

215th 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 20th May, 2019

1. Opening remarks of the Chairman
2. Confirmation of the minutes of the 214th meeting held on 26th April, 2019 at Indira Paryavaran Bhawan, JorBagh Road, New Delhi
3. Consideration of Proposals:

<p>3.1</p>	<p>Establishment of Industrial Estate for Synthetic Organic Chemical manufacturing units and Cogeneration Power Plant – 30 MW at Kothapatnam village, Kota mandal and East Kanupuru village, Chillakur mandal, SPSR Nellore district, Andhra Pradesh and establishment of Desalination Plant (45 MLD) at Thamminapatnam village, Chillakur mandal, SPSR Nellore district by M/s Krishnapatnam Infratech limited – Navayuga Pharma city –Terms of Reference</p> <p>[Proposal No. IA/AP/NCP/102923/2019] [F. No. 21-27/2019-IA.III]</p>																		
<p>3.1.1</p>	<p>The project proponent along with the EIA consultant M/s Team Labs and Consultants, Hyderabad, made a presentation and provided the following information to the Committee:</p> <p>(i) The proposal Establishment of industrial Estate for Synthetic Organic Chemical manufacturing units and Cogeneration Power Plant – 30 MW at Kothapatnam village, Kota mandal and East Kanupuru village, Chillakur mandal, SPSR Nellore district, Andhra Pradesh and establishment of Desalination Plant at Thamminapatnam village, Chillakur mandal, SPSR Nellore district</p> <p>(ii) Location: The location of Industrial Estate is Kothapatnam village, Kota mandal and East Kanupuru village, Chillakur mandal, SPSR Nellore district, Andhra Pradesh.</p> <p>The location of proposed desalination plant is Thamminapatnam village, Chillakur mandal, SPSR Nellore district, Andhra Pradesh.</p> <p>(iii) Land Use: Land use pattern is given below:</p> <table border="1" data-bbox="328 1619 1485 2004"> <thead> <tr> <th>Description</th> <th>Area (in acres)</th> <th>Area (in ha)</th> </tr> </thead> <tbody> <tr> <td>Plotted Area</td> <td>894.9</td> <td>362.15</td> </tr> <tr> <td>Roads</td> <td>135.7</td> <td>54.92</td> </tr> <tr> <td>Green Belt</td> <td>139.43</td> <td>56.43</td> </tr> <tr> <td>Solvent recovery system</td> <td>8</td> <td>3.24</td> </tr> <tr> <td>Co-Gen power plant & Utilities</td> <td>23.45</td> <td>9.49</td> </tr> </tbody> </table>	Description	Area (in acres)	Area (in ha)	Plotted Area	894.9	362.15	Roads	135.7	54.92	Green Belt	139.43	56.43	Solvent recovery system	8	3.24	Co-Gen power plant & Utilities	23.45	9.49
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Common Effluent Treatment plant and STP	15	6.07
Common facilities	23.12	9.36
Commercial hub and service area	22.55	9.13
Total Area	1262.15	510.77
Desalination plant (Earmarked separately near coast)	20	8.09

- (iv) **Land use of the site and around the site up to 10 km radius:** The land use of site presently is barren/rainfed agriculture, the surrounding area up to 10 km radius land use comprises mostly Agriculture, Crop land, Built up (Rural), Transportation, Mining/Industrial, Forest, Plantation, Forest-Dense, Scrub Land Open, Sandy areas, Lakes/Ponds, Tanks, River/Stream/Drain, Canal and Sea (Bay of Bengal).
- (v) **Justification for selection of the site:** The site is selected as part of port area development. Two other sites were evaluated, i.e. Thamminapatnam village, Chillakur mandal, SPSR Nellore district, Andhra Pradesh, and Krishnapatnam village, Muttukuru mandal, SPSR Nellore district, Andhra Pradesh before finalizing this site. The other sites were rejected due to their proximity to thermal power plants.
- (vi) **Rehabilitation involved, if any:** Nil, project area already acquired by the project proponent.
- (vii) **Terrain, level with respect of MSL, requirement of filling if any:** The topographic contours in the proposed project site are ranging from 5 -7 m AMSL (above mean sea level).
- (viii) **Tree cutting, types, numbers, girth size etc.:** The project involves some clearing of bushes and grass. No major trees cutting activities are envisaged.
- (ix) **CETP:**
- 1. Type of effluent, Quantity, effluent conveyance system from the member units to CETP**
- Type of effluents:
- The sources of effluent are both common facilities and individual industries of the estate.
- The effluents anticipated from the common facilities are utilities blow downs, pre-treatment waste water. The effluents anticipated from the individual industries are from utilities, pollution control facilities, washings, process etc. additionally domestic wastewater is generated from both developer facilities and individual units. The total effluent is 12.7 MLD. These effluents are segregated as high TDS /COD and LOW TDS / COD streams and separately

transferred to the common effluent treatment plant (CETP) of 16 MLD capacity by above pipe line system.

The treatment scheme consisting of the following unit operations:

HTDS Effluent: Stripped in a steam stripper to remove organics and then concentrated in Multiple Effect Evaporators (MEE) followed by drying in Agitated Thin Film Dryer (ATFD). Stripper condensate will be sent to cement plants for Co-Incineration. Salt from ATFD is sent to TSDF. Distillate from MEE and ATFD is sent for further treatment in biological treatment plant.

LTDS Effluent: Sent to biological treatment plant along with condensate from MEE and ATFD followed by Guard ponds.

The treated effluents are sent to Marine outfall system through designated marine outfall at a discharge point after conducting bioassay test and achieving marine disposal standards.

2. Treatment and usage of treated sewage

The domestic waste water is treated in a dedicated common sewage treatment plant and the treated waste water used for on land irrigation for greenbelt development.

(x) Types of wastes, sources, collection, treatment, waste generation and disposal:

The proposed common facilities and amenities generate the Hazardous waste, like stripper distillate, evaporation salts, ETP sludge from CETP, solvent residue from SRS system, STP sludge, waste oil, used batteries. Ash from coal fired boilers shall be sent to brick manufacturers during operation stage.

Individual unit shall also generate the following hazardous waste, like, organic residue, inorganic residue, spent carbon, catalyst and filter media. The quantity mentioned for individual units is tentative. Total solid waste generated and mode of disposal from common facilities and amenities individual plots is presented intable below:

Total Solid Waste Generated and Mode of Disposal (Tentative)

S.No.	Description	Units	Quantity	Mode of Treatment/Disposal
Common Facilities				
1	Stripper Distillate	KLD	120.5	To be sent to Cement Industries for Co-incineration.
2	Evaporation salts	TPD	725	To be sent to TSDF
3	ETP Sludge	TPD	150	To be sent to TSDF/ Cement plants for co-incineration

4	STP Sludge	TPD	50	To be used as manure
5	Spent Solvent	KLD	3222	To be recovered within plant premises and reused
6	Mixed Solvent	KLD	358	To be sent to authorized recovery units/Cement plants for co-incineration
7	Waste oil	KLPA	70	To be sent to Authorized Recyclers
8	Used Batteries	Nos	3000	To be sent to Authorized Recyclers
9	Ash from Boiler	TPD	550	Sold to Brick manufactures and cement plants
Individual Plots				
1	Organic residue	TPD	268.5	To be sent to TDSF/Cement Plants for Co-incineration
2	Spent Carbon, Catalyst and Hyflow	TPD	4	
3	Inorganic Residue	TPD	54	To be sent to TSDF
4	Sludge from primary treatment	TPD	40	To be sent to TSDF

The nearest habitations are Yamadinnapalem in northeast direction, which has about 40 houses and Posinavaripalem in west direction, which has about 30 houses. The nearest revenue village from the site is Kothapatnam village located at a distance of 2.5 km from the site in southeast direction.

- (xi) **Total water requirement and its source:** Source of water will be Buckingham Canal. Water requirement for the proposed project is during construction and operation phases. Water requirement during construction stage is 1 MLD, which shall be drawn from ground water/ water drawn from neighboring port area. Water requirement during operation phase shall be 38.3 MLD. It is proposed to establish desalination plant of 45 MLD Capacity at Thamminapatnam. Total water balance is presented in table below:

Total Water Balance

Purpose	INPUT, MLD		OUTPUT, MLD	
	Fresh Water	Recycled Water	Loss	Effluent
Water for Individual Plots	31.3	1.6	19.3	13.66
Boiler Feed	2.5		2.4	0.15

DM Rejects	0.5			0.5
Domestic	0.9		0.08	0.82
Gardening	0.68	0.82	1.5	
Gross Total	35.9	2.4	23.2	15.13
Total	38.3		38.3	

- (xii) **Water bodies, diversion if any:** No water body is being intercepted due to the proposed project, hence no impact on drainage.
- (xiii) **Whether the project is in Critically Polluted area:** No.
- (xiv) **National Park/ Wild Life Sanctuary in 10 km radius area & Eco-Sensitive Zone in 10 km radius area:** No ecological sensitive places like national park, sanctuary, biosphere reserve, tiger reserve, elephant reserve, heritage sites and critically polluted area and inter-state boundary within the impact area of 10 km. However, there are five reserve forests in the study area. Kothapalem RF is at a distance of Adjacent t site in East direction, Momidi RF is at a distance of 2.1 km in NW direction, Tammenapatnam RF is at a distance of 5.1 km in North direction, Udatavaripalem PF is at a distance of 9.4 km in SW direction and Vallipedu RF is at a distance of 9.8 km in SW direction.
- (xv) **If the project involves diversion of forest land, extend of the forest land:** No, the project does not involve diversion of forest land.
- (xvi) **Investment/Cost of the project:** INR 675 Crore.
- (xvii) **Benefits of the project:** The following benefits are envisaged; Rainfed agricultural land to be converted into Industrial Estate, Employment potential to locals, Technical skill development to locals, Availability of affordable medicines, Facilitation of health care-worldwide, Import substitution and export potential.
- (xviii) **Employment potential:** It will generate 20,000 people direct and indirect employment opportunities for both skilled and unskilled labour during operation phase.
- (xix) **If any court case pending for violation of the environmental laws:** No.

- 3.1.2 The EAC during detailed deliberations in the 215th meeting on 20th May, 2019, has observed the following:
- (i) The proposal involves the CRZ Clearance also.
- (ii) Not provided the list of Category A and category B industries as per EIA Notification, 2006 as amended from time to time.

