corridor CBIC is a key part of the East Coast Economic Corridor (ECEC), India's first coastal corridor Its development which is in line with the National/State objective of improving manufacturing GDP, promoting port-led industrialization etc.</li> </ul>
<b>3.7.2</b>	<p>The observations of EAC, after detailed deliberation during its 220<sup>th</sup> meeting held on 26<sup>th</sup> July, 2019, are as under:</p> <p>(i) The proposal requires CRZ clearance. However, proponent has informed that no activity shall be undertaken in CRZ area.</p>

	<ul style="list-style-type: none"> <li>(ii) The Decision Support System of the Ministry suggests the presence of Reserved Forests and Protected Forests within the proposed site and thus involve Forest diversion under Forest Conservation Act, 1980.</li> <li>(iii) More than two-third of the proposed site comprises agriculture land, water bodies and plantations.</li> <li>(iv) Proponent has submitted undertaking to exclude the Pharmaceutical Sector from the focus sectors proposed for establishment in the Krishapatnam node.</li> </ul>
<b>3.7.3</b>	<p>The proposal was considered in the 220<sup>th</sup> EAC meeting held on 26<sup>th</sup> July, 2019. The EAC after detailed deliberation <b>recommended</b> the project for grant of <b>Terms of Reference (ToR)</b>, and for preparation of EIA/EMP report with public consultations subject to compliance of all conditions as notified in the standard ToR applicable for such projects and specific conditions, as mentioned below:</p> <ul style="list-style-type: none"> <li>(i) The proponent has to seek CRZ Clearance also, as per provisions contained in the CRZ Notification, 2011 and subsequent amendments, if any.</li> <li>(ii) Exact land classification and landownership details to be submitted.</li> <li>(iii) No Pharma unit and sugar industry shall be established within the proposed industrial area.</li> <li>(iv) Proponent shall explore the possibility to establish the Solar Plant and Desalination Plant to meet their energy and water requirements.</li> <li>(v) All existing natural waterbodies should be protected.</li> <li>(vi) Proponent to submit a certificate from Chief Wildlife Warden, Andhra Pradesh that proposed project site is outside of ESZ of Pulicat Bird Sanctuary.</li> <li>(vii) State Forest department may ascertain whether proposed project site is falling within the Forest land. Proponent is advised to approach the State Forest Department to obtain above clarification. If the forest land is involved, proponent shall obtain the Forest Clearance for its diversion as per the provisions under Forest Conservation Act, 1980.</li> <li>(viii) Green belt must be developed using only native species. No exotic species to be used. Seedlings of native species can be procured from nurseries of the Forest Department. Detailed plan for green belt development shall be prepared and implemented in consultation with the State Forest Department.</li> <li>(ix) Explore the possibility of hazardous waste disposal facility within 30 km of proposed industrial area.</li> <li>(x) Traffic circulation plan to be prepared and strictly implemented including development of service roads merging with highways.</li> <li>(xi) Confirmation of no turtle nesting to be authenticated. Proponent shall prepare the Marine Conservation Plan in consultation with the Chief Wildlife Warden of the state and submit to this Ministry and its Regional Office concerned within three months.</li> <li>(xii) The PP shall not use groundwater 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), as the case may be, for obtaining No Objection Certificate (NOC), for withdrawal of ground water.</li> <li>(xiii) The activities and budget earmarked for Corporate Environmental Responsibility (CER) shall be as per ministry's O.M No 22-65/2017-IA.II</li> </ul>

	<p>(M) dated 1<sup>st</sup> May, 2018 and the action plan on the activities proposed under CER shall be submitted at the time of appraisal of the project included in the EIA/EMP Report.</p> <p>(xiv) The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.</p>
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List of the Members attended 220<sup>th</sup> meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Industrial Estate and Miscellaneous projects held on 26<sup>th</sup> July, 2019 and approved the above minutes.

Sl. No.	Name of the EAC member	Role/Designation	Signature
1	Dr. Deepak Arun Apte, Director, Bombay Natural History Society (BNHS), Mumbai	Chairman	
2	Dr. V.K. Jain, Professor of Chemistry, School of Sciences, Gujarat University, Ahmedabad	Member	
3	Dr. M.V. Ramana Murthy, Project Director, NIOT Campus, Pallikarai, Chennai	Member	
4	Shri T.P Singh, Advisor, MEITY, New Delhi	Member	
5	Dr. N.K. Verma, Former AD, CPCB, New Delhi	Member	
6	Dr. Manoranjan Hota Former Advisor/Scientist-G, MoEF&CC	Member	
7	Dr. Anil Kumar Singh, IFS (Retd), Ex PCCF Assam, Tower F, Float No. 103 Grand Anjara Heritage, Sector 74, Noida, UP	Member	
8	Shri Prabhakar Singh, DG, CPWD, Delhi.	Member	
9	Shri Narendra Surana, Managing Director, Bhagyanagar India Limited and Surana Telecom. and Power Limited, Hyderabad	Member	
10	Dr. Mohan Singh Panwar, Associate Professor, H.N.B Garhwal Central University, Srinagar,	Member	 26/07/2019
11	Dr. Anuradha Shukla, Central Road Research Institute (CRRI), Mathura Road, New Delhi	Member	 26/7/19.
12	Shri N.K. Gupta, Member (EAC), Scientist E & In-charge (ESS), Central Pollution Control Board,	Member	
13	Dr. D. Chakraborty, Scientist MoWR, RD & GR, New Delhi	Member	 26/7/19
14	Smt. Bindu Manghat, Director Survey of India New Delhi	Member	
15	Shri Raghu Kumar Kodali, Director/Scientist-F, IA-III Division, MoEF&CC	Member Secretary (Infra-1 EAC)	 26/7/2019
16	Shri Ashish Kumar, Joint Director, IA-III, MoEF&CC	Special Invitee	 26.07.2019