Minutes of 217th 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 27th June, 2019

- 1. Opening remarks of the Chairman
- 2. Confirmation of the minutes of the last meeting: The EAC while confirming the minutes of its 215th Meeting held on 20th May, 2018, took note of suggestions of members and recommended for correction therein as under:

Page #	Item	For	Read as	
44	3.6.5	Further, M/s GMECI, Jaipur submitted a letter dated 27 th April, 2019 to the Ministry informing that they have sent above mentioned complaint letter dated 8 th April, 2019	• • 1	

3. Proposals considered:

3.1	'Establishment of Canara Industrial Area' in Taluk Bantwal, District Dakshina Kannada, Karnataka by M/s Karnataka Industrial Areas Development Board (KIADB) – Environmental Clearance [Proposal No. IA/KA/NCP/29175/2015] [F. No. 21-135/2015-IA.III]		
3.1.1	The proposal was considered in 217 th meeting held on 27 th June, 2019.		
	The EAC observed that EIA/EMP report was incomplete as the declaration by consultant was not included in the report EIA/EMP report. The co-ordinator who prepared EIA/EMP report has not attended the meeting.		
	The EAC, therefore, deferred the proposal for want of above-mentioned information along with the revised EIA/EMP report including declaration by the Consultant and follow the generic structure as per appendix III of EIA Notification, 2006 as amended from time to time.		
3.2	Development of Multi-product SEZ at Nanguneri Taluk, Tirunelveli District, Tamil Nadu by M/s AMRL International Tech City Limited -		

Extension of validity of Environmental Clearance [Proposal No. IA/TN/NCP/108021/2019] [F. No. 21-354/2008-IA.III]

- **3.2.1** The project proponent made a presentation and provided following information to the Committee:
 - (i) The proposal is for extension of validity of environmental clearance granted to M/s AMRL International Hi-Tech City Limited vide MoEF&CC's letter No.21-354/2008-IA.III dated 18th April, 2012, for the development of Multi-product SEZ at Nanguneri Taluk, Tirunelveli District, Tamil Nadu.
 - (ii) Proposed total area of 1019.225 ha covering the villages of TherkuNanguneri, Rajakkalmangalam, Puliyurkurichi, Alankulam and Veppankulam in Tirunelveli District in the state of Tamil Nadu.
 - (iii) M/s. AMRL International Tech City Limited, Nanguneri along with Tamil Nadu Industrial Development Corporation Ltd, the nodal agency designated by Government of Tamil Nadu has set up a Multiproduct SEZ.
 - (iv) Consent to Establishment (CTE) was issued by Tamil Nadu Pollution Control Board vide Proceedings No. T2/TNPCB/F.No.1950/TNV/RL/A/12 and Consent to Operate (CTO) vide Proceedings No. T2/TNPCB/F.0882TNV/RL/TNV/A&W/2017 Dated 20.03.2017 for developing infrastructure for Industrial Plots with area of 130 Hectares in Phase-I. The CTO was renewal of Consent Order on 12.04.2019 for the year 2019-2020.
 - (v) Landuse pattern: Total plot area of 1019.225 ha of barren land will be converted as SEZ in phase wise development in three phases. The processing zone will be 701.38 ha (68.81%) and Non-processing Zone 317.85 ha (31.19%). Propose appropriate land use structure to accommodate the various types of industries like Electronics and Hardware, IT, Auto-Components, Electronics Components, etc.,
 - (vi) The project layout has been approved by DTCP (Directorate of Town & Country Planning) vide DTCP No. 80/2010.
 - The SEZ land use plan describes the categories of land uses as Industrial land, Residential sector, Social Amenities and Specific Infrastructure, Utilities, Greenery and Roads.
 - (vii) Water requirement and its sources: The total water requirement will be 42.08 MLD. Fresh water requirement will be 17.45 MLD and Treated and Recycled water demand will be 24.63 MLD. Source of water is Tamil Nadu Water Supply and Drainage Board (TWAD).
 - (viii) Waste water generation, treatment and disposal: The STP capacity

will be 20 MLD for processing zone and 10 MLD for Non processing zone.

(ix) Municipal Solid Waste generated disposal facility: The Municipal Solid waste 5000 TPD will be generated in the project. The Non-hazardous solid waste such as packing materials, scrap wood, cardboard, plastics, unused metal pieces, garbage in the form of papers, cloth fibres, polythene bags, electric components, wire, scrap metal, glass bottles, thermocol etc.

Most of the above materials are useful. A single external agency of the state government would be employed for whole of the SEZ area to collect the Non-hazardous solid waste. Domestic waste generated from the SEZ zone will be taken to the bio composting plant which will be installed by the local competent authorities of State Government.

Presently, 14 Industries are occupying around 60 Acres of land. Hence, there is no change in water requirement, waste water generation and Municipal Solid waste generation as considered in Environmental Clearance.

- (x) The total power requirement is 126 MW and will be met from TNEB (Tamil Nadu Electricity Board).
- (xi) Rain water harvesting: The water collected through Roof Top Collection may supplement the demand of raw water. Rain water harvesting structures will be developed along the road drains, pathways, drains and common areas. Rain water harvesting in the individual plots is to be done by the user industry.

The surface runoff from paved areas will be collected in a storage pond of around 15000 cum capacity according to the existing terrain. Harvested rain water will be utilized for green belt.

- (xii) **Hazardous Waste Management:** Present industries are not generating the any Hazardous wastes. However, Hazardous waste generated from the project facilities and industries will be mainly:
 - STP sludge
 - Used oil/Waste oil etc,
 - Apart from it, industries may generate their hazardous waste

The STP sludge from STPs will be taken to the land fill site for composting and will be used as manure for Green Belt.

Processed wastes like spent oils, E-wastes, etc., will be transported by the individual unit to nearby TNPCB authorized TSDF for further treatment and disposal as per CPCB norms.