	<ul style="list-style-type: none"> (iii) No dyes and intermediate industries shall be established within the proposed Industrial Estate. (iv) Disposal of Hazardous waste is major issue of concern for this project. (v) Kothapalem Reserved Forest is just adjacent to the proposed site. (vi) Green belt around forest land should not be less than 100m. (vii) Distance of the desalination plant is about 5 km from the proposed Industrial Estate. Desalinated water will be transported through pipelines. (viii) Proponent has not informed about the usage of groundwater for the project. (ix) Proponent has not prepared the traffic circulation plan and predictive traffic models. (x) Proponent has proposed to use coal as fuel for boilers.
3.1.3	<p>The EAC, after detailed deliberation during the 215th EAC meeting held on 20thMay, 2019, recommended the project for grant of Terms of Reference (ToR), 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"> (i) The PP has to apply for CRZ Clearance also, as per provisions contained in the CRZ Notification, 2019. (ii) Conservation Plan to be prepared for protection of Reserved Forests in consultation with the State Forest Department. (iii) Proponent shall provide list of all category A and category B industries to be housed within the proposed Industrial Estate along with its layout plan. (iv) No dyes and intermediate industries shall be established within the proposed Industrial Estate. (v) Prepare Green belt plan with the buffer of 50 m from adjacent forest land within the proposed land marked for development of Industrial Estate. (vi) Proponent shall prepare the traffic circulation plan with traffic model predictions. (vii) Proponent shall explore the possibilities of using alternative fuel instead of using coal for boilers. (viii) Explore the possibility to establish and utilisation of the Solar power for energy needs. (ix) Submit copy of MoU with nearby Hazardous Waste Management Facility. (x) The activities and budget earmarked for Corporate Environmental Responsibility (CER) shall be as per ministry's O.M No 22-65/2017-IA.III dated 01.05.2018 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>(xi) 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.</p> <p>(xii) The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M) dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.</p>
3.2	<p>Development of Industrial Estate "Foundry Park" at Hauli Bagan, Ranihati, Amta Road, Howrah, West Bengal by M/s Foundry Cluster Development Association – Terms of Reference</p> <p>[Proposal No. IA/WB/NCP/96144/2019] [F. No. 21-28/2019-IA.III]</p>
3.2.1	<p>The project proponent along with the EIA consultant M/s Grass Roots Research & Creation India (P) Ltd. made a presentation and provided the following information to the Committee:</p> <p>(i) The proposal is for development of Industrial Estate "Foundry Park" at Hauli Bagan, Ranihati, Amta Road, Howrah, West Bengal. It will accommodate 150 Foundry units with a total production capacity of 1.0 Million Ton/yr Foundry products and 1,80,000 Ton/year Pig Iron.</p> <p>(ii) Location: Hauli Bagan, Ranihati, Amta Road, P.S. Jagatballavpur, Howrah West Bengal.</p> <p>(iii) Land use of the site and around the site up to 10 km radius: Foundry Cluster Development Association occupies about 924 acres (nearly 3739298.64 sqm). The land is already acquired; registration and mutation are completed and fully developed. The proposed site is designated for development of an Industrial Estate/factory.</p> <p>(iv) Land Acquisition: Total Plot area is 3739295.33 sqm. (924 acres). The acquired land is fully developed.</p> <p>(v) Justification for selection of the site: The proposed Site has been acquired on the basis of its connectivity to the major cities through the National Highway and the State Highway no 6 and second Hooghly Bridge. 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>

- (vi) **CETP:**
1. Type of effluent, Quantity, effluent conveyance system from the member units to CETP- Wastes from the industries, Residential Complex & from the commercial area.
 2. 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.
- (vii) **Rain Water Harvesting:** RWH will be provided by individual industry.
- (viii) **Rehabilitation involved, if any:** No R&R is proposed.
- (ix) **Terrain, level with respect of MSL, requirement of filling if any:** No.
- (x) **Tree cutting, types, numbers, girth size etc.:** No.
- (xi) **Total water requirement and its source:** Required water for proposed unit will be 5.25 MLD supplied by deep water tube well. Water distribution system shall include: Water for Industrial purposes - 3.15 MLD Domestic - 1.75 MLD Other uses- 0.35 MLD.
- (xii) **Total Power requirement:** The total electrical load for the project 90MW. There is provision of DG sets for power back up in the Project. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.
- (xiii) **Waste water generation, treatment and disposal:**
- | Use | Wastewater Generation (MLD) | | |
|------------|-----------------------------|---------|--------|
| | Non SEZ | SEZ | Total |
| Industrial | 0.00105 | 0.00045 | 0.0015 |
| Domestic | 1.131 | 0.569 | 1.70 |
| Utility | 0.018 | 0.002 | 0.020 |
| Total | 1.15005 | 0.57145 | 1.7215 |
- It is expected that the project will generate approx. 1.7215 MLD of wastewater. The waste water will be treated in water treatment plant. Treated waste water will be fully used for dust suppression and horticulture & green belt maintenance.
- (xiv) **Water bodies, diversion if any:** The River Hooghly is at a distance of approx. 10.5 km away from the site in East direction.
- (xv) **Whether the project is in Critically Polluted area:** No.

(xvi) **Municipal solid waste generated disposal facility:**

Construction Phase:

The total quantity of domestic waste has been worked out as 3.75 MT per day at the ultimate stage of development. For disposing off this domestic waste and the non-hazardous industrial waste, a solid waste disposal site has been located within the park.

Operation Phase:

There will be approx. 6.0 Lakh tones/year generation of solid waste which will be recycled.

(xvii) **Hazardous wastes (as per Hazardous Waste Management Rules):** No hazardous waste will be generated. A small amount of Bio Medical Waste generated from the Health Centre and it will be disposed through authorized and recognized agency of West Bengal Pollution Control Board.

(xviii) **National Park/ Wild Life Sanctuary in 10 km radius area & Eco-Sensitive Zone in 10 km radius area:** No.

(xix) **If the project involves diversion of forest land, extend of the forest land:** No.

(xx) **Investment/Cost of the project:** INR 9502.72 Lakhs.

(xxi) **Benefits of the project:** The project aims at development of growth centre, 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 & 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 & 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.

(xxii) **Employment potential:**

Construction Phase: For proposed unit there will be requirement of temporary workers during construction

Operational phase: During operation there will be requirement of skilled employees. Most of these workers will be local one. The project will generate more than 10,000 jobs.

	<p>(xxiii) If any court case pending for violation of the environmental laws: No.</p> <p>(xxiv) Details of earlier EC, if any and compliance thereof: Earlier EC granted on dated 24th March, 2008 vide letter no. 21-1149/2007-IA.III.</p>
3.2.2	<p>The EAC during detailed deliberations in the 215th meeting on 20th May, 2019, has observed the following:</p> <ul style="list-style-type: none"> (i) Proponent/EIA consultant has submitted application for this proposal as new proposal. It was not mentioned in Form-1 of ToR application that EC was granted for the same project on 24th March, 2008. (ii) The Proponent mentioned that proposal has already been granted EC on 24th March, 2008. However, the project could not be completed due to Singur-Nandiram controversy related to land acquisition for establishment of Special Economic Zone (SEZ) project of the State Government. The EC expired before completion of the proposed construction work. Hence applied afresh for grant of EC. Details of the completed infrastructure facilities are not provided. (iii) Earlier EC was granted vide letter no. 21-1149/2007-IA.III dated 24th March, 2008 for the capacity of 1.0 Million Tonnes only. The proponent also informed that they had earlier submitted the request for the capacity of 1.0 Million Ton/Year of foundry products and 1,80,000 Ton/Year of Pig Iron. However, in the EC letter, it was mentioned as 1.0 Million Ton/Year of foundry products only. Then, EAC asked the PP to submit the revised cost of the project. (iv) Total cost of the proposal granted EC in 2008 is Rs. 125 crore without including the cost of land. However, the cost has been reduced to Rs. 95.03 Crore without including the cost of land. At present the cost of the land has increased by many folds as compared to 2008. (v) Submitted a list of 119 Industries to be housed within the proposed Foundry Park. Only one (M/s Concast Infrastructure Pvt. Ltd.) of these industries belongs to Category A industries. (vi) Base Line Data (BLD) was collected by an agency that does not have QCI/NABET accreditation.
3.2.3	<p>After deliberations during 215th meeting on 20th May, 2019, the EAC deferred the proposal for want of following information/clarifications:</p> <ul style="list-style-type: none"> (i) Proponent needs to submit the revised Form-1 application as expansion proposal only. Proponent should also mention about the additional production of 0.18 Million Ton/Year Pig Iron. The details of earlier EC granted for this Foundry Park project also to be mentioned in the Form-I application. (ii) Proponent needs to clearly state in its application and revised Form-2 that KNIC is a subset of MNIMZ.

	<p>(iii) Provide the details of completed infrastructure facilities in the Foundry Park with layout plan.</p> <p>(iv) Provide the details of project cost including the cost of land with the proof.</p> <p>(v) Explore the possibility of using surface water for Foundry park.</p> <p>(vi) Submit an undertaking that no industry is established and operational within the Foundry Park premise.</p> <p>(vii) Long term use of ground water for the project may lead to Arsenic problem. Proponent to shift to use of surface water subsequently.</p>
3.3	<p>Development of Kalinganagar National Investment & Manufacturing Zone (KNIMZ) at Kalinganagar, district Jajpur in Odisha. by M/s Odisha Industrial Infrastructure Development Corporation– Terms of Reference</p> <p>[Proposal No. IA/OR/NCP/101080/2019] [F. No. 21-29/2019-IA.III]</p>
3.3.1	<p>The project proponent along with the EIA consultant M/s Greencindia Consulting Private Limited, Ghaziabad, made a presentation and provided the following information to the Committee:</p> <p>(i) The proposed project is for development of Kalinganagar National Investment & Manufacturing Zone (KNIMZ) at Kalinganagar, district Jajpur, Odisha</p> <p>(ii) Location: Kalinganagar, district Jajpur, Odisha.</p> <p>(iii) Land use of the site and around the site up to 10 km radius:</p> <ul style="list-style-type: none"> ➤ The site demarcated for NIMZ extends over 43 villages as listed below in Jajpur district and also forms a part of the Kalinganagar Development Authority (KNDA) area. ➤ Land use of the KNIMZ area is dominated by agricultural use & village settlements. Productive agricultural land is concentrated around drainage channels, reservoirs and Brahmani River. ➤ There are some existing industries within the project site. ➤ Barang Reserved Forest, Balibo Reserved Forest, Patilo Reserved Forest, Mahagiri Protected Forest, Ragarhi Protected Forest, Tamka Protected Forest are located within 10 km radius from the project boundary. <p>(iv) Land Acquisition: KNIMZ covers an area of 16,325 hectares (163.25 sq.km) of land out of which the existing area is 6,777 hectares (67.77 sq.km) and the area available for future development shall be 9,548 hectares (95.48 sq.km).</p> <ul style="list-style-type: none"> ➤ Processing Area: 67.33 sq.km (Existing – 30.11 sq.km + Proposed – 37.22 sq.km) (41% of total area). ➤ Non-processing Area: 95.92 sq.km (Existing – 37.66 sq.km + Proposed – 58.26 sq.km) (59% of total area)

(v) **Justification for selection of the site:** Some of the key advantages of locating the NIMZ at the said site at Kalinganagar are:

- The KNIMZ includes Kalinganagar Industrial Complex (KNIC) which has been developed by IDCO in the Jajpur district of Odisha, known as the Steel Hub of Odisha.
- Availability of raw materials and minerals in the state
- **Road Connectivity:**
 - NH-53 (200) connects the site to the sea port of Paradip (120 km away) towards the east and the industrial town of Angul towards the west, through which it is further connected to Raipur and Rourkela.
 - Along the south, NH 53 connects the site to the city of Cuttack (85 km) and capital city Bhubaneswar (110 km) in the south.
 - NH 215 connects the site to Keonjhar (85 km) in the north, from where it is further connected to Jamshedpur and Kharagpur.
 - The NH-5 also passes near the project area and connects it to the major cities like Kolkata and Bhubaneswar.
 - Distances of major urban areas from the site-
 - ✓ Bhubaneswar:- 110 km.
 - ✓ Cuttack:- 86 km.
 - ✓ ParadipPort:- 120 km.
 - ✓ Keonjhar:- 96 km.
 - ✓ Angul:- 110 km.
 - ✓ Jamshedpur:- 260 km
- **Rail Connectivity:**
 - The Jajpur - Keonjhar railway station, lying on the Kharagpur - Bhubaneswar railwayline, connects the site with the east coast railway network.
 - The Jakhapura junction connects the site to the Jamshedpur - Vishakhapatnam railway line.
- **Air Connectivity:**
 - The airport closest to the site is the Biju Patnaik International Airport (120 km) in Bhubaneswar, which connects it to all major metros and cities including New Delhi and Mumbai.

➤ **Port:**

- Kalinganagar is located at a distance of 120 km from Paradip Port and 160 km from Dhamra Port which are well connected through road and rail.

➤ Land availability:

- Proximity to urban centres of Bhubaneswar, Cuttack, Paradeep, Keonjhar, Angul, etc.

(vi) **Rain Water Harvesting:** Details of such information will be furnished in the EIA Report.

(vii) **CETP:** No CETP is proposed. The individual industrial units will have their own ETP to treat their industrial waste water.

(viii) **Rehabilitation involved, if any:** There will be some rehabilitation issues in the project, which will be addressed following Nation / State R&R Policy.

(ix) **Terrain, level with respect of MSL, requirement of filling if any:**

- Kalinganagar region has an average elevation of 51 m above Mean Sea Level and the ground level varies from 24 m to 258 m.
- The area is quite flat with few undulating depressions and hillocks. The Area is more or less N-S trending land terrain with a few intermittent saucer type depressions, ridges and valleys having steep gradient.

(x) **Tree cutting, types, numbers, girth size etc.:** Details of such information will be furnished in the EIA Report

(xi) **Total water requirement and its source:** The total water demand for the proposed development in the KNIMZ is estimated as 304.13 MLD. Fresh water demand is 180.12 MLD and the balance water demand of 124.01 MLD can be fulfilled from the recycled water.

Water from Brahmani river will be made available to meet the requirement of the KNIMZ.

(xii) **Power requirement:** Peak load demand has been estimated to be around 939.7 MW, which will be required in the Industrial area, Residential area, Commercial / Institutional / Amenities areas, Logistic facilities, lighting load and utilities (WTP, STP, etc.).

(xiii) **Waste water generation, treatment and disposal:** The respective Industries to be located in the KNIMZ area shall have their own Wastewater treatment facilities.

The domestic sewage to be generated in the KNIMZ area shall be collected through extensive sewerage system and finally treated in the proposed four (4) numbers of STPs.

(xiv) **Water bodies, diversion if any:**

- A number of streams and ponds are spread over entire area of KNIMZ site, covering a total area of 2.07 Sq. Km.
- The streams or rivulets flowing through the site ultimately drain into the Brahmani River.
- Brahmani River flows in the southernmost part of the site, which confluences with River Mahanadi and Baitarni eventually draining into Bay of Bengal.
- Brahmani River forms a large delta before emptying into the Bay of Bengal at Dhamra

(xv) **Whether the project is in Critically Polluted area:** No.

(xvi) **Municipal solid waste generated disposal facility:** Total quantity of domestic solid waste generated from industrial, logistics & terminal, domestic, commercial, institutional, green areas, utility areas and street sweeping in the proposed KNIMZ shall be around 333.2 tons/day.

The municipal wastes produced from residential areas, shops, commercial and industrial establishments are composed of food and other discarded waste materials such as paper, plastic, glass, metal, rags, packaging materials. The physical composition of municipal solid waste is normally presented as Organic, Recyclables and Inert matter. There is a small percentage of recyclable material and more of compostable organic matter and inert materials.

After composting, recycling, and removal of moisture, 15% of the solid waste (in the form of inert material) would reach landfills. Also the sulfate-rich dried sludge from water treatment plants and waste water treatment plants will be sent to municipal landfills. The land requirement has been estimated at 8.77 hectares. An area of 70 acre (28.32 ha) has been allotted to M/s Ramky Infra in Kanchichua for solid waste management for the area.

(xvii) **National Park/ Wild Life Sanctuary in 10 km radius area:** No.

(xviii) **Eco-Sensitive Zone in 10 km radius area:**

Sl. No.	Name of the Forest	Distance w.r.t. the project boundary
1	Dangadi R. F.	Within project boundary
2	Barang R. F.	2.0 km
3	Patilo R. F.	9.2 km
4	Balibo R.F.	6.6 km
5	Mahagiri PF	4.0 km

6	Ragarhi PF	4.4 km
7	Tamka PF	7.0 km

- (xix) **If the project involves diversion of forest land, extend of the forest land:** 12.71 sq.km of forest land is present within the project site which shall remain undisturbed.
- (xx) **Investment/Cost of the project:** INR 10,627 Crore.
- (xxi) **Benefits of the project:** KNIMZ will be developed as integrated industrial townships with state of the art infrastructure and land use on the basis of zoning; clean and energy efficient technology; necessary social infrastructure; skill development facilities, etc., to provide a productive environment to persons transitioning from the primary sector to the secondary and tertiary sectors.
- It would integrate the existing industrial base of KNIC with the facilities and incentives provided by a NIMZ to develop a world class industrial zone. This would result in the development of a self-sustained cluster in the value chain of metallurgical industries.
- (xxii) **Employment potential:** Employment generation during the operational phase has been estimated to be around 4,00,000 (both direct & indirect).
- (xxiii) **If any court case pending for violation of the environmental laws:** No.

- 3.3.2 After deliberations during 215th meeting on 20th May, 2019, the EAC **deferred** the proposal for want of following information/clarifications:
- (i) Revised Form-1 clearly stating whether the proposed project is New or Expansion.
 - (ii) Submit copy of Notification/Government Order of the State Government for establishment of Kalinganagar Industrial Complex (KNIC) over 67.77 sq.km of land.
 - (iii) Submit copy of Notification/Government Order of the State Government for establishment of Kalinganagar National Investment and Manufacturing Zone (KNIMZ) over 163.25 sq.km of land that encompasses KNIC area also.
 - (iv) Submit a letter with detailed list of all the industrial units and EC letters of all the existing industrial/commercial units located within the proposed KNIMZ.
 - (v) Submit credible proof of application submitted for seeking Forest Clearance for 12.71 sq.km of forest land involved within the proposed KNIMZ for consideration of ToR.

<p>3.4</p>	<p>Construction of 4/6-lane access control NH-754K from Dhadhaniya Sasan (district Jodhpur) to Rajasthan-Gujarat Border near Sanchole (district Jalore) in the state of Rajasthan, part of Amritsar to Kandla Corridor under Bharatmala Pariyojana by M/s National Highways Authority of India - Further consideration for Environmental Clearance</p> <p>[Proposal No. IA/RJ/NCP/94687/2018] [F. No. 10-51/2018-IA.III]</p>
<p>3.4.1</p>	<p>The project proponent along with the EIA Consultant M/s Enviro Infra Solutions Pvt. Ltd., Ghaziabad, provided the following information to the Committee:</p> <ul style="list-style-type: none"> (i) The proposal involves the Construction of 4/6 lane Access Control National Highway No. 754K from Dhadhaniya Sasan (Jodhpur district) to Rajasthan-Gujarat Border near Sanchole (district Jalore) in the state of Rajasthan under Bharatmala Pariyojana (Package 7/Lot-4). The alignment has a length of 208.242 Km. (ii) Location: The alignment shall start between Dhandhaniya Sasan and Agolai towns in district Jodhpur at design Ch. -1+142 km (26°19'12.53"N, 72°35'48.83"E) and traverses entirely through plain/rolling terrain in Rajasthan state and ends at Rajasthan–Gujarat Border at Ch. 207+100 km (24°39'51.63"N 71°44'46.86"E) of district Jalore, Rajasthan. (iii) The proposed section will cover Jodhpur, Barmer and Jalore districts in Rajasthan state. (iv) Land use of the site and around the site up to 10 km radius: The Land use pattern on 10 km on either side of the project road was analyzed and is found to be predominately agriculture followed by fallow, wastelands, forest and few habitations. (v) Land Acquisition and Proposed RoW: The land acquisition for the proposed alignment is approximately 1730.16 ha. The proposed RoW of the project is 70 m. (vi) Total water requirement and its source: The peak water requirement is 19,000 KLD during construction stage and will be extracted from local surface water resources i.e. from nearby canals after getting necessary permission from concerned authority. The work will be executed through contractor and will be furnished at EC compliance stage. (vii) Water bodies, diversion if any- 179 Wells will be impacted due to the proposed highway. (viii) Waste Management: <ul style="list-style-type: none"> (a) Water requirement, source, status of clearance: The peak water requirement is 19,000KLD during construction stage and will be extracted from local surface water resources i.e. from nearby canals after getting necessary permission from

concerned authority. The work will be executed through contractor and will be furnished at EC compliance stage.

- (b) **Waste water quantity, treatment capacity, detail:** 68 KLD Waste water shall be generated and shall be disposed through soak pits.
- (c) **Recycling / reuse of treated water and disposal:** Waste water shall be disposed through soak pits.
- (d) **Solid Waste Management:** 500 kg/day (approx.) during construction phase and 50 kg/day (approx.) during operation phase. Bio degradable waste shall be disposed through bio composting and other waste through landfill site.
- (e) **Hazardous Waste Management:** The hazardous waste generated during construction period will be disposed off as per applicable rule.
- (ix) **Tree cutting, types, numbers, girth size etc.:** The alignment will involve cutting of around 5,909 trees.
- (x) **Rehabilitation involved if any:** Total 370 structures are coming in the proposed RoW. The land will be acquired as per procedure laid down in RFCT LARR Act, 2013.
- (xi) **If the project involves diversion of forest land, extend of the forest land -** Yes, after joint enumeration the diversion of 13.219 ha of Protected forest land has been identified and submitted online for clearance vide proposal no. FP/RJ/ROAD/38738/2019 dated 6th February, 2019.
- (xii) **Green belt development (20 % of construction projects and 33% for others) –** Green belt development will be done as per IRC SP 21:2009 /MoRTH Code/Guidelines. Plantation of about 1,24,800 trees has been proposed. Shrub plantation and grass carpeting in median is also proposed.
- (xiii) **Rain Water Harvesting:** Rainwater harvesting structures shall be provided near the disposal point of the side drains as prescribed by CGWB guidelines.
- (xiv) **Parking requirement with provision made -** The proposed expressway has provision of parking at Toll Plaza and Way side amenities.
- (xv) **Whether the project is in Critically Polluted area:** No.
- (xvi) **National Park/ Wild Life Sanctuary in 10 km radius area and Eco-Sensitive Zone in 10 km radius area:** The proposed alignment does not pass through Wildlife Sanctuary/National Park and its eco sensitive zone.
- (xvii) **Investment/Cost of the project:** INR. 4043 Crore.
- (xviii) **Benefits of the project:**
 - The proposed project would act as the prime artery for the economic flow to this region.

- Enhanced connectivity between rural & urban population which will benefit the all sections of the society like general population, small-medium-large scale industries, farmers, businessmen etc.
- Improved access to higher education facilities & modern health facilities.
- Strengthening of both rural & urban economies which in turn will improve economic scenario of the state and country.
- Faster transportation will strengthen tourist development in the area.
- Improved road connectivity helps in better implementation and management of government schemes.
- With improvement in economy, more generation of employment opportunities.

(xix) **Employment potential:** During the construction of the road project around 1000 persons would be employed temporarily for a period of 2 years. However due to construction of toll plazas approx. 100 persons will be employed on permanent basis. Preference will be given to local people for employment.

(xx) **ToR Details:** The ToR for the project was granted vide letter No.10-51/2018-IA.III dated 12th September, 2018.