(xiii) Water bodies: There are 3 small ponds (Seasonal) within the SEZ

Area and their excess flow reaches a seasonal nallah name Nambiar River. It is proposed to keep the ponds as such for ground water recharge and Aesthetic purpose. The existing input drains to the ponds will be de-silted and channelized to maintain the natural inlets and outlets as such. Excess drain from these ponds will reach the Nambiar River as of now. There will not be any impact on the natural drainage pattern of the ponds due to the SEZ activities. The ponds has been protected and river banks will be strengthened with surplus earth. No proposal of disturbing the water bodies and they will be protected as stated above.

(xiv) Details of tree cutting: The entire SEZ area is a dry barren land since the time of acquiring lands except for few bushes. Hence tree cutting was not carried out and also additional green belt development is being carried out around the premises and both sides of all roads.

For green belt development, tree plantation and maintenance are being carried along with the periphery of the site and also to develop lawn and greenery and around the project building. Tree species such as Neem, ficus, bamboo, Fox Tail, Eucalyptus, etc have been planted and maintained in the site.

- (xv) **Investment/Cost:** The total estimated project cost is 613.90 Crores. The cost spent as on 31.03.2018 is 21.66 Crores.
- (xvi) **Details of Forest land involved, if any:** There is no Forest land involved.
- (xvii) National Park/Wild Life Sanctuary in 10 km radius area: No National Park/Wild Life Sanctuary is located within 10 km radius area.
- (xviii) **Eco-Sensitive Zone in 10 km radius area:** No Eco-Sensitive area is located within 10 km radius area.
- (xix) Employment potential: Construction works and operational works for different type of industries will be taking place in different plots of the SEZ.

Construction Phase : 40000 to 50000 numbers of workers.

Operation Phase : 70000 to 80000 number of workers.

(xx) Benefits of the project:

<u>Creation of Employment</u>: Government of Tamil Nadu is providing incentives to create employment opportunities in southern Tamil Nadu. Organised and Unorganised sectors of workers will be employed in large numbers.

Enhancement in regional economy: Government of Tamil Nadu has accelerated the pace of development in southern Tamil Nadu by

creating Industrial nodes on the Chennai Kanyakumari Industrial Corridor (CKIC) where we are placed strategically on the Tirunelveli – Tuticorin Node.

80 Kms to Tuticorin Port, the 4th largest container terminal benefits the investors in our SEZ to access the international market at ease in the quickest possible time.

<u>Development of various types of industries:</u> AMRL SEZ is the largest Multi product SEZ and the only one with a Free Trade Warehousing Zone after Chennai, giving the investors the benefit of Manufacturing and trading within the same location and providing ample expansion opportunities with the limitless land option available.

Located at a distance of 4Kms from Nanguneri Railway station on the Chennai – Kanyakumari Railway line can help the investors internalise the externalities if large cargo movement through rail is necessitated. Our SEZ being in the vicinity of two international airports viz. Thiruvananthapuram and Madurai with Cargo handling facility provides access to the international perishable agri market.

<u>Possible increase in GDP:</u> The districts of Tuticorin, Tirunelveli and Kanyakumari can benefit from this opportunity in the process creating more agriculture related employment by processing the said agriculture products within our SEZ.

<u>Socio-economic development</u>: The existing Social infrastructure in the nearby towns can be made use of to some extent, however, development of SEZ and in turn industries will spur the establishment of adequate social infrastructure in the vicinity.

Benefits to investors: This will help investors into AMRL SEZ to benefit from the capital subsidy and more efficient capital deployment for the same project invested elsewhere.

- (xxi) A capital cost provision of about Rs. 9.20 Crore has been done towards the environmental protection, control & mitigation measures and implementation of the EMP. It also includes Rs. 3.00 Crore for CER activities.
- (xxii) If any court case pending for violation of the environmental laws: There is no court case pending against the project.
- (xxiii) ToR Details: TOR was earlier granted vide File No. 21-354/2008-IA-III
- (xxiv) **Public Hearing:** DDC Hall, District Collectorate, Tirunelveli on 13th October, 2009.
- 3.2.2 During detailed deliberation during the 217th meeting on 27th May, 2019, EAC

observed the following:

- (i) At present, development is being carried out in Phase-1 of the said project and 14 industries have already been established. Total Sewage generated from 14 industries is 8 KLD which is treated in the STP of 20 KLD capacity. Treated sewage is utilized for irrigating the green belt area.
- (ii) The proponent has committed to complete the remaining work in next three years.
- (iii) Waste water generated from the facilities will be treated in STP and treated sewage will be used in green belt development. Solid waste will be treated in the area proposed for solid waste management.
- (iv) Project does not involve any forest diversion of wildlife related issue.
- (v) The CER includes:
 - Infrastructure for drinking water supply by proving five PVC water tanks of 500 litres capacity installed at three villages Vepangulam, Manjankulam and Perumpathu villages, Public amenities.
 - Bus shelter has been constructed near AMRL SEZ for the benefit of local villagers
 - Rain water harvesting and aquifer recharge. Three rain water ponds of about 50 KL capacity each present in the SEZ area, stores the run off rain water and aids in the aquifer recharge in the area.
- 3.2.3 The Ministry's notification dated 29th April, 2015 regarding extension of validity of EC for such projects from five to seven years is fairly applicable in the instant case. The validity may be extended for further three years as per Ministry's notifications dated 29th April, 2015 and 31st August, 2015 on same terms and conditions as per EC dated 18th April, 2012.

Since, the proponent has applied for validity extension of EC on 7th June, 2019, i.e., after one month and before 3 months of expiry of the validity of existing EC, approval of MEF&CC may be sought for extension of the said EC.

In view of above-mentioned rule position and commitment of proponent to complete the work in next three years, the EAC **recommended to extend the validity of EC** for a period of three years, w.e.f. 18th April, 2019 to 17th April, 2022.