(xxi) **Public Hearing:** Public Hearing was conducted at:

- 22nd January 2019 at Additional District Magistrate Office, tehsil Bhinmal, district Jalore.
- 28th January 2019 at State Secondary School, Dhandhaniya Bhayla, tehsil Balesar, district Jodhpur
- 13th February 2019 at Atal Seva Kendra, Gram Panchyat Asotra, tehsil Pachpadra, district Barmer

Major issues raised during the public hearing and response of project proponent are:

S. No.	Issues raised	Response of PP
1	Request to tell us about the compensation amount of the acquired land of the farmers by the Government.	Compensation of acquired land, residential and commercial construction will be given as per criteria and rules of Land Acquisition Act 2013.
2	Tell us about the provisions made for their movement in case national highway is passing through the middle of their land / farm.	Service lane / SVP will be provided along the national highway and underpass and overbridge will be made at a fixed distance from the highway so that no problem in movement arises.

3	What are the provisions made to stop the negative impact that will arise on nearby lands of farmers due to the construction of this national highway.	Rs 37 Cr. has been proposed for Environment Management Plan under this proposed project. Trees will be planted on both sides of the road in rows of three since ROW is of 70m. As per EMP, there is provision of Green belt plan to control air pollution and approx. 1,24,800 trees will be planted. There will be provision of water sprinkling on both sides of highway so as to control the dust. More and more plantation will be done.
4	This road construction will destroy our biodiversity. What are the provisions to protect it?	Shri Vijay Sharma, Environmental Consultant – In this proposed project, tree plantation will be done on both sides of the road and approx. 1,24,800 trees will be planted, as a result of which biodiversity of the area will not be affected.
5	In Sanchore, 24 Km area from Golasan to Bhadura, is irrigated by Narmada canal for sowing of 3 crops. Crops and environment will be affected due to this proposed project. Farmers will be adversely affected by this.	Due to this project, no river or canal will be blocked and to protect them, small and big bridges will be constructed which will not affect the irrigated land of farmers. Huge plantation will be done on both side of the road which will increase the oxygen level in the area and will not affect the lifecycle of people living in the nearby area.
6	In Jalore district, trees like Kejdi, Rohida, Neem, Babool, Shisham and Peepal will be affected in this region and will create an imbalance in the environment.	Under this project, only those trees will be planted which are found in this region. Help of Forest department will be taken so that plantation is done properly.
7	Jalore district is famous for it's spices cultivation. Due to this road construction, production quantity of spices like Jeera, Esab, Daal, Dalhan, Mirch, Dhaniya, Saauf, etc will reduce and disturb the social component of this region.	Due to this project, land of those farmers which will be affected, will be given appropriate compensation so that they can purchase new land and cultivate their spices. This will then not affect their income and production of spices.
8	Due to environmental imbalance, there is a probability of increase in diseases in the region during the summer season.	To protect the environment, tree plantation will be done on both sides of the road and approx. 1,24,800 trees will be planted. This will minimize the probability of increase in diseases in the region during the summer season.

(xxii) **If any court case pending for violation of the environmental laws:** No.

(xxiii) Fly ash will be used as per MoEF&CC notification, 2016. Fly ash is available at JSW Barmer Power Station and Giral Lignite Power Plant which is close to the proposed project and is located within 300 km. Approx. 3.7 Mcm amount of fly ash

is proposed to be used for the construction of the proposed project as per availability.

(xxiv) The proposed expressway is part of an exclusive transport corridor from Amritsar to Jamnagar and our alignment is part of this and is being planned between Dhadhaniya Sasan (Jodhpur district) to Rajasthan-Gujarat Border near Sanchore (district Jalore) by the Government of India.

(xxv) Information about packages of the Amritsar-Jamnagar Corrdior, as desired by EAC, was also provided. It was informed that the cumulative impact assessment of Amritsar to Jamnagar section will be done after completion of details study of the entire stretch from Amritsar to Jamnagar corridor.

(xxvi) The major habitations along the expressway corridor are Dhadhaniya Sasan, Deogarh, Dhadhaniya Bhayala, Aagolai, Jasti, Mansar, Rama Berdawas, RorwaKhurd, Tibaniya, Gangawas, Bagnawas, Mandli, Meghawas, Mohanpura, Dhoondhali, TirsingriSodha, Tirsingri Chauhan, Thob, RewaraJetmalan, Patau Kalan, Hanumangarh and Golasan etc.

(xxvii) Detailed Landuse pattern along the alignment was provided as under:

S.No.	Particulars	Area(Ha)	Percentage (%)
1.	Water bodies	54.8	0.26
2.	Fallow land	80.5	0.39
3.	Forest land	58.2	0.28
4.	Settlements	31.25	0.15
5.	Waste land	1250	6.00
6.	Crop land	19349.45	92.92
	Total	20824.2	100

(xxviii) 10 Major bridges, 20 Minor Bridges, 1 ROB, 85 SVUP, 26 VUP, 9 Interchange and 34 LVUP are proposed along the project stretch for free passage to locals.

(xxix) Provided the details of fund allocation of Rs.20.20 Crore for Corporate Environment Responsibility (CER) as per Ministry's O.M. No. 22-65/2017-IA.III dated 1stMay, 2018 for various activities.

(xxx) Total cost of EMP was mentioned as 33.80 crore, which does not include CER, mentioned above.

(xxx) Provided air Modelling Result for predicted Concentration of CO at NH-125, Deogarh, SH-28, Kelankot, NH-25, Patau, NH-325, Muthali, and SH-28, Balotra.

(xxxii) The Isopleth developed for PM₁₀ and PM_{2.5} along the road alignment where monitored values are highest in receptor villages for PM₁₀ and PM_{2.5} respectively. The maximum GLC due to excavation, loading & unloading activities for PM₁₀ and PM_{2.5} were found to be 3.4 µg/m³ and 2.1 µg/m³, respectively.

Location	Pollutants	N-Cord.	E-Cord.	GLC (µg/m ³)
Khoda	PM 10	24.656759	71.769535	3.4
Dhadhaniya Sasan	PM 2.5	26.308786	72.565544	2.1

(xxxiii) The resultant impact due to construction activities (excavation and crushing) on the ambient air quality for PM₁₀ and PM_{2.5} at monitoring station Khoda and Dhadhaniya Sasan respectively is presented below which shows that, the resultant concentration level is within the NAAQS.

Station Name	Pollutants	Sampling Station	Avg. Conc. (µg/m ³)	Predicted GLC (µg/m ³)	Resultant concentration (µg/m ³)	NAAQS (µg/m ³)
Khoda	PM ₁₀	AAQ 15	93.48	3.4	96.88	100
Dhadhaniya Sasan	PM _{2.5}	AAQ 1	34.1	2.1	36.2	60

(xxxiv) Summary of impacts and mitigation measures:

Environmental Issue/ Component	Impact Description	Remedial Measure
Emission from construction vehicles and machinery	<ul style="list-style-type: none"> Effect on human health Dust settled on leaves may reduce growth rate of the plants Crowded market places and construction sites will have higher degree of emission 	<p>All vehicles, equipment and machinery used for construction shall be regularly maintained to ensure that the pollution emissions levels are as per norms of SPCB</p> <p>Monitoring of suspended particulate matter to be conducted at least once a month at the sites where crushers are used.</p> <p>The human settlements should be at least 500 m downward wind direction of asphalt mixing plant</p>

Dust and its treatment	<ul style="list-style-type: none"> The impact of dust at construction sites is rather adverse, but localized in nature No serious health problem is likely to be caused 	<p>Precautions to reduce the level of dust emissions from the hot mix plants shall be taken.</p> <p>The hot-mix plants should be located at least 500 m from the nearest habitation. They should be filled with dust extraction unit.</p> <p>Water should be sprayed in the line and earth mixing sites, asphalt mixing site and service roads. In filling subgrade, water spraying is needed to solidity the material. After the impacting, water should be sprayed regularly to prevent dust.</p> <p>Vehicles delivering material should be covered.</p>
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(xxxv) Submitted a certificate from Chief Wildlife Warden stating that no Protected Area or Wildlife Corridor falls within the 10 km radius of the proposed alignment.

(xxxvi) Provided the details of Packages for Amritsar to Jamnagar project corridor under Bharatmala Pariyojana. The total length of Amritsar to Jamnagar alignment is 1298.285 km out of which 761.985 km is green field notified by MoRTH, Gazette notification No.-1655 dated 8th May, 2018. The details of packages under this corridor is summarised below:

S.No.	Section name	Alignment classification	Length (km)	TOR status	EC status
1	Existing NH-54 with four lane configuration (Amritsar to Bathinda section)	Existing alignment (NH-54)	196.20	Does not attract prior EC under EIA Notificatio, 2006 and subsequent amendments	
2	Existing NH-54 with two lane configuration which will is being upgraded to four lane configuration (Bathinda to Sangariya/ Chautala).	Existing alignment (NH-54)	85.10	Does not attract prior EC under EIA Notificatio, 2006 and subsequent amendments	
3	Construction of 4/6 lane expressway from Chautala in Sirsa district in the state of Haryana to Rasiser in Bikaner district in the state of Rajasthan under Bharatmala Pariyojana. Length: 252.500 km Proposal No. IA/RJ/NCP/94430/2018] F. No. 10-53/2018-IA.III	Greenfield alignment (New NH-754K)	252.80	EAC committee in its 193 rd meeting dated 26 July, 2018 granted TOR.	EAC committee in its 208 th meeting dated 19 February, 2019 recommended the project for Environmental Clearance

4	<p>Construction of 4/6 lane road (NH-754K) from Rasiser, Bikaner (km 0.000) to Deogarh, Jodhpur (km 175.758) in the state of Rajasthan, part of Amritsar to Kandla Expressway under Bharatmala Pariyojana.</p> <p>Length: 175.785 km</p> <p>Proposal No. IA/RJ/NCP/94368/2019</p> <p>F. No. 10-63/2018-IA.III</p>	<p>Greenfield alignment (New NH-754K)</p>	175.758	<p>EAC committee in its 195th meeting dated 31 August, 2018 granted TOR.</p>	<p>EAC committee in its 208th meeting recommended the project for EC, however due to shortcoming</p> <p>EAC committee will be reconsidering the project in its upcoming 215th meeting for Environmental Clearance</p>
5	<p>Construction of 4/6-lane access control NH-754K from Dhadhaniya Sasan (District Jodhpur) to Rajasthan-Gujarat Border near Sanchore (District Jalore) in the state of Rajasthan.</p> <p>Length : 208.242</p> <p>Proposal No. IA/RJ/NCP/94687/2018</p> <p>F. No. 10-51/2018-IA.III</p>	<p>Greenfield alignment (New NH-754K)</p>	208.242	<p>EAC committee in its 193rd meeting dated 26 July, 2018 granted TOR.</p>	<p>EAC committee during its 208th meeting held on 19th February, 2019 deferred the project due to submission of public hearing details for two districts instead of three districts in final EIA and EMP. Accordingly, EIA and EMP is updated and submitted online.</p> <p>EAC committee during 211th meeting held on 27th March, 2019, reconsider the project and raised shortcomings</p> <p>/Additional details. ADS reply have been uploaded online dated 04.05.2019 & EAC committee will be reconsidering the project in its upcoming 215th meeting.</p>
6	<p>Development of new proposed National Highway NH-754K greenfield alignment Sanchore - Santalpur section (Economic Corridor-3) starting from Vantdau in Banaskantha district to Ranmalpura in Patan district in the State of Gujarat. Length approx. 124.6 km</p> <p>Proposal No. IA/GJ/MIS/75732/2018</p> <p>F. No. 10-60/2018-IA.III</p>	<p>Greenfield alignment (New NH-754K)</p>	125.185	<p>EAC committee in its 206th meeting dated 25 January, 2018 granted TOR.</p>	<p>Public hearing is under process</p>