3.3 Development of Multimodal Corridor from Navghar to Chirner (near JNTP) in the state of Maharashtra by M/s Mumbai Metropolitan Region Development Authority - Terms of Reference

[Proposal No. IA/MH/MIS/105434/2019] [F. No.10-25/2014-IA.III]

- 3.3.1 At the onset Chairman stated that MMRDA is one of the donors to the organization where Chairman is also Director and thus have direct Conflict of Interest. Chairman thus excused himself from this specific agenda item and deliberations thereon, and requested Mr. A.K. Sigh to Chair the same.
- 3.3.2 The project proponent along with the EIA consultant M/s Louis Berger Consulting Private Limited, made a presentation and provided the following information to the Committee:

Background:

- The proposal involves development of Multi Modal Corridor from Navghar to Chirner (near JNPT) in the state of Maharashtra by Mumbai Metropolitan Regional Development Authority. Length of alignment is 80 km.
- The Ministry earlier grated ToR to this project vide F.No.10-25/2014-IA.III dated12th January, 2015 based on the recommendations of EAC in its 141st meeting held on 26th-28th November, 2014.Validity of ToR was further extended for a period of one year vide Ministry's letter of even number dated12th January, 2018.
- As per approved TOR, alignment was passing through the core zone of Sanjay Gandhi National Park (SGNP) diverting approx. 18 ha land of National Park land. Based on the approved TOR, Draft EIA study was carried out and submitted for Public hearing in 2017.
- Public hearing has been conducted in Raigad, Palghar and Thane districts on 16th January, 2018, 20th March, 2018 and 15th May, 2018 respectively. The issues raised were primarily regarding employment generation from the project and compensation for loss of land and structures. The public was also inquisitive about the likely benefits of the project. The public was assured by the project proponent that the proposed project is likely to generate employment for approx.1000-1200 workers. They were also assured that employment of local workers will be preferred for construction purpose; compensation will be given as per existing government norms and affected people will be rehabilitated as per Rehabilitation and Resettlement Act, 2013.
- At a later stage, the alignment was shifted to avoid the core zone of SGNP, as advised by State Board of Wildlife (SBWL) in its meeting held on 28th September, 2018.
- Accordingly, the alignment was revised in Palghar District as per advice of SBWL after conducting public hearing in all three districts. The revised alignment in Palghar district passes through the same villages

affected in the old alignment covering 6.74 Km from village-Bapane to village-Shilottar and there is no change in land area.

- Subsequently, the validity of the approved Terms of Reference had expired on 12th January, 2019.
- Thereafter, application was submitted afresh for obtaining TOR on 21st May 2019, considering the revised alignment.
- Location: The project road falls in the tehsils of Vasai, Bhiwandi, Kalyan, Thane, Ambernath, Panvel, Uran and Pen in Palghar, Thane and Raigad Districts of Maharashtra.

Land use of the site and around the site up to 10 km radius

The land use pattern of the project area consists of agricultural, residential, mangroves, reserve forests, National Park, creeks and river. Paddy, sugarcane, cotton are the predominant crops of the project area.

Land use pattern within 10 km of the project area is agricultural, forest, sanctuaries, mangrove, commercial, residencies, urban and villages. It also passes through the costal/low lying areas. The land use pattern within 10km radius is as given below:

Land Use Pattern	Area in hectares	
Settlement	2,60,837.35	
Cultivated land	1,12,781.02	
Forest Land	29,069.85	
Barren land	8037.93	
Water Bodies	4914.38	
Salt Pans	749.65	

- Proposed RoW: The proposed right of way (RoW) varies from 45m to 126 m, however, it is kept as 99 m in general to accommodate accesscontrolled highway lanes, service lane, parking lane, pedestrian footpath and metro facility at the Centre (30m). The RoW has been reduced to 45 m in vital wildlife areas.
- Justification for selection of the site: Alignment selection was carried out on the basis of evaluation of various alternatives for each option. Both qualitative and quantitative evaluation has been done for various factors influencing the selection process. These factors can be broadly grouped under main heads such as geometrics, cost, economic benefits and social and environmental impacts. The qualitative evaluation rates the alternative as less desirable, desirable, more desirable and most desirable against each factor.

The proposed Multi Modal Corridor is designed for highway geometrical requirement for maximum design speed of 120 kmph and proposed

metro geometrical requirement.

• Total water requirement and its source: About 250 KLD is likely to be required during construction period, which will be met through tankers and approved vendors.

Surface water will be preferably used for meeting the water requirement for construction to the maximum possible extent depending upon the availability of water in nearby rivers/streams with requisite permission.

- Water bodies, diversion if any: Kamavadi River, Ulhas River, Guha River, Kasadi River, minor streams and ponds are crossing the alignment.
- Waste water generation, treatment and disposal: Waste water would be generated mainly from the workers camp for which septic tanks with soak pits will be provided at campsites.
- Municipal solid waste generated disposal facility: Septik tanks and soak pits will be provided for disposal of Municipal solid waste generated from labour camps during construction period.

The solid wastes generated due to construction and allied activities will be reused for rehabilitation of borrow area/quarries sites, campsite and in temporary diversions and slopes.

- Terrain, level with respect to MSL, requirement of filling if any:
 Terrain is Plain and Rolling. Overburden will be generated during excavation for alignment and at borrow areas. It is proposed to reuse these materials for construction of embankment, rehabilitation of borrow areas and other allied sites and or filling of low lying/ disfigured wasteland.
- Tree cutting, types, numbers, girth size etc.: As per preliminary assessment, it is anticipated that 5135 trees are likely to be affected due to the proposed project. Tree enumerations (tree inventories) of total trees and trees to be felled will be prepared during detailed EIA study. Compensatory afforestation will be done in the ratio of 1:10. Common trees species include Tectona grandes, Mangifera indica Bauhinia variegata, etc. Efforts will be made to minimize the trees loss by restricting tree cutting within formation width. Avenue plantation shall be carried out as per IRC SP: 21:2009 on available ROW apart from statutory requirements. Required tree cutting will be done after having requisite permission from competent authority.
- Rehabilitation involved if any: Approximately 311 families are going to be affected because of land acquisition & resettlement.
- Whether the project is in Critically Polluted area: There are no

Critically Polluted Areas within 10km radius of the project boundary.

- National Park/ Wild Life Sanctuary in 10 km radius area: The project alignment falls within the Protected area of Tungareshwar Wildlife Sanctuary. Wildlife proposal for Tungareshwar Wildlife Sanctuary been uploaded online on the MoEF&CC portal vide proposal number FP/MH/ROAD/4021/2019 dated 24th March, 2019.
- **Eco-Sensitive Zone in 10 km radius area:** The project alignment falls within the ESZ of Tungareshwar Wildlife Sanctuary, ESZ of Sanjay Gandhi National Park (SGNP) and 10 km boundary of Thane Creek Flamingo Sanctuary.

Eco-Sensitive Zone of Karnala Bird Sanctuary is at a distance of 8 km from the proposed alignment. Matheran Eco-Sensitive Zone is at a distance of 105 km from the proposed alignment.

Proposal for Thane Creek Flamingo Sanctuary has been uploaded vide proposal number FP/MH/ROAD/4022/2019 dated 24th March, 2019.

- If the project involves diversion of forest land, extend of the forest land: Approximately 110.4038 ha of forest land will be diverted for the proposed project. Forest proposal has been submitted online on the MoEF&CC portal vide proposal number FP/MH/Others/31355/2018 dated 25th January, 2018.
- Investment/Cost of the project: The total civil cost of the project is approximately Rs. 19225.73 Crores.
- **Benefits of the project:** The following benefits are expected from the proposed project:
- High speed movement between the MMR regions
- Choice of multiple modes to travel
- Easy and fast transfer modes of travel
- Cost savings over development of separate corridors for each transportation mode
- **Employment potential:** The proposed road project will improve the economic and social welfare of those using the road or served by it. Ultimately it will create jobs by increasing access to markets, education and health services etc.

The project will also create direct and indirect employment opportunities significantly during construction and operation phase.

• If any court case pending for violation of the environmental laws: No.

- **3.3.3** The EAC after detailed deliberations during its 217th meeting held on 20th June, 2019, has observed the following:
 - (i) The proposal involves the CRZ area also.
 - (ii) The project is passing through chicken neck area of SGNP and Tungareshwar Wildlife Sanctuary. It is required by proponent to provide how the alignment will be made with robust engineering design and plan alongside of other projects so as to provide uninterrupted wildlife corridor between SGNP and Tungareshwar Wildlife Sanctuary.
 - (iii) The proponent could not clearly provide the details of area under mangrove vegetation and number of mangrove trees that would be affected due to proposed alignment.
 - (iv) Since, the alignment has been changed on advice of State Board of Wildlife, the affected families due to changed alignment would be different than the past one. Therefore, the concern of all affected families due to changed alignment needs to be heard in public hearing so as to address it adequately. In view of this, committee opined that project proponent should conduct fresh Public Hearing again.
 - (v) The project proponent also proposed to conduct public hearings afresh for this project in all three districts.
 - (vi) Earlier Base Line Data was collected and monitored by M/s Vardan Envirolab, Gurugram, Haryana and the presentation was given by M/s Louis Berger Consulting Private Limited. No MoU in this regard and certificate from QCI/NABET were produced before the committee.
- 3.3.4 In view of above-mentioned observations, the EAC, after detailed deliberation during its 217th EAC meeting held on 27th June, 2019, **recommended** the project for grant of **Terms of Reference (ToR)**, and for preparation of EIA/EMP report with public consultations (again in all three districts, i.e., Raigad, Palghar and Thane districts) subject to compliance of all conditions as notified in the standard ToR applicable for such projects and specific conditions, as mentioned below:
 - (i) The PP has to apply for CRZ Clearance also, as per extant CRZ Regulations along with the following documents:
 - (a) Form-I (Annexure-IV of the CRZ Notification, 2011),
 - (b) Rapid EIA Report including marine and terrestrial component,
 - (c) Disaster Management Report, Risk Assessment Report and Management Plan,
 - (d) CRZ map indicating HTL and LTL, demarcated by one of the authorized agencies in 1:4000 scale,

- (e) Project layout superimposed on the above map,
- (f) CRZ map covering 7 km radius around the project site, and indicating the CRZ-I, II, III & IV areas including other notified ecologically sensitive areas, and
- (g) NOC from the concerned SPCB/UT PCC for the projects involving discharge of effluents, solid wastes, sewage and the like.
- (ii) Provide uninterrupted wildlife corridor between SGNP and Tungareshwar Wildlife Sanctuary.
- (iii) Collection of fresh Base Line Data and preparation of EIA/EMP report shall be done by QCI/NABET accredited consultant only as per the provisions of EIA Notification, 2006, as amended from time to time.
- (iv) Provide the details of mangroves (no. of trees and extent etc.) to be cut for the proposed project and permission to be obtained for the same by competent authority.
- (v) Mangrove Conservation Plan shall be prepared in consultation with the State Government.
- (vi) Coastal Biodiversity Conservation Plan shall be prepared in consultation with the State Government.
- (vii) Carry out detailed traffic study to assess inflow of traffic from adjoining areas like airport/urban cities.
- (viii) Study to be carried out on Acoustic and Light Proofing measures considering the Wildlife Institute of India manual and other studies by the reputed institutes on the matter. The study shall be carried by the qualified professionals, scientists from any national institute having requisite experience to conduct such study.
- (ix) Rain water harvesting structures to be constructed at the either sides of the road with special precaution of oil filters and de-silting chambers.
- (x) Provide compilation of road kill data on existing roads (national and state highways) in the vicinity of the proposed project.
- (xi) Provide measures to avoid road kills of wildlife by the way of road kill management plan.
- (xii) The alignment of road should be such that the cutting of trees is kept at bare minimum and for this the proponent shall obtain permission from the competent authorities.
- (xiii) A comprehensive plan for plantation of three rows of native species, as per IRC guidelines, shall be provided.
- (xiv) The activities and budget earmarked for Corporate Environmental