	7	Existing NH-27 with four lane configuration (Santalpur to Malia section)	Existing alignment (NH-27)	124.00	Does not attract prior EC under EIA Notificatio, 2006 and subsequent amendments
	8	Existing NH-151A (Malia to Jamnagar section)	Existing alignment (NH-151A)	131.00	Does not attract prior EC under EIA Notificatio, 2006 and subsequent amendments
3.4.2	The EAC, during 208 th meeting held on 19-20 February, 2019, observed Public Hearing has been conducted for only two out of three districts. Therefore, the EAC did not consider the proposal and advised the PP to submit the revised EIA/EMP after incorporating all the Public Hearing reports of the all districts involved in this project. Hence the proposal was <i>deferred</i> by the EAC.				
3.4.3	The EAC, after detailed deliberations during 211 th meeting held on 27 th March, 2019, <i>deferred</i> the proposal for want of following information/documents: (i) Details of all the packages of the proposed alignment shall be submitted. (ii) Predictive Modelling for PM _{2.5} and PM ₁₀ along with the mitigation measures. (iii) In compliance to the submission of the proponent, a certificate from Chief Wildlife Warden stating that no Protected Area or Wildlife Corridor falls within the 10 km radius of the proposed alignment shall be submitted to the Ministry. (iv) Certificate of accreditation from QCI/NABET.				
3.4.4	After detailed deliberations during 215 th meeting of EC(Infra-1) on 20 th May, 2019, following points were observed: (i) Provided details of all the packages of the proposed alignment. (ii) Carried out Predictive Modelling for PM _{2.5} and PM ₁₀ along with the mitigation measures. (iii) Provided a certificate from Chief Wildlife Warden stating that no Protected Area or Wildlife Corridor falls within the 10 km radius of the proposed alignment. (iv) Provided a copy of valid certificate of accreditation from QCI/NABET.				
3.4.5	The EAC, after detailed deliberations during 215 th meeting held on 20 May, 2019, recommended the project for grant of Environmental Clearance , with the following specific conditions in addition to all standard conditions applicable for such projects: (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.				

- (ii) The recommendations of Cumulative Impact Assessment studies for all the packages shall be implemented under intimation to the Ministry and its Regional Office concerned.
- (iii) Approval/permission of concerned authority shall be obtained before drawing water from the irrigation canal. State Pollution Control Board (SPCB) concerned shall not issue Consent to operate (CTO) till the project proponent obtains such permission.
- (iv) The proponent shall obtain permission from the competent authorities for tree felling along the proposed alignment.
- (v) As proposed, proponent shall plant 1,24,800 trees 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).
- (vi) As proposed, rainwater harvesting structures shall be provided near the disposal point of the side drains as prescribed by CGWB guidelines.
- (vii) 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.
- (viii) Fund provisions of Rs. 20.215 Crores (@ 0.5% of the total project cost of Rs. 4043 Crore) shall be provided for Corporate Environment Responsibility (CER) as per the Ministry's O.M. No. 22-65/2017-IA.III dated 1st May, 2018. The expenditure details, as per the plan, shall be submitted to the concerned Regional Office of the Ministry.
- (ix) The proposal involves diversion of 13.219 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.
- (x) 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>3.5</p>	<p>Development of Industrial Park at Nakkapalli near Nakkapalli village, Nakkapalli mandal, Visakhapatnam district in an area of 1578 Ha (3899 acres) by M/s Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC) - Re-consideration for Terms of Reference</p> <p>[Proposal No. IA/AP/NCP/84879/2018] [F. No. 21-140/2018-IA.III]</p>																									
<p>3.5.1</p>	<p>The project proponent along with the EIA consultant M/s L&T Infrastructure Engineering Limited, Hyderabad, made a presentation and provided the following information to the Committee:</p> <p>(i) The proposal is for Development of Industrial part at Nakkapalli near Nakkapalli village, Nakkapalli mandal, Visakhapatnam district in an area of 1578 Ha (3899 acres) by M/s Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC)</p> <p>(ii) Location: Project site is falling in Butchirajupeta, D L Puram, Vempadu, Chandanada, Rajayyapeta villages in Nakkapalli mandal of Visakhapatnam district in Andhra Pradesh.</p> <p>(iii) Land use of the site and around the site up to 10 km radius: The proposed project site of Nakkapalli IP is spread an area of 1578 Ha (3899 acres) in Butchirajupeta, D L Puram, Vempadu, Chandanada, Rajayyapeta villages in Nakkapalli mandal of Visakhapatnam district in Andhra Pradesh. The site is mostly comprised of agriculture, plantation; fallow; barren, unculturable, wasteland/scrubland; water bodies and settlements located within the site.</p> <p>The surrounding area up to 10.0 km radius land use comprises mostly Agriculture Plantation, Crop land, Aquaculture/Pisciculture, Builtup (Rural), Transportation, Mining/Industrial, Forest, Plantation, Forest-Dense, Gullied/Ravenous, Scrub land Dense, Scrub land Open, Sandy areas, Salt Affected, Lakes/Ponds, Reservoir/Tanks, River/Stream/Drain, Canal and Sea (Bay of Bengal).</p> <p>The existing landuse of study area i.e., 10 km radius from project site is given below:</p> <table border="1" data-bbox="336 1653 1417 1975"> <thead> <tr> <th>S.No</th> <th>Classes</th> <th>Area (Ha)</th> <th>Area(acres)</th> <th>% of Area</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Agriculture Plantation</td> <td>13662.02</td> <td>33759.58</td> <td>24.56%</td> </tr> <tr> <td>2</td> <td>Crop land</td> <td>10683.24</td> <td>26398.86</td> <td>19.21%</td> </tr> <tr> <td>3</td> <td>Aquaculture/Pisciculture</td> <td>396.46</td> <td>979.67</td> <td>0.71%</td> </tr> <tr> <td>4</td> <td>Builtup (Rural)</td> <td>991.98</td> <td>2451.23</td> <td>1.78%</td> </tr> </tbody> </table>	S.No	Classes	Area (Ha)	Area(acres)	% of Area	1	Agriculture Plantation	13662.02	33759.58	24.56%	2	Crop land	10683.24	26398.86	19.21%	3	Aquaculture/Pisciculture	396.46	979.67	0.71%	4	Builtup (Rural)	991.98	2451.23	1.78%
S.No	Classes	Area (Ha)	Area(acres)	% of Area																						
1	Agriculture Plantation	13662.02	33759.58	24.56%																						
2	Crop land	10683.24	26398.86	19.21%																						
3	Aquaculture/Pisciculture	396.46	979.67	0.71%																						
4	Builtup (Rural)	991.98	2451.23	1.78%																						

5	Transportation	151.29	373.85	0.27%
6	Mining/Industrial	261.47	646.10	0.47%
7	Forest Plantation	367.34	907.71	0.66%
8	Forest-Dense	1631.23	4030.85	2.93%
9	Gullied/Ravenous	9.66	23.86	0.02%
10	Scrub land Dense	231.33	571.62	0.42%
11	Scrub land Open	1992.83	4924.39	3.58%
12	Sandy areas	400.72	990.19	0.72%
13	Salt Affected	3.42	8.45	0.01%
14	Lakes/Ponds	172.19	425.48	0.31%
15	Reservoir/Tanks	1028.91	2542.50	1.85%
16	River/Stream/Drain	227.01	560.97	0.41%
17	Canal	156.42	386.53	0.28%
18	Sea (Bay of Bengal)	23250.82	57454.03	41.80%
Total		55618.32	137435.88	100%

(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 10km buffer of the Study Area constituting the 66.37% are:

Agriculture Plantation – 24.56%, Crop land - 19.21% and Sea (bay of Bengal) - 41.8%

Minor Classes:

The other minor land uses classes in the 10km buffer of the Project Area constituting the 14.42% are:

Scrub land Open - 3.58%; Forest-Dense - 2.93%; Reservoir/Tanks - 1.85%; Builtup (Rural) - 1.78%; Sandy areas - 0.72%; Aquaculture/Pisciculture - 0.71%; Forest Plantation - 0.66%; Mining/Industrial - 0.47%; Scrub land Dense - 0.42%; River/Stream/Drain - 0.41%; Lakes/Ponds - 0.31%; Canal - 0.28%; Transportation - 0.27%; Gullied/Ravenous - 0.02%; and Salt Affected - 0.01%

The land use breakup of project site is given below :

S.No	Classes	Area (Ha)	Area(acres)	% of Area
1	Agriculture Plantation	742.30	1834.25	47.04%
2	Crop land	130.43	322.29	8.27%
3	Aquaculture/Pisciculture	102.66	253.68	6.51%
4	Builtup (Rural)	46.17	114.09	2.93%
5	Scrub land Dense	230.08	568.54	14.58%
6	Scrub land Open	191.89	474.18	12.16%
7	Sandy areas	44.66	110.36	2.83%
8	Lakes/Ponds	45.48	112.39	2.88%
9	Reservoir/Tanks	13.56	33.51	0.86%
10	River/Stream/Drain	30.64	75.72	1.94%
Total		1577.87	3899.00	100.00%

- (iv) **Justification for selection of the site:** Andhra Pradesh is strategically located on the south eastern coast of India and is regarded as one of the largest producer of marine products in the country. The prominent industries in the state include Agro & Food-based, petroleum products, pharmaceuticals, textile, basic metals, non-metallic mineral products, etc. Further, the state in the country has pioneered and enacted the concept of industrial single-window clearance. The policy seeks to create an investor-friendly climate by ensuring highest ease of doing business and would provide all the clearances within 21 working days. Further, the state also promises for 24 hours of uninterrupted power supply to investors setting up units.

The Visakhapatnam–Chennai Industrial Corridor (VCIC) is a key part of the planned East Coast Economic Corridor, India’s first coastal corridor. VCIC is aligned with the Golden Quadrilateral and is poised to play a critical role in driving India’s “Act East Policy.” VCIC’s long coastline and strategically located ports provide it with an opportunity to create multiple international gateways to connect India with the vibrant global production networks of South East and East Asia that form the bedrock of global manufacturing today. VCIC is aimed at fulfilling the objectives of the Government of India, Make in India Policy which aimed to promote manufacturing activities. Visakhapatnam node is one of the important nodes in VCIC. APIIC has identified four (04) nodes for development of industrial corridors,

i.e., Visakhapatnam Node, Kakinada Node, Gannavaram- Kanikapadu Node and Yeperedu- Srikalahasti Node.

Visakhapatnam, one of the key districts coming within the immediate influence of VCIC has all the potential to become an industrial hub. Government of Andhra Pradesh (GoAP) has embarked on major initiative of positioning Visakhapatnam district as the central hub for various sunrise sectors in an endeavour to attract investments from National and International Players across the globe.

APIIC has identified land parcel in Visakhapatnam node at Rambilli and Nakkapalli. At Nakkapalli, about 1578 Ha (3899 acres) of land was identified at Butchirajupeta, D L Puram, Vempadu, Chandanada, Rajayyapeta villages in Nakkapalli mandal, of Visakhapatnam district for development of industrial park.

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

- Strategically located near to four states Andhra Pradesh, Telangana, Chhattisgarh and Odisha.
- The site is located around 60 km from City of Visakhapatnam 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 ~2.9 km on North of the site.
- The nearest Railway station to the project site is at Gullipadu located at 7.2 km towards NW.
- Visakhapatnam Airport is located at a distance of 64 km towards NE. The Airport has direct flight connectivity to International destinations such as Kuala Lumpur, Singapore, Colombo, Dubai, National destinations such as Bangalore, Kolkata, Delhi, Hyderabad, Mumbai, Port Blair, Jagdalpur, Tirupati, Vijayawada, Ahmedabad, Bhubaneswar, Chennai, & Coimbatore.
- Gangavaram Port is located at distance of 60 km NE.
- Water and Power supply can be assured for the proposed IP will be met from the Yeleru Left Main Canal (YLMC) in line with the existing industrial water supply policy of the state. APSPDCL is responsible for undertaking distribution of Power in Visakhapatnam district.

(v) **Total water requirement and its source:** Total water demand for the proposed IP is 18.87 MLD but considering the reuse of 540 KLD of treated sewage from the STP, the net fresh water demand is 18.4 MLD and 700 KL of fire water demand.

The water will be sourced from the Yeleru Left Main Canal (YLMC) in line with the existing industrial water supply policy of the State located at 35 km.

(vi) **Municipal solid waste generated disposal facility:** Total municipal solid waste generation is estimated at 18.5 TPD which include biodegradable and Non-bio

Degradable/Recyclable waste) and 79.5 TPD of Industrial Waste (hazardous, non-hazardous and recyclable waste).

The industrial solid waste generated daily shall be collected via trucks and transported to the landfill site. A TSDF is being proposed to be developed by APIIC for common utilisation of industrial parks developed and under development in Visakhapatnam region. This TSDF will serve requirement of Nakkapalli I.P and until it is operational, it is proposed to use JNU Pharma city TSDF. Industries shall follow Hazardous and Other Waste (Management and Transboundary Movement) and amendment thereof, 2016.

(vii) **Waste water generation, treatment and disposal:** Industries willing to have own treatment facilities for effluent and sewage shall be developed by the industry in their premises.

- Estimated effluent generation: ~8.575 MLD
- Estimated sewage generation: ~0.998 MLD

Industries willing to have own treatment facilities for effluent and sewage shall be developed by the industry in their premises. If industry would like to utilise common treatment facilities, effluent of ~8.575 MLD and sewage of ~0.998 MLD generated in the industrial area will be treated together in the proposed CETP of 9.6 MLD capacity. The treated wastewater will be disposed into sea through marine outfall facility. CETP will be developed on modular basis based on industrial wastewater generation. The sewage from residential areas will be treated in STP of 675 KLD capacity which will be developed on modular basis. Treated sewage will be reused for greenbelt and toilet flushing etc

(viii) **Rain Water Harvesting:** Nakkapalli IP is planned with water recycling, waste management, rainwater harvesting, use of non-renewable energy like solar powered street lights, etc. for efficient use of resources.

(ix) **Water bodies, diversion if any:** 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. Major part of the stream is less than 100m width. As the stream width reduces, buffer equal to the width of the stream is proposed.

Adequate landscaped green spaces/buffers will be provided near water bodies.

(x) **Tree cutting, types, numbers, girth size etc.:** The site is comprised of agriculture plantation, aquaculture, scrubland, dense scrub land on hills, water bodies and settlements are located within the site. The following are the type of trees within site. Clearance of these trees is envisaged.

Scientific Name	Local Name
<i>Borassus flabellifer</i>	Thaadi

<i>Coco snucifera</i>	Kobbari
<i>Wrightia tinctoria</i>	Ankudu
<i>Annona squamosa</i>	Seethaphal
<i>Anacardium occidentale</i>	Jeedimamidi
<i>Acacia auriculiformis</i>	Australia Tumma
<i>Eucalyptus globulus</i>	Neelagirichettu
<i>Phoenix sylvestris</i>	Eetha
<i>Casuarina equisetifolia</i>	Sarugudu
<i>Mangifera indica</i>	Mango

(xi) **If the project involves diversion of forest land, extend of the forest land:** No forest area is involved.

(xii) **Rehabilitation involved, if any:** About 1578 Ha (3899 acres) of land was identified at Butchirajupeta, D.L. Puram, Vempadu, Chandanada, Rajayyapeta villages in Nakkapalli mandal. APIIC is in the possession of 3096 acres as on date. The balance land is under progress of acquisition. The following is the list of villages falling in Nakkapalli project site.

village	Settlements
Butchirajupeta	<ul style="list-style-type: none"> • Buchchirajupeta • Nallamattipalem • Kotha Chandanada
Donivani Lakshmpuram	<ul style="list-style-type: none"> • Vadapeta
Vempadu	<ul style="list-style-type: none"> • Mulapara
Chandanada	<ul style="list-style-type: none"> • Chandanada • Patimida • Tammayyapeta
Rajayyapeta	<ul style="list-style-type: none"> • Rajayyapeta • Boyapadu

These villages contain some settlements. Settlements falling in Nakkapalli Site Boundary. No resettlement will be taken up to the existing settlements, however Scattered dwellings will be relocated into the residential area proposed. An

adequate green buffer and access roads to road network will be provided to the existing settlements which are falling in the project site.

(xiii) **Terrain, level with respect to MSL, requirement of filling, if any:** The existing terrain of the entire project site is relatively flat and gentle. Existing ground elevation is ranging from 0m to 126 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.

(xiv) **CETP:**

Type of effluent, Quantity, effluent conveyance system from the member units to CETP	Industries willing to have own treatment facilities for effluent and sewage shall be developed by the industry in their premises. <ul style="list-style-type: none"> • Estimated effluent generation: ~8.575 MLD • Estimated sewage generation: ~0.998 MLD
Treatment and usage of treated sewage	If industry would like to utilise common treatment facilities, effluent of ~8.575 MLD and sewage of ~0.998MLD generated in the industrial area will be combinedly treated in proposed CETP of 9.6 MLD capacity. The treated wastewater will be disposed into sea through marine outfall facility. CETP will be developed on modular basis based on industrial wastewater generation. The sewage from residential areas will be treated in STP of 675 KLD capacity which will be developed on modular basis. Treated sewage will be reused for greenbelt and toilet flushing etc

(xv) **Whether the project is in Critically Polluted area:** No.

(xvi) **National Park/ Wild Life Sanctuary in 10 km radius area:** Not Applicable.

(xvii) **If the project falls within 10 km of eco- sensitive area, Name of eco- sensitive area and distance from the project site:** Not Applicable. Following reserve forests are located within 10.km radius area.

Reserve Forests (RF)	
Rajayyapeta R.F	Adjacent
DonivaniLakshmipuram R.F	Adjacent
Vempadu R.F	1.6 km; NW
Payakaraopeta R.F	8.4 km; N
Pentakota R.F	3.7 km; SW
RF near KottaPolvaram	4.7 km; NNE

	<p>The water bodies located are Bay of Bengal – Abutting and TandavaNadi – 6.5 km; W</p> <p>(xviii) Investment/Cost of the project: INR 1191 Crore.</p> <p>(xix) Employment potential: Direct employment of about 30,800 and 2.5 times of direct employment as indirect employment will be generated during construction and during operation phases respectively, thereby opening up employment opportunities for the youth in the catchment region.</p> <p>(xx) Benefits of the project:</p> <ul style="list-style-type: none"> • The total estimated manufacturing industry output in 25 years after the complete industrial plotted land is absorbed and all the industrial units commence production, is about Rs. 1 lakh Crores. • Proposed Park is likely to generate direct and indirect employment potential of about 30,800 respectively, thereby opening up employment opportunities for the youth in the catchment region. • Employment opportunities to the local people for skilled, semi-skilled and unskilled work force during the construction and operation phases • As a part of the Corporate Social Responsibility (CSR) initiatives, it is envisaged to create better and quality Education, Health, Hygiene and Sanitation, Empowerment and Livelihoods and Community Development Initiatives. • The proposed project shall further act as a catalyst to industrialization and urbanization of the region. • There will be improvement in living standards. General welfare will improve in the area as per capita income will go up in the post project period. • Overall economic growth of Visakhapatnam district, in particular and State of Andhra Pradesh and Nation in general. • The proposed project is in Visakhapatnam–Chennai Industrial Corridor (VCIC), 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., <p>(xxi) If any court case pending for violation of the environmental laws: No.</p>
3.5.2	<p>During detailed deliberations, in 204th meeting of EAC (Infra-1), held on 17th December, 2018, it was observed that as Pharma units are proposed in this project as well as other projects. Therefore, proponent was advised to have appropriate planning within the state so that pharma units are not spread over in various industrial areas, rather put them at one place. Sufficient buffer is needed between inhabited areas and proposed industrial area. In view of above, the EAC deferred the proposal.</p>

3.5.3	<p>During 211th meeting of EC(Infra-1) held on 27th March, 2019, the project proponent along with the EIA consultant M/s L&T Infrastructure Engineering Limited, Hyderabad, has made a presentation and provided following information to the Committee:</p> <ul style="list-style-type: none"> (i) The industries to be housed within the proposed Industrial Area include the Pharmaceuticals, Chemicals and Petrochemicals, Industrial and Consumer Electronics, Auto and Auto components, Aerospace and defence, Light and heavy Engineering, CRZ permissible hazardous material storages, Building Materials Industry/Non Metallic minerals, MSME, Plastics, Food and Agro Processing Industry, Textile and Apparel manufacturing. (ii) The area coverage of the pharma and chemical units is reduced from 20% to 11.5% of proposed industrial area. (iii) Green buffer of 50 m is provided all around settlements. (iv) The pharma and chemical units will be located 500 m away from the settlements. Non-pharma and chemical units will be located between the 50 m buffer and 500 m distance. (v) Green belt is 18% of proposed industrial area. Rest of the green cover shall be developed by the individual industries.
3.5.4	<p>After detailed deliberations during 211th meeting of EC(Infra-1), the EAC has made following observations:</p> <ul style="list-style-type: none"> (i) The project also involves the CRZ Clearance. (ii) Whether the proponent has made any efforts for preparing the 'Zoning Atlas of Industries' as desired by EAC(Infra-1) in its 204th meeting of EAC (Infra-1), held on 17th December, 2018. If so, the details may be submitted to the MoEFCC. (iii) The Pharma/chemical units are scattered at 5 locations within the proposed Industrial Area. The EAC has suggested to keep all of them at one place. (iv) There is no proposal for establishing Environmental Cell by the proponent. (v) The Ramkey TSDF facility is located nearby the proposed TSDF facility. (vi) CRZ area is 5.76% of proposed industrial area. Creek area is very important. This area should be disturbance free and no activity should be permitted in area between sea and creek. (vii) The area between 50 m and 500 m from the settlements should not be used for establishing red category (as per CPCB classification) industries. (viii) Not provided the details of Corporate Environment Responsibility (CER) budget.
3.5.5	<p>The proposal was considered in the 211th EAC meeting held on 27th March 2019. The EAC after detailed deliberation recommended the project for grant of Terms of Reference (ToR), and for preparation of EIA/EMP report with public consultations subject</p>

	<p>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"> (i) The PP has to seek CRZ Clearance also, as per provisions contained in the CRZ Notification 2011 and subsequent amendments, if any. (ii) The creek areas are to be protected and the location of Pharma and Petro-chemical industries adjacent to the creek are to be relocated so that the creek is not disturbed. (iii) No activity shall be permitted in area between sea and creek. (iv) Proponent shall prepare the Zoning Atlas so that the polluting industries including Pharma/Chemical units are not scattered all over the region. (v) Proponent to indicate the details of type of Pharma and Petro-chemical industries proposed to be setup. Clustering of Pharma and Petro-chemical industries for separate CETP to be worked out. (vi) No Pharma, Chemical and Petro-chemical units shall be established within 500 m of the existing settlements within the proposed industrial area. (vii) Non-pharma, non-chemical and non-Petro-chemical industries shall be established between 50 m and 500 m from the settlements. (viii) No red category industries (as per CPCB classification) shall be established between 50 m and 500 m from the settlements within the proposed industrial area. (ix) The planned Pharma, Chemical and Petro-chemical units shall not exceed 11.5% of total industrial area as proposed. (x) All existing waterbodies should be protected. (xi) No extraction of the groundwater shall be undertaken. Water allocation letter to be submitted for use of water from Yeleru Left Main Canal (YLMC). (xii) Proponent shall establish an Environmental Cell specifically for the proposed industrial area. (xiii) The proposed TSDF facility shall be used for captive purposes only. (xiv) 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 01.05.2018 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. (xv) 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.
3.5.6	<p>The proponent, vide their letter no. GM/EMP/APIIC/IP-Nakkapalli/EC/2017 dated 23rd April, 2019, has requested to amend the specific conditions mentioned in point no. (iii) and</p>

(viii) recommended by EAC in its 211th EAC meeting held on 27th March 2019, as mentioned in para 3.5.5 above.