- Responsibility (CER) shall be as per ministry's O.M No 22-65/2017-IA.III dated 1st May, 2018 and the action plan on the activities proposed under CER shall be submitted at the time of appraisal of the project included in the EIA/EMP Report.
- (xv) The PP shall not use groundwater/surface water without obtaining approval from CGWA/SGWA as the case may be. The project proponent shall apply to the Central Ground Water Authority (CGWA)/State Ground Water Authority (SGWA)/Competent Authority, as the case may be, for obtaining No Objection Certificate (NOC), for withdrawal of ground water.
- (xvi) The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I(M), dated 25th October, 2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.
- Development of Urban Extension Road-II (NH-344M) from Design chainage Km 0.000 to Km 38.111. Development of link road (new NH-344P) (Km 0.000 to Km 29.600). between Bawana Industrial Area Delhi (from Km 7.750 of UER II) till bypass of NH-352A at village Barwasni, Sonipat in Haryana as spur of Urban Extension Road-II (NH-344M) in the state of Delhi/Haryana. Development of link road (new NH-344N) (Km 0.000 to Km 7.500) between Dichaon Kalan till Bahadurgarh Bypass/NH-10 in the state of Delhi/Haryana. (Total Length of Project: 75.211 Km) by M/s National Highways Authority of India (NHAI) Terms of Reference

[Proposal No. IA/DL/MIS/104396/2019] [F. No.10-30/2019-IA.III]

- 3.4.1 The project proponent along with the EIA consultant M/s Amaltas Enviro Industrial Consultants LLP (AEC), New Delhi, made a presentation and provided the following information to the Committee:
 - (i) To decongest the traffic from Delhi, Delhi Development Authority (DDA) as part of the Delhi Master Plan 2021 proposed Urban Extension Road (UER) II as 3rdring road of Delhi connecting all the major National Highways in the western side of Delhi including NH-1, NH-10, NH-8 and NH-2. The RoW for UER was decided as 100 m. Although substantial chunk of land was acquired in western part of Delhi between NH-1 and NH-8 including construction of road for a length of 16 Km (approximately) however, no progress was made in the section between NH-8 and NH-2. Also the section between NH-8 and NH-1 has major hindrances in terms of land acquisition including built up structures. DDA then decided to get the UER-II section between NH-8 and NH-1 to be developed by National Highway Authority of India (NHAI).

NHAI entrusted to Develop Urban Extension Road-II (UER-II). "The highway starting from its junction with NH-44 near Bankoli Village connecting Narela, Mundka, Najafgarh, Dwarka and terminating at its junction with NH-248 BB near Bhartalchowk in the NCT of Delhi". This section of UER-II is declared as NH-344M vide Ministry of Road Transport and Highways Gazette Notification S.O. 1466(E) dated 3rd April, 2018 (Annex-A enclosed).

This section of UER-2 has two Spurs (1) spur to Barwasni By-pass (Sonipat), length is 29.600 Km & (2) Spur to Bahadurgarh By-pass, length is 7.500 Km.

- Spur to Barwasni By-pass (Sonipat) is declared as NH-344P vide Ministry of Road Transport and Highways Gazette Notification S.O. 969(E) dated 22nd February, 2019 (Annex-B enclosed) "The highway starting from its junction with NH-344M near Bawana Industrial Area in NCT of Delhi and terminating at its junction with NH-352A near Barwasini village(Sonipat) in the State of Haryana."
- Spur to Bahadurgarh By-pass is declared as NH-344N vide Ministry of Road Transport and Highways Gazette Notification S.O. 969(E) dated 22nd February, 2019 (Annex-B enclosed) "The highway starting from its junction with NH-344M near DichaunKalan in NCT of Delhi and terminating at its junction with NH- 9 near Balaur village (Bahadurgarh Bypass) in the state of Haryana".

Thus, total length of project road is 75.211 Km. Project Road is traversing through two states i.e. Delhi and Haryana.

- (ii) The proposed project road alignment of UER-II takes off from NH-44 (old NH-1) at Ch. 23+800 near village Bankoli connecting Narela, Mundka, Najafgarh, Dwarka and terminates near the junction of NH-248BB at Sector 24 in Dwarka near BharthalChowk in the NCT of Delhi. Spur (NH-344P) to Barwasni By-pass (Sonipat) starting from its junction with new NH-344M near Bawana Industrial Area in NCT of Delhi and terminating at its junction with NH-352A near Barwasini village (Sonipat) in the State of Haryana. Spur (NH-344N) to Bahadurgarh starting from its junction with new NH-344M near Dichaun Kalan in NCT of Delhi and terminating at its junction with NH-9 (old NH-10) near Balaur village (Bahadurgarh Bypass) in the State of Haryana.
- (iii) **Location:** State-wise location is given in the table below:

S.	State	District	Tehsil	Villages
No.				_

1.	Delhi	North, North	Narela &	Bankoli, Holambi Kalan, Holambi	
		West, West	Bawana,	Khurd, Khera Khurd, Bawana,	
		and South	Kanjhawala,	Dariyapur Kalan, Harweli, Karala,	
		West	Nangloi,	Mohammad Pur Majari, Madan	
			Najafgarh &	Pur Dabas, Rani Khera, Rasulpur,	
			Kapashera.	Mundka, Bakkarwala, Dichaon	
				Kalan, Jaroda Kalan, Neelwal	
				Nangli Sakrawati, Masoodabad,	
				Najafgarh, Roshanpura,	
				Dindarpur, Tajpur, Chhawala,	
				Dhulsiras in NCT of Delhi	
2.	Haryana	Sonepat and	Kharkhoda &	Jhinjoli, Halalpur, Nahara,	
		Jhajjar	Sonepat,	Mandora, Garhi Bala,	
			Bahadurgarh	Mohammadabad, Bindroli,	

- (iv) Land Use of the Site and around the site up to 10 km radius: The alignment is passing through plain terrain. The predominant land use along the alignment is agricultural followed by residential & commercial and mix land use.
- (v) Land Acquisition and RoW: Total land acquisition for the proposed project is 234.4522 ha, out of which 57.2318 ha is government land and 177.2204 ha is private land. The existing RoW of UER-II (NH-344M) varies between 55 m to 100 m except approx. 8 Km of length has no available ROW and Proposed ROW varies from 35 m to 200 m (200m PROW at proposed toll plaza). There is no existing RoW available for Spur to Bahadurgarh By-pass (NH-344N) and Proposed ROW varies from 35 m to 60 m. The existing RoW of Spur to Sonipat By-pass (NH-344P) varies between 30 m to 45 m and Proposed ROW varies from 30 to 170m (170m PROW at proposed toll plaza).

Bypass / realignment has been proposed at 4 locations –a) Realignment from design Ch. 15+000 to Ch. 20+400 (5.4 km), b) Realignment from design Ch. 27+000 to 27+100 (0.1 km), c) Realignment from design Ch. 27+600 to 27+900 (0.3 km) and d) Realignment from design Ch. 30+200 to 32+200 (2 km) is proposed.

(vi) Justification for selection of the site:

a. The alignment of UER 2 takes off from NH 1 (Ch. 23+800) near village Bankoli and terminates near the junction of Sector 24 in Dwarka. The present alignment is proposed to connect NH 1 with NH 8 passing through Bawana Industrial Area, Rohini Sector 34, 35, 36, 37, Mundka Industrial Area, Najafgarh & Dwarka. The proposed alignment crosses the Delhi-Karnal Railway Line, NH 10 and Delhi-Rohtak Railway Line and merges with the contract package of UER 2 taken up with Dwarka Expressway at Sector 24 which further connects it with

Shiv Murti at NH 8.

- b. Sonipat is proposed to be connected with UER 2 by a spur road which will take off at the crossing of UER 2 with Bawana Industrial Area (Sector 3/4). The same spur will connect UER 2 with Barwasni By-pass NH 252-A (near Sonipat). Length of the spur has been worked out to be 28.3 km. This road will assist in reducing the traffic loadon NH-1, as this section will serve as an alternate connectivity between Delhi &Sonipat further connecting Sonipat with Gurgaon.
- c. Spur to Bahadurgarh By-pass is proposed to bedeveloped as an additional roadalongwith the proposed UER 2. The proposed section will have a total length ofapprox. 7.6 km from UER 2 (km 26+600) to Bahadurgarh By-pass (near Village Balaur, NH-10). This spur will provide direct connectivity to commuters from Bahadurgarh & Rohtak to areas of Delhi (including Vasant Kunj, Hauz Khas, Green Park etc.) & parts of Gurgaon via UER 2 and Dwarka Expressway.

(vii) Proposed development:

- Bridge & Culverts: 1 major bridges, 23 minor bridges and 30 culverts
- Interchanges: Ch. 0+000 of NH-344M, Ch. 1+750 of NH-344M, Ch. 5+200 of NH-344M, Ch. 7+750 of NH-344M, Ch. 11+300 of NH-344M, Ch. 26+135 of NH-344M, Ch. 29+300 of NH-344P and Ch. 7+300 of NH-344N
- Flyover & VUP: 43 Grade separator structure; 10 Vehicular Underpasses, 12 Light Vehicular Underpasses, 8 Pedestrian Subway
- ROB: 6-lane ROB at Ch. 3+505 (UER-II) and Ch. 20+700 (UER-II)
- Junction: 19 major junctions and 74 minor junctions
- Slip/Service Roads: (104.966) km
- Toll Plaza: 2 toll plaza at Ch. 23+100 of 344M and Ch. 9+300 of 344P
- Bus Byes: 29 Locations
- (viii) Total water requirement and its source: Total water requirement for 30 months of construction period is 2311572 KL. Majority would be sourced from Delhi Jal Board. The required permission will be obtained by the Contractor prior to construction as per law/agreement.

- (ix) Material Requirement: The expected quantity of materials required during the construction phase of the project on per kilometer basis shall be - Aggregate: 3051634 MT, Steel: 123478 MT, Earth Fill: 6791587 Cum, Cement: 588405 (MT), Bitumen: 30411 MT. The construction material will be sourced from government approved quarries and borrow areas identified along the proposed project road.
- (x) Water bodies, diversion if any: The proposed alignment is crossing various water bodies. Details are given below:

<u>UER-II</u>

• Drain No 6 :Chainage : Km. 0+550

Nahri Major Distributary : Chainage : Km. 0+835

• Drain :Chainage : Km. 2+315

Western Yamuna Canal :Chainage : Km. 7+100

Water Body 1: Chainage: Km. 14+400

Water Body 2: Chainage : Km. 15+900

Mungashpur Drain: Chainage: Km. 27.100 to 27+200

• Pond: Chainage: Km. 33+500

Najafgarh Drain: Chainage: Km. 37+400

SPUR-1

- Twin Drain Chainage: Km. 15+700, Km. 19+477, Km. 29+293
- Distributary/Canal: Chainage: Km. 15+508, Km. 23+908, Km. 25+252, Km. 28+756, Km. 23+200 to 24+325

SPUR-2

- Mungashpur Drain: Chainage: Km. 5+400
- (xi) Waste water generation, treatment and disposal: Mobile toilets with package STP will be provided for the workers in construction phase. Toilets and STPs shall be provided in the amenities area during the operation phase. Details will be furnished in EIA report.
- (xii) Municipal solid waste generated disposal facility: 1000 kg of municipal waste is expected to be generated during construction considering 2500labour. During operation phase, the municipal solid waste shall be generated from the amenities proposed along the alignment. Waste management during construction and operational phase shall be done as per Solid Waste Management Rules, 2016.

Wastes generated within the site would be of food items, paints, cement, grit, bitumen, tar, cement, concrete, oil & grease etc. Waste shall be segregated and collected in separate bins and disposed-off according to MoEF&CC regulations.

(xiii) Terrain, level with respect to MSL, requirement of filling if any: The alignment is mainly passing through plain terrain with elevation ranges from 210m to 230m AMSL.