S. No.	Clauses as recommended by EAC in its 211th meeting on 27th March, 2019	Requested amendment by the proponent
1.	(iii) No activity shall be permitted in area between sea and creek.	Industries other than Pharma and Chemical may be developed between creek and project boundary.
2.	(viii) No red category industries (as per CPCB classification) shall be established between 50m and 500m from the settlements within the proposed industrial area.	To allow red categories industries other than Chemical and Pharma units beyond 50m up to 500m from the settlements within the proposed industrial area.

3.5.7 The proposal was reconsidered in the 215th EAC meeting held on 20th May, 2019. By considering the proponent's point of view, the EAC revisited its earlier decision and suggested proponent to prepare a list of Orange, Green and White categories of industries, which may be permitted in area between sea and creek as well as within the 250 m from the settlement. Accordingly, proponent has submitted the revised list of industries vide their letter no. GM/EMP/APIIC/IP-Nakkapalli/EC/2017 dated 20th May, 2019, given as under:

(i) Industries permitted in area between sea and creek.

Sector	Anticipated Types of Industrial/Activities
Industrial and Consumer Electronics	Medical equipment, defense electronics, control equipments. Solar panels and module. Communication Equipment. Consumer Electronics Electronic Components Industrial Electronics
Auto components	Assembly of auto components & ware housing
Packaging	Plastic packaging, wood/paper packaging etc.

(ii) Categories of industries which can be established within three zones based on the distance from existing settlements within the proposed Industrial Park.

Industries proposed within 50m–250m from settlement (orange, green and white category)	Industries proposed within 250m–500m from settlement (red category)	Industries proposed within Beyond 500m from settlement (red category)
<ol style="list-style-type: none"> 1. Industrial and consumer electronics 2. Auto components 3. Aero space and defence – R&D 4. Aero engine components, communication devices 5. MSME (Leather Products such as Sports goods excluding tanning and hide processing Plastic products for Packaging, automobile, consumer durables, healthcare by injection, :low Moulding, Extrusion etc., Timber/Wood Products such as Furniture, Sports goods, Wood Flooring) 	<ol style="list-style-type: none"> 1. Engineering (light and heavy engineering) 2. Building Materials Industry/Non Metallic minerals (processed minerals, Clay building products, bricks, AAC Blocks, Kerbs Stones) 3. Food and Agro Processing Industry 4. Automobile manufacturing 5. Aerospace and defence 	<ol style="list-style-type: none"> 1. Pharmaceuticals 2. Chemical 3. Petrochemical 4. Tiles, Ceramics and refractories, glass and glassware, graphite, marbles

The EAC after detailed deliberation during 215th meeting held on 20th May, 2019, **recommended** following modifications in the Specific Conditions recommended in 211th meeting held on 27th March, 2019:

Reference Section of MoM of 211 th meeting on 27.03.2019	Conditions for Environmental Clearance (as mentioned in MoM of 211 th meeting on 27.03.2019)	EAC's Recommendation during 215 th meeting of EAC held on 20 th May, 2019									
3.3.5(iii)	No activity shall be permitted in area between sea and creek	<table border="1"> <thead> <tr> <th data-bbox="657 620 895 680">Sector</th> <th data-bbox="895 620 1453 680">Anticipated Types of Industrial/Activities</th> </tr> </thead> <tbody> <tr> <td data-bbox="657 680 895 1003">Industrial and Consumer Electronics</td> <td data-bbox="895 680 1453 1003"> Medical equipment, defense electronics, control equipment. Solar panels and module. Communication Equipment. Consumer Electronics Electronic Components Industrial Electronics </td> </tr> <tr> <td data-bbox="657 1003 895 1099">Auto components</td> <td data-bbox="895 1003 1453 1099">Assembly of auto components & ware housing</td> </tr> <tr> <td data-bbox="657 1099 895 1189">Packaging</td> <td data-bbox="895 1099 1453 1189">Plastic packaging, wood/paper packaging etc.</td> </tr> </tbody> </table>	Sector	Anticipated Types of Industrial/Activities	Industrial and Consumer Electronics	Medical equipment, defense electronics, control equipment. Solar panels and module. Communication Equipment. Consumer Electronics Electronic Components Industrial Electronics	Auto components	Assembly of auto components & ware housing	Packaging	Plastic packaging, wood/paper packaging etc.	
Sector	Anticipated Types of Industrial/Activities										
Industrial and Consumer Electronics	Medical equipment, defense electronics, control equipment. Solar panels and module. Communication Equipment. Consumer Electronics Electronic Components Industrial Electronics										
Auto components	Assembly of auto components & ware housing										
Packaging	Plastic packaging, wood/paper packaging etc.										

	3.3.5(viii)	No red category industries (as per CPCB classification) shall be established between 50 m and 500 m from the settlements within the proposed industrial area.	<p>Industries proposed within 50m–250m from settlement (orange, green and white category)</p> <ul style="list-style-type: none"> - Industrial and consumer electronics - Auto components - Aero space and defense – R&D - Aero engine components, communication devices - MSME (Leather Products such as Sports goods excluding tanning and hide processing Plastic products for Packaging, automobile, consumer durables, healthcare by injection, low Moulding, Extrusion, Timber/Wood Products such as Furniture, Sports goods, Wood Flooring) 	<p>Industries proposed within 250m–500m from settlement (red category)</p> <ul style="list-style-type: none"> - Engineering (light and heavy engineering) - Building Materials Industry/Non Metallic minerals (processed minerals, Clay building products, bricks, AAC Blocks, Kerbs Stones) - Food and Agro Processing Industry - Automobile manufacturing - Aerospace and defense 	<p>Industries proposed within Beyond 500m from settlement (red category)</p> <ul style="list-style-type: none"> - Pharmaceuticals - Chemical - Petrochemical - Tiles, Ceramics and refractories, glass and glassware, graphite, marbles
3.6	<p>Construction of 4/6 lane road (NH-754K) from Raisar, Bikaner (km 0.000) to Deogarh, Jodhour (km 180.000) in the state of Rajasthan, part of Amritsar to Kandla Expressway under Bharatmala Pariyojana by M/s National Highways Authority of India - Re-consideration for Environmental Clearance</p> <p>[Proposal No. IA/RJ/NCP/94368/2019][F. No. 10-63/2018-IA.III]</p>				
3.6.1	<p>The project proponent along with the EIA consultant M/s Global Management and Engineering Consultants International, made a presentation and provided the following information to the Committee:</p> <p>(i) The proposed project is a new 4/6 lane National Highway (NH-754K) connecting Rasiser in Bikaner district to Deogarh in Jodhpur district, Rajasthan. The proposed</p>				

alignment is a 175.758 km long and lies in North-West region of Rajasthan. The alignment terminates on NH-125 at Deogarh, which is near Jodhpur.

- (ii) **Location:** Project Area falls in Bikaner and Jodhpur district of western Rajasthan State.
- (iii) **Land use of the site and around the site up to 10 km radius:** The land use pattern on 10 km either side of the project road is predominately agriculture followed by fallow, wastelands and few habitations. The proposed project neither passes through any protected area i.e. wildlife sanctuary, national park, conserve reserve, nor falls within 10 km boundary.
- (iv) **Land Acquisition and Proposed RoW:** The proposed land acquisition for the proposed alignment is approx. 1394.68 ha and the proposed RoW of the project 70m green field.
- (v) **Total water requirement and its source:** Total requirement of water for the construction is estimated 1000 KLD which will be taken from IGNP canal and ground water sources.
- (vi) **Municipal Waste (domestic and or commercial wastes):** Construction Phase Domestic Waste shall be generated from temporary construction camps @ grams per head per day. The solid waste will be disposed as per Solid Waste Management Rules, 2016. Operation Phase Domestic Waste be produced from commercial establishment will be disposed off at municipal waste disposal site. Solid waste will be generated during operation phase from way side amenities and will be handled as per established rules.
- (vii) **Hazardous Waste (as per Hazardous Waste Management Rules):** Used/Waste oil and lubricants will be utilized in oiling shuttering and remaining balance will be sold to authorized recyclers. The hazardous waste (management, handling & trans-boundary movement) rules, 2018 and its amendments till date will be followed.
- (viii) **Water bodies, diversion if any:** The proposed road alignment crosses IGNP canal only at km 145.
- (ix) **If the project involves diversion of forest land, extend of the forest land:** The Proposed Project does not involve any diversion of forest land.
Approx 5 m wide area for whole project length on either side is reserve for new plantation.
- (x) **Tree cutting, types, numbers, girth size etc.:** Number of affected Trees is approx. 9000.

Species Wise Details

Name of Tree	Number
Khejri	3600

Babul	1350
Rohida	900
Neem	1080
Others	2070
Total	9000

- (xi) **Rehabilitation involved if any:** Total 396 no. of structures will be affected due to proposed road. The NHAI shall compensate the affected title holder as per NHAI Act 1956.
- (xii) **Whether the project is in Critically Polluted area:** No
- (xiii) **National Park/ Wild Life Sanctuary in 10 km radius area & Eco-Sensitive Zone in 10 km radius area:** The proposed project neither passes through any protected area i.e. wildlife sanctuary, national park, conserve reserve, nor falls within 10 km boundary.
- (xiv) **Parking requirement with provision made:** Parking is provided 105 nos. of four wheeler vehicles and 420 nos. of two wheeler vehicles.
- (xv) **Investment/Cost of the project:** INR 3000 Crores (approx.)
- (xvi) **Benefits of the project:**
- It will Improve the basic facilities for international trade via road transportation;
 - It will provide connectivity for the remote areas existed in western Rajasthan, North-West Gujarat and southern part of Punjab with main stream of development.
 - It is an economic corridor which provides direct and quick excess from Amritsar to Kandla Port for export and import of goods.
 - It will decrease the travelling time taken in the present route and provide cost effective benefits to the farmers and industries.
 - It will provide better road connectivity to Punjab, Haryana, Rajasthan and Gujarat.
 - It will create direct and indirect employment in western Rajasthan where resources are very less for live hood.
 - It will play vital role to bust up the economy and economic growth rate of locality, States, and Nation also.
- (xvii) **Employment potential:** Total 2,78,100 jobs during construction period (3 years) and about 2,70,000 jobs during maintenance period (10-15 years).