- (xiv) Tree cutting, types, numbers, girth size etc.: The alignment will require cutting of approximately 10,000 no. of trees (including forest area). Detailed assessment shall be made during detailed study.
- (xv) **Rehabilitation involved if any:** Approximately 40-50 structures likely to be affected along the project road. Affected Structure will be compensated as per NH Act, 1956.
- (xvi) Rain water harvesting: As per IRC guidelines
- (xvii) Whether the project is in Critically Polluted area: No.
- (xviii) National Park/ Wild Life Sanctuary in 10 km radius area: There are
 NO National Park, Wildlife Sanctuary, Biosphere Reserved etc. within
 10 km radius of the alignment of the Proposed Project Road.
- (xix) **Eco-Sensitive Zone in 10 km radius area:** Not applicable.
- (xx) If the project involves diversion of forest land, extend of the forest land: Approximately 15 ha of forest land will be diverted.
- (xxi) Investment/Cost of the project: Rs. 3,988.22 Crore
- (xxii) Benefits of the project: Proposed project will improve the road network benefiting the local people & tourist; reduce the travel time, distance as well as transportation cost; boost socio-economic and tourism development along the project road; income of vulnerable and poor people will be increased; increase possibility of employment of semi-skilled and unskilled people living along the project road and its adjoining villages during the construction and operational period; will provide better driving conditions and road safety.
- (xxiii) **Employment potential:** Approx. 2500 during construction and approx. 50 during operation phase.
- (xxiv) If any court case pending for violation of the environmental laws: No.
- 3.4.2 The EAC after detailed deliberation during its 217th EAC meeting held on 27thJune, 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:
 - Carry out detailed traffic study to assess inflow of traffic from adjoining areas like airport/urban cities.
 - (ii) Study to be carried out on Acoustic and Light Proofing measures considering the Wildlife Institute of India manual and other studies by the reputed institutes on the matter. The study shall be carried by the qualified professionals, scientists from any national institute having

- requisite experience to conduct such study.
- (iii) Rain water harvesting structures to be constructed at the either sides of the road with special precaution of oil filters and de-silting chambers.
- (iv) Provide compilation of road kill data on existing roads (national and state highways) in the vicinity of the proposed project.
- (v) Provide measures to avoid road kills of wildlife by the way of road kill management plan.
- (vi) The alignment of road should be such that the cutting of trees is kept at bare minimum and for this the proponent shall obtain permission from the competent authorities.
- (vii) A comprehensive plan for plantation of three rows of native species, as per IRC guidelines, shall be provided.
- (viii) 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 1st May, 2018 and the action plan on the activities proposed under CER shall be submitted at the time of appraisal of the project included in the EIA/EMP Report.
- (ix) The PP shall not use groundwater/surface water without obtaining approval from CGWA/SGWA as the case may be. The project proponent shall apply to the Central Ground Water Authority (CGWA)/State Ground Water Authority (SGWA)/Competent Authority, as the case may be, for obtaining No Objection Certificate (NOC), for withdrawal of ground water.
- (x) The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25th October, 2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.

3.5 Framing of sector specific guidelines to be prescribed in critically polluted areas

- 3.5.1 Ministry, vide its OM dated 12th June, 2019, has decided to de-link the process of grant of environmental clearance from the Comprehensive Environmental Pollution Index (CEPI) score and directed the Central Pollution Control Board (CPCB) to propose the additional safeguards to be prescribed for the projects/activities proposed in the Critically Polluted Areas (CPAs). CBCP has provided following safeguards that will be prescribed on case to case basis by the sectoral EACs.
 - Project proponent should provide the best available pollution control technology so as to ensure that there is no adverse effect on

environment.

- Expert Appraisal Committee may further consider prescribing the stringent emission/effluent norms for the projects proposed in such areas.
- The industries should be advised to use green/clean fuel in place of conventional fossil fuel.
- The industries should be directed for reuse/recycle of effluent by implementing advanced technology such as ZLD.
- The industries should be advised to utilise the domestic wastewater either in the process or for development of green belt.
- The industries should be encouraged to use green/clean technologies in the manufacturing process to reduce waste generation.
- Fugitive emission control mechanism should be implemented effectively within the industry including providing concrete/asphaltic road to minimise dust pollution.
- Adequate Green belt development should be made for reduction of air pollutants in and around the CPAs.
- Views of concerned SPCBs/PCCs may be sought based on the local conditions.
- Such projects may be asked to allocate more budget towards Corporate Social Responsibility (CSR) fund for remedial works with in the core and impact zones of the CPAs.
- The industries may be advised to use phosphate free detergent/ecofriendly cleaning agents for flood and machineries washing.

It was also desired that these safeguards be referred to the concerned sectoral EACs in their next meetings for detailed discussion regarding framing of sector specific guidelines for the appraisal of projects located within the CPAs. Thereafter, the sector specific guidelines will be forwarded to IA Policy for further necessary action.

- 3.5.2 In view of above, the Member Secretary, CPCB was requested to nominate an officer from CPCB to participate in the meeting and contribute for framing of sector specific guidelines as mentioned above. However, nobody from CPCB attended the meeting.
- **3.5.3** EAC after detailed deliberation in its 217th meeting held on 27th June, 2019, has decided to constituted a sub-committee for the purpose, comprising following members:
 - (i) Shri N.K. Verma, Member EAC (Infra-1) Chairman

(ii) Dr. V.K. Jain, Member EAC(Infra-1) – Member Dr. D. Chakraborty, Member EAC(Infra-1) - Member (iii) 3.6 A site visit was conducted by a sub-committee of the EAC to ascertain the ground truth of the environmental viability of the project for grant of Environmental Clearance to the project for setting up of Kolhar Industrial Area Phase-II at Village Kolhar, Taluk Bidar, District Taluk, Karnataka by M/s Karnataka Industrial Areas Development Board. [Proposal No. IA/KA/NCP/65436/2014] [F.No. 21-6/2014-IA.III]. The copy of site visit report is enclosed as *Annexure*.

List of the Members attended 217th meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Industrial Estate and Miscellaneous projects held on 27th June, 2019 and approved the above minutes.

SI. No.	Name of the EAC member	Role/Designation	Signature
1	Dr. Deepak Arun Apte, Director, Bombay Natural History Society (BNHS), Mumbai	Chairman	an
2	Dr. V.K. Jain, Professor of Chemistry, School of Sciences, Gujarat University, Ahmedabad	Wember	2
3	Dr. M.V. Ramana Murthy, Project Director, NIOT Campus, Pallikarai, Chennai	Member	٤٠٠ الت
4	Shri T.P Singh, Advisor, MEITY, New Delhi	Member	
5	Dr. N.K. Verma, Former AD, CPCB, New Delhi	Member	Clariene.
6	Dr. Manoranjan Hota Former Advisor/Scientist-G, MoEF&CC	Member	
7	Dr. Anil Kumar Singh, IFS (Retd), Ex PCCF Assam, Tower F, Float No. 103 Grand Anjara Heritage, Sector 74, Noida, UP	Member	
8	Shri Prabhakar Singh, DG, CPWD, Delhi.	Member	
9	Shri Narendra Surana, Managing Director, Bhagyanagar India Limited and Surana Telecom. and Power Limited, Hyderabad	Member	
10	Dr. Mohan Singh Panwar, Associate Professor , H.N.B Garhwarl Central University, Srinagar,	Member	
11	Dr.Anuradha Shukla, Central Road Research Institute (CRRI), Mathura Road, New Delhi	Member	Hours -
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)	Rema
16	Shri Ashish Kumar, Joint Director , IA-III, MoEF&CC	Special Invitee	Bernal

Report of the Sub-Committee to the site visit to ascertain the ground truth of the project viability from environmental consideration atKolhar Industrial Area, Phase - I (existing)&Phase - II (proposed)at Kolhar village, Bidar Taluka, Bidar District, Karnataka to be developed by KIADB

As per the decision of Expert Appraisal Committee of Infra-I during the 206th meeting held on 24th& 25th January, 2019, the Sub-committee was constituted by MOEF&CC vide order No. 19-21/2018-IA.III dated 10th June, 2019 for the site inspection at the KIADB at Bidar. The visit was made by the following Sub-committee members on 22.06.2019, along with therepresentative of SPCB (Bidar) and officals of KIADB:

(i) Mr. N.K. Verma, Member EAC -Chairman
 (ii) Dr. V.K. Jain, Member EAC -Member
 (iii) Mr. D. Chakraborty, Member EAC -Member

(iv) Mr. John Thomas, Representative, MOEF&CC - Member Secretary

(v) Mr. Mahesh Patil, SPCB, Karnataka - Field Assistant

Following officials of KIADB were present during the visit:

- (i) Sh. T. R. Swamy, Chief Development Officer
- (ii) Sh. Sannappaiah, H. V., Joint Director
- (iii) Sh. Mohan Kumar, Deputy Development Officer
- (iv) Sh. Prakash T., Development Officer
- (v) Sh. Subhash Naik, Deputy Development Officer
- (vi) Sh. Anil Rathod, Asstt. Engineer

Chairman of the sub-committee held a brief discussion with all the officilas of KIADB to have an overview of the existing industries located in Phase-I and the proposed plan of industries proposed for Phase-II. During the site visit, the Sub-committee observed the following:

- 1. The site Phase-I and Phase-II of Kolhar Industrial Area are adjoining to each other and total area of the proposed project of Phase-II is 600 acres (242.81 ha).
- 2. Physical inspectionwas carried out by the team at M/s SaiLife Sciences Ltd., Unit IV located at Phase-I, for the treatment of effluent. The existing unit is manufacturing drugs and pharmaceuticals and has installed effluent

- treatment with ZLD which was found operational. The unit is abstracting ground water through 2 (two) dug wells located within the plant complex and reuses treated effluent (RO permeate) for boiler and cooling purposes.
- 3. The committee was informed that some industries were closed down in Phase-I as these were not treating the effluents, which have resulted in ground water pollution. The monthly data monitored by the SPCB at the locations; Lime Light, KIADB, KIA, Bidar; Bidar Pipe, KIADB, KIA, Bidar and Vivimed lab, KIADB, KIA, Bidar have shown deviation of values of pH; Turbidity; Total Dissolved Solids; Chloride; Total Hardness as CaCO₃, Calcium and Magnesium. The data with respect to the parameters like BOD; COD; Phenolic Compounds, etc. are not monitored by SPCB. It was also informed that CPCB has declared this area as critically polluted area. SPCB has engaged NEERI for taking up detailed assessment of pollution and to suggest the remedial action plan. The Sub-committee has desired to have the recommendations and outcome of the report of NEERI.
- 4. The Sub-committee expressed that the aquifer remediation needs to be taken up with precise scientific manner with solute transport modelling studies to ascertain the lateral and vertical extent of the pollutants and its concentration. The Sub-committee also mentioned that remediation of ground water contamination requires long term pumping and treatment mechanism for which dedicated treatment system is essential.
- 5. Since the lake and the pond received rainfall runoff from the catchment areas of site, no water polluting units should be proposed in Phase-II. Proponent should also submit the list of industries (Category/ Type) proposed under B-Category or Red/ Orange/ Green category which are non-water polluting.
- 6. The main problem of ground water pollution in Phase-I has been mainly due to non-commitment of water supply and establishment of common Effluent-Treatment Plant for the industries by KIADB. It resulted the industries to abstract ground water and discharge of the effluent without appropriate treatment.
- 7. The site proposed for CETP to be located at Phase-II for treatment of effluents of Phase-I & II together was inspected. It has been observed that the location map of CETP submitted is in variance from the actual site location.
- 8. Composite data base for treatment of effluent generated by existing industries in Phase-I and anticipated effluent load from Phase-II for designing the CETP is an essential. Further, the effluent load and type for each industry

- along with current treatment practices by each industry existing in Phase-I needs to be submitted in tabular form.
- 9. No ground water should be abstracted for construction and industrial purposes. Therefore, a formal approval is needed from Karanja Dam Authority for regular supply of water. Further, a complete water balance diagram is also needed.
- 10. The Sub-committee visited different locations of natural drainage located within the Phase-II and also the location of Belur tank and pond. It has been observed that all the natural drainage should not be disturbed and green buffer all along the drainage length should be maintained.
- 11. During the site visit of Phase-II, the Sub-committee observed that the site boundary of Phase-II is touching the village boundary of Belur. There is a need of at least 100 meters of buffer between the Village limit and boundary of Phase-II. The lay out plan needs to be modified taking into consideration this aspect.
- 12. During the visit, it has been observed that the boundary of Air Force Station, Bidar is running close to the site of Phase-II. Necessary NOC from Aviation authorities to the EACis essential, which should be submitted to the EAC.
- 13. The Sub-committee also observed that warehouse has been located within the land of Phase-II.

(N.K. Verma)

(D. Chakraborty)

(V.K. Jain)

(John Thomas)