(xviii) **ToR Details:** The ToR for the project was accorded vide letter No.10-63/2018-IA.III dated 4th January, 2019.

(xix) **Public Hearing:** Public Hearing was conducted at:

- 29th January, 2019 at Govt. Sec. School Sirmandi, Jodhpur.
- 30th January, 2019 at Collectorate Office, Bikaner

Major issues raised during the public hearing and response of project proponent are:

Major Issues	Respond from NHAI
Public Hearing at Sirmandi Jodhpur	
Related to tree cutting, low survival rate of new planting trees, mitigation measures for minimization of adverse impact of dust particulates on locality, compensation for land acquisition, safety of cattle's during operation phase etc.	NHAI has responded for adopting tree species which are resistant against hot & dry climatic conditions, adopting adequate measures to control dust particulates, proper compensation of land as per rules, barricading of highway to check the access of animal for whole length except the locations of underpasses, overpasses, cross drainage structures, junction etc.
Public Hearing at Bikaner	
Related to maintenance period for tree to be planted along the corridor, what kind of measures to be adopted to control the access of wild animal and cattle's etc.	NHAI has responded for adopting minimum 3 year of maintenance for newly planted trees along the corridor, provision of barricading, box culverts and under passes at adequate distance etc.

(xx) **If any court case pending for violation of the environmental laws:** No.

3.6.2 The proponent along with the EIA consultant made presentation before EAC during its 208th meeting held on 19-20 February, 2019. The observations of EAC are as under:

(i) Cumulative Impact Assessment will be carried after completion of EIA study of all parts under Economic corridor (NH-754k).The actual length of alignment is 175.758 km

(ii) There is no protected area or animal corridors within 10 km radius of proposed corridor. NOC from Chief Wildlife Warden is under progress.

(iii) 1000 KLD Water for construction will be taken from canal and ground water sources. The water will be extracted after permission of the concerned authority.



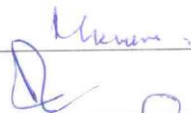
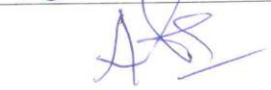
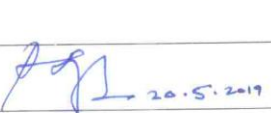




	<ul style="list-style-type: none"> (iv) The proposed alignment is passing through open area where comparatively less number of trees are existed. Permission for tree cutting from District Collector (Bikaner & Jodhpur) is under progress. (v) There is no forest diversion involved in this project. (vi) Approx. 9000 trees fall within the proposed project corridor. Relocating the existing trees will be taken as far as possible. (vii) Approx. 90000 trees will be planted within available space along the proposed corridor alignment for better green belt development. (viii) There are only one rainy season Nala at km 156 and one canal crossing at km 145. Minor bridges are proposed on both crossing to avoid any adverse impacts. Adequate measure will be followed at time of construction near these crossings. Silt Fencing, stone pitching gabion wall etc. are proposed to prevent sedimentation in canal water. (ix) The Estimated EMP cost is 30.60. Crores, which is exclusive of CER. (x) The CER budget is Rs. 15.53 Crores.
3.6.3	<p>The EAC, after detailed deliberations during 208th meeting held on 19-20 February, 2019, recommended the project for grant of Environmental Clearance, subject to submission of certificate as mentioned at point no. (i) below and with the following specific conditions in addition to all standard conditions applicable for such projects:</p> <ul style="list-style-type: none"> (i) In compliance to the submission of the proponent, a certificate from Chief Wildlife Warden stating that no Protected Area or Wildlife Corridor falls within the 10 km radius of the proposed alignment shall be submitted to the Ministry. (ii) No ground water to be used for the project as the ground water quality is saline at depths. Only surface water to be used for IGNP (Indira Gandhi Nahar Pariyojana). Approval/permission of concerned authority shall be obtained before drawing surface water from the irrigation canal. State Pollution Control Board (SPCB) concerned shall not issue Consent to operate (CTO) till the project proponent obtains such permission. (iii) The proponent shall obtain permission from the competent authorities for tree cutting along the proposed alignment. A comprehensive plan for afforestation including minimum three times plantation by native species shall be provided. (iv) Relocating the existing trees shall be taken as far as possible. As committed, not less than 90000 trees shall be planted within available space along the proposed corridor alignment for better green belt development. (v) Silt fencing, stone pitching gabion wall etc. shall be constructed to prevent sedimentation in canal water and crossings. Adequate measure shall be followed at time of construction near these crossings. (vi) The RoW shall not exceed 70m at any point of the proposed 8-lane alignment,

	<p>except for the junction improvement at the intersections of the other roads.</p> <p>(vii) The fund provisions provided for CER i.e. Rs. 15.53 crores, the expenditure details as per the plan shall be submitted to the concerned Regional Office of the Ministry.</p> <p>(viii) The recommendations of Cumulative Impact Assessment shall be implemented under intimation to the Ministry and its Regional Office concerned.</p>
3.6.4	<p>The EAC members have received a complaint from the EIA Consultant M/s Global Management and Engineers Consultants wherein it is mentioned that Proponent has done a presentation before EAC in illegal manner for obtaining Environmental Clearance for the said project during 208th meeting of EAC held on 19th February 2019.</p> <p>The EAC (Infra-1) discussed the matter in its 214th meeting held on 26th April, 2019, and noted the seriousness of the nature of the complaint and it was decided that further discussion/decision on this matter will be done after receiving the comments/clarification from NHAI in the upcoming meeting of EAC in the month of May 2019 .</p>
3.6.5	<p>The EAC discussed the matter vis-à-vis the complaint during its 215th meeting held on 20th May, 2019, wherein Dr. Meena Bhaduri, EIA coordinator from M/s GNECI, Jaipur, Shri S.K. Mishra, Project Director (Jodhpur) and Dr. Biswajit Mukhopadhyay GM(Environment) from NHAI appeared before the EAC.</p> <p>The EAC observed the following points:</p> <p>(i) M/s GMECI, Jaipur, vide their letter dated 8th April, 2019 and their email dated 8th April, 2019, has submitted that proponent has done a presentation before the EAC, during 208th meeting of EAC held on 19th February 2019 in illegal manner for obtaining Environmental Clearance for the said project. Following allegations were made by M/s GMECI, Jaipur on NHAI:</p> <ol style="list-style-type: none"> a) According to the complaint, none of their representatives had attended the said meeting held on 19-20 February, 2019. b) The disclosure of consultant and list of experts etc., as given in the EIA report, are actually taken from the website/internet. c) Forged documents were submitted online and presented before the EAC. d) Experts, whose names have been mentioned in the EIA Report, have already left the company (M/s GMECI, Jaipur). <p>(ii) A letter was sent from Joint Secretary, MOEF&CC to Chairman, NHAI seeking clarification on these issues.</p> <p>(iii) Further, M/s GMECI, Jaipur submitted a letter dated 27th April, 2019 to the Ministry informing that they have sent above mentioned complaint letter dated 8th April, 2019 and some other person/organisation has used their letter head for sending forged letter. They further submitted that M/s GMECI, Jaipur has been associated</p>

	<p>as Environmental Consultant after an agreement with M/s Pentacle in association with M/s Jhunjhunu Engineers Private Limited, the DPR Consultant for the said project. They also informed that the draft EIA, final EIA and made presentation on 19th February, 2019 before EAC in its 208th meeting.</p> <p>(iv) In response, Member (Project), NHAI, vide letter No. NHAI/Bharatmala/DPR/Lot-4/Package-6/2017/135024 dated 16th May, 2019, has sent a letter stating that as per report received from field units, the entire work has been carried out M/s GMECI, Jaipur. This has been confirmed by M/s GMECI, vide their letter dated 27th April, 2019, Jaipur.</p> <p>(v) Proponent has submitted following documents:</p> <ol style="list-style-type: none"> a) Copy of work order/MOU stating that M/s Jhunjhunu Engineers Private Limited, Jaipur has awarded the consultancy work to M/s Global Management and Engineering Consultants International (GMECI), Jaipur, for preparation of EIA report and Forest proposal uploading at the cost of Rs. 2.36 Lakh only. b) Copy of Certificate of Accreditation by QCI/NABET in favour of M/s GMECI, Jaipur, valid up to 3rd February, 2019. c) Extension of validity of Accreditation by QCI/NABET in favour of M/s GMECI, Jaipur up to 25th March, 2019. d) Copy of declaration by consultants/experts contributing to the EIA/EMP studies for the said project. e) Proof of site visit by EIA consultant in the form of a cash receipt for vehicle hire/toll plaza and field photographs.
<p>3.6.6</p>	<p>After detailed deliberations during the 215th meeting on 20th May, 2019, EAC has following observations:</p> <ol style="list-style-type: none"> (i) Since neither the consultant nor his authorized representative was present during the EAC meeting on 19th February, 2019, the presentation was illegal. (ii) The response from NHAI is based on the inputs from M/s GMECI, Jaipur only. NHAI should have conducted detailed enquiry in this matter before sending any response to the Ministry. (iii) The complaint letter dated 8th April, 2019 was signed by Shri Vinod Saharan, CEO, M/s GMECI, Jaipur. The same complaint was also sent to this Ministry through his email id. saharan@gmecinternational.com on 8th April, 2019. Shri Saharan has also signed the disclosure of consultants as well as the letter dated 27th April, 2019, stating that the complaint letter was not sent by them. (iv) The EAC members have seen the signature on the letter and prima facie of the opinion that the signatures have been done by one person using pen and that it does not seem to have scanned. There seems no sign of forgery.

	<ul style="list-style-type: none"> (v) Shri Vinod Saharan, CEO, M/s GMECI, Jaipur did not attend the EAC meeting. However, M/s GMECI was represented by EIA Coordinator, Dr. Meena Bhaduri. (vi) The EIA Coordinator has also admitted that she did not attend the Public Hearing. (vii) The EIA Coordinator has admitted that she was not present before EAC during presentation on 19 February, 2019 due to health reasons. (viii) As per attendance record of the 208th EAC meeting held on 19 February, 2019, the said proposal was defended by the Project Director, NHAI, Jodhpur and two consultants namely Dr. Mahavir P. Saini and Yaqub Ali Sheikh. (ix) It is worth mentioning that the copy of work order/MOU, signed between M/s Jhunjhunu Engineers Private Limited, Jiapur and M/s GMECI, Jaipur, does not mentioned the date of agreement.
3.6.7	<p>After detailed deliberations, EAC recommended the following:</p> <ul style="list-style-type: none"> (i) NHAI shall conduct detailed investigation in this matter and submit report to this Ministry. (ii) MoEFCC may initiate independent enquiry in the matter, if required. (iii) Before reaching to any decision, EAC also seeks comments of QCI/NABET regarding involvement of EIA Coordinator and other Functional Area Experts of M/s GMECI, Jaipur, in preparation of EIA/EMP report for the said project. (iv) Recommendations of EAC in its 208th Meeting on 19-20 February, 2019, regarding grant of EC to this project may kept on hold and remain suspended till the enquiry report is received and a decision is taken in this regard.

List of the Members attended 215th meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Industrial Estate and Miscellaneous projects held on 20th May, 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, Special 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	
11	Dr. Anuradha Shukla, Central Road Research Institute (CRRI), Mathura Road, New Delhi	Member	
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	
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)	
16	Shri Ashish Kumar, Joint Director, IA-III, MoEF&CC	Special Invitee